

HIGHER
EDUCATION
HANDBOOK
OF
THEORY
AND
RESEARCH

Volume XX

**HIGHER EDUCATION:
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THEORY AND
RESEARCH**
Volume XXI

Edited by

JOHN C. SMART
University of Memphis



Springer

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I. LIFE UNDER CONSTRUCTION: AUTOETHNOGRAPHY OF A RESEARCHER

Yvonna S. Lincoln
Texas A&M University

The best laid plans of mice and men gang awry . . .
—Robert Burns, Scottish poet

[P]eople not only construct their worlds, but watch themselves doing
the construction, and then enter and believe in their constructed
worlds.
—Edward M. Bruner (1986, p. 25)

We all construct our lives. That is, our lives are consciously and unconsciously created, enacted, by each of us, day by day, fabricated from our hopes, dreams, beliefs, expectations, social interactions, reflections, day-dreams, attitudes, values, and, equally critically, our social locations. It is critical to know, recounting autobiographically my professional journey, that my social location is white, female, southern, the descendant of mountain people, clanny and taciturn with strangers, and Georgia red-clay farmers, freeholders, cotton growers and pine resin contractors. For those for whom birth order matters (one brand of psychologists), I am my father's fourth child of five, the first girl.

The fact that we construct our lives—create, enact, make them up as we go—does not alter the fact that there are very real, tangible material circumstances to our lives. I grew up in Tampa, Florida, a very real physical place, a far sleepier and dreamier place, it seems, than the booming city I find today, and often spent parts of summers on my father's farm outside Baxley, Georgia, a farmstead left to him and his brothers as an inheritance by his mother, with a farmhouse occupied by my father's aunt, my great-aunt Laura, and her third husband. I loved those summers, even with no indoor plumbing or running water, and found Aunt Laura and Uncle "Pat" Patterson bonny company for a gangly kid. On the farm, I learned a

lot of largely useless skills, at least useless for my life today: how to feed corn through a sheller for feed and seed, how to avoid the corn snakes that lived among the dried ears, how to unseat crabby hens for their eggs while avoiding egg-sucking blacksnakes around the nests, how to milk a surly cow, how to haul water from a cool draw well, how to harvest scuppernongs from the tall trees they climbed, how to ride the mules barebacked with only a rope halter, how to drive a tractor, and how to cook a lovely peach cobbler over an open hearth fire. My memories, as is true for all of us, make me partially who I am today.

One memory which stands out from the early years, largely because, in the wake of a professional life I have enjoyed and derived many satisfactions from, is a high school memory. My mother wanted my sister and me to go to college, a luxury she never had, having come of age during the Great Depression. My father, however, a bit more old-fashioned, believed college to be largely a waste for young girls, unless they planned, as one of my aunts had, to become school teachers. Good grades were drummed into both of us, however, and my father's "take" on the world was that he earned the money, and our "jobs" were to be students, period. So we earned good grades, my sister and I (as had our brothers before us), made the National Honor Society, and went to a high school out of our residential district that would today be labeled a magnet high school. A beautiful Gothic building, it was dedicated to academically gifted students.¹

Despite doing well academically, and being extremely busy with school activities and clubs, one of the high school counselors, Mrs. Ruby Tyree, had other ideas. Ruby Tyree and her family had moved down from Georgia about the same time my father's family had moved to Florida during the Depression. Somehow, although I never got a clear connection, the families knew each other well. And so my father trusted Ruby Tyree, who got "constructed" in my mind as my high school nemesis. Ruby Tyree had somehow decided, despite my good grades and deep involvement in the high school theater group, the high school annual staff, and other things, that I was "not college material." Mrs. Tyree's judgment about me—based no doubt on my somewhat lighthearted approach to schoolwork, and a bit of high school airheadedness—influenced my father greatly, and he opposed my being sent to school at all. Fortunately for me, I was a National Merit Finalist, and got enough scholarships that I could partly escape the Cotton Mather-like pronouncements of the well-intentioned Ruby Tyree regarding my academic ability, for I loved university life, and the longer

¹ In the May 16, 2005 issue of *Newsweek* magazine that high school was named the 10th best (out of the 100 best) in America.

I stayed, the better I got at building good study habits and getting pleasure from serious and difficult learning. I still laugh, however, every time I get a letter of acceptance from a journal editor, and wonder whether Ruby Tyree looks down on a professional life the opposite of her dire predictions about wasting money.

In thinking about what this chapter should include, I have come to the conclusion that it will be different from the others that have preceded it in previous volumes. Because of who I am, and the particular career path I have taken, it is shaped by two different themes. First, it is more autoethnographic in tone and content than the others and second, it seems as though what I have to pass on are the lessons I have learned, and the wisdom accumulated, both on my own, but also from those older and wiser than I at various stages of my career. The lessons I have learned are the legacy I can pass down to future scholars, and so I share them, somewhat in chronological order.

A LIFE OF LESSONS AND LEARNING

When I try to tell my current graduate students that graduate school is the last, best place to learn systematically (as opposed to haphazardly, or whenever life presents one of its little “lessons”), they often groan in complaint, reminding me that it’s just hard work. I am a bit regretful that they will not know, until they have left graduate school, just how pleasurable classes are, or how strongly confidence is built when professional competence is being acquired. One of the great guilty secrets of the professoriate, of course, is that you *must* go on reading books, as fast as you can, if you hope to maintain any professional competence. Reading books so often becomes a casualty of busy lives that it is a shame we on the faculty are rewarded for doing so! Books are, however, treasures. We buy them, read them, hoard them, and build extensive professional libraries to keep them close to us. And when our own resources fail, we slip over to our libraries, hoping to locate something out of print, or too expensive to own, or something older but still full of sound research, experience, or knowledge. The sense of discovery always awaits you, if you leave graduate school for the professoriate. No doubt, the prizes of discovery also await outside the ivory towers and ivy-covered halls; but they are a regular certainty within these corridors, and that certainty draws a particular kind of individual to a vocation of teaching, reading, learning, and research.

There are, however, other aspects of faculty work which draw individuals to the learning life. One important one is the people who exert

a powerful influence over one's life. They come in two varieties: mentors and teachers and great colleagues and collaborators.

MENTORS AND TEACHERS

The research is absolutely accurate; mentors can shape lives. As an undergraduate, I had superb teachers and mentors. Today, colleges and universities hire folks they call "undergraduate advisors" and "graduate advisors." I think, in the press of demands by research institutions for external dollars, the faculty have sometimes abdicated the advising responsibility for students. In some institutions I have been in, or visited, entire subsidiary enterprises have been created to manage the advising function. As an undergraduate, however, I had access to excellent advisors, several of them, over the course of my baccalaureate degree. Several of them come to mind, and their influence, as the early Bennington studies show, has traveled down the years with me. Dr. Eleanor Huzar, a professor of ancient history, was a stunning role model of what a female professor might be. She was a sound scholar, but also a thoughtful advisor, and her honors course in ancient history, in which I was invited to enroll, provided a prototype of what graduate seminars might prove to be. The informal end-of-semester buffet dinners she gave for her honors students welcomed me into the life, home, and rhythms of an academic life and created a kind of inchoate longing for what I thought might be my own life, my own students. In the same vein, informal, end-of-semester dinners at the house of Richard Brandon, in art history, gave me the same feel for what the life of a faculty member might be like. Friends made during class, now enjoying a lovely gourmet meal together, in what seemed to me, from my blue collar background an elegant home, made this life seem like some kind of earthly paradise—which is indeed how some academics feel about it (Ryan and Sackrey, 1984).

William Whallon, professor of classics and Greek, handed back our first papers in my first (second-year) Greek class with him and commented as he handed mine back, "You're the first comp. Lit. major I've ever seen that could write." That single comment has stayed with me until this moment, and spurred me on to believe that I might be able to engage in research, and write it up, just as other faculty members were no doubt doing when their office doors were closed.

Richard Sullivan, who during my baccalaureate years chaired the history department, gave me a lifelong love for medieval history, and a retirement dream of going back and finishing a Ph.D. in history. It is a pipe dream, likely, but one I would truly enjoy seeing realized. James

D. Rust—at that time, the Associate Dean of Liberal Arts and a fun individual who would get into a Romantic poets poetry declamation contest with someone at the drop of a hat (and who encouraged me to learn many, many poems by heart, snatches of which still run through my mind today)—told me once, quietly in his office, that I could be or do anything I wanted to, so I'd “better aim high.” His admonition has stayed with me to this day, and I've found myself trying to live up to his, and my other teachers' expectations most of my life.

The lesson for me has always been that excellent teaching and caring teachers can, and do, make a difference. In retrospect, it took awhile for their advising to pay off, but in terms of sheer satisfaction and sense of purpose and meaning, pay off it did, for I have enjoyed a life that I always felt was meaningful and worthwhile. Some comment here may be called for, since most state institutions these days are under conspicuous pressure to develop metrics that demonstrate conclusively “value added” as a consequence of completing a baccalaureate degree. While criticism of those who work in the assessment arena is inappropriate, I wonder whether legislatures throughout the United States understand the deeper meanings of a higher education, and recognize that vocational preparation is largely outdated before four or five years on the job are completed. Value added at the end of a baccalaureate is value superseded in a few short years. The lessons of value—the commitment to learning and constantly upgrading skills, the strategies for seeking out information, the critical abilities to evaluate information and transform it into knowledge, the ability to extract life's lessons and turn them into wisdom, prudence, and an ethical and loving life—are not those which are readily assessed in some exit examination, the last semester before graduation.

COLLEGIAL CONNECTIONS

Although there is some lingering prejudice that the “lone Ranger” model of research is still the best way to enculturate new young scholars to the academic profession, the evidence is mounting that this model is less than helpful in many ways. Promotion and tenure policies embody this single-author model when they “count,” for purposes of third-year reviews, initial promotion and tenure, and later promotion to full professor, the number of single-authored publications alongside the number of co- or multiauthored publications, and act to discredit, or worse, to penalize, faculty members who strive to work in teams, with other faculty members who bring additional and different strengths to research problems. At least one major research university was in the habit of requiring

that multi-authored articles be explained in terms of how much the faculty member under review contributed, and her or his percentage of actual written material (Lincoln, 2000).

The trend within the Federal government, however, as well as among the major foundations funding research in higher education, has been to prefer programmatic research, that is, research which depends on collaborating with multiple colleagues who bring different theoretical, disciplinary, and methodological perspectives to some broad research or policy question. Sometimes, these are even grants and contracts which assume multi-institutional collaboratives that cooperate on various aspects of research. Given that this is the world that many of our newer and younger colleagues will inherit, why would we discourage them from building strong collegial relationships early on (Lincoln, 2001)?

I was fortunate in that my colleagues at my first full-time professional position, at the University of Kansas, did not hold collaboration against me, and in fact, considered it a strong point that I was being mentored by both individuals in and external to our department and college. My first work, with Egon Guba (later to become my husband) was considered smart and solid, and so collaboration and coauthorship were not issues with the senior colleagues making that first and most important promotion and tenure decision. Nor did my Dean at the time, Dale Scannell, consider coauthorship a handicap. His constant and ebullient mandate—“It’s not enough to survive, Yvonna; you have to *thrive!*”—was a piece of encouragement I rarely hear given to young scholars today, although the pressures seem greater, and perhaps they need to hear it more often.

Over the years, I have had the joy and pleasure of working with other smart, hip, thoughtful, and delightful people. Bill Tierney, one of the brightest stars in the world of higher education research, has often invited me into his projects, where we have collaborated or coauthored (see, for instance, Tierney, 1999, 2000; Tierney and Mclaughlin, 1993 or, more recently, Lincoln and Tierney, 2004). Bill is a demanding colleague, but the discipline, deadlines, and intellectual competence he brings to his work, and ours, has stretched me in ways I might not have been had I missed the opportunities he provided. Moving through my vita is not only to recall projects on which we worked, but also to recall trips, dinners, annual meetings at both the ASHE and the American Educational Research Association (AERA), and memories unrelated to whatever we were writing or editing—snorkeling, parasailing, and hiking in Hawaii, museums in Santa Fe, trips to State College, Pennsylvania, dinners, the Los Angeles Philharmonic.

Working more recently with Norman Denzin, at the University of Illinois, has been another learning experience. Mitch Allen, then senior editor at Sage Publications, had been trying (with no luck) to get a handbook of qualitative research done since 1985, when he first approached Egon and me about doing it. I had said at the time that I did not believe the field of qualitative research—which was, in fact, not a field *per se* at the time—was ready for a handbook project. Mitch put the project aside and said nothing more about it for roughly five years.

In 1990, at a small qualitative research conference in Edmonton, Alberta, Mitch brought up the handbook project again and said that he believed I should work with Norman Denzin, at the University of Illinois on this project. Why Norman Denzin, I asked? Mitch's reasons were two-fold: we were from two different disciplines (Norman was in sociology and communications research), and would therefore bring very different perspectives to the project, and Mitch also believed that we would get along well and work productively together. I agreed to a meeting with Norman, but would agree to no collaborative arrangements until we had had a chance to discuss working together.

During a snowy, cold, windy meeting of the AERA in Chicago, and after a standing room only of crowded session at AERA, audience members lined up to chat with the panelists. At the end of the line was a fellow who looked as though he had just come in to escape the cold: backpack, Bermuda shorts, flip-flops, and a lightweight jacket. I wondered what the “homeless person” would say when he got to the end of the line at the podium. What he said was, Hi, I'm Norman Denzin. Would you like to talk about doing a handbook? Norman and I, as well as others, have laughed about that moment for many years. Norman is still in his Bermuda shorts, and we are still editing books and also a journal on qualitative methodology, *Qualitative Inquiry*, many of these projects from the fruitful mind of Mitch Allen, a savvy editor and publisher able to see the future better than anyone I've ever known.

Subsequently, Norman and I have collaborated on the first, second, and third editions of the *Handbook of Qualitative Research* (Denzin and Lincoln, 1994, 2000, 2005), as well as a number of other works (Denzin and Lincoln, 2002; Lincoln and Denzin, 2003), including a volume of which I am especially proud, a set of very personal and individual commentaries by scholars on the effects of the September 11, 2001 attacks on the World Trade Center towers (Denzin and Lincoln, 2003). It is not a well-known book, but it is a powerful and moving collection, from a group of scholars and colleagues who grieved in very different and painful ways.

Those projects have led to others, which we, Norman Denzin and I, continue to pursue now (for instance, Denzin, Lincoln, and Smith, in preparation). Working in this way, however, has taught me several lessons. Some scholars work with colleagues as though they were serial monogamists—one colleague at a time, long or short term. I find, however, that I am more stimulated if I am working with several colleagues over the long term. Thus, I still write some with Egon, my colleague and husband, even while I might work on some project with Bill Tierney, and during that time, continue to work on a handbook, or the journal we coedit, with Norman, and at the same time, be writing with new coauthors or coeditors, Christine Stanley, Gaile Cannella, or now, Susan Lynham, or one or another of my students (González y González and Lincoln, 2004–05; Lincoln, Thorp, and Russon, 2003).

Of the many productive and richly rewarding ongoing colleague-ships that I witness, several follow this pattern. That is, friends and colleagues that I know well, and whom I admire, feed their scholarly lives and nourish their souls with “accomplices” who have different theoretical and disciplinary interests, but who are also friends. Thus, interesting careers are stitched together by pursuing not a single line of research, but rather by quilting together two or three intersecting, mutually complementary interests, with several colleagues with whom to interact at any given time. There is something to be said for being monomaniacal about one’s research interests. Certainly, at a minimum, it is less distracting, less hectic, and far easier to concentrate when work is confined to a single area. Over the years, however, I have found working in that way is likely to bore me.

It is also the case that I am somewhat of an “accidental tourist” in the methodological world, having gotten into paradigms and methods as more or less of a sideline. When I found that I was leaving behind my disciplinary world, the world of higher education research, I discovered that I was happier when I returned to it, and consequently, my pursuing several different strands of research has been a way of keeping me grounded in my discipline (where I also do much of my teaching). Straddling both worlds prevents my feeling as though I were losing something very important to me.

The overlap of friendship and collegueship, of hard work and fun, is a joy of this life that some seem to miss whether because of personality bent, or familial responsibilities, or because of other presses of time. The lessons I take away from this manner of working—finding friendships, finding research interests, and finding work we can do together—are manifold. First, everything we are told about how two heads being better than

one is true in collaborative and coauthored work. The brightest moments in a long career are frequently those where conversations between a collaborator and me led to new understandings and insights. Individuals working in an intellectual dyad, or a larger community, achieve a depth of understanding of the research problem that a single individual can only arrive at more slowly, if at all. A chance remark, a puzzle presented differently, even a mistake in speaking, a joke, an irritation with a stubborn finding, all can lead to a new insight, a new theoretical formulation, a surprising implication for a piece of research. It is especially pleasing when a colleague notes that she or he liked or enjoyed a small turn of phrase, that it captured the essence of some complex strand of events. That small turn of phrase was frequently prompted by a conversation with some colleague about the research I was doing—sometimes a coauthor, sometimes just a friendly fellow scholar.

Second, as many of my senior colleagues will know, working with different coauthors, colleagues, and collaborators will inevitably mean working differently. When people are simply friends, many personality quirks are forgotten, forgiven, or simply ignored. When two or more individuals, however, have a common piece of work to turn out, or, more significantly, when they have agreed to undertake a long-term project, for instance, a multiyear grant, those personality quirks become sometimes monumental in importance. Every failing and fault can become a mountain to move. Here, too, I plead guilty of every offense known to humankind. I write maddeningly slowly. I formulate some piece of writing in my head before a word goes on paper (my husband does just the opposite, sitting down at the keyboard, and getting some words down on paper, seems to prompt the creative processes in him. For me, such writing is piddling and a waste of time.). I write with an outline, while others feel more creative and intellectually spontaneous if they are free of an outline. My style, learned in part from working with Egon, is to divide up the work into what a coauthor and I feel might be two equal parts (determined by the outline), and to write one half of the piece, trading when each is done. That has worked well for Egon and me, and for Norman and me, but doesn't always work well with others.

In other instances, depending on the style of the coauthor or collaborators, I will begin a piece, and write whatever I can of the work, indicating where other sections need to be filled in. Coauthors then fill in the portions that they can, and we meet and talk about the missing parts, or how the parts completed fit together. This has also worked well with some coauthors. Gaile Cannella, Elsa González, and Martha Kyrillidou are good examples of this style of writing. The important lesson is that

coauthors be willing to work with different people who may possess very different intellectual styles, and very different modes of writing, some swift, some pokey. I have been fortunate, blessed, or lucky, depending on the reader's point of view, in having coauthors and collaborators who were first and foremost, bright, but second, consistently and lovingly forgiving.

Another lesson here is important, and it comes rather in the mode of the "confessional tale" of which van Maanen (1988) speaks. Sometimes, when writing with a colleague, I have written very little, or nothing. My name goes on work because I have been instrumental in developing the ideas, opening the venue, and/or working through the structure of the arguments with a colleague. Other times, my colleagues have written nothing on a paper that is listed as coauthored, for precisely the same reasons. The times are few, but my colleagues will know precisely who they are, on both sides of this dilemma. It is not a practice I recommend for the very new in the profession, but I have a suspicion that more senior collaborators do it more often than one might expect. Certainly, I know this circumstance prevails in other disciplines, where having different disciplinary perspectives represented on a paper, or recognizing that one is using research data generated by a larger group of which one is a member, or "returning the favor" when one's own name has been put on a paper simply because one is a coprincipal investigator but not because one collected and analyzed this particular set of data; this is done all the time. In medicine, for instance, my colleagues inform me that one cannot publish in certain journals without being certain that a virologist's name is on the paper, or a pharmaceutical research chemist's, or an oncologist's. Consequently, names are added and subtracted, sometimes as a response to a journal's conventions, sometimes as a recognition of the larger group of investigators' work. I suspect this happens more often than we would like to admit, especially as scholars become more senior.

Most assuredly, at some point in time, scholars can afford to be ever more generous in their inclusions. Others have been generous with me, and I find myself making certain when I write with data generated by group effort that I include as many significant individuals as possible, whether or not they have actually contributed one half or one third or 25%, or 10% of the work of writing. *Connections* mean far more to me now than it did in years past, when I sought out companionable folks with similar interests. Connections now mean being a part of a larger intellectual community, including recognizing people who have contributed to my own research, whether as parallel coworkers on the same grant or as people who collected and analyzed some part of the data that I reference when I write.

A HEART IN THE LIBERAL ARTS

It is sometimes amazing to me how little some students know of the liberal arts. Here, I am not speaking of the kind of cultural multiple-choice questionnaire method of Edward Hirsch, which seeks to identify some thousand-plus terms with which individuals should be familiar in order to call themselves “educated” or “literate.” Rather, I am speaking of a kind of broad education which familiarizes students with grand and enduring ideas; with some knowledge of the arts, good literature, and music; with a sense of social science and the persistent social issues which pervade life in the West, giving rise to poverty, economic deprivation, alienation, and social injustice; and with a strong sense of history and its lessons. Unlike some contemporary writers, I have no western canon in mind, although I do bear a strong prejudice toward some language training, and am every day thankful for a curriculum that demanded it.

It is discouraging that students today feel they cannot read a novel at any time during graduate study, or that they have no time for newspapers or news magazines. Many read the *Chronicle*, but do not have the broader background to connect the articles in our trade newspaper with larger currents in American or global life. Some do not see their privileged position in the world order, and cannot see the link between their advantage and the disadvantages suffered by others. In a class several years ago, we were discussing the larger issues of education for the handicapped, and higher education’s role in making space for individuals with a variety of handicapping conditions. One student blurted out that she worked with a fellow who was dying of AIDS, and she was “tired of doing his work and [her own], too.” Unknown to her, she was sitting in a class where three of her classmates had siblings with Down’s syndrome, of whom two had just achieved sufficient independence to have their own jobs and independent living arrangements. The student who originally spoke would not be quieted, but insisted that she understood this better than anyone, and that hiring (or educating, presumably) handicapped individuals merely transferred the burden of work onto nonhandicapped individuals. I recognized that I was not going to get through to this student at that time in class, or later, as it turns out, but found myself grieved on behalf of the students who had supported their Down’s siblings toward independence because there was clearly no long-term learning for one student about the deeper meanings of inclusion or about its inherent social justice. I cannot help but think that a background other than accounting (the woman’s baccalaureate and master’s degrees) would have lent a better sense of the diversity and potential represented by differently abled individuals.

Some years ago, I was the coprincipal investigator (with Stan Carpenter) on a project, the central premise of which was to challenge the widespread nostrum that the public was disenchanted with higher education and its accomplishments. As a part of this research, we conducted dozens of focus groups, with hundreds of students and parents of current students, asking them what they expected of higher education, and where higher education met their needs and where it did not. Of the not-so-astonishing things we found, we discovered that students disliked their large lecture sections and small laboratories with individuals whose English was not as understandable as students might have liked. Among the astonishing findings was that students declared they had no prejudices they know of against those who were different from themselves, racially, but they had no interest in living with them in the residence halls. It was an interesting, and telling, contradiction, we thought (Lincoln, 1999a,b). Further probing of this issue among undergraduates in several of the focus groups led us to understand that the undergraduates envisioned a life where they did not have to deal with diversity at all, an assumption firmly contradicted by surveys of employers of Texas A&M graduates, who consider the ability to work in diverse, and shifting, project teams as one of the top two skills desired in graduates they hire.

The role of the liberal arts in liberalizing students is well documented (Astin, 1978, 1993; Levine and Cureton, 1998). The reduction in authoritarianism, an increase in tolerance, and a new respect for difference and diversity are frequent accompaniments to a well-designed liberal arts curriculum. When the major provides little, if any, exposure to the larger ideals of democracy, it is no wonder that students go unchallenged with respect to the narrow and sometimes prejudiced views they bring from their high schools.

More than the lessons students have not had, however, is the contribution a liberal arts background can bring to teaching, to research, and to one's personal life. I have found that there is no small amount of consolation in reading poetry and novels. Both prompt me to see the world differently, and I read avidly, and encourage my students to find time—or make time—to do so likewise. I try to help them understand that good literature can support their own writing, as they not only enjoy a good story, or a well-crafted and poignant poem, but also begin to have insight into style, form, and the deployment of rhetorical devices and flourishes. I tell a perfectly true story about having sat in a meeting with a number of administrators while doing a stint as an interim department head as we searched for a permanent chairman. While there, I was commenting on some piece of policy and referred to “the eighth floor” to signify the

administrative headquarters for the College of Education and Human Development. One of the administrators flew into a grand snit and declared, “The ‘floor’ does not make decisions! The ‘floor’ is nothing! What is this ‘floor’ to which you refer? There are *people* up there, people with titles!” It was all I could do to refrain from saying, “Joe [not the administrator’s real name], ‘the eighth floor’ is a literary trope, specifically a form of metonymy known as synecdoche, you idiot”—a piece of information which no doubt would have been as welcomed as fleas, both for its content and for its delivery. I have told the story often, however, to illustrate what being buried in a discipline well outside the liberal arts can do to one’s thinking, and how narrow one’s vision can become when even rhetorical devices—one of the characteristics which makes English such a rich, aesthetic, and delicious linguistic resource—are not recognized. And how often have we said “Rome” when we meant a papal decree? Or said “the river is rising” when what we meant bore no resemblance whatsoever to any body of water, but rather referred to our own sense of overload? Or said “the monarchy” when we meant the entire royal family, or the particular and peculiar relationship of the reigning monarch to Parliament in Great Britain? Tropes enrich, enliven, and make more facile and supple our linguistic exchanges and written communications; it is a shame when even superordinate administrators cannot and do not recognize, let alone use, them. Needless to say, I avoid any fancy language around this administrator to this day; colorful or erudite language is neither welcomed nor understood.

Sadder, however, than the random administrator is the lack of facility and grace with which a few of my students write. Despite the extensive writing requirements of a doctoral program, some students seem never to attend to their own writing styles. This is in sharp contrast to well-known higher education researchers who attend to every word. I recall working on a journal article with Ann Austin and Catherine Marshall once. We were going over the final version prior to submission, and I was stunned to hear Ann carefully considering every single word. Is this the best word? Is this the meaning we wish to convey? Is there a better word to describe the situation, circumstances, context that we might want to use? Such attention to writing, however, creates memories of Michigan State University, my alma mater, and Ann’s current home institution. On the old engineering building, there was a lintel over one of the doorways, which read: “The English language is your most important tool. Learn to use it with precision.” And how frequently do I see even senior researchers write carelessly or without precision. I cannot help but believe—although I am willing to admit that this may simply be a personal prejudice of mine—that

a thorough grounding in the liberal arts might have improved and sharpened writing skills in both experienced researchers and my own students.

There is something else critical which my own liberal arts background has granted me. Qualitative methods, expanded greatly from the classical age of anthropology to include the critiques of poststructuralism, feminism, and postmodernism, have slowly erased the boundaries between fact and fiction, between science and art, and between “soft” and “hard” disciplines. One of the more important insights achieved in this “blurring of the genres” between postmodernism and performance studies is the understanding that culture does not precede the humans who enact it. It does not preexist individuals, nor it is “out there,” waiting for individuals to step into it, or anthropologists to discover and chronicle it. Rather, culture is created and re-created as individuals enact, or *perform*, it (Denning, 1996; Denzin, 2003).

Teaching that to students is not easy, but it is made somewhat easier with a liberal arts background. I think I can track back all the way to my baccalaureate two (at least two) life-changing courses I took. The first, directly related to the culture-as-performance problem I just outlined, was a course titled “The History of Ideas.” I was comfortably accustomed to the idea that nations have histories. That artifacts have histories. That paintings have histories (frequently told in their iconographies, if one has the tutoring to “read” them). That even individuals or groups have histories. But ideas? Ideas have histories? Today, it sounds almost foolish to speak of it. But to a 19-year-old sophomore or 20-year-old junior, the very idea was a revelation, an epiphany. Ideas could have “histories.” Although I was fairly lost most of the semester, having long concluded that everyone who took the course was far, far smarter than I, nevertheless, I now see that what I took from the course was not simply an idea of the history of some of the more important ideas in Western civilization, but rather the understanding that ideas do have histories. That ideas rarely emerge, like Botticelli’s *Venus*, from the seas, fully formed. Having “seen” this so many years ago, I now think in historical terms about the ideas I play with, and those that I pass on to students, as well as “constructing” my major research interests as the history of faculty intellectual life.

The other idea that has consistently compelled me emerged from a course I took (after rave reviews from friends) from a radical new young professor, titled “Principles of Right Reason.” Principles of right reason—by which the new young professor meant the ability to reason in a straight line or logically—turned out to be the second most useful course I took as an undergraduate. I can see flaws in reasoning, recognize a number of logical errors made in arguments, and can generally mount my own

arguments in a straightforward and straight-line manner. This is not, however, a skill which wins friends and influences people. Nevertheless, it has been enormously helpful in organizing my own thinking, for instance, when I am writing a paper or preparing a journal submission, and it helps me mount reasonable objections to the arguments of others, in calm and even form. As I said, such a skill is not likely to make a lot of new friends for one; it does permit me, however, slowly to make sense of arguments and claims presented and to sort out where the flaws, if any, exist in those arguments.

I can think of at least a dozen courses taken during my undergraduate years, which I wish I could take all over again. More mature, and unconcerned with my date for Saturday night, I'm reasonably certain I would learn far more than I did at 20. Nevertheless, the liberal arts, particularly my specialization in medieval history in combination with sociology, has given me a particular outlook on both my own era, which I describe as a world in transition between modernism and postmodernism, between industrialization and a postindustrial world, on the precipice between a world being colonized and a world rapidly denouncing colonization, and between the nation-state and the global village. There is so much to learn, and I fear that I wasted some time during those "four critical years." Wasted time or not, however, I wish my own students had a more solid grounding in the liberal arts. I dearly wish they felt they had the time to read a good novel. Or any novel. Or that they had time to read a poem before sleep each night. Or write one. Or that they wrote children's books as a hobby.² I am often comforted by visiting with good friends at ASHE, or AERA, and discovering what good books they have read in the last six months. My own experience has led me to believe that the best and brightest among us invariably find or make time for pleasure reading above and beyond their scholarly work. For some, it is good novels; for others, biography; for yet others, contemporary history, criticism, or public policy. They read, however. I believe in every instance it is a strong liberal arts background that has inculcated in them a love for good literature, good poetry, good biography, and good critical intellectual work.

In any event, a part of who I am, and a part of my career, is owed to the sound intellectual grounding I got at Michigan State in the early 1960s.

²One of my favorite students, a frequent attendee at ASHE, has created some of the most beautiful and moving children's stories one can imagine. I have urged him time and again to write these stories down, and even volunteered to find, among our architecture or visual arts students, a good illustrator. In addition to the money that might be made (many students live in penurious circumstances), I think the stories created for his own children would move many, many other children. He says maybe, but right now, he's too busy with graduate work. A shame.

Fine professors were the rule, not the exception. Unlike the criticisms swirling about higher education now to the effect that senior professors are too rarely in the undergraduate classroom, too preoccupied with their grants, contracts, and entrepreneurial work (a situation, incidentally, fostered and indeed mandated by many research universities themselves, even as they try to counteract this tendency), or too busy with their outside consulting opportunities, I enjoyed the benefits of being taught by a superb class of senior professors: historians, sociologists, art historians, comparative literature specialists, and modern and classical languages scholars. This work has given me a kind of heritage I would not trade for any money.

NOTHING TEACHES RESEARCH LIKE DOING RESEARCH

The academy is enmeshed today in a dialogue about how to cultivate new researchers, sometimes simply sound researchers, sometimes researchers in a new climate where “evidence-based” or “scientifically based” researchers are what is wanted (as though previous generations of researchers were not interested in evidence or were not scientific) (Eisenhart and DeHaan, 2005). Much of the debate circles around the issue of what “real” science is. The National Research Council (2002) has declared that much of what passes for research is not real research, but at best, merely scholarship (clearly, scholarship is to the National Research Council a second-class activity). Others have joined the Cochrane Collaboration in the United Kingdom in declaring that experimental design, specifically randomized field trials and the search for causal relationships (known in the United States as the “clinical model”), is not only the “real” science but even the “gold standard” (Mosteller and Boruch, 2002, p. 174).

I wonder whether the “crisis” in educational research is due less to whether our students are being prepared than whether or not they are being prepared according to the National Research Council’s or Mosteller and Boruch’s prescription of what qualifies as science. Students appear to be better prepared than earlier researchers were, since they still take the recommended statistics courses but now are often, at least in Research Extensive universities, also required to take a qualitative research strand as well. My major concern with my own students is whether or not they can “read” research and provide trenchant criticisms of what they are reading, although that seems to come with practice, time, and experience.

My own mentoring in research proved an extraordinary experience. I worked first with Allan Beegle and Jon Rieger at Michigan State

University on the Ontonagon County Out-Migration Study, before I began doctoral work, and learned much about collecting and analyzing different kinds of data, including historical data from the *Ontonagon Herald*, and watching Jon photograph landmarks and buildings which signified community or community past, including the local grange buildings, old, out of business (or out of productive metal veins) mining operations, and oldtimers. If ever I thought taking pictures was simply taking pictures, I was in for a surprise.

Each photograph was logged onto a list, numbered, and the subject described in succinct, but complete, terms, including date and time of the day photographed. Jon Rieger (now at the University of Louisville) was a rural sociologist, deeply interested in the changing landscape of our rural communities. He is also today what is termed a “visual sociologist,” recording those changing landscapes, the loss of arable land to development and developers, the parceling out of formerly productive family farms to “ranchettes” from which urban and suburban workers commute, the loss of family farms to agribusiness and the corporatization of food (for an excellent study of how children can be brought closer to food, and understand their ability to produce it, see Thorp, 2006).

I worked for Jon (and Allan) for a summer, partly in the upper peninsula of Michigan, and partly back at Michigan State, where I was the “third party” in various inter-rater reliability estimates of job descriptions and codes, and also tried to make sense of historical data on the Ontonagon County school boards and their policy activities—a task for which I was little prepared, but which, fortunately, prepared me for later work of the same variety. While I didn’t know enough to do a good job at the time, I was able to soak up what other, more senior doctoral students and postdocs were doing.

Among other things I learned was how to “chart” family dynamics, birth rates and dates, and job transitions from a complex form developed by Jon Rieger, and utilized on the project with the families who agreed to be interviewed. I began to understand different life cycles, and how they might be graphed and displayed against each other, and realized later, to my great pleasure, that I had begun to understand something very important about the rhythms and processes of doing multimethod research. Very different kinds and forms of data were being gathered on that project (much larger than I am able to credit it with being), with each professor, postdoctoral student, and graduate student responsible for a different part of the project, a different collection method, and a different “slice” of the analyses. It was my first deep experience with serious sociological research, and I wish I could have given back in full

measure what it taught me about managing large research projects. I have “seen” some of the project’s lessons unfolding in my own management of research projects, and smiled quietly when I saw myself pulling together research staff for group meetings. Learning about group process was also a critical lesson from that project, and it still amazes and delights me to watch some group with which I am working pull together for a common goal around inquiry.

My next research experience involved working with Robert Wolf (now deceased) on the Midwest Pupil Personnel Evaluation contract at Indiana, where I got experience interviewing, some good feedback on the interviewing, and some training in preparing transcripts for later analysis. While I didn’t recognize it at the time, Bob Wolf also engaged me in a peer debriefing exercise (he didn’t call it that, nor would I term it that until much, much later, after having read *Tearoom Trade* [Humphreys, 1970], with its retrospect on the ethical issues surrounding the research done). The process, repeated when I worked on Research on Institutions of Teacher Education Project (RITE), was simply debriefing on what I thought I had learned from the day’s interviewing and/or observations (or other forms of research) over dinner. Done correctly, everyone’s understandings about what they thought they knew which they didn’t know before the day’s research might be challenged, questioned, probed, subjected to requests for clarifications, extensions, or examples. It is a remarkably effective process for helping individuals to focus on main themes, on highly salient points, on issues to which they might wish to return in the next day’s interviews or observations.

This peer debriefing process was a research strategy reinforced by my work with David L. Clark and Egon Guba on RITE Project. There were other lessons I learned, in the field, and back at the conference table, about doing good research, and Dave and Egon were patient teachers for all of the doctoral students working on the project. One of the best things I learned was that it is perfectly acceptable to admit that you are on the wrong track, and to set yourself—and the project—onto the right track, or at least a better track. RITE Project (NIE funded, when the National Institute of Education was still in existence, and still deeply interested in field-initiated proposals) sought to discover what kinds of KPU activities were going on throughout the colleges of education in the United States. KPU was shorthand for “knowledge production and utilization,” and the central question was: how and under what circumstances are schools, colleges, and departments of education (SCDEs) turning out knowledge around educational problems and issues and how was this knowledge being utilized in the reform of K-12 education? The project began with an

extensive open-ended questionnaire, sent to deans or department heads throughout the country.

It didn't take many to arrive before the project coprincipal investigators realized that they didn't know much more than they had before they began. I can still recall the afternoon Dave said, "You know, we're not really going to know anything until we get out and talk to these people," and Egon agreed with him. That wasn't, however, the project that was funded. For several days thereafter, Dave was on the phone to their project manager, and somehow—and this will truly seem like the "good old days"—talked the project manager into letting them write a new proposal, and keep the same funding. At that point, the project went into high gear, and went on the road. Dave and Egon made numerous trips to institutions around the country, identified as having something perhaps "interesting" going on via the completed surveys. On each trip, they took one or more research assistants, and for large, research I institutions, the entire project team might go (the two co-PIs, and two to four research assistants, depending on who was working with them at the time).

Together, the co-PIs and the research assistants developed interview protocols—different for each person, depending on the role she or he played in either KPU, or administering some unit which engaged in KPU—worked on travel logistics, such as compiling fairly firm interview schedules, making hotel reservations, arranging for travel, and the like. Sometimes, the research assistants interviewed solo, and sometimes, especially with vice presidents and deans, we interviewed with one of the senior folks. We typed and prepared summaries of each of our interviews, and passed them to all project members within several days of returning from the field. We debriefed at the end of each day in the field, with Dave or Egon or both pressing us for what we had learned, and comparing notes on where social constructions (although we did not call them that at the time) matched, and where they diverged, utilizing the points of divergence as places where we wished to probe further on the following day.

In the middle of the project, a most astonishing thing happened. A senior researcher from the University of Minnesota heard about the project, was interested in it, and had a sabbatical coming. She talked with Dave and Egon, and was invited to join us, and that is how I got to know Mary Corcoran. Mary Corcoran taught me much of what I consider the basics of fieldwork. Traveling with Mary was always a delight. She was a shrewd interviewer, experienced at "tricks of the trade," such as rising early enough to have breakfast with a local newspaper, in order to familiarize herself with news of the university we were visiting, and

what “town-gown” issues might be. Consequently, she went into each interview with what appeared to be “insider knowledge,” and could frame her questions in the larger social context in which the university operated. She, too, somehow knew about this “peer debriefing” tactic, and used it to help the research assistants frame and organize the knowledge and information they were gathering.

It’s a wonder I ever finished my doctorate, because I spent the better part of 18 months to 2 years on the road. But I knew so much when I got done about how to conduct field research that it was well worth it. The lessons I derived about how to conduct serious research were once again lessons that have driven my own research practices. My sense of sequencing, of how to organize the various stages of research, of how reporting to funding agencies is carried out, of how to record interviews and write them up—all were products of those doctoral research experiences, and the intense learning experience of the year with Mary Corcoran. Mary continued to be a mentor and support to me throughout my early years at the University of Kansas, where she taught me another valuable lesson: no matter what your heartaches, your work is a splendid, rewarding, and comforting refuge. Indeed, it has been, often.

Although I have had many mentors, one last one stands out as giving a new young professor the best advice of her early career: Cecil Miskel. Cecil and his lovely and talented wife, Sue, have been friends and supporters from the beginning. When, as a new and untenured professor, I felt pulled in too many directions, and didn’t know what invitations I should take, and which I should turn down, Cecil repeated, firmly and as often as needed to effect the desired behavior, “Look to the University norms for promotion and tenure. If what someone is asking you to do doesn’t ‘fit’ with those norms, don’t do it! Just write. Do research, and write.” To help me with that project, Cecil must have read every single paper, article, and chapter I turned out for years on end. He was a superb editor, and contributed greatly to my learning clarity, simplicity, and directness in writing, and he could raise substantive questions about the research better than anyone else on the faculty. From Cecil, I learned that one large role of the senior faculty is to keep new, young professors from becoming distracted with the many, often conflicting, demands on their time, and to concentrate on creating the skills needed to hone their research and teaching, however many contradictory pressures appeared to be coming in. I have tried to do that with the new faculty that I have mentored, as a way of helping them to stay focused. It was a valuable set of lessons, and I try to pass them on. I know that Cecil has mentored others along

the way; I hope they have appreciated the subtle gifts he so graciously granted them.

The major lesson, then, that the National Research Council might learn is that it is not necessarily randomized field trials which make for cultivating a new generation of educational researchers. It is, rather, the experiences and teachings of a generation of senior researchers (of whatever stripe, quantitative, or qualitative), *well funded*, who can provide all manner of research opportunities for doctoral students to become immersed in serious inquiry projects. Too many research assistants complain that they are treated as “gophers”—go for this, go for that. My own best experiences came about when I was treated as a partner in the research: made responsible for some part of the research, some set of tasks, expected to complete the task on time and well, and when I failed at the latter, being royally upbraided and told to re-do it. Such partnership between senior researchers and graduate students, between mentors and their mentored students, lends a sense of empowerment to research training that is impossible to inculcate in the classroom alone.

This kind of training does something else critical, too. It teaches doctoral students how they should be interacting with their own students. There is a wealth of material on mentoring out there—how to ask for it, what mentors should do—but no one tells anyone how they might learn to mentor. The most effective way—to me, at least—to learn how to mentor was in being mentored well. Perhaps there are individuals who are “natural” mentors. I rather suspect, however, that mentoring is like parenting: we learn it from our own first models. Good parents teach us how to be good parents; indifferent parents teach us how to be indifferent parents ourselves, and so on. Good mentors leave us with models that return to us unbidden with each student we shepherd through graduate study.

Another lesson that I have derived from my own set of experiences is that it matters little whether one is trained on a project that is largely quantitative, or primarily qualitative. The important thing about the experience is that one learn systematic and disciplined processes because the systematicity and disciplined quality (Cronbach and Suppes, 1969), the rhythms of the various processes, the skills needed to cultivate good relationships with project managers, the politics of achieving entry into sites and dealing with gatekeepers of various sorts, are applicable whether the research one intends to conduct as a professor is one paradigm or another, this model or that. It is the discipline, the systematic nature of the work, the critical bent of mind, the integrity in one’s relationships

with other researchers and research participants alike, which is critical, as well as the socialization to values which are professional, ethical, fiscally and managerially scrupulous, intellectually honest and open. At the end, those are the characteristics which make for fine researchers, rather than a single method—such as randomized field trials—which enhance educational research. Learning those things can only be accomplished while one is practicing them, in real research situations, with real researchers.

A Policy Note

Were anyone to take my lessons to heart, and to consider seriously the manner in which new young scholars and researchers were socialized and trained, this might suggest changes in Federal, state, and philanthropic funding policies and practices. The Federal government, as well as the state government, for instance, might well go back to a far larger proportion of field-initiated grants and contracts. Numbers of well-prepared faculty that I know frequently bypass the opportunity to seek external funding simply because the announced “priorities” of various Federal and state agencies either have nothing to do with their own interests or have framed those priorities in ways which preclude reframing them in constructivist and/or critical modes, and thus are considered by the researchers to be “more of the same.” That is, the requests for proposals are couched in terms that individuals find to be banal, or unlikely to lead to either new insights or fresh policies and practices. Field-initiated studies would overturn this lack of engagement somewhat, and open possibilities for more scholars to become involved with funding initiatives, which in turn would open opportunities for more extensive graduate student training in research.

Multiple approaches to stubborn educational problems would likely yield far richer results in terms of Federal and state policy options, in turn creating the likelihood of a more engaged public and civic dialogue around what is working, what practices promote social and educational justice, and what, therefore, is cost effective. When I say “multiple approaches,” let me be clear, I do not mean simply the kind of approach that I frequently use for exploration of problems and issues, although that is where I am trained best. I mean that some researchers might well be engaged in randomized field trials and others in serious critical theorist work in colleges and universities, while others might provide microethnographies of classroom and teaching practices, others might be engaged in long-term follow-up studies of undergraduates (similar to the Bennington studies of long ago), as a way of countering the prevailing (and largely shallow efforts

at assessing the “value added” approach to baccalaureate studies), and still others who might adopt or adapt noneducational theories to test various administrative practices. In short, we might have a multitude of studies, from a plenitude of available models and theoretical approaches, which might then be available for meta-analyses, a useful model very different from randomized field trials for determining “what works” and what shows less promise.

The major issue is not only what hard scientists, medical researchers, and others call multiple perspectives on deep scientific puzzles but also that opportunities for expanded research means expanded opportunities for graduate training in scholarship. If my own experience was any model, then experience with senior researchers, engaged in serious, organized inquiry, is the most useful practical and theoretical training available for the generation after us.

ON BEING “FIRST”

Número uno, number one, first; Everybody wants to be number one, first, *Primus inter pares*. Being first is fun, at least in theory. Sometimes, however, being the first is anxiety provoking, scary, sometimes terrifying. Several times, I’ve been the “first,” and for all those women and under-represented groups out there who end up being “the first,” I can honestly say that I know something of what you’re feeling.

I was the first woman hired into the department at the University of Kansas. Herold Regier, who chaired the search committee, confessed to me after I was hired that he had hoped, with a name like Lincoln, that I would be *both* a woman and an African-American candidate. He settled for a woman, of course, and it never mattered to him because we got on famously. It did matter, however, to others.

The then-chair of the department (of whom I should be speaking no evil, but it’s an hilarious story, anyway), refused to have the order of the mailboxes switched (so that I could be fitted between the Ks and the Ms). Instead, he insisted that I ask his secretary for my mail every day. I finally became quite frustrated with having Delores Cox take out her keys and unlock the only desk drawer she kept locked, and asked her why I couldn’t have a mailbox, since the other professors had them, and since there were several empty pigeonholes. Calmly, coolly, and distantly she informed me that Mike (Milo B. Stucky) assured her that he would “run [me] off within the year” and therefore, there was no need to change the mailboxes. I smiled, thanked her for my mail, and made a promise to myself.

I had also noticed that while the male professors were called Dr. So-and-so, or Professor So-and-so, I was called “Miss Lincoln.” I asked why, since I was holding a tenure track position, I could not be called Professor Lincoln, and I was informed (same secretary) that I had not defended my dissertation yet, and so did not really “deserve” to be called Professor, and most assuredly, not doctor. Furthermore, although Lincoln was my married name, I was informed that since I was no longer married but divorced, I did not “deserve” to be addressed as Mrs.

I was hired into that department in part because it was the only department on campus where there was no woman and no minority individual. The toughest, wittiest, and best Affirmative Action Officer I have ever known, Bonnie Ritter, had told the department that if they did not hire a woman, they could not hire at all. For some faculty, this was a good idea. For others, obviously, it meant nothing less than, in Mike’s words, “the destruction of a good department.” In retrospect, this is funny. At the time I was living it, it seemed less funny, and I had many tearful phone calls with my mentors at Indiana University, who encouraged me to “hang tough” and finish the dissertation, period. Indeed, defending that first semester made a bit of difference. Joking with the Dean about not having a mailbox also made a difference. It was the first time I really understood the difference between a wolfhound and a Chihuahua. I never forgot the concept of “big dog” after that, although fortunately, I could use them sparingly.

Another first which has been what the Rolling Stones call “a long, strange road” has been my appointment as a Distinguished Professor at Texas A&M. As some readers will know, Texas A&M was, in the memory of many still here, formerly an all-male military academy. Many vestiges of that militarily hierarchical structure still remain, and in some ways, the institution is still catching its breath in shock from having admitted women, African-Americans, and Latinos. The institution is way behind the state’s demographics in admissions, although it is struggling hard to catch up and meet its responsibilities. It is a conservative institution, with the vast majority of its students, donors, and parents routinely voting Republican in national, state, and local elections. There are many “hidden injuries” of patriarchy, class, and race to which women and underrepresented groups are subject to every day. When good women are asked why they stay, numbers of them smile and respond, “This is ‘missionary work’; this is where the work really needs to be done.”

With the support of my dean, Jane Close Conoley, and associate dean, Ernie Goetz, my file went forward and eventually (after several years, in fact), a review committee and the Provost acted positively, and I was given

the rank of Distinguished Professor. Another first. There had never been a female Distinguished Professor, although there is one other now (Susan Golden) and some “in the making.” The year after I was given the rank, someone nominated me, and I ended up on the Executive Committee of this august body (there are only 42 of them, of some 2,500 faculty).

I try always to show up (Woody Allen says that it’s 95% of everything, including success), and always to be “at the table.” At the annual convocation, however, when the President asks the Distinguished Professors to rise and be recognized, I am uncomfortably aware that there is a sea of men and only two women among the group and my face gets warm and I can barely wait for the signal to be seated again.

Being first is sometimes a joy but sometimes also uncomfortable. It seems I try to mind my manners more than I used to, and think before I speak—something I never did before—and try to speak more diplomatically. I am more conscious of the organizational culture and find myself “dressing up” rather than “dressing down” for meetings with the President, or the Provost, or even the Executive Committee. I am painfully aware of the “example” that I am possibly setting, and how I must not, must not, must not ruin this experience for other women, for African-Americans, for Latinos, for all those underrepresented groups on campus that will come after me. It sometimes feels as though it’s a lot of responsibility, and that is frightening sometimes. My colleagues and friends will think it amusing that I call myself, to myself, the “reluctant dragon.” The good news is that my colleagues among the Distinguished Professors have welcomed me warmly, greet me in kind ways, and have even elected another woman (a quite smart and wonderful one, incidentally; she is a real superstar on this campus). I am hoping that my attention to manners and diplomacy will pay off for others behind me.

The lesson is that someone has to be number one, but the “Who’s on first?” game can be a lonely one, and sometimes, a scary one. No one should be afraid to break new ground, to open new doors, especially for groups which they find underrepresented anywhere. By the same token, the “firsts” should also prepare themselves for moments of uncertainty, when they sense the responsibility and feel the weight of many folks pushing from behind.

FINDING FUN RESEARCH PROBLEMS AND PUBLISHING

I suspect that one of the reasons for this chapter having been commissioned was a story I told—a true one—about publishing to the editor of this volume. We were sitting on the hotel terrace in Sacramento, drinking

beers—John Smart, Bunty Ethington, Susan Talburt, and I (a bonny group, indeed)—doing what my father used to call “swapping lies”—telling stories about ourselves as researchers. They were funny stories, the kind senior folks tell as they review the disastrous parts of their careers that have now become sources of amusement. We were talking about publishing a set of papers we had just given, and I commented that we shouldn’t look to the *Journal of Higher Education*, because I wouldn’t want to ruin a perfect record. John asked what I meant, and I said that I had never been published in the *Journal*. John and Bunty were astonished. “Why not?” they asked.

“Well,” I said, “I don’t know. I used to submit a lot of things, but the [then]-editor would never publish them. Some of them even came back with reviews that had three people out of three saying ‘publish’ or ‘publish with minor revisions,’ but the editor would never publish them. So except for a short book review, I’ve never been published in one of my ‘core journals’.”

“How can this happen?” John wanted to know.

“I don’t know,” I shook my head, joining their disbelief. “The editor used to say that he really liked the article, and reviewers would sometimes say ‘publish,’ but he made an editorial decision that none of my things should be published, whatever I was writing about, but especially about new paradigm inquiry.”

I went on to say that the same thing had happened to me with the *Educational Researcher*. Egon and I had written a number of strong pieces, and believing they were applicable to a broader audience than simply Division J (the postsecondary education division of the American Educational Research Association), we had submitted them to *Educational Researcher*. The same thing would happen: the reviewers would genuinely believe the articles cut a new edge to the broader field of research, and frequently, a piece would come back with three recommendations to publish, but Bill Russell would never publish them. I laughed, and told them that I still have in my “Reject” files a letter from Bill Russell, dated about midyear 1985, that declared that the “paradigm wars” were over and that there was nothing new to be said and consequently, he was not publishing a piece which the reviewers thought was “very thoughtful,” “fabulous,” and “cutting edge,” and which they recommended be published without revisions, “as is.”

The funniest part of that latter story, of course, is that the paradigm wars were just beginning. For one, alternative paradigm practitioners and theoreticians were only just beginning to think through the poststructuralist critique, the postmodern and narrative turns, the crises of legitimation

and authority, and the ethical ramifications of doing alternative paradigm inquiry. Two, the “paradigm wars” are far from over, as I indicated earlier in this piece, with the National Research Council’s call for “scientific training” of educational researchers, their rather narrow definition of “scientific,” and their dismissal of some research as perhaps “scholarship,” but definitely not what they would call scientific inquiry,³ which effectively blocks out qualitative research, with the No Child Left Behind legislation which mandates only experimental inquiry will be funded in research and evaluation efforts, and with other federal moves to delegitimize or marginalize alternative forms of inquiry, whether interpretive, deconstructive, or critical. A shame, really, and one which will turn into a national shame in educational research.

Terry Denny commented nearly 35 years ago that if we were to translate all we knew from educational research for the past 100 years into human size, we would have a three-foot dwarf. Nearly 35 years later, authors comment on the “awful state” of educational research (National Research Council, 2002). Considering that the so-called “scientific” inquiry—the very kind which the National Research Council and others are calling for—is responsible for the largest portion of that research conducted over the past century or so, it is no wonder that others call for multiple paradigms to be deployed in investigating social issues.

Research “problems” have never been the problem. The higher education researchers active in the professional organizations (whether ASHE or AIR or AERA) can think of dozens of arenas in which useful research could be pursued, and they nominate a dozen or two good problems at every professional meeting. Individual researchers can usually tick off a half-dozen serious issues in their own specialties, which could use further investigation or research in a different mode. Research problems were not a problem for me, either. I could always think of three or four on a rather simple and noncomplex exchange with a colleague or a friend and one or two just speaking with students about their own inchoate ideas for dissertations. One of the fortunate and serendipitous habits of mind that I acquired via mentoring was thinking of problems as logical syllogisms, that is, as problems of interacting “facts” which led to action, value, or

³I have always preferred Cronbach and Suppes’s (1969) definition of research as disciplined and systematic inquiry, which displays both the raw products entering into the analyses and the logical processes by which they were compressed and rearranged. While it has all the elements of what we know as science, it does not prescribe a particular formula for conducting that research; in turn, that lack of methodological prescription opens up the inquiry process and scientific research to multiple methodologies and theoretical lenses. Consequently, their definition comes closest to eschewing orthodoxy of virtually any I know.

conceptual conundra of various sorts. I “hear” problems stated differently from many of my students and try to help them see how to put problems into a context. And so I think in terms of “statements,” “interacting statements,” and “problem,” like this:

Statement 1: Schools of education are being called upon to respond to problems and situations (e.g., multicultural education, integration, in-service re-education of teachers, field-based training) that move them further from the academic setting and more closely into actual school sites.

Statement 2: University promotion and tenure systems, under the goad of decreasing budgets, declining enrollment, and the existence of large proportions of faculty already tenured or appointed at upper professorial ranks, are stressing traditional criteria of research and scholarly activity.

Conclusion (the problem): Individual professors in schools of education are faced with a Hobson’s choice: fulfill institutional responsibilities while risking personal academic careers or fulfill personal career needs while exposing their school to charges of negligence, ineffectiveness, or inattention to the serious needs of the public schools (Guba, 1978, p. 45–46).

This logical syllogism form of thinking about problems is nearly obsessive with me, and I try to make it nearly obsessive with my students because it helps them to remember that problems do not exist in nature (since Nature “solves” her own problems before they become problems, when left to her own devices) but rather are perceived by humans—a situation which gives rise to thinking scientifically in the first place. Thinking in this way has now become second nature to me, and the result has been that I have never been without researchable “problems.” That doesn’t mean, however, that life, or more specifically my career, turned out as I predicted it would or should.

On the way to working on some problems of leadership, I found a whole new set of concerns and issues: alternative paradigm inquiry. I first became interested in this arena because of an extensive background during graduate study in program evaluation. Bob Wolf, as well as Donald Coan and Egon Guba, were concerned that conventional inquiry gave rather unsatisfactory answers to questions typically addressed in program evaluations. There was frequently a difficulty in proposing sound generalizations; internal validity checks yielded shaky results at best; objectivity seemed almost impossible to achieve, given the multiple and often competing values circulating within large-scale state and Federal programs

and the competing and frequently contradictory needs and intentions of legitimate stakeholders. It began to appear that conventional inquiry was ill-suited to such a different form of inquiry as evaluation. Any proposal which promised to give equally systematic results from the inquiry effort but which also took account of the special needs of program evaluations, especially the prominent role of stakeholder values and the legitimate claims of a larger body of stakeholders than merely project managers and funders, seemed both useful and heuristic. And so it was that I got into alternative paradigm inquiry. My original intent was simply to work at proposing a form of disciplined inquiry that responded to the realities and responsibilities of program evaluators.

What followed a series of papers and my first book (Guba and Lincoln, 1981) was totally unexpected. Half of our audiences were warmly receptive and acknowledged that our proposal—naturalistic evaluation (a term borrowed from Bob Wolf)—matched their field experiences closely. The other half were appalled that we appeared to be undermining our status as social scientists and indeed, undermining science in general. The outrage was immediate and palpable. But a funny thing happened to us on the way to (what some thought was) well-deserved obscurity.

Students and workshop audiences alike for the next several years plied us with questions about the new paradigm,⁴ until it became clear that there were many issues which had not occurred to us, and questions which the inquiry community needed answered in order to be persuaded. In the process of attempting to answer these questions (and some of the best were from our students), we realized that naturalistic evaluation was really naturalistic inquiry and that an alternative paradigm was equally applicable to broader research and policy analyses, as well as evaluation processes. As we tried to codify our new understandings and record the answers our students proposed, we realized a new book was called for and *Naturalistic Inquiry* (Lincoln and Guba, 1985) got underway.

⁴We originally used the term paradigm simply because the word often denotes a worldview or philosophical system. As we extracted the philosophical assumptions behind conventional inquiry, we began to construct alternative axioms that represented the direct opposite of those behind experimental inquiry. Some theoreticians have quarreled with our use of the term paradigm, but Guba and I stand by it, and refer to philosophical systems and the metaphysics of various forms of inquiry. Our insistence on this distinction is, in part, related to the tendency of some researchers to refer to interpretive models of inquiry as qualitative and experimental as quantitative—in short, labeling the models by their predominant methods. But methods can be, and are, utilized in the service of several philosophical systems for inquiry. Thus, naturalistic inquirers can and do utilize quantitative methods, when they are the best for collecting and expressing some set of data. And experimentalists can and do utilize qualitative methods when they seem useful. Thus, labeling the paradigms by means of methods is likely confusing, misleading, and inaccurate.

Much of my amused construction of something like “a funny thing happened to me on the way to a career in leadership” is due to the persistent “call” to work on methods and paradigms, in various forms and venues. In between this work, I have tried to work on some broader higher education issues, particularly problems with promotion and tenure, and more recently, on the shifting role of institutional review boards, particularly in light of the new conservatism in research more broadly (Cannella and Lincoln, 2004; Lincoln and Cannella, 2004a,b; Lincoln and Tierney, 2005), and on scholars’ constructions of academic libraries in light of the shifts from text to digital collections and electronic data bases (Heath *et al.*, 2000, 2001; Lincoln, 2002; Lincoln, Cook, and Kyrillidou, 2005).

Nevertheless, the paradigm revolution—the same one Bill Russell said was over in 1985—has shaped my own career, my teaching and teaching interests, and the trajectory of my professional and personal life. I’m certain that had I not begun work in this arena, my life would have turned out very differently. How differently, I don’t know; but I do know that the paradigm revolution, and my chance to be in on the beginning of that revolution and act as somewhat of a theoretician in it, have been a professional blessing. And a tremendous experience, both for a young professional and for a mature one. Ongoing research on qualitative methods has forced me to think beyond what I know, and I hope it always does. Certainly, working occasionally with Egon (even in his retirement) and constantly with Norman Denzin has kept me working productively, and I trust it does until well after retirement.

What anyone could deduce from this is that continuing to work sometimes means that the search for interesting problems is less a personal search than an effort to dodge the problems that come looking for you. The lucky life is defined as being a faculty member with more interesting problems, and fascinating professional opportunities, to explore than one could research in two or three lifetimes.

The work changes over time, as someone might expect. Although as a profession, we are pressing hip, young researchers into service earlier than ever before in their careers, likely my career was more traditional than the careers of younger faculty members. My professional life unfolded slowly and over time with added responsibilities, and service requests added as I moved through the ranks and acquired some seasoning. The steady move into additional requests, service opportunities, elections, and career responsibilities (e.g., service on editorial boards, coediting journals, and the like) has given me the chance to develop skills in assessing where other, new faculty are and what they are ready for. The responsibilities of a senior faculty member have also given me the perfect chance to suggest to

new faculty opportunities for funding, publishing, and presentation which they might not have known about or been confident enough to pursue. Reading their work makes it easier to suggest publication outlets after presentation, ways in which they might shift a focus to make publication easier, or how they might turn a paper into a proposal for funding in order to pursue a topic further.

The humorous part of this all is that, as a brand-new professor myself, I thought it likely that I would not last long, I could not produce enough scholarly work to stay in the professoriate, or that if I stayed, then I would be one of those “permanently stuck” individuals who makes it to associate professor but never goes any farther. That seemed like the worst of all possible worlds to me. The upshot has been that when I mentor young faculty, it’s not enough for me to get them through that first critical promotion and tenure decision; I begin immediately, as soon as a positive decision is announced, to query them about their timetable and their research, funding, and publication plans between that day and promotion to full professor. I hound them about the progress they are making. I ask to read their proposed conference papers and their proposed journal articles. My own fears about what a career of mine might look like have created a more positive outcome for the “newbies” behind me.

CREATING COMMUNITY

Another lesson I learned, partly from my dear friend Ann Austin, is that it is sometimes within our power to live and work in the kind of community of which we want to be a part. A sense of warm and loving community is not always possible, but frequently it is. Doing what one loves—in our case, being hired to do teaching, research, and to think—is actually not much fun if one is doing it alone or in a hostile environment. Therefore, it is frequently up to us to create, to construct an environment where people care for one another, where more mature faculty are supported through their inevitable life cycle changes, health issues, and newer phenomena such as parenting one’s own parents, and where new faculty are supported, mentored, and nurtured to achieve their own dreams and potentials. Over the years, as I’ve thought about “community,” I’ve wondered about what, precisely, one can do to achieve this sense of community. While I still don’t know what creates community, what makes or breaks a sense of community, I do know some of the things that meld faculty into a sense of solidarity.

On the serious side, senior faculty have the power to make or break community. I have, unfortunately, witnessed senior faculty acting

as though the junior faculty (or women) were their enemies, and who cast the “old guard-young Turks” as a deadly battle. Nothing could be farther from the truth, of course, and it is a painful sight to see the senior generation “eating their young.” I’d rather see the younger generation as an inheritance that I have been willed. It creates a mindset where I want to tend that inheritance, see that it grows, and make certain that it remains useful and productive and enriched for a long, long time. On the positive side, I have also seen that senior faculty can come to see these young faculty as resources. Academe is not the corporate world. When one young faculty member gets promoted and tenured, no senior faculty are “laid off,” or handed an “early retirement” package. In the same way, the promotion and tenuring of a young faculty member does not mean that other, newer young faculty will not have a position. The cutthroat competition that exists in the corporate world does not exist in the same form in the academy. When we hire, unless it is for a temporary post, it means that a line is available and will remain available until the faculty member does not want to be there any longer.

My first responsibility, as a result, is to live constantly valuing the excitement, and yes, sometimes, the naïvete, of newer members of the faculty. We look for them hard, we put them through grueling interview schedules in order to make decisions, and then we finally determine whom we would like to join us. Why would we not then throw our combined weight toward ensuring that they not only survive but also thrive?

A second way of being which enhances community is enjoying the job. And finding time for laughter. Often, our new young faculty are hysterically funny, and we likely ought to take advantage of their innate stand up comic routines to laugh with them often and contribute our own hyperbolic senses of institutions of higher education as organizations to extend the wit and reduce the inevitable quotidian tensions and stresses of daily life in academies. The gifted young people we hire are far more than simply production machines for the “corporatized” academic world. They are amiable companions, good Friday night light dinner partners, and ready wits for the occasional idiocy that erupts at faculty meetings, retreats, and committee work sessions. My only regret is that I have spent too little time in these past years entertaining because I have always enjoyed informal gatherings and find meals, the sharing of food, a good time to acculturate young faculty to sound communitarian values and to listen to their complaints.

Their complaints, in fact, are an excellent place to begin. Sometimes, new young faculty don’t entirely understand why something has happened as it has. Their sense of the idiotic, or worse, the chaotic, frequently just

doesn't have a *context* or a *history*. More senior faculty can lend that sense of organizational history, having been in the department and college longer, and perhaps having been a part of the earliest decisions personally. With the long view under their belts, senior faculty can help junior faculty understand where current decisions proceed from, and how the conversations prior to some current discussion came to unfold. The histories themselves are a part of the organizational learning all new faculty members undergo; how much easier the learning goes when it goes in tandem with social and recreational events.

Senior faculty can help, too, by setting examples for what a faculty member does and how a faculty member behaves. Sometimes, senior faculty members have not always been self-conscious about the models they were exhibiting for junior faculty. Senior faculty who are conscious about the management of their public personae remember that junior faculty are soaking up cues about what a department should look like. Senior faculty show up at faculty and committee meetings, prepared and ready for a serious discussion of the issues on the table. Senior faculty prepare for class and the gossip that flows between students consistently says that senior faculty are responsive to graduate students, and solid and current in the classroom. Senior faculty often do what they have not been asked to do but which is needed, like mentoring. Senior faculty who are doing their job notice when junior faculty are struggling with something and ask how they can help. (Sometimes, it is personal, and you cannot help. All faculty have family issues, sibling issues, parent issues, and marital issues. Sometimes, we can only listen. Sometimes, the best we can do is to let the junior faculty member know we're here and available.)

Another way in which we can strive for community is to commit to our own learning. It seems that "learning communities" is one of those terms that has come into currency, and now means nearly anything that someone wants it to mean. Indeed, for some the term means a rather narrow and circumscribed group, an intact set of persons with carefully prescribed tasks to accomplish over a given time period. For me, however, the broader meaning is quite simply a community (such as a department) that is dedicated to seeing that each of its members finds ways and enablers to learn, to grow. The senior faculty can model this ongoing learning process both by their own research processes and by providing venues, such as reading groups around thematic areas in which graduate students can join them in this effort. In this way, faculty continue their own learning, but graduate students are also trained to engage themselves and others in the labors of learning.

In some ways, the community we want is frequently within our reach. We have to want it, however, very much, and be willing to work at it on a daily basis. Community is one of the great benefits of an academic life; to fail to find it, to fail to work for it, to give up on having that community seems a great waste of the possibilities. Indeed, we cannot convince our own students of the value of learning communities if we do not, ourselves, work at creating one among both senior and junior faculty.

Since this is my professional story, let me be upfront about my own efforts at community. First, I'm better at working at it than I was 30 years ago. But second, good at it or not, I have always had the blessing of good friends, a community of wonderful people to cherish and care for, and an "invisible college" of friends with talent, brains, and wit. How lucky can any one woman be? Over the years, my community has included some folks who have been there for nearly all the 30+ years of my career; some folks who are relatively new friends; some former students; and some of my best friends' students. The group grows, the love and caring grows.

PAY IT FORWARD

My background may or may not be like that of others of my colleagues. I was raised in a household that would today be described as fundamentalist. We were not, I think, like what folks think of as fundamentalist today; I was most assuredly not raised in the tradition that we see expressing itself in a variety of discriminatory policies, regulatory votes, or hate speech today. One tenet of my particular faith was that when one is granted blessings—whether in the form of riches, or jobs, a successful business, a prosperous farm, a successful career, or other mark of the favor or hard work in life—s/he owes something back to the community. It is not a bad ethic, and it is a good teaching for service later in life.

There is often no way we can repay the many kindnesses or help given to us early in our careers. The only way to give back is to pay it forward, to give to those coming behind us. This is where mentoring comes in.

Christine Stanley and I were talking with Egon not long ago, and bemoaning the fact that while we mentor new young faculty whenever and wherever we are deemed useful to them, we wondered why some other faculty do not mentor anyone. We never regret mentoring but are conscious that mentoring takes many forms at different times in the mentee's career, and others might contribute different kinds of mentoring to the mix. Egon asked, "Do these folks know how to mentor? How, exactly,

do you learn how to mentor?” It had never occurred to either Christine or me that perhaps individuals don’t mentor because they never learned how. Perhaps they were not mentored themselves. Perhaps they were mentored but in ways which they found not very useful, and consequently, they became discouraged with the process. Perhaps an earlier experience with mentoring attempts left them rebuffed. Perhaps they simply never learned how to support others as partners in the enterprise. For whatever reason, they never learned how to mentor effectively. They never learned how to tailor their help to what the young faculty express a need for. They never acquired the skills to respond to requests for help or to recognize when a young faculty member needed help but was too confused or frightened to know how to ask for it.

As a part of most research institutions today, the role of mentoring—of paying it forward—is widely touted. Indeed, senior faculty, associate deans, and chairpersons are encouraged and rewarded for “adopting” one or more junior faculty and helping them to establish sound research lines, steady publication and writing habits, and solid classroom teaching skills. Workshops are offered in grant writing and proposal preparation. The editors of journals are rounded up to pass along their experience regarding how to handle reviews, resubmissions, and rejections, as a way of creating positive responses to the experiences all of us have over the years. Centers for excellence in teaching offer, on an absolutely free basis, tutoring in lecture preparation, design of laboratory and clinical experiences, as well as group work, help with constructing midterms and final exams, assistance in the preparation and maintenance of teaching portfolios, and a variety of other services.

Nothing quite supplants the friendship, the collegueship, the attention of a mentor, however. What the books and articles never tell you about mentoring is that individuals cannot be “assigned” to mentor. Mentoring is a relationship—a friendship created out of shared experiences and time spent together and one person’s caring for the success and joy of another. Centers and workshops can support the work of a mentor, but they can’t substitute for it. The simple communication that we cared enough to bring you here, and we care that you succeed and stay is worth more than gold.

It’s not just one’s own faculty and colleagues that senior faculty can support. Sometimes, those mentored by our friends and colleagues at other institutions also need support of one kind or another. Perhaps they work in an area that is one of our own areas of interest or specialization. Or they want advice that their own dissertation advisors or colleagues don’t seem to be able to give. The job of listening to young faculty doesn’t

necessarily end at our own institution's geographic boundaries. Sometimes, we are asked for advice or counsel outside of our own institutions. My own experience has been that senior faculty from many institutions were willing to help me, to give advice, to chat about something I didn't understand, and to extend my working context. Bob Birnbaum, David Leslie, Vince Tinto, Mary Corcoran, Shirley Clark, and dozens of others supported me as a young faculty member; I think of them as some young person asks me for advice, for my sense of competing job offers, or for advice on coauthoring, publication outlets, or tasks they are being asked to take on. I'm not always helpful, but I try to remember the help I was so freely and often cheerfully given, and give back.

AND THE STORIES I COULD TELL . . .

The story of my life is somehow much more interesting than this must seem to readers. There are many stories I could tell, some of them which touch my heart still, some of which make me chuckle with laughter. Yet, I have always found that stories go better with a quiet drink in the late afternoon, after a long day of sessions and committee meetings. They lose something in the abstract and distant realm of ink and paper, of black and white. I could talk about salsa lessons alongside Millie Garcia in a session in Pittsburgh, and Millie's cheering me on to learn new steps. I could talk about Bob Birnbaum's funny/sad story about playing with Isaac Stern conducting in the Milwaukee symphony, and how the story got me through the toughest public speaking I ever did. I could talk about difficult Board meetings, and listening to senior folks figure out how to pull ASHE's financial bacon out of the fire. I could talk about evening sails around Coronado Island and meeting new people. Or I might talk about the incredible conversations around governance at Bill Tierney's small forums and roundtables in Santa Fe.

Somehow, though, those stories seem less alive when I write them, and far more joyous and sometimes rollicking when I tell them, so I am leaving them out. The most important lesson for me remains that after a long hard day, after a lot of hard work, after coordinating and collaborating and trying to get the job done, there is always some time for laughter, for swapping stories, for picking up someone else's piece of the history. It is hard for me to imagine anything else I might have done with my life that would give me more pleasure or satisfaction. This life is a gift and a blessing, and I have been the most fortunate of women to have enjoyed it all.

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2. MANDATED OPENNESS AND HIGHER-EDUCATION GOVERNANCE: POLICY, THEORETICAL, AND ANALYTIC PERSPECTIVES

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Openness is a cherished value, if problematical practice, in the governance of public-sector institutions in the United States. Although the nation enjoys a long tradition of espoused commitment to the principle of “open government,” legal guarantees of citizens’ *right* to information about their government are a relatively modern creation. In the American states, these guarantees prominently take the form of open-meeting and records laws.¹ Often known as *sunshine laws*, these provisions became widely institutionalized in state statute during the 1960s–70s, when, amidst the Vietnam War, the Watergate scandal, and other widely publicized episodes of corruption at the state level, public confidence in governmental institutions and leaders plummeted. Although these laws vary in form from one state to the next, they share a similar purpose—to make public bodies more transparent and accountable by providing citizens with reliable access to and knowledge about the conditions and deliberations of those bodies.

Every state in the nation today mandates governmental openness through the device of sunshine laws. These laws exert substantial influence on the nature of decision making within the public sector. In the context of *higher education*, sunshine laws help serve the ends of public accountability, academic honesty, fiscal soundness, institutional effectiveness and efficiency, and procedural and outcome equity in decision making. Because of these diverse goals, sunshine laws affect virtually every area of campus functioning: board deliberation, presidential search and selection, research and intellectual property issues, budget decisions,

¹ Congress, in 1965, passed the Freedom of Information Act, the nation’s first *federal* open-meeting statute. While the Act represents a landmark development in the evolution of the public’s-right-to-know, we restrict our focus in this chapter to mandated openness in the states.

resource allocation, business transactions, investments and financial holdings, university foundations, and athletics.

Yet mandated openness in public higher education also produces sharp tensions around a set of competing societal values and goals. In the last national study of legally compelled openness in higher education, published 20 years ago, Cleveland (1985) memorably characterized the tensions as posing for society a *trilemma*. Cleveland meant that sunshine laws, when applied to higher education, create conflict among three desirable societal objectives: ensuring the accountability of publicly owned, governed, and financed institutions; protecting individual privacy rights; and providing institutions the autonomy they need to achieve their public purposes. Cleveland argued that ensuring accountability—the chief rationale asserted in support of sunshine laws during their rapid expansion in the states—acknowledges but one of these obligations. The protection of individual privacy rights is a second important consideration. A third, and perhaps the most vexing of the three societal aims, however, involves the special mandate of higher-education institutions to effectively, efficiently, and equitably achieve their manifold public purposes. As distinctive organizations² possessing formally delegated authority from legislatures (Yudof, 1983), public colleges and universities bear certain responsibilities that are different from and more varied than those of most other state agencies. Sunshine laws, while clearly serving other laudable societal ends, sometimes can interfere with the ability of higher-education institutions to fulfill their mandate. It is the need for balance among these competing tensions—accountability, privacy, and autonomy—that makes mandated openness in public higher education especially complex and contentious.³

Policymakers today are paying increasing attention to openness issues in public higher education. This increased awareness springs from

² The features that distinguish higher-education institutions from most other state agencies are professional bureaucracy, academic freedom, tenure, shared governance, loose coupling, and appointed, multimember governing boards (Goodsell, 1981; Mintzberg, 1991). See Sherman's (2000, pp. 678–679) discussion of court decisions upholding the principle that state universities are not like any other state agency and should not be treated as such.

³ Although this tension may be especially acute in higher education, analysts have noted its presence in virtually all public settings. One recent analysis framed the problem as follows: "There is an inherent tension between open government on one hand, and government efficiency on the other. Government can become exceedingly efficient when not burdened by the requirements of state sunshine laws, but such efficiency can be both undemocratic and contrary to the public's interest. At the other extreme, notions of open government for the sake of open government, while sounding nice in the abstract, can easily create paralysis in local government, with public officials unable to coordinate with each other in a way that promotes, not retards, the public's interest in good government" (O'Connor and Baratz, 2004, p. 721).

a variety of conditions: intensified critiques of institutional governance; changing fiscal conditions in the states; increasing attention to accountability for public spending; new electronic technologies; emerging threats to campus and public security; and evolving institutional arrangements for funded research, technology transfer, and corporate support. Consequently, many states in recent years have altered their legal requirements mandating openness in public colleges and universities. Although some of these changes have enhanced the climate for openness, and others have detracted from it, keen observers on all sides have noted the potentially profound implications of the changes for both public higher education and American society.

In this general climate of reform, it seems important to explore the laws at the heart of the public compact with higher education, those that promise transparency in the workings of public colleges and universities, and to examine some of the implications of mandated openness for institutional governance. The remainder of the chapter provides such an examination. First, we examine the evolution of mandated openness in public-sector organizations, chart differences among the states in their legal climates for openness, and describe various contemporary conflicts that surround the application of the laws to public higher education. We then discuss select major findings from our own recent study of sunshine laws and public higher-education governance. Turning next to various avenues of theory and research in the policy and organization literatures, we identify a series of orienting questions and conceptual approaches with which to frame future study on mandated openness in higher education. Finally, building on the distinct advantages that American federalism affords, we propose several analytical alternatives for conducting future research on this topic.

MANDATED OPENNESS: ORIGINS, EVOLUTION, AND DEMOCRATIC UNDERPINNINGS

Although the concept of *open government* dates to this nation's founding, its practice is largely a 20th-century phenomenon whose origin lies in the American states. Over two centuries ago, prominent framers of the U.S. Constitution argued eloquently for public access to meetings and information held by governmental bodies, perhaps the most famous such being James Madison's pronouncement that, "A popular government, without popular information, or the means of acquiring it, is but a Prologue to a Farce or a Tragedy; or perhaps both" (Madison, cited in Hunt, 1910). Thomas Jefferson also advocated public admission to

meetings as a check on government's power and as a means for ensuring the propriety of government action (Pupillo, 1993; Sunstein, 1986). Yet delegates to the Constitutional Convention in 1787 chose to conduct their deliberations in secret, believing that "so great were the difficulties encountered from the divergent sentiments and interests of different parts of the country" that public knowledge of the ongoing debates would imperil their work (Bryce, 1891).⁴ With the precedent set, committees of the U.S. Congress and of the several state legislatures subsequently conducted much of their business in closed session, as did most public agencies. Some advocates of the public's "right to know" over time have pointed to first amendment guarantees of free speech and a free press as the basis for a constitutional claim to open government, but generally courts have rejected these arguments (Bensabat, 1982; Sunstein, 1986).⁵ Thus, while the United States has a long history of public distrust of government that operates behind closed doors, throughout much of the nation's history government nonetheless was permitted to do so. This pattern of generally *closed government* endured well into the late 19th century, when Utah pioneered legislation requiring public access to some public bodies.

Utah's 1898 statute required that city councils "sit with open doors." In a 1908 case interpreting that statute, the Utah Supreme Court discussed the emphasis the law placed on ensuring that the entire process of decision-making be open to the public:

The purpose was not that the public might know how the vote stood, but the purpose evidently was that the public might know what the councilmen thought about the matters in case they expressed an opinion upon them. Moreover, the public have the right to know just what public business is being considered, and by whom, and to what extent it is discussed.

(O'Connell, 1980, p. 835)

Over time, however, subsequent court interpretation limited the scope of Utah's statute (O'Connell, 1980). In 1905, Florida enacted the nation's

⁴Jefferson regretted the closing of the Convention. He wrote, "Nothing can justify this example but the innocence of their intentions, and ignorance of the value of public discussions" (Sunstein, 1986, p. 896, quoting a letter from Jefferson to John Adams, August 30, 1787). See Sunstein's (1986) analysis of the implications of Jefferson's and James Madison's conceptions of the function of the first amendment for public access to government information.

⁵Nevertheless, press freedom was a matter of intense concern to the framers of the First Amendment, who conceived of the press as a structural bulwark against government tyranny (Dyk, 1992). Indeed, Anderson (1983) contends that protection of the institutional press was far more important to the framers than protection of speech.

second such openness legislation, requiring all city and town meetings in the state be open to the public. This law, too, was deemed largely ineffective because the statute's narrow literal scope and subsequent limitation by courts left most governmental activity impervious to public inspection (Barnes, 1971). Thus, by the early 1900s, only two states legally mandated openness of meetings or information held by governments, and in both cases the laws provided the public with only modest access.

This condition changed rapidly beginning in the middle of the 20th century. In 1950, the American Society of Newspaper Editors undertook a national campaign aimed at remedying "domestic news suppression" (Cross, 1953). Among the objectives of the campaign was a vigorous initiative to make the meetings and records of state governments more open to the press and general public.⁶ The close cooperation of various civic groups and media organizations in lobbying state officials for legally mandated openness of public bodies paid dividends: in 1953, New Mexico and California became the first states to adopt comprehensive open-meetings laws. New Mexico's statutes required that all final decisions of all governing boards of state or local subdivisions supported by public funds be made at public meetings. California's Brown Act, which initially was limited only to local governments in that state, contained similar provisions (Barnes, 1971). Within the span of a decade, by 1962, 26 states had enacted open-meeting and records legislation (Open Meetings Statutes, 1962).

Yet, many of these early legislative successes were neither immediate nor uniform. Between 1957 and 1962, bills mandating openness in public-agency deliberations failed to achieve final passage in 16 states (Open Meetings Statutes, 1962). In states where legislation occurred, passage usually resulted only after successive legislative defeats. In Massachusetts, for instance, the legislative impetus for open government began in 1955 when bills providing for an open-meeting law were filed in both the House and the Senate. After three years of hard-fought incremental gains, proponents produced the state's first open-meeting act in 1958 (LaBelle, 1990). The Florida Legislature debated sunshine bills in every one of its sessions from 1957 until 1967, when the state's landmark "Government in the Sunshine Law" was enacted (Barnes, 1971). Incredibly, the Tennessee General Assembly first began the debate on openness legislation in 1957, but another 17 years passed before it adopted the state's Open-Meeting Act, which, when finally enacted in 1974, became recognized by several

⁶Other goals included the admission of photographers to courtrooms, television and radio coverage of the U.S. Congress, and fewer closed Congressional committees (Cross, 1953).

national organizations as the nation's best such law (Adams, 1974; Hollow and Ennis, 1975; Wickham, 1975).⁷

The Watergate scandal and similar, widely publicized episodes of malversation and outright illegality at the state level propelled a new wave of sunshine legislation in the early 1970s.⁸ During this period, professional journalism organizations, citizen advocacy groups, and politicians campaigning on good-government platforms often championed open-meeting and records laws as a remedy to government corruption. Texas, for instance, passed its Open Records Act in 1973 as a response to the "Sharpstown" scandal, which had resulted in the indictments of two-dozen high-ranking state officials for bribery and fraud and ultimately brought down the state's governor, attorney general, and top legislative leaders (Kinch, 2005).⁹ By 1976, when New York adopted its Open-Meetings Law, all 50 states had enacted comprehensive openness legislation.

As this history suggests, state sunshine laws are in the broadest sense products of public concern over the ways public officials make decisions. Throughout the 20th century, proponents of mandated openness advocated the laws as a mechanism for rendering state governments more accountable to citizens.¹⁰ Advocates rationalized these accountability linkages in several different ways. For example, some proponents extolled sunshine laws as a logical manifestation of America's pluralist democratic tradition: the laws would serve as a check on governmental power by

⁷ The laws often ran into difficulty over the question of whether legislatures should be exempt from openness requirements. In some states, legislative reforms eased passage of languishing sunshine bills. For example, by the early 1970s, the Tennessee legislature had amended its own rules providing that all committees be open to the public. Thus, the legislature's objections of 1957, concerning whether its committees should be required to meet publicly, were no longer an impediment to broader sunshine legislation, which passed in 1974 (Hollow and Ennis, 1975).

⁸ Analysts have also documented how a complex interplay of social and political forces in some states led to the laws' adoption (Barnes, 1971; Open Meetings Statutes, 1962; Pupillo, 1993). Barnes (1971, p. 361), for example, notes that in the years preceding the enactment of Florida's sunshine laws, reapportionment of the legislature had increased the representation of the urban centers in central and south Florida. "These representatives," Barnes writes, "were more sensitive to the influence of the media than the rural legislators who dominated the legislature before reapportionment. The media's active endorsement of the measure helped convince the legislators of the popularity of an open meeting law," providing impetus for its passage.

⁹ In some states, deliberations on sunshine bills uncovered questionable practices that boosted support for legislation. In recounting the history of Florida's laws, Barnes (1971) notes that officials of one state agency testified against the laws' enactment because the agency sometimes employed "convicted felons, known drug addicts, or [those] otherwise unqualified for state employment," and wished that these practices not be exposed (pp. 361–362). Appalled at the revelations, the bill's proponents then pointed to the testimony of the agency officials as evidence of the need for comprehensive openness legislation and demanded that agency personnel matters also be covered under any such legislation.

¹⁰ Not all observers accept the premise that increased openness is an unalloyed public good. See Huefner (2003), Rossi (1997), and Tucker (1980) for critiques of the laws in certain settings.

setting the press and public-information advocates against governments and their agents, thus ensuring that the power that information brings remains broadly accessible by different interests within society (Cross, 1953; Yudof, 1983).

Proponents of openness legislation also claimed that the laws would make public officials more accountable *directly* to citizens. Armed with information about their government, citizens would be able to make informed judgments about their political leaders and institutions. By compelling disclosure, proponents argued, sunshine laws would permit citizens to better gauge whether officials were adequately representing their interests. Having made these determinations, citizens would then be able to weigh whether their representatives should be returned to office, or new ones should take their place. One early analysis of mandated openness characterized the reasoning as follows: “The people must be able to ‘go beyond and behind’ the decisions reached and be apprised of the ‘pros and cons’ involved if they are to make sound judgments on questions of policy and to select their representatives intelligently” (Open Meetings Statutes, 1962, pp. 1200–1201).

Finally, openness advocates argued that the laws would help to promote good public policy. Governments, they asserted, are likely to be more responsive to public preferences when officials are able to ascertain clearly the preferences of citizens. Hence, sunshine laws would serve the ends of good policy by providing officials with information about the “real-world” conditions of concern to citizens, which officials could then utilize in developing solutions to pressing public problems (Cross, 1953; Open Meetings Statutes, 1962; Yudof, 1983).

Most states’ public-information laws contain language, the so-called public policy statements, reflecting the democratic purposes that the authors of the statutes had intended these laws to serve. Although such statutory declarations vary in length, strength, and poetic disposition (Schwing, 2000), the statements are important because they express the intent of the legislature and often specify that the laws should be liberally construed.¹¹ For example, the preamble to California’s sunshine legislation of 1953, parts of which numerous other states copied verbatim when crafting their own laws, proclaims:

It is the public policy of this state that public agencies exist to aid in the conduct of the people’s business and the proceedings of public agencies be conducted openly so that the public may remain informed.

¹¹ See Schwing’s (2000) review of the policy statements accompanying open-meeting acts.

In enacting this article the Legislature finds and declares that it is the intent of the law that actions of state agencies be taken openly and that their deliberations be conducted openly.

The people of this state do not yield their sovereignty to the agencies which serve them. The people, in delegating authority, do not give their public servants the right to decide what is good for the people to know and what is not good for them to know. The people insist on remaining informed so that they may retain control over the instruments they have created.

A somewhat bolder proclamation characterizes the Texas statute, adopted in 1973:

Pursuant to the fundamental philosophy of the American constitutional form of representative government, which holds to the principle that government is the servant of the people, and not the master of them, it is hereby declared to be the public policy of the State of Texas that all persons are, unless otherwise expressly provided by law, at all times entitled to full and complete information regarding the affairs of government and the official acts of those who represent them as public officials and employees. The people, in delegating authority, do not give their public servants the right to decide what is good for the people to know and what is not good for them to know. The people insist on remaining informed so that they may retain control over the instruments they have created. To that end, the provisions of this Act shall be liberally construed with the view of carrying out the above declaration of public policy.

THE CONTEMPORARY LANDSCAPE OF OPEN GOVERNMENT

Broad national characterizations of the laws' democratic purposes hide much substantive differentiation at the state level. Indeed, there is remarkable state-by-state variation in the contemporary landscape of open government. For example, while open-meeting statutes commonly include a description of the governmental bodies required to hold open meetings, a definition of the term *meeting*, a description of the procedural requirements of the law, and an itemization of specific exemptions and remedies for violations of the law, the specific provisions of the laws vary considerably along each of these various dimensions (Pupillo, 1993; Schwing, 2000).¹² Schwing (2000) in fact, observes that while virtually

¹²Schwing's (2000) analysis identified nine dimensions along which these laws vary: definitions of entities subject to the law; mechanical details; definitions of meetings, quorums, deliberations, and

all open-meeting statutes list some of the governmental bodies covered by the act, the laws utilize different tests to define precisely which bodies may be subject: some states identify bodies subject to the law by the manner of the bodies' creation; other states identify the bodies subject to the law by their receipt or disbursement of public funds; still other states identify bodies subject to the law by the public nature of the power and duties of the body. Thus, the laws vary significantly in terms of their applicable scope. Additionally, while all statutes include a provision requiring governmental bodies to notify the public regarding the date, time, and location of a pending session, such provisions vary with respect to the minimum number of days or hours that notice must be posted, as well as the manner in which posting must occur. Likewise, all open-meeting laws contain exemptions permitting public bodies to conduct closed sessions under certain conditions, e.g., matters related to personnel evaluations, collective bargaining, real-estate transactions, and litigation. Yet the number, nature, and scope of these executive-session privileges vary from one state to the next. Open-meeting statutes also vary in the remedies they provide for violations. Some statutes stipulate only civil penalties with fines ranging from as little as \$10 to \$5,000;¹³ other statutes provide both civil and criminal penalties (usually misdemeanor offenses), which may range from a few days to one year in jail. This pattern of complexity and variability also characterizes state open-records laws.

Given these differences in the laws, analysts over time have developed typologies that attempt to portray the relative legal climates for governmental openness across the 50 states (Adams, 1974; Cleveland, 1985; Iorio, 1985).¹⁴ The typologies measure the comprehensiveness of state sunshine laws in each state along various dimensions, and rank the 50 states on the basis of these openness "scores." For example, Adams, in 1974, classified the states using 11 unweighted criteria for openness. A decade later, Iorio (1985) replicated the Adams study, drawing a series of conclusions about trends in the comprehensiveness of the laws over the previous 10-year period. Notably, Iorio found a trend toward open-meeting laws that allowed greater access to government and provided stiffer penalties for noncompliance, but she also documented a decline in the number of states whose laws forbade executive sessions.

voting; executive-session exemptions; remedies; cures; defenses; prescribed processes of litigation; and stipulations for attorneys' fees, defense arrangements, and reimbursement.

¹³ Under Wisconsin law, for example, the penalty for violating the open meeting law is a fine of \$25 to \$300 for each official who attended the meeting; the fines must be paid personally.

¹⁴ It is worth noting that these classifications do not capture how open the states are in practice; rather, they measure only the extent of formal legal requirements in a given state.

Also in 1985, Cleveland published his “spectrum of openness” that classified and ranked the states based upon 25 attributes of their sunshine statutes.¹⁵ Although the Cleveland and Iorio studies consistently identified two states—Tennessee and Florida—as exhibiting relatively great openness under the law, they demonstrated little agreement in their ranking of many other states.

Although these typologies and rankings afford useful insights into the status of sunshine laws at particular moments in the laws’ evolution, ultimately their value may be limited because many states have altered substantially their requirements for governmental openness over time.¹⁶ Indeed, one distinguishing feature of the contemporary landscape of state sunshine laws is the frequency with which legislatures in recent years have debated the laws’ amendment. Since the mid 1990s, lawmakers have revised open-meeting and records laws—or seriously debated doing so—in almost every state of the Union. Particularly high-profile episodes have taken place in California, Georgia, Illinois, Kansas, Maine, Mississippi, Missouri, New Jersey, North Carolina, North Dakota, Pennsylvania, South Dakota, Texas, and West Virginia.

Many openness advocates, and some legal analysts, claim that recent statutory revisions have eroded the effectiveness of public-information laws nationally (Davis, 1994; Ismach, 2000; Kallestad, 2003; Kjos, 2002; Pupillo, 1993).¹⁷ They point, for example, to numerous exemptions that have been carved into records statutes as evidence of diminishing governmental openness. The cases of Florida and Tennessee—states whose

¹⁵ Because of the prominence of Cleveland’s work, we believe it is useful to list the criteria Cleveland used in developing his ranking. These criteria were as follows: whether the law contained a policy statement; permitted exemptions for individual bodies; required all final actions be made in open meeting; required discussion be held in open meeting; permitted information gathering in open meeting; required committee meetings be open, advisory boards be open, informal meetings be open, quasi-judicial meetings be open, meetings of local entities be open, and subquorum meetings be open; permitted involved parties to request openness; required minutes of closed meetings be maintained; provided for criminal penalties; excluded all exemptions; excluded exemptions for personnel, employment, property, financial, legal, labor negotiations, and security matters; and provided enforcement provisions.

¹⁶ Recently, researchers with the Citizen Access Project at the University of Florida developed a sevenfold rating system of “weather categories,” ranging from “sunny” to “dark,” with which to classify 30 dimensions of state open-meeting and records laws nationally. These ratings are updated frequently and available via the Internet (<http://www.citizenaccess.org/>), thus overcoming some of the limitations plaguing earlier classification schemes.

¹⁷ The climate for openness in a state may be influenced by resource constraints, in addition to formal changes in the law. For example, Hawaii’s Office of Information Practices, which provides legal advice to public bodies on the applicability of sunshine laws, experienced budget cuts that decreased its size from 15 staff members in 1995 to 8 in 2005. These cuts created backlogs that undermined the office’s capacity to ensure compliance with the law (Lee, 2005).

laws were once lauded as model statutes—are revealing. The Florida legislature passed 15 bills creating new exemptions to public-records laws in 2001 and another 10 bills in 2002; in 2003, Florida legislators considered an additional 35 records exemptions (Kallestad, 2003). In Tennessee, the General Assembly has adopted more than 200 exemptions to the state's open-meeting and records laws since those laws were originally enacted (Alligood, 2004). Executive-session exemptions have proliferated in other states, too, prompting observers to lament that too much of the public's business now is being conducted behind closed doors (Benson, 2003).

Although many of these new exemptions have arisen from reasonable concerns for protecting the privacy interests of citizens (e.g., consumer privacy, crime-victim identity, and student and employee disciplinary records),¹⁸ public-information advocates counter that increasingly parties are using these otherwise legitimate concerns for privacy as “cover” in rolling back openness to suit their own proprietary interests (Ismach, 2000).¹⁹ Openness advocates also point to what they view as reduced access to records relating to matters of alleged public security. In the wake of the “9/11” attacks, many states began restricting access to information deemed to have implications for public safety. In Florida, the legislature in 2001 and 2002 banned public access to information on certain pharmaceuticals stockpiles, security plans for state-owned property, and crop-duster aircraft—for fear the planes might be used in acts of terrorism. Similar bills have been proposed recently in Idaho, Maryland, Michigan, Minnesota, Missouri, Oklahoma, and Washington, prompting concerns that the public's right to know is being substantially dismantled in the name of public security (Kjos, 2002).

Openness advocates point disturbingly also to the results of statewide openness “audits,” which in many states have highlighted pervasive problems of noncompliance with sunshine laws by certain government agencies.²⁰ For example, campaign organizers in Rhode Island in 2003 sent identical records requests to 137 state agencies, departments, commissions, and school districts seeking a complete listing of employees, their job titles, and salaries as provided under law. The audit documented

¹⁸ Municipal leagues, state school board associations, and state associations of district attorneys have been particularly active proponents of these exemptions.

¹⁹ One senate bill in Florida in 2002 would have closed off public utility records, ostensibly to protect against identity theft. Critics alleged, however, that the real push for this exemption came from public utilities seeking to shield their customer base from competitors (Assaults on Sunshine, 2002). In 2003, the legislature considered bills that would have prevented public access to reports of catastrophic mistakes by doctors or pharmacists (Kallestad, 2003).

²⁰ These audit campaigns typically are led by coalitions of press associations, nonprofit public watchdog groups (e.g., local affiliates of Common Cause), and university-affiliated researchers.

“widespread noncompliance” with the requests by many of those public agencies (Fitzpatrick, 2003). A similar survey conducted in Alabama in 2003 found “widespread ignorance” of the open-meeting and records laws in that state (Weaver, 2003).²¹ An audit of records accessibility in 95 Tennessee counties in 2004 found that government workers “routinely” denied auditors access to records of schools, planning departments, and law enforcement agencies, which should have been available under sunshine law (Alligood, 2004). An Ohio audit conducted in 2004 found that agencies complied with records requests as required by law only about one-half of the time (Reporters Committee, 2004a). Since 1999, similar audits and surveys have been conducted in at least 31 states, including Arizona, California, Connecticut, Colorado, Florida, Illinois, Indiana, Maryland, Minnesota, New Jersey, Texas, Washington, West Virginia, and Wisconsin (Open Records Surveys, 2005).

Despite ongoing concerns in some states concerning noncompliance with routine records requests and a pattern of proliferating exemptions to open-meeting and records laws in other states, evidence is inconclusive of a trend toward a general weakening of openness nationally. Indeed, many states have strengthened, rather than weakened, their legal requirements for openness. Writing more than a decade ago, Pupillo (1993, pp. 1177–1184) concluded that legislatures recently had strengthened open-meeting statutes by (1) broadening the applicability of the laws to encompass more public bodies, (2) narrowing statutory exceptions to the laws, and (3) adding stiffer penalties for violations. More recent legislation provides additional evidence along these lines. In 2003, for example, Illinois became the first state to enact a “verbatim record” bill, requiring public bodies to keep a precise record of executive-session proceedings that a court might review privately when ruling on a potential violation (Reporters Committee, 2003). In 2004, Kansas, Maine, Missouri, and South Dakota also enacted changes to their laws that enhanced the climate for openness in those states. Kansas’ new law requires the release of documents relating to the “character and qualifications” of any person appointed to fill a vacancy in an elected position and permits those who successfully sue against the wrongful denial of public records to recover attorney’s fees (Reporters Committee, 2004b). The Maine legislation, which

²¹ Ignorance of the laws is not limited to state officials. A 2002 poll conducted by University of Florida researchers to gauge public knowledge of the laws in the state found that more than 81% of respondents did not know the requests do not have to be made in writing, 58% did not know that citizens are not required to explain why they want the information requested, and 70% did not know that citizens do not have to present identification to obtain the requested information (Gailey, 2002). Similar surveys have been conducted in Washington (<http://www.washingtoncog.org/news/nr221.html>), and elsewhere.

the state press association characterized as “the broadest package of public access reforms in the 45-year history of Maine’s Freedom of Access Act,” established a criteria and an annual review process by which to evaluate the appropriateness of existing records exemptions, reduced the time-frame within which agencies must respond to records requests and the costs they may charge requestors, and commissioned a body to examine how well state agencies are enforcing disclosure laws (Reporters Committee, 2004c). Missouri’s law also reduced the copying fees that agencies are permitted to charge those who make records requests, increased the maximum fine for sunshine-law violations to \$5,000 (a fivefold increase), specified requirements for the posting of notice for meetings conducted electronically, and lowered the standard of proof required to demonstrate whether a party has broken the law (The Missouri Bar, 2004). Finally, the South Dakota law created a special state commission to review openness complaints and to publicly scold officeholders who are found to violate the law (Brokaw, 2004).

In summary, the contemporary landscape of sunshine laws is one marked by much variability in the nature and scope of the laws across the states, volatility of the laws over time, and ambiguity concerning the existence of trends toward a general weakening or strengthening of the laws nationally.²² This general climate of variability, volatility, and ambiguity holds important implications for the manner in which openness in public higher education is mandated throughout the nation.

MANDATED OPENNESS AND HIGHER EDUCATION: LEGAL PATTERNS AND CONTEMPORARY FLASHPOINTS

Because sunshine laws differ from one state to the next, the specific applications of the laws to higher-education institutions also vary across the states, as they have varied over time (Cleveland, 1985; Schwing, 2000; Sherman, 2000). Each state has its own version of the laws affecting educational institutions, and often, application of the laws to colleges and universities varies within states by system or by sector. In a few states, sunshine laws are partly or wholly specific to the system at hand. For example, the flagship universities of California, Michigan, and Minnesota

²²Even indicators such as change in the number of open-meeting and records complaints filed annually can be open to interpretation. For example, the Texas attorney general’s office issued 10,747 rulings on open-government issues in 2003, a 25% increase from 2002 (Abbott Fighting Ignorance, 2004). Whether the increase can be attributed to a growing propensity for misbehavior by public officials, to increased awareness by citizens of legal recourse, to more vigorous enforcement by the attorney general, or to a combination of the factors is unclear.

have a form of constitutional autonomy not provided to other universities in the same state and are therefore exempted from certain openness obligations that are incumbent upon the other institutions.²³ In some states, private universities that receive public funds, such as Cornell University and Syracuse University, at times have been deemed to be covered by sunshine laws (Cleveland, 1985). Another form of differentiation may be found in the application of sunshine laws to vocational postsecondary institutions, which sometimes are covered under the laws for K-12 education. Additionally important are variations in the “depth of coverage” of the laws—that is, how deeply within the university organization openness laws may apply.²⁴ At one extreme lies Florida, where committees, subcommittees, and even advisory boards must be open to the public. At the other extreme, according to Cleveland (1985, p. 133), is the “closed state of Pennsylvania, [where] only meetings of the Board of Regents must be open.” Of course, the actual climate of openness depends not only on the letter of the law but also on the context of compliance within a given state. Thus, the distinctive historical, cultural, and political contexts in which sunshine laws are fashioned and enforced serve as another source of differentiation in the concept and practice of mandated openness in higher education.

One commonality among the states, however, is the frequency with which disputes involving higher-education institutions have catalyzed efforts to amend state sunshine laws. For example, a running controversy between the University of North Carolina (UNC) and the North Carolina Press Association in the late 1990s centered on whether the state’s sunshine laws should be changed to make confidential the proceedings of faculty and student committees that advised the UNC chancellor, to seal alumni and donor records, and to restrict access to the chancellor’s office mail (Kirkpatrick, 1997a). This dispute inspired a series of legislative proposals that could have reshaped the nature of public access to meetings and information held by all public agencies in North Carolina—not merely those of public colleges and universities. One news account characterized the conflict as having had potential to “unravel 20 years of gains and balance in the laws that govern open meetings and public records” in that state (Kirkpatrick, 1997b). Controversies involving higher education have stirred disputes of comparable scope and magnitude in many other states.

²³ Cleveland also cites Massachusetts, Virginia, and Wisconsin as states where the laws once had been applied less rigorously to public universities than they had to other agencies.

²⁴ The question of depth of coverage of the law tends to be determined by courts on a case-by-case basis, rather than under statute proper (Cleveland, 1985, pp. 133–134).

Clearly, the one openness issue in higher education that has generated more conflict, litigation, and editorialization than any other is the presidential search and selection (Estes, 2000; McLaughlin and Riesman, 1985, 1986; Sherman, 2000).²⁵ Although a variety of complex issues are at stake in the application of sunshine laws to presidential search processes, the major dilemma for policymakers is how best to balance the demand for accountability with the need of institutions to be able to recruit highly capable leaders. Thus, states must weigh the following questions: When, in the search for and selection of a new college or university president, should citizens gain access to search proceedings? Is the public interest well served when search committees are compelled to reveal the names of all applicants and nominees for a presidency, or should only the names of finalists be disclosed? When should those names be disclosed? To what extent do the benefits of attracting experienced candidates—benefits alleged to result when candidate confidentiality is protected—warrant restrictions on the public's right-to-know? Does the use of executive-search firms to assist institutions in their search for new presidents enhance the effectiveness and efficiency of searches, or shirk accountability by permitting outside parties to evade openness requirements, or both? Under what conditions do the availability of more information impede rather than advance the public interest?

High-profile litigation over presidential searches in public higher education are good indicators of this arena's complex, contentious nature. In recent years, public-information disputes over the selection of new presidents have resulted in legal suits involving a number of institutions, including Michigan State University, Georgia State University, and the Universities of Kentucky, Michigan, Minnesota, New Mexico, and Washington. Table 2.1 provides a synopsis of 18 lawsuits reviewed by legal authorities since the mid 1980s. This listing reports final rulings in cases in which either legal action before a court or formal petition with a state attorney general's office was filed; neither lower court decisions that subsequently were reviewed by higher courts nor numerous other clashes in which parties threatened legal action, but failed to pursue it, are reported. In all but one of the cases described in the table (the exception being *Arizona Bd. v. Phoenix Newspapers*), news organizations and other openness advocates brought suit or petition alleging a presidential search committee either had met illegally (i.e., in private or without proper notice) to interview or discuss candidates or had illegally withheld public

²⁵ Important early studies were those by McLaughlin and Riesman (1985, 1986), who used surveys and case studies to examine presidential searches conducted in the sunshine.

Table 2.1: Litigation Over Openness in College and University Presidential Searches, 1986–2004 (Cases Arranged Alphabetically by State and Year)

Plaintiff(s)	Defendant	Year Suit or Petition Filed	Year Judgment Rendered	Ruling
Arizona Board of Regents	<i>The Arizona Republic and Mesa Tribune</i>	1989	1991	The Board sought declaratory judgment that it was justified in withholding from the media names and resumes of nominees and applicants for appointment to the presidency of Arizona State University, as well as of same information concerning persons who were final candidates for position. Newspapers counterclaimed for relief under public-records law and sought the production of resumes of all 256 persons in pool. The Arizona Supreme Court held that that the Board was not required to disclose information on “prospects,” only the names and resumes of the 17 persons who were in the smaller pool of “finalists” whom the Board had interviewed confidentially out-of-state (<i>Arizona Bd. of Regents v. Phoenix Newspapers</i> , 1991).
<i>Atlanta Journal and the Atlanta Constitution</i>	Board of Regents of the University System of Georgia	1986	1989	The Supreme Court of Georgia held that a statutory exemption to open-records law for “confidential evaluations” in connection with hiring decisions of government agencies was not applicable to the University System’s search for a new president of Georgia State University because the newspapers requested only the names and resumes (not evaluations) of candidates for the position (<i>Board of Regents v. The Atlanta Journal</i> , 1989).

<i>Lexington Herald-Leader Company</i>	University of Kentucky Presidential Search Committee	1986	1987	In reversing a circuit-court decision, the Supreme Court of Kentucky held that the University of Kentucky Presidential Search Committee, which was created by formal action of the Board of Trustees of the University of Kentucky, is a public agency and therefore subject to the provisions of the Open-Meetings Act. The Court held, "... exceptions to open meeting requirements... was not [designed] to permit discussion of general personnel matters in secret, so that presidential search committee was not excepted from requirements of Open Meetings Act in screening candidates and selecting successor president" (p. 884). (<i>Lexington Herald-Leader Co. v. University of Kentucky</i> , 1987).
<i>Boston Globe</i>	The University of Massachusetts	1991	1991	The attorney general ruled that the University of Massachusetts Board violated state open-meetings law when members met behind closed door to select an interim president; the attorney general ordered the board to rescind its appointment and hold another session to fill the position (Phillips, 1991).
<i>Worcester Telegram and Gazette</i>	Worcester State College	2002	2002	The attorney general ruled that Worcester's board violated state open-meetings law by allowing private interviews of semifinalists vying for the presidency. The attorney general also concluded, however, that the process was not so tarnished as to require a new search be conducted (Astell, 2002).
<i>Ann Arbor News and Detroit Free Press</i>	Board of Regents of The University of Michigan	1988	1993	The Michigan Supreme Court rejected the Board's assertion that application of the Open-Meetings Act (OMA) to presidential search processes of the University violated the autonomy vested in the body by the state Constitution. The Court held that the Board violated the OMA by interviewing and deliberating on candidates in secret (<i>Booth Newspapers v. University of Michigan Board of Regents</i> , 1993). (<i>cont.</i>)

Table 2.1: (Continued)

Plaintiff(s)	Defendant	Year Suit or Petition Filed	Year Judgment Rendered	Ruling
<i>Lansing State Journal and The Detroit News</i>	Board of Trustees of Michigan State University	1993	1999	In reversing the Court of Appeals decision, the Michigan Supreme Court held that the application of the state's Open-Meetings Act to presidential searches processes by the Board of Michigan State University was an unconstitutional infringement on the Board's power of institutional supervision. The opinion read: "The Michigan Constitution confers a unique constitutional status on our public universities and their governing boards, which grants defendant broad authority over Michigan State University, including the power to elect the president of the university. . . . The Legislature is institutionally unable to craft an open-meetings act that would not, in the context of a presidential selection committee, unconstitutionally infringe the governing board's power to supervise the institution" (p. 493) (<i>Federated Publications v. Michigan State Board of Trustees</i> , 1999).
<i>Oakland Press</i>	Oakland University Board of Trustees, Presidential Search Advisory Committee	1996	1997	A Circuit Court had declared that the Oakland University Board of Trustees improperly delegated its authority to select the president of Oakland University to defendant Presidential Search Advisory Committee and enjoined the Committee from holding any further meetings relating to the search except in compliance with the Open-Meetings Act. The Michigan Court of Appeals vacated the injunction and dismissed the appeal as moot because, while the appeal was pending, (1) a new president was hired in conformity with the terms of the injunction and (2) an amendment to the state's Open-Meetings Act exempting universities from the Open-Meetings Act became enacted (<i>Great Lakes v. Oakland Board</i> , 1997).

<i>The Minnesota Daily</i>	The University of Minnesota	1988	1988	Court of Appeals denied the university newspaper's appeal for injunctive relief to compel the University of Minnesota Presidential Search Advisory Committee to hold open meetings. The court found that the committee's role was to provide only advice and consultation to the regents on the selection of the president. Because the committee would play an active role in screening applicants and narrowing the field to a short list of finalists, but its decisions would be subject to review by the regents, the committee was held not to be within the purview of the state's Open-Meeting Law (<i>Minnesota Daily v. University of Minnesota</i> , 1988).
<i>Star Tribune</i> ; <i>St. Paul Pioneer Press</i> ; <i>Minnesota Daily</i> ; <i>Rochester Post-Bulletin</i> ; and Minnesota Joint Media Committee	University of Minnesota	2002	2004	The Minnesota Supreme Court ruled that release of information on finalists for the presidency of the University of Minnesota did not violate the underlying constitutional protections insulating the Board of Regents from legislative control, nor did it impede the Regents' ability to "manage" the University. Because the Minnesota Constitution does not exempt the Board of Regents from the state's Open-Meeting Law and Data Practices Act, the Board therefore was compelled to release its list of finalists for the position of president (<i>Star Tribune v. University of Minnesota Board of Regents</i> , 2004).
The Associated Press; <i>the Lincoln Journal Star</i> ; <i>Omaha World-Herald</i> ; and Omaha television station, WOWT	University of Nebraska	2004	2004	The state Attorney General ruled that meetings conducted out-of-state with candidates for the presidency of the University of Nebraska constituted "interviews" and, as such, the names of those finalists must be made public under state open-records law (Bauer, 2004; Hord, 2004a,b).

(cont.)

Table 2.3. (Continued)

Plaintiff(s)	Defendant	Year Suit or Petition Filed	Year Judgment Rendered	Ruling
The New Mexico Foundation for Open Government and the <i>Albuquerque Tribune</i>	Board of Regents of the University of New Mexico	1989	1991	In this consent decree, the plaintiffs and the Regents settled on a policy under which a candidate's application for the university presidency is publicly disclosed when the candidate interviews for the job, permitting applicants an opportunity to withdraw from the running before the interview to prevent their applications from being disclosed (Estes, 2000).
The New Mexico Foundation for Open Government and the <i>Albuquerque Journal</i>	Board of Regents of the University of New Mexico	1998	1998	A district court judge held that the Board likely violated the terms of the 1991 consent decree concerning when the names of candidates for the position of president must be made public. The court enjoined the Board from completing its search unless it disclosed the names of 14 candidates whom the search committee had interviewed; the Board terminated its search (<i>Gallagher v. Board of Regents</i> , 1998).
<i>Las Vegas Review-Journal</i>	University and Community College System of Nevada	2000	2001	In a suit involving a search at the Community College of Southern Nevada, the Nevada Supreme Court ruled that the position of president of taxpayer-funded colleges is not a "public officer" under state law, thus candidates for the job are not subject to the Open-Meeting Law and can be interviewed behind closed doors (<i>University and Community College System of Nevada v. Las Vegas Review-Journal</i> , 2001).

<i>The Daily News Journal</i>	The Tennessee State University and Community College System Board of Regents	1989	1990	An Appeals Court held that the meetings between a chancellor and the advisory committee that was assisting him screen applicants for the presidency of Tennessee State University was not required to be public because the committee was not a governing body and because it did not make a decision or deliberate toward a decision (<i>Mid-South Publishing v. Tennessee State University</i> , 1990).
Utah Society of Professional Journalists	Utah Board of Regents (University of Utah)	1997	1997	The attorney general ruled that the Utah Board of Regents did not fully comply with the Open and Public Meetings requirements regarding notice and conduct of a meeting it held behind closed doors to select the new president of the University of Utah, but that any violations were cured by a subsequent meeting held in the open (Cortez, 1997).
<i>The Seattle Times</i>	University of Washington Board of Regents	1995	1995	A superior court denied newspaper's request to force regents to interview candidates for the presidency of the University of Washington in open session. The court also allowed regents to rank their candidate preferences and discuss potential salary levels for presidential candidates in closed session. The court, however, said meetings should be open when discussing timetables and the scheduling of finalist interviews, campus visits by candidates, and the role of a search consultant or methods for notifying candidates of their selection or rejection (Broom, 1995a).
<i>The Seattle Times</i>	University of Washington Board of Regents	1995	1995	A superior court held that the University of Washington Board of Regents knowingly violated the state's Open-Meetings Act by holding two secret meetings without required public notice. The court ordered the regents to identify those who attended the meetings and to describe what matters were discussed (Broom, 1995b).
Sources: In addition to the individual sources cited, information on select litigation came from Estes (2000) and Sherman (2000).				

records (e.g., names of candidates for the position or scoring sheets used to evaluate candidates) pertinent to a search. Collectively, these cases convey the richness of the issues that often are at dispute in the application of openness laws to presidential searches in higher education.

Although revealing of the complex legal questions that attend presidential search disputes, the table does not convey the long-term repercussions—legal, policy, and political—that can follow in the wake of litigation. The case of Michigan, therefore, is instructive. In 1988, the *Ann Arbor News* and the *Detroit Free Press* sued the University of Michigan Board of Regents, alleging it had violated the state's Open-Meetings Act during its recent search for a new president. The Board responded that the Michigan Constitution's autonomy provision for public universities, which dated to 1850 and had been broadly upheld since in a series of court rulings, superceded the open-meetings statute, thus permitting the Board to conduct its search in the manner in which it had. The Michigan Supreme Court in 1993, however, sided with the newspapers, ruling that the University of Michigan had indeed violated state law (*Booth Newspapers*, 1993). Several months later, in a case involving a disputed search at Michigan State University (MSU), an appellate court similarly ruled in favor of the *Detroit News* and the *Lansing State Journal*, holding that MSU also had broken the law during its 1993 search for a new president. The university appealed the decision.

In response to these significant legal setbacks, the universities began to aggressively lobby lawmakers to exempt presidential searches from coverage under the Open Meetings Act (Leatherman, 1993; Peterson & McLendon, 1998). In 1996, the University of Michigan again began screening candidates to replace an outgoing president, using a complex process of consultants and an advisory committee to privately vet candidates. Although this search was more open than previous ones (Sherman, 2000), newspapers sued the university claiming that all aspects of its search must be open under the sunshine law. A circuit judge sided with the papers. Over time, however, the lobbying efforts of the universities, highlighted by growing public concern over the costs of conducting searches in the sunshine and defending them in court,²⁶ led Michigan's legislature to take action of its own: in December 1996 the legislature amended the law so as to permit university search committees to withhold the names of all but five finalists for the position of president (Healy, 1996). Meanwhile, the appeal filed by MSU involving its 1993 search reached the Michigan

²⁶ In its 1996 search, the University of Michigan paid \$225,000 to outside attorneys to help the school defend the university against newspapers' suits (Peterson and McLendon, 1998).

Supreme Court, which, in 1999, issued a landmark ruling that the application of the Open-Meetings Act to university presidential searches was an unconstitutional infringement upon university governing boards' power of institutional supervision (*Federated Publications*, 1999).

The Michigan experience is not unique. Estes (2000) notes that controversy over presidential search and selection in higher education has inspired change in sunshine statutes in a number of other states. In an analysis of those changes, Estes notes what he characterizes as a trend toward an increasing number of state legislatures that have added exceptions to their public-records laws expressly exempting from disclosure the names of applicants for public employment. Of the 22 states that Estes identified as now having such exemptions, at least three—Michigan, New Mexico, and Texas—have applied the exemption exclusively to public-university presidential searches. As in Michigan, the New Mexico and Texas legislatures revised their statutes after courts compelled universities to reveal the names of candidates. Estes notes a distinctive pattern in these cases: a presidential search attracted litigation from the media in pursuit of disclosure of candidate identities, the media initially won its suit, the university appealed to the legislature arguing it could not attract presidential candidates of sufficient quality under existing law, and the legislature then provided exemptions allowing for greater confidentiality in searches in an effort to address the concerns of higher-education officials. Estes (2000, p. 509) concludes that this adversarial process, culminating in legislative intervention, may be appropriate in a representative democracy. He writes, "Perhaps state legislatures are in the best position to judge the value of attracting top leadership to their higher-educational systems, and can balance the desire for total openness with the practical reality that such openness will diminish their state's chances of attracting top candidates . . ."

Beyond presidential search and selection, other issues raise questions about the appropriate boundaries of state openness laws. For example, the deliberations and decision-making processes of institutional and system governing boards often serve as flashpoints for debate over mandated openness. In some instances, these conflicts have garnered national press attention, as in the case of Auburn University, which a circuit-court judge ruled in 2001 had violated Alabama's open-meetings act at least 39 times during the previous three-year period (Schmidt, 2001). Issues commonly at dispute center on the applicability of sunshine laws to the use of electronic communications in board deliberation (Jayson, 2002; Nathans, 2004; Wetzel, 1998); board retreats, workshops, and social outings (HCCS, 2001; Hord, 2004a,b); issue-briefing sessions held for

trustees prior to formal votes (Bush, 2004); advisory bodies and *ad hoc* groups of decision makers at subboard levels (Arnone, 2004; Kirkpatrick, 1997a); and the meetings of informal groups of campus or system leaders (Anez, 2003; Klein, 2001; Quinn, 2003).²⁷ In at least one recent case, recurring litigation over openness complaints brought against a system board led to the reorganization of its legal-affairs office (Chancellor, 2004).

University-affiliated foundations are another source of steady controversy. These foundations—independent 501(c)(3) organizations established for the purpose of raising, managing, and dispersing private funds on behalf of host institutions—now number in excess of 1,500 nationally (Roha, 2000). Many universities have become increasingly dependent on their foundations for private financial support, as state appropriations have declined. As the importance of foundations to public universities has grown, so too have disputes over the extent to which foundations' activities should be open to public inspection.²⁸ Since 1980, courts have ruled on the applicability of state open-meeting and records laws to foundations affiliated with the University of Louisville (1980, 2003, 2004), West Virginia University (1989), University of South Carolina (1991), University of Toledo (1992), Kentucky State University (1992), Indiana University (1995), and Iowa State University (2003) (Bass, 2004; Geervarghese, 1996). Often at the center of such disputes is the question of how states should balance (1) the need for accountability in the use of funds by tax-supported institutions, (2) donors' privacy concerns, and (3) the need of institutions to be able to respond to external financial conditions.²⁹ In the past few years, governors and legislatures in several states (e.g., Colorado and Tennessee) waded into foundation-related controversies when foundations affiliated with flagship universities became embroiled in allegations of financial impropriety (Bartels, 2004; Stambaugh, 2003).³⁰

²⁷ In both Illinois and Florida, faculty and media organizations sued state college president associations for holding meetings privately.

²⁸ Not all university-foundation relations proceed amicably. In May 2004, the Board of Regents of the University of Georgia voted to terminate its relationship with the University of Georgia Foundation, which controls the university's \$400 million endowment, amid criticisms by the university that the foundation was micromanaging its affairs and complaints by the foundation about the leadership and spending practices of the university's president (Basinger, 2004).

²⁹ In response to these openness controversies, the Association of Governing Boards of Universities and Colleges and the Council for Advancement and Support of Education in 2005 jointly created guidelines for defining the degree of independence between universities and their affiliated foundations. See <http://www.case.org/files/AboutCASE/PDF/CASEAGB.pdf>.

³⁰ One example of the issues that can arise involves the case of the University of Louisville Foundation's McConnell Center for Political Leadership, named for U.S. Senator Mitch McConnell (R-KY). A

New conflicts over mandated openness in higher education continue to arise. Very recently, for example, organizations opposed to affirmative-action practices in college and university admissions announced a nationwide campaign in which open-records laws would be used to force institutions to divulge information about their policies. Organizers planned to use records laws to determine the weight campuses are giving to the race and ethnicity of applicants when making admission decisions. The leader of one of the organizations, the National Association of Scholars, described sunshine laws as an effective “weapon” for promoting transparency by universities that, in his view, had sought to “hide” the data (Schmidt, 2004).

Thus, in summary, the contemporary landscape is one marked by the existence of diverse climates for openness in public higher education, of fluid state legal and policy settings, and of continuing controversies over the ways in which laws compelling openness may best be applied to higher-education institutions. Yet, with the exception of several thoughtful legal analyses (Davis, 1994; Estes, 2000; Geevarghese, 1996; Sherman, 2000), little effort has been made in recent years to systematically explore this landscape or its implications for higher-education governance. Although much has been written about select issues, notably presidential search and selection, the literature overall is prescriptive, anecdotal, or hortatory. Indeed, the laws, and especially their governance implications, have not been examined systematically and comprehensively since Cleveland’s undertaking, 20 years ago.

A NATIONAL STUDY OF MANDATED OPENNESS AND HIGHER-EDUCATION GOVERNANCE

Given the sparse research base, we initiated a national study of mandated openness in public higher education in the fall of 2002 to better understand the laws and their impact on institutional governance.³¹ Because in the context of higher education, mandated openness represents a

circuit-court judge ruled in favor of the *Louisville Courier-Journal*, which had filed an open-records suit against the Foundation seeking disclosure of the names of contributors. Foundation officials argued that proceeds to the center, which totaled in excess of \$6 million, had provided scholarships to more than 150 Kentuckians, and cautioned that revealing donors’ identities would hamper fund raising. However, the Center for Responsive Politics, a campaign-finance watchdog, claimed that some of the donors were political-action committees that had been among the senator’s biggest campaign contributors, insinuating that the university had become entangled in the groups’ influence-peddling (Pitsch, 2004).

³¹ Our study was funded by the University of Southern California’s Center for Higher Education Policy Analysis and the Association of Governing Boards of Universities and Colleges.

complex legal, organizational, and policy phenomenon for which few systematic insights exist, our study took the form of a rigorous exploratory analysis. We sought to learn about the laws and their governance impacts by interviewing individuals who were most familiar with the laws' operation, enriching those insights with multiple archival sources. Thus, we relied heavily on field research methods to help us accumulate and compare insights drawn from a variety of settings. Overall our aim was to identify the boundaries of the phenomenon and the robustness of relationships we documented (King, Keohane, and Verba, 1994; Yin, 2002).

This interest of ours drove our sample-selection strategy. Although we did not pursue a formal *most different systems design* (King, Keohane, and Verba, 1994), we did seek to select states with notable differences so that our conclusions would be sensitive to contextual distinctions among the states and their higher-education systems. We followed a two-stage sample-selection process. First, we chose as sites for intensive study six states whose diversity along certain dimensions, we believed, would afford insights into the operation and impact of mandated openness in distinctive settings. Using seven criteria to ensure diversity,³² we selected California, Florida, Iowa, Massachusetts, Texas, and Washington as our sample. We next identified informants within each state who were likely to be well informed about the application of sunshine laws to colleges and universities. We identified members of governing boards, senior campus officials (e.g., presidents and general counsels), faculty senate leaders, members of the press, attorneys general, state agency officials, and legislators. We also identified national observers with first-hand perspective on sunshine laws, including leaders of national higher-education associations, executive-search firm consultants, and public-information advocates.

Throughout 2003, we conducted site visits to the six states in our sample. In each state, we collected documents (e.g., newspaper articles, legislation, and reports) and interviewed key informants. We used protocols tailored to the different categories of respondents to guide our interviews. Including both the national and the state-specific respondents, we interviewed a total of 92 officials, many of whose experiences cut across our informant categories, thus enabling them to reflect on openness from multiple professional and organizational perspectives.

³²The seven criteria included geography, population, higher-education enrollment, organizational diversity of higher education, state governance, state rank on Cleveland's (1985) "openness index," and state classification on a national survey conducted by the American Association of State Colleges and Universities, which asked state officials the extent to which they believed sunshine laws had been applied "appropriately" to higher education in their states.

We developed an elaborate set of procedures for coding and analyzing our data (Huberman and Miles, 1998; Miles and Huberman, 1994). We created an electronic file of the transcribed interview data, which consisted of nearly 900 pages of single-spaced text. We then developed an extensive coding scheme and assigned a series of codes to each portion of text in the electronic files.³³ These procedures permitted us to electronically sort and cross-sort codes and the themes to which the codes were assigned. The patterns that emerged from this systematic sorting and comparing of data served as the basis of our study findings.

We present below 14 findings of our study. Because we have elaborated on these and other findings elsewhere (Hearn, McLendon, and Gilchrist, 2004; McLendon and Hearn, in press), we provide here only brief summaries of select findings, rather than detailed discussions of all of them. From the findings emerge a general picture of stakeholder views that in some ways defies conventional wisdom: we found no evidence of outright revolt against sunshine laws and more cooperation and respect among the various parties to openness than stereotypes often suggest. At the same time, clearly there are very significant challenges and tensions over the implementation of mandated openness in public higher education.

First, we found that states and systems within them vary remarkably in their ongoing levels and nature of attention to openness issues in higher education. In some states, higher-education officials attend very closely to openness issues and assign substantial human resources to help manage those issues; in other states, leaders characterize these issues as being far less significant in their work. Differing media climates, critical judicial holdings, past controversies, and other factors help to shape the extent to which the laws are deemed salient. On a related question, our study found no evidence of a trend away from openness. Many states have refined their sunshine laws in recent years, but these go both toward and away from reduced openness. Absent any clear patterns in our data, we cannot conclude that there are now discernible tendencies toward a weakening of sunshine laws nationally.

Sunshine laws have become increasingly institutionalized in public higher-education governance. Openness is a widely shared value, and respondents repeatedly told us that maintaining open meetings and records is essential for ensuring public trust in public colleges and

³³ Our codebook included 97 codes, including 66 thematic codes. For each portion of text, we assigned a series of demographic and content codes. We also assigned codes indicating positive and negative valence so that we could assess the tone an interviewee used in discussing a given topic.

universities—despite the fact that openness often is uncomfortable for campus leaders. As might be expected, media officials held the most uniformly positive views of mandated openness in higher education. Institutional leaders, however, also voiced strong support, often espousing their commitment in broad philosophical terms, e.g., the importance of transparency in promoting democratic values within the academy and in the broader society.

At the same time, however, the various parties hold distinct notions of the “public good” as it relates to openness in higher education. Almost all of our media respondents presented the view that openness is an absolute value and more information about higher-education institutions is an unalloyed public good. As a result, the media officials we interviewed equated the *public good* with complete public disclosure about virtually all aspects of campus governance, regardless of the implications for campuses. Campus leaders, by contrast, tended to view the public good in terms of a multifaceted balancing of institutional needs for discretion in disclosure that sometimes outweigh blanket accession to media demands for openness.

A fourth finding involves a shared concern by all parties that the specific applications of sunshine laws often are not well understood. Even at the highest levels of governance, officials in every state told us, the precise application of the laws to a given situation is often ambiguous. In fact, we found a notable zone of confusion or inattention surrounding the details of openness requirements for public higher education. Dynamic legal and policy climates contribute to this misunderstanding: legislatures frequently amend their laws, courts reinterpret the laws, and a transition from one attorney general to the next may change the state’s enforcement of its laws. These changes breed uncertainty among officials about their precise obligations under the law.

Officials in every state also expressed concern for the arguably excessive use of the laws—a condition we refer to as the “weaponization” of openness. Weaponizing sometimes involves use of the laws by commercial interests to gain an edge over competitors, by parties involved in collective bargaining to gain an upper hand in negotiations, and by parties involved in litigation as a way to circumvent “discovery” rules. Weaponizers sometimes have employed the laws to bog down institutions in records requests, forcing campuses to expend resources at especially inopportune times (e.g., at the end of a budget cycle). Similarly, at pivotal times in a negotiating process, unions have sued institutions to tie the hands of officials, consume institutional resources, and create a public impression of institutional impropriety.

Closely related to the weaponizing issue is the broader question of costs: especially in states with large, highly visible institutions, setting up legal and organizational systems for handling openness queries can be expensive. Appealing to judicial authorities for clarification of an institution's legal obligation presents additional financial burdens. What is more, a single records request can consume vast amounts of time and resources; in the case, for instance, of an institution being asked for a record of every meeting its president had held over the previous three-year period. Redacting the calendars of campus administrators to protect the privacy of students or faculty can be time-consuming and can open them to liability. Some institutions also have been subjected to "fishing expeditions," in which huge swathes of information are requested in the hopes that a suspicious shred may be found. Institutions also sometimes bear heavy political costs when allegations of wrongdoing are raised. Numerous leaders said that the mere appearance of impropriety likely would invite external inspection and scrutiny, and that this alone justified their spending substantial resources in maintaining systems for compliance.

Seventh, in contrast to the popular view, media representatives generally tend not to be especially negative toward higher education, although they do express concerns over the attitudes of campus leaders and the nature of their organizations. They tend to see campuses as naturally prone to secretiveness and cumbersome procedures. Yet, the mistrust that exists is not as pronounced as many might believe. A familiar stereotype is that of institutions reluctant to engage the media and of media eager to sue institutions, but both parties reported that they expend much effort developing productive working relationships. Of course, there is appreciable variation in the nature of these relationships. In some systems, mutual accommodations have fostered productive relationships; in other settings, ongoing distrust prevails.

As the previous finding implies, individuals can play major roles in the specifics of implementation, application, and reform of openness laws. Media and academic institutions figure prominently in the openness storyline in public higher education, but the laws often take shape and are applied in particular ways because of certain critical individuals. Fondly remembered champions, committed state officials, public demagogues, powerful critics, attorneys general and courts expressing different attitudes toward the laws, beloved presidents, and scheming college officials were all mentioned to us as important figures in the states.³⁴

³⁴ For example, one of Georgia Governor Roy Barnes' first acts as chief executive was to strengthen his state's sunshine act, which he helped draft as a member of the legislature in the 1970s. Close observers

Although faculty tend not to see sunshine laws as significantly affecting their own activities, significant connections are emerging. Several respondents related emerging concerns about researchers' freedom to conduct research privately, without public notice and media attention. Several institutions' general counsels voiced concern that, under existing laws, citizens or proprietary interests could force the disclosure of information about a research program—against researchers' wishes and before a patent application could be filed.³⁵

Our study also led us to a number of conclusions regarding the impact of mandated openness on institutional governing boards. Most stakeholders told us that the laws have helped sustain the generally high levels of public support their institutions now enjoy. Yet openness also can impair board performance, effectiveness, and development. Openness can create awkward climates for board discussion to the extent that board members often are reluctant to discuss controversial issues in public. This reluctance of trustees to speak freely in public settings can result in boards skimming the surface of or bypassing controversial issues. Respondents also expressed concerns about the impact of sunshine laws on board learning and communication. For example, board members, especially new ones, need to be able to learn outside of the public eye, where they may feel free to ask "dumb questions" without risking public embarrassment; sunshine laws often preclude such opportunities.³⁶

Although there appears to be broad consensus that presidents should be selected with substantial input from the public, respondents also expressed deep concern about the drawbacks associated with conducting presidential searches in the public eye. The foremost criticism is that complete openness tends to have a "chilling effect" upon searches, diluting both the quality and the quantity of applicants for the position of president. Sitting presidents are unwilling generally to become candidates at peer institutions because public exposure of their candidacy could compromise the backing of the board and other constituencies at their present institutions, thus opening the field to provosts and other administrators

attribute the governor's commitment to openness to his work for the *Marietta Daily Journal*, for which he served as counsel for many years (Patel, 1999).

³⁵ A recent analysis identifies several ways in which records laws may adversely affect research on university campuses (Reed, 2004). This analyst also classifies the states into four categories on the basis of the protections their statutes accord academic research: 18 states have "research-encouraging" exemptions designed to protect academic research; 17 states have "research-friendly" exemptions; 9 states have "research-supporting" exemptions; and 6 states have "research-unfriendly" statutes, or ones containing no language that protects academic research.

³⁶ In 2003, a trustee of the University of Florida resigned her seat saying sunshine laws had so impeded her interactions with fellow board members as to have undermined her effectiveness.

at comparable institutions or to presidents of less prestigious ones. In recognition of the need for balancing between absolute secrecy and unmitigated exposure, most respondents favored confidentiality in the early stages of a search, but broad public participation in the later stages, when the names of finalists are announced.

Respondents in each of the states we studied reported both lingering and new controversy over the openness of university foundations. Indeed, many of our respondents characterized these issues as among the most contentious openness questions their institutions face. Campus officials we interviewed were most concerned about potential threats to donor anonymity, worrying that forced disclosure of donors' identities could hurt fund-raising efforts, and cited specific instances in which this was said to have occurred.

Another area of concern involves communications technologies that have created new tensions in the debate over access to information in higher education. The spread of e-mail, cell phones, and videoconferencing poses legal and policy dilemmas for institutions and their leaders by blurring the meaning of what constitutes a "meeting," a "record," or a "deliberation" for purposes of determining the extent to which openness laws apply. For example, some officials acknowledged they were unsure whether their institution's practice of purging e-mail messages was a violation of state law—this at a time when some media organizations have sought access, under records laws, to the entire e-mail databases of campuses. Officials also expressed concern about the growing tendency of administrators not to electronically record or exchange novel or controversial ideas for fear such records could be obtained through public-disclosure laws. Respondents viewed this trend as inhibiting creative problem solving by administrators.

Finally, heightened anxieties in the post-"9/11" era about the preparedness of public agencies for acts of terrorism have made campus security issues a significant concern in the context of mandated openness. Campus officials in each of the states we studied expressed concern that their institutions could be compelled under sunshine laws to publish the blueprints of research facilities, the emergency evacuation procedures, the campus security plans, the placement of security cameras, the routines of police patrols, the location of hazardous chemicals, or other documents that might endanger campuses or communities. Some states have enacted statutory exemptions to address these concerns, thereby raising the larger question of how exceptions to openness can be crafted so that states do not restrict public access to legitimate information.

THEORETICAL PERSPECTIVES ON MANDATED OPENNESS AND HIGHER-EDUCATION GOVERNANCE

Although important descriptive and comparative insights on sunshine laws and public higher education have begun accumulating, there remains scant conceptualization about broader questions of openness in higher-education governance. In this section of the chapter, we turn to various avenues of theory and research in the policy and organization literatures that we believe can hold promise as fresh approaches to the study of mandated openness in higher-education settings.

WHAT FACTORS EXPLAIN PATTERNS IN STATE OPENNESS LEGISLATION AND REFORM, PARTICULARLY REFORMS IN THE HIGHER-EDUCATION ARENA?

Notwithstanding this nation's history of generally widespread support for the *principle* of openness, the actual climates of governmental openness have varied remarkably—both across states and over time. Indices of mandated openness, such as Cleveland's (1985), amply demonstrate the wide variability that exists in the legal and policy postures of the states. The history of mandated openness also demonstrates temporal variability among the states: some states, such as California, New Mexico, and Utah, were early leaders in openness reforms, while other states, such as New York, were relative laggards. At the same time, this history reveals several distinct eras of reform activity—periods when large numbers of states enacted similar kinds of reforms, such as in the 1950s and, again, in the early 1970s, when the laws became widely institutionalized virtually everywhere. In recent years, the pattern appears to have been one of measured policy rethinking, with reforms in some states having enhanced openness and reforms elsewhere having detracted from it.

These patterns raise a number of interesting questions that have eluded systematic scholarly attention, but that could form the basis for important new lines of research. Looking back over the past one-half century of statutory change, what explains variations in the origins, evolution, and proliferation of state openness regimes? Under what conditions are states most likely to reform their openness policies? Why do some states emerge as trend setters in the establishment of new openness regimes? What explains the seeming tendency of many states to adopt similar policies at approximately the same period in time? More specifically, what factors influence the adoption of openness initiatives in higher

education, such as the spate of legislation permitting exemptions in the conduct of university presidential searches, or other exemptions?

Much of the anecdotal writing on compelled openness—and indeed even our own recent research—indicates that a certain degree of idiosyncrasy may be at work. Local disputes and scandals, interpersonal relations, and the values, proclivities, or experiences of individual actors appear to play an important role in shaping state policy and law. Yet the literature also provides limited, tantalizing evidence that a set of more generalized conditions may affect openness policy across states and over time. For example, in state after state whose history of sunshine legislation has been chronicled, the presence of an organized lobby advocating for change (e.g., powerful media organizations) is portrayed as having exerted critical influence on the course of openness legislation (Barnes, 1971; Cross, 1953; Davis, 1994; Estes, 2000; LaBelle, 1990; Pupillo, 1993; Wickham, 1975). Studies also have highlighted the general propensity of a state's citizenry toward openness (i.e., a cultural predisposition toward transparent government) and certain characteristics of legislatures as factors affecting the openness policies of states.³⁷

These studies suggest the value of scholarship that examines the antecedents of openness legislation and reform. Most commentators and analysts of mandated openness have focused primarily on the policy or organizational consequences of the laws. Here, however, we are suggesting the desirability of research into the determinants of openness laws. This new avenue would in effect reconceptualize mandated openness as a *dependent* variable for future study, in contrast with the independent-variable focus that now predominates. Although insufficient scholarship exists currently to address this kind of question head-on, we believe valuable conceptual leverage is to be found in the comparative-state politics and policy literature, particularly research on state policy innovation and diffusion, which has emerged as perhaps the leading conceptual lens for explaining interstate variations in policy adoption and reform.

Policy innovation and diffusion research draws on theories of American federalism in conceptualizing the 50 states as both individual policy actors and agents of potential mutual influence within a larger social system. It suggests that states adopt the policies they do in part because of their internal sociodemographic, economic, and political characteristics and in part because of their ability to influence one another's behavior. In

³⁷ See footnote 8.

this respect, it melds previously rival models of state policy adoption into a single, unified perspective.

Social scientists have studied comparatively the determinants of state policy for 50 years. Early studies favored socioeconomic or political explanations of state policy activity. Both interpretations, however, identified the important drivers of policy as residing within individual states. Walker's (1969) landmark study of policy diffusion first challenged this assumption. Walker noted that some states (e.g., New York, California, Wisconsin) had long been recognized as policy innovators, or as states to which their neighbors looked for ideas when crafting their own policies. He reasoned that states might emulate the policies of their neighbors, resulting in the spread of policies regionally. In fact, Walker's analysis of some 90 state policies enacted prior to 1965 revealed distinct regional patterns in policy adoption. His work helped broaden the scope of inquiry from the intrastate determinants of policy to the interstate migration of policy.

In the early 1990s, Berry and Berry (1990, 1992) brought further conceptual and analytical sophistication to bear on Walker's ideas through their pioneering use of event history analysis to study state lottery and tax adoptions. Their longitudinal analyses indicated that the best predictors of states adopting new lotteries and taxes were a variety of characteristics internal to the states *and* the prior adoption behavior of neighboring states, i.e., the greater the proportion of a state's neighbors who had already adopted a lottery or a new tax, the more likely that state was to adopt the same policy. Over the past decade, numerous studies have assayed the determinants of policy adoption along the lines developed initially by Walker and refined subsequently by the Berry's. Researchers have applied the policy innovation and diffusion perspective to the study of school-choice initiatives in states and cities, consumer-protection policies, health-insurance reforms, abortion and death-penalty statutes, public utilities deregulation, and various state administrative reforms (Glick and Hays, 1991; Hays, 1996; Ka and Teske, 2002; Mintrom, 1997; Mooney and Lee, 1995, 1999; Stream, 1999). Notably, higher-education researchers also have begun incorporating these theoretical and methodological approaches into their own work (Doyle, 2005; Hearn and Griswold, 1994; McLendon, Hearn, and Deaton, 2006; McLendon, Heller, and Young, 2005).

Building on this tradition of research, we propose an initial framework for comparative analysis that conceptualizes mandated openness as a form of policy innovation and seeks to explain patterns in the initial adoption, subsequent reform, or contemporary variation in state openness

policies³⁸ as a function of the factors previous research has shown to influence policy adoption in other areas. For example, using the enactment dates of sunshine legislation as dependent variables, one could analyze the probability of a state adopting an openness regime initially or a particular kind of reform subsequently—approaches for which event history analysis would be ideal (DesJardins, 2003; McLendon, Hearn, and Deaton, 2006). Alternatively, employing as one's dependent-variable state "scores" on a 50-state index of openness laws [such as Cleveland's (1985)], one could analyze the factors that account for more or less rigorous openness climates—an avenue for which pooled cross-sectional time-series analysis would be especially suitable. One limitation of both of these approaches is that they would require a longitudinal data set containing annual indicators of the factors presumed to influence policy adoption or change. The advantage of these approaches is that they permit the researcher to examine the impact of influences that may vary substantially across space and over time.

The conceptually relevant independent-variable influences in such a model of state openness policy reform might include socioeconomic development patterns, political culture and ideology, interest group characteristics, legislative professionalism, divided government, policy entrepreneurship, and interstate influences on policy behavior, as well as a set of higher-education system-specific characteristics.³⁹ *Socioeconomic development* refers to influences on state policy arising from long-term demographic, educational, and economic conditions within a given state. By the terms, *political culture* and *ideology*, we are referring to the works of Elazar (1972), Erikson, Wright, and McIver (1993), and Berry *et al.* (1998), who, separately, developed various conceptualizations and measures of the impact of elite and mass attitudes on state policy. *Interest-group characteristics* include measures of the lobbying capabilities and internal cohesion of one or more influential parties of relevance advocating for or resisting policy change, such as a coalition of open-government groups (Thomas and Hrebennar, 1999). *Legislative professionalism* refers to particular attributes of state legislatures—particularly session length, member compensation, and number of staff—that may influence the policy postures of state governments (Squire, 2000). *Divided government* refers to the condition that exists when the legislative and executive branches of a state are held by different political parties (Alt and Lowry, 1994). By *policy*

³⁸ These foci may represent different dependent variables requiring nuanced conceptualization.

³⁹ For elaboration on the theoretical linkages between these factors and the state policy outcomes, see McLendon, Hearn, and Deaton (2006) and McLendon, Heller, and Young (2005).

entrepreneurship, we mean the existence within a state of one or more individuals whose actions promote dynamic policy change (Baumgartner and Jones, 1993; Kingdon, 1984; Mintrom, 1997). *Interstate influence* (i.e., diffusion) refers to the tendencies of states in some domains of policy activity to emulate one another's behavior (Berry and Berry, 1992). Additionally, in order for this general model to be applicable to policies specific to higher education, or to account for higher education's influence on the broader policy landscape, we propose incorporating indicators of conceptually relevant conditions within the sector itself, including the organizational ecology of higher education, the aggregate size and wealth of the sector, the interest-group activity of higher education, the legal bases of public universities, and the recent patterns of conflict over openness in public higher education.

Specifying these relationships directionally, future research might reasonably hypothesize the existence of policies mandating greater governmental openness (or policies mandating greater openness in the higher-education sector) in states where levels of urbanization, education, and income are higher; where the political ideology of a state's citizenry is more liberal; where levels of legislative professionalism are higher; where a well-organized and -resourced coalition of openness advocates exists; where party control of government is divided;⁴⁰ where one or more policy insiders (e.g., a governor or key legislator) have emerged as dedicated champions of open government; where a greater proportion of neighboring states have already adopted similar openness reforms; where the organizational ecology of higher education in a given state exhibits greater balance between two- and four-year institutions;⁴¹ where higher education consumes a relatively smaller share of the state budget; where public colleges and universities have a history of relatively ineffectual lobbying of state officials; where flagship universities are statutory creations, rather than constitutional ones; and where there is an absence historically of high-profile conflicts over openness issues involving public higher education.

Admittedly, the directions of some of these relationships are speculative and the overall conceptual framework we have outlined (i.e., one

⁴⁰ Often it is theorized that, where different parties control the two branches of government, the incentives for legislatures to control executive agencies (e.g., enacting sunshine laws) are greater.

⁴¹ Our premise is, because public bureaucracies (including public colleges and universities) in general prefer to function under less, rather than more, external oversight (e.g., rigorous sunshine laws), they might actively resist such oversight. Thus, we reason that systems where relatively autonomous, prestigious, well-funded research universities that have become politically engaged over openness issues are dominant are ones more likely to have resisted openness pressures.

grounded in the policy innovation and diffusion literature) is but one of several conceivable possibilities. Our suggestions, however, are aimed toward establishing a conceptually well-grounded starting point from which to address systematically the questions we raised at the beginning of this section, those aimed at enhancing generalized understanding of the sources of variation in openness policy across the 50 states.

HOW DO DIFFERENT OPENNESS ARRANGEMENTS INFLUENCE POLICY CHOICE—PARTICULARLY POLICY CHOICE IN HIGHER-EDUCATION AGENCIES AND INSTITUTIONS?

Sunshine laws were designed expressly for the purpose of influencing the behavior of public officials, namely, to reduce official misconduct and to increase the likelihood of decisions made in the public's "best interest." Yet very little is known empirically about how and to what extent openness influences policy choice. Precisely, how do environments characterized by more rather than less openness shape policymakers' incentives for choosing among various policy alternatives? More specifically, how does access by the public to the decision-making processes of public college and university governing boards influence board behavior on specific policies such as tuition and fee setting, access and admissions, or institutional expenditures? Phrased simplistically, how might openness matter in the adoption of specific board policies? For guidance on these questions, we look to several strands of research in public regulatory theory and principal-agent relations.

In his study of state public utility commissions, Berry (1984) sought to develop a *postcapture theory* of regulation to challenge the once-dominant notion that regulated groups over time tend to control the agencies first established to regulate them (see Bernstein, 1955). Berry's model of rate regulation by utility commissions was based on an assessment of the goals of commissioners, the characteristics of a commission, and the access by the public to agency deliberations. He argued that the principal pecuniary goal of regulatory commissioners is to "survive," meaning maintaining sufficient legislative and public support to remain in office for the duration of one's term. The chief nonpecuniary goal of commissioners involves setting rates consistent with the "cost-of-service" principle, a policy widely viewed within the domain of utility regulation as constituting good public policy. Berry deduces, however, that these twin goals of commissioners—serving in office and making good public policy—are likely to vary across commissions depending on characteristics of a commission and of its environment.

With respect to the environment,⁴² Berry hypothesized that two types of potential public intervention may influence regulatory rate setting. First, commissions face potential intercession on consumers' behalf from formal "intervenors"—often representatives of public interest groups. These consumer intervenors, argues Berry, can change the incentive structures within which commissioners operate. Because intervenors can interfere with the attainment of commissioners' survival goal by obstructing agency proceedings, it is in the interest of commissioners "to bargain with intervenors trading influence on regulatory policy for cooperation in moving proceedings along at a steady pace. Thus, in settings where intervenors are not present, the regulated firm is in a stronger position to bargain with the commission for higher electricity prices." (p. 530)

A second potential form of public intervention that may influence utility commission rate setting involves the presence of public observers at commission hearings. Building on the work of Wamsley and Zald (1973), Berry contends that public agencies subject to a high degree of scrutiny will be more responsive to their environments. In the case of public utility regulation, Berry notes that some states bar the public from commission proceedings, while other states permit public access. Some of the observers at open meetings are likely to be members of the press, whose coverage of proceedings is likely to create broader public exposure to commission decisions. Berry reasons that, the greater this exposure, the more likely regulatory decisions unfavorable to consumers (i.e., higher electricity rates) will prompt consumer engagement in the future. Consequently, the survival goal of commissioners provides an incentive for commissions to make rate decisions more favorable to consumers when agency proceedings are open to the public than when they are closed.

Berry analyzed the effects of these and other hypothesized relationships on the price of electricity established by state commissions using a cross-sectional data set and a multivariate model of the rate-setting process. His analysis revealed support for both of his openness hypotheses: (1) the presence of a consumer intervenor in regulatory proceedings affects the price of electricity established and (2) the extent to which regulatory commission proceedings are open to the public is inversely related to the price of electricity set by a commission.

Lowry's (2001) application of principal-agent theory (Calvert, McCubbins, and Weingast, 1989; McCubbins, 1985) to explain the tuition

⁴²Berry also develops hypotheses about the importance of commission professionalism, which we have excluded from our discussion for the sake of space.

pricing and spending behaviors of public universities provides additional conceptual support for this general line of reasoning. Lowry hypothesized that statewide governance structures for higher education should help explain variation across states and systems because these institutional arrangements “affect the ability of different actors to influence decisions . . .” (p. 846). Lowry reasoned that *regulatory coordinating boards*—present in 21 states at the time of his study—are in effect extensions of elected officials’ capacity to supervise because either the state legislature or the governor appoints all the members of these boards. Because of this direct political control, Lowry hypothesizes that regulatory coordinating boards should behave in a manner more or less consistent with the preferences of elected officials (and of voters), namely, in the form of setting lower tuition levels and spending more on instructional and student services. Lowry suggests that other kinds of higher-education governance structures (ones without such direct political oversight) tend to institutionalize the preferences of faculty and administrators and, thus, lead to policies that are more or less consistent with the preferences of academic stakeholders, that is, higher tuition levels and lower spending on student and instructional services. Lowry estimated a series of models using data on 407 public universities for a single year, 1995. Consistent with his hypotheses, Lowry found that universities located in states with regulatory boards in fact charged significantly lower prices and spent more on student and instructional services. He attributed these differences to the greater political influence exercised over higher-education agency officials in states that practice the regulatory coordinating-board model.

Together, the Berry and Lowry studies—and the larger theoretical streams from which the studies flow—suggest how different openness arrangements may influence the incentives, and ultimately, the policy choices of public higher-education boards. The studies sensitize us to at least three key governance considerations: the trustees’ policy goals, the implications of different principal-agent relationships for trustee survival, and the role of public information and intervention in shaping board behavior. First, not unlike their counterparts in public utility commissions, individual members of public-university governing boards are likely to hold substantive policy goals. For example, board members personally may be more or less inclined toward the goal of maintaining relatively low tuition levels or of enhancing the research prestige of the institutions on whose boards they serve. Second, however, trustees’ adherence to these policy goals will likely vary depending on trustees’ assessment of

the threats to their own individual “survival” and that of their institutions. Members of governing boards, whether at the state level or at the level of the individual institution, are agents of the principals who appoint them. Often, these principals are governors. In a few states—Colorado, Michigan, New Mexico, Nebraska, Nevada—voters determine board membership directly in statewide elections (McGuinness, 1997).⁴³ Under either scenario, trustee survival depends on sustaining political and/or public support sufficient to permit them to keep their jobs. Thus, a third key consideration involves the impact of openness on trustees’ perceptions of the threats to their survival. One potential threat may be intervention by consumers (i.e., students, families, etc.) when public college and university boards pursue policies that are misaligned with consumers’ preferences. For many of the same reasons Berry outlined, we might expect the level of consumer intervention to vary across board settings depending on the degree of mandated openness that attends those settings. Where there is greater openness under law (i.e., greater access to board proceedings by the media and the general public), there is likely to be greater external scrutiny of board decisions, which may increase the threat of organized consumer reaction, as well as direct or indirect intervention by political elites, in the event of decisions deemed adverse to consumers’ interests. This increased threat of external intervention may drive college and university boards toward policy positions that are broadly popular with the public or with the elected officials; it may also militate, however, against boards taking positions that serve the public interest, yet are politically unpopular.

We might conclude, therefore, that openness “matters” in the governance of public higher-education institutions because varying climates of openness may differentially shape the incentives for decision making by individual trustees and, therefore, the policy choices of public higher-education institutions and agencies. Although the literature on regulatory policymaking provides other theoretical rationales for the behavior of public-sector boards (e.g., Gerber and Teske, 2000), we view this particular approach as especially useful because it affords researchers testable hypotheses with which to study openness effects on specific policies across different legal, political, and organizational settings.

⁴³ Until 1997, voters also elected members of the University of Illinois Board of Trustees. In some of the states we mention, popular elections cover only one (e.g., Colorado) or several universities (e.g., Michigan) within the state; the governor appoints membership of the governing boards of the other colleges and universities.

TO WHAT EXTENT DOES THE PURPORTED RELATIONSHIP BETWEEN
OPENNESS IN INSTITUTIONAL GOVERNANCE AND PUBLIC CONFIDENCE
IN HIGHER EDUCATION HOLD UP TO EMPIRICAL SCRUTINY?

Media officials, institutional leaders, board members, and legislators interviewed in the recent Hearn, McLendon, and Gilchrist study (2004) frequently asserted that mandated openness enhances public confidence in state-supported institutions. This claim echoes perceptions reported in earlier work on higher-education sunshine laws (Cleveland, 1985; McLaughlin and Riesman, 1985; Sherman, 2000), and closely parallels assertions made in support of state public-information laws in general during their era of institutionalization several decades ago (Cross, 1953; Open Meetings Statutes, 1962; Pupillo, 1993). The claim, however, lacks empirical evidence. That is, to our knowledge, public perceptions have never been studied in a way sufficiently systematic to support inferences about the effects of openness on public confidence.

Although the claim of a positive relationship may seem obviously true to supporters of sunshine legislation, might the reverse in fact be true? Might expanded openness diminish, rather than enhance, the public's trust in higher education? Organizational life, in any setting, can be unavoidably disorderly, conflicted, inefficient, and at times, dispiriting. In public higher education, faculty, staff, and students can and do fail their institutions and the public trust. Even if such failings are infrequent, their exposure to public view may not always be edifying and productive, especially if public distrust is high, public support is low, and public knowledgeability about the entire enterprise is limited. In such circumstances, direct access by citizens to the decision-making processes of public colleges and universities may inspire less, not more, trust.

Political scientists McCubbins (1985) and Clingermeier (1991) have hypothesized that policymaker and public tolerance of secrecy (e.g., via laxness in openness legislation) may be greater in settings where uncertainties are low, suggesting that secrecy is efficient and acceptable to the extent a domain is seen as reasonably routinized and predictable, and not expected to produce controversies over decision-maker discretion. Similarly, in their review of the literature on trust in organizations, Mayer, Davis, and Schoorman (1995) suggest that the need for trust among different parties lessens as more information is provided. Absent enough information, trust is more needed.⁴⁴ Thus, prior research suggests that

⁴⁴ For more on the trust literature, also see Biley and Pearce (1998), Jones and George (1998), and Dirks and Ferrin (2001).

when uncertainties are low and information is high, openness may be viewed as less necessary by stakeholders.

Applying these views to higher education, one might surmise that, to the extent sunshine laws reveal more of the workings of higher education to the general public, making decision processes in that setting better known and understood, trust will be less demanded and more easily accorded institutions. That hypothesis is in keeping with the sunshine literature. It should be noted, however, that for sunshine legislation to be effective, stakeholders should have the “right” amount and kind of information (Rohrbaugh and Wehr, 1978). Perhaps certain amounts and kinds of information can lower rather than raise trust, in the manner that, when gossip columnists print specific facts about celebrities, readers eagerly but perhaps fallaciously generalize to broader attributions regarding the character of the celebrities.

The hypothesis of a positive relationship between openness and confidence should be subjected to empirical examination via a survey of citizens’ attitudes toward public higher education, using a sample of states stratified by their legal provisions for openness in public-institutional settings. With appropriate controls for confounding factors, and perhaps access to comparable surveys of media, legislators, and system officials as well, it would be possible to learn more about the nature of the connection between openness and public confidence.

UNDER WHAT CONDITIONS CAN SECRECY AND PRIVACY CONTRIBUTE TO EFFECTIVE DECISION MAKING IN HIGHER EDUCATION?

There is a robust literature in organizational theory (e.g., see Perrow, 1986) on how differing structural arrangements (rules, divisions of labor, reporting requirements, team composition, etc.) affect decision processes. Openness laws alter the dynamics of high-level decisions in organizations by turning what may naturally tend to be competitive, strategic discussions into what are at least in part theatrical performances for external constituencies. The higher-education decision makers and stakeholders interviewed by Hearn, McLendon, and Gilchrist (2004) varied in their views on the conditions under which information and deliberations should be kept in the “shade,” i.e., out of public view. This question has been little considered in higher education from a scholarly perspective, but theories and research on organizational decision making under varying conditions are potentially of use for understanding the implications of secrecy in different situations.

Organizational theorists have considered secrecy, privacy, and other information-flow issues as strategic factors in performance (e.g., see Stinchcombe, 1990). Economists have produced a robust literature on information as a factor in economic markets.⁴⁵ Theoretical economists term the problem of secrecy a matter of “asymmetric information,” i.e., a matter of two parties to a negotiation or transaction having different levels of knowledgeability about the issues at hand. For example, private and public colleges and universities compete aggressively for presidents and for funds of various kinds, and the information asymmetries involved in that public/private competition may have implications for effective governance in the public sector. To our knowledge, other scholarly fields’ theoretical and research perspectives on information asymmetries have not been considered in studies of higher-education governance.

Of course, the effectiveness of decision making is not an easy topic for analysis, but researchers could begin by assaying the domains protected under most states’ sunshine applications (e.g., real-estate transactions, business investments, personnel matters, security concerns, early stages of presidential searches) and then contrast the nature and fate of decisions in such domains across more open and more closed settings. For example, given that Florida’s robust laws do not protect discussions of real-estate issues from public scrutiny, analysts might study what price, if any, the state has paid for its openness, relative to other states facing similar matters. Although empirical analysis of such matters is daunting, the question is worthy of attention. The conventional wisdom is that limits on openness (i.e., allowing pockets of asymmetric information) are selectively warranted, but hard data on that assertion are entirely lacking. In keeping information symmetrical around such issues as real-estate transactions, Florida and some other states have selectively chosen to reject the conventional wisdom. The results of such choices merit empirical analysis.

The effectiveness of specific choices for restricted openness especially warrants attention. Eisenberg and Witten (1987) suggest that organization theorists and managers need to adopt a thoroughly contingent perspective on the utility of openness, evaluating its appropriateness neutrally situation by situation. The same point may apply to policy: the value of selective limits on openness to the public should be subjected to critical scrutiny, if only to ensure thorough consideration of what, ultimately, best serves the public good.

In this context, it may be important to think of openness laws as a kind of external control system on managers and leaders in higher

⁴⁵ Several recent Nobel Prizes in economics have been awarded in this area (e.g., Stiglitz, 2000).

education. Such a system can be studied as to its efficiency and effectiveness. Although research from this perspective is rare in higher education, it has been a frequent topic in the broader management literature. Walsh and Seward (1990), for example, examined the relative efficiency of internal and external control systems in corporate governance. Although internal controls are delivered by such mechanisms as incentive pay systems for managers, external controls are imposed via the vulnerability of managers to external takeover bids because of poor performance. The authors argue that the contrasting approaches each deliver distinctive benefits and costs, and are each appropriate in varying circumstances, but they generally view internal systems as more efficient. For them, external systems are best considered last resorts.

In universities under legally mandated openness, external as well as internal controls are salient daily. The constraints on strategic planning and management are far greater in public settings than in privately controlled settings, for example, and expectations and controls should be adjusted appropriately (Hearn, 1988; Perry and Rainey, 1988; Ring and Perry, 1987). Hostile takeovers occur more metaphorically than analogously to stockholder revolts. Obviously, the theoretical literature on external controls from a management-studies perspective would require adaptation for higher education—the analogies to corporate governance are strained. Nevertheless, the effort may be worthwhile.

IN WHAT WAYS ARE OPENNESS LAWS EVOLVING, AND WHY?

Analysts of sunshine statutes in settings beyond higher education have noted that the laws may be becoming so difficult to follow that true compliance is impossible. For example, Brehm and Hamilton (1996) reported that most violations of openness provisions in the arena of environmental protections were based on ignorance of the laws, rather than outright evasion of them. Hearn, McLendon, and Gilchrist (2004) reported similar confusion regarding higher-education laws in some settings. What is more, some observers have suggested that openness laws are weakening around the country, as exceptions are granted for increasing numbers of situations (e.g., Davis, 1994; Schmidt, 2001). In this evolving context, with the laws becoming more arcane and thus potentially more difficult to follow, is it possible that policymakers and leaders may begin to de-emphasize openness, or even abandon those statutes altogether? Our own empirical analysis suggests that it is too early to conclude that such a trend is currently underway, but the question remains valid: if the laws are not

being followed “on the street,” can the enduring longevity of the laws still be assumed?

Perhaps openness statutes are destined to become one of higher education’s transient “management fads.” Some similarities between the laws and the features of fads noted by Birnbaum (2001) are notable: most such laws were created in a time of perceived crisis (the Watergate era), and over time the founding narratives of openness against power have been refined, with some accompanying disillusionment. For example, a current counternarrative regarding sunshine laws is that they can ruin presidential searches, impede effective resource diversification, and generally reduce the competitiveness and quality of the public sector as compared with the private sector of higher education.⁴⁶ Another counternarrative developing in recent years is that the laws do not always “travel well” from other organizational sectors (e.g., public-works contracting) into higher education, with its loose coupling and its institutionalized professional norms favoring discretion and autonomy.

Of course, an important difference between the sunshine laws and the fads studied by Birnbaum is their origins—most of the fads noted by Birnbaum arose in the business context, while sunshine laws arose in state’s legal and political contexts. Fads arising in public domains may be fundamentally different from fads in management. Matters involving public trust are different from marginal changes in forms of institutional management. Yet, it seems important to examine conceptual linkages and differences between the organizational literature and the political innovation literature discussed at some length earlier in this chapter. Regardless of the extent the analogy to Birnbaum’s management fads holds, the life cycles of innovations in management may inform thinking about the life cycles of governance innovations. No governance feature remains unchanged over time, and the patterns of change in sunshine laws noted earlier are a topic of both theoretical and practical importance.

ANALYTICAL ALTERNATIVES IN THE DESIGN OF FUTURE OPENNESS RESEARCH

Because conceptualization and empirical testing go hand in hand, we devote this final section of the chapter to examining several types of designs for conducting future research on legally mandated openness in higher education, and discuss the merits and limitations of each

⁴⁶ See McLaughlin and Riesman and a variety of recent *Chronicle of Higher Education* articles.

alternative. From a rigorous analytic perspective, ascertaining the benefits, costs, and ultimate governance effects of various implementations of sunshine laws in public higher education is difficult if not impossible. All 50 states have had sunshine laws of some kind in place for many years, so there is no clear-cut “control group” in the public sector. How, then, might comparisons among the states and the sectors and systems of higher education within them be leveraged in future research to improve our understanding of the effects of mandated openness?

Several analytic alternatives exist, and each should be explored in future work. Here, we briefly examine the potential usefulness of multi-state longitudinal and cross-sectional designs and single-state designs. In considering these alternative approaches, we discuss issues and problems associated with sample selection, data collection, and the generalizability of findings. Across each of the alternatives, we examine the appropriateness of systematic comparative inquiry. Too often, questions of research design devolve into stale recitations of the pros and cons of quantitative and qualitative approaches. Instead, we urge attention to creative use of a variety of methods aimed toward an intelligent comparison of governance under different openness conditions.⁴⁷

Multistate designs have the advantage of greater generalizability across distinct settings. As numerous analysts have observed, the extent of substantive demographic, economic, social, and political differences across states is extraordinary (Gray and Hanson, 2004). For a study of higher-education governance in state postsecondary systems, in particular, we must consider as well the many differences among state postsecondary systems and policies. Potentially relevant elements of variation for such a study include the population size of the state, its total postsecondary enrollment and its breakdown among two and four institutions and the public and private sectors, the state’s total number of postsecondary institutions and its breakdown among two- and four-year institutions and public and private institutions, the nature of the state higher-education governance system, and, of course, the history and nature of the sunshine statutes in place in the state. States may even vary in the social and political “climate” surrounding openness—the Hearn, McLendon, and Gilchrist (2004) analysis found the level of underlying trust among different stakeholders (notably, the media and higher-education leaders) varies from state to state and shapes the nature of

⁴⁷ Ragin (1987) provides a useful review of productive approaches to comparative research, while King, Keohane, and Verba (1994) argue persuasively for the complementarity of qualitative and quantitative research designs.

interactions around openness issues. Interestingly, there can be substantial within-state variation around openness: for example, in California, mandated openness is substantially wider in the community-college system than in the University of California system. Obviously, a study of openness in one system in one state may have very little to suggest for openness policies and practices in systems in other states.

Yet interstate differences are not of the magnitude as to overwhelm the search for generalized understanding. Rather, the states share some basic social, economic, and political similarities. Thus, the 50 states represent a system of constrained variation that makes possible meaningful comparisons. Some attention to sampling to reflect the dimensions of variation, however, is essential if generalizability is a goal—multistate studies can address that need.

Two kinds of multistate designs are possible: longitudinal and cross-sectional. Without question, longitudinal designs provide many advantages, such as those we mentioned in our earlier conceptualizing of openness laws as a form of state policy innovation. Openness approaches vary appreciably across states in their stability and in the extent to which they have become institutionalized. A state's level of formalization of its openness statutes may increase in response to past episodes, for example. Only by examining openness issues over time can analysts begin to understand the origins, effects, and costs of particular policy moves and approaches. Additionally, one of the distinct advantages of the longitudinal analytic techniques that policy scientists have incorporated into the field in recent years (e.g., pooled cross-sectional time-series analysis and event history analysis) is that they represent improvements over cross-sectional designs in the inferences that can be drawn from a 50-state sample. As we noted previously, however, use of these techniques can impose heavy data-collection burdens. Collecting comprehensive data on a wide range of theoretically relevant indicators at the campus, system, and state level over time may be impracticable in many instances.

Multistate, cross-sectional designs are usually more feasible, and therefore are prevalent among contemporary quantitative studies of state policy change. In such studies, analysts hope that data from interviews, documents, or databases will provide a usable profile of a state's openness context. Designs of this kind can range from cursory review of public documents in a set of states, without actual contact with state leaders and citizens, to in-depth surveys and interviews, document review, and data analysis. Data collection and analysis for these more ambitious cross-sectional designs can be logistically complex, financially burdensome,

and labor-intensive. To the extent such designs are feasible, however, the benefits can be substantial. In such projects, for example, it is possible to integrate some historical data and information into the work. In particular, while respondents' recollections of past actions and perceptions for an interview or survey are never unassailable as research resources, such recollections can be useful additions to purely contemporary or archival data.

Even at their most ambitious, however, multistate designs can be subject to the criticism of insufficient depth. Attempting to draw conclusions on predetermined conceptual dimensions across states may sacrifice what is most important about the context of a particular state. In contrast, truly in-depth exploration of a single state—either through qualitative or quantitative focused analysis—can provide richer, more grounded, and better-contextualized information (Nicholson-Crotty and Meier, 2002). For example, analysts and policymakers in a state, especially a larger state with substantial “data” around such openness issues as presidential searches, may find important locally useful returns to pursuing analysis in that state alone.

Single-state designs can take several forms. In states with an adequately rich supply of institutions, comparisons of governance-related processes and outcomes between otherwise similar public and private institutions can be fruitful; in such settings, private higher education may serve as an ideal control group for purposes of comparison with public-sector institutions. Such comparisons permit analysis of the impacts of mandated openness among institutions that are roughly similar in mission, size, complexity, and resource base but that differ in their fundamental legal obligations to openness. Perry and Rainey (1988) provide a useful overview of empirical studies comparing public and private organizations within similar functional categories (e.g., schooling, service provision) and suggest directions for future research in this vein. One of the most cited educational studies they include is Chubb and Moe's (1990) article reporting comparatively on the organizational perceptions of administrators and teachers in public and private K-12 schools. In a given state, a survey or interview design might similarly untangle differences across the public and private postsecondary sectors. Of course, the missions of private institutions rarely emphasize the public good and the investment of state resources in that sector is far lower. Caution in inferences is essential. Still, private higher education operates outside of the purview of sunshine laws,⁴⁸ and comparing governance activities,

⁴⁸ A recent court ruling (Hoover, 2004) may extend openness laws into private higher education.

such as board effectiveness, communication, and development patterns or presidential selection processes, in the two sectors may well be worthwhile.

Comparisons across public systems within individual states can also be fruitful. As noted earlier, systems within states sometimes vary in the openness laws affecting them. For example, in California, Michigan, and Minnesota, states with a constitutionally autonomous flagship institution, the research-university sector is immune from some of the openness requirements in place in the state-university and community-college systems. Different sectors in public higher education tend to have significantly different personnel, students, missions, and funding, and those differences can compromise analysis. Nevertheless, comparisons across systems within given states have the distinctive advantage of “controlling for” differences in state politics, history, and culture. It seems appropriate to examine within-state differences in openness regimes. Like some comparisons across states, analysis of this variation may provide grounds for generating productive directions for analysis and policy consideration.

Another within-state approach to analysis is the examination of governance change over time. Of special interest would be comparing institutional processes and outcomes before and after a reform in openness statutes. Recent changes in the application of state sunshine laws to higher-education institutions may provide researchers opportunities to examine how such reforms as the shielding from public view of donor records or the names of applicants in presidential searches might influence various dimensions of institutional governance. By comparing the experiences of institutions before and after a change in state law, analysts may be able to discern the ground-level implications of state-level policy changes. Obviously, analysts should treat cautiously the findings drawn from pre- and postreform comparisons involving a single institution or state. Regardless, however, such studies might contribute useful insights on the governance influences of various kinds of policy changes.

Analyses such as those outlined above each make sense as feasible avenues to greater understanding of the costs, benefits, and effects of various forms of openness. Unlike many topics in higher-education studies, mandated openness is a significant concern among large numbers of stakeholders, including students, faculty, administrators, boards, the press, elected officials, and the larger public. Given the absence of much systematic empirical and conceptual work on the topic, a variety of research design options merits consideration.

CONCLUSION

Openness in governance, upon systematic study, is both widely shared as a public value and hotly disputed in its application. Higher-education leaders honor its tenets in the abstract, and debate its proper extensions to their day-to-day work. This duality cannot be condemned, for it is fully in keeping with the ambiguities of our democracy itself, as noted in the opening passages of this chapter. Can leaders both cherish openness and work energetically to limit its scope? Clearly, they can and do. In an essay such as this, we can only attempt to delve deeper into the workings of what seems, to current eyes, an archetypically American problem.

Secrecy often carries negative connotations of deception and misdeed, but such analogies are facile. In business, for example, the skillful feint as well as the artful use of information unavailable to others are more often accepted and admired than condemned and criminalized. The cutting point for the distinction between socially legitimate and illegitimate withholding of information lies in the law, as one would hope and expect. For example, for commodities and securities markets to operate properly, the law requires certain domains of full disclosure and proscribes certain forms of deception. At the same time, patents, licenses, business plans, and marketing information may be withheld from the public. In public affairs, however, the distinctions between legitimate and illegitimate secrecy are murkier. As noted earlier, concealed policy deliberations were the norm throughout much of the U.S. history, and public leaders later deemed “great” by historians (e.g., Thomas Jefferson, Franklin Roosevelt, John Kennedy) maintained governmental and personal secrets of palpable public significance. Would those secrets’ revelation during the leaders’ lives have better served the public good? Likewise, while sunshine laws most assuredly have helped stanch malfeasance in some settings, the laws have had unintended negative consequences for public deliberation and decision making in many other settings. Thus, while there are reasonable objectives at the heart of the laws that promote transparency in government—and in higher education—there are also reasonable boundaries to such transparency. In doing the public’s business, what is best revealed and what is wisely kept confidential? What should be exposed and what should be allowably secret?

Our review of mandated openness in higher education portrays an uncertain and evolving answer to these questions. Variations by domain, timing, and context abound, and only limited generalizations are currently possible. It may be best to think of the notion of allowable secrets

as a social construction subject to ongoing revision. Openness laws are products of an evolving social consensus, reflecting it imperfectly but undeniably. The social construction of allowable secrets, the laws that reflect that construction, and the day-to-day and longer-term effects of the laws on higher education each compose compelling territory for further investigation.

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3. STUDYING COLLEGE ACCESS AND CHOICE: A PROPOSED CONCEPTUAL MODEL

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The student financial aid programs that were authorized under Title IV of the Higher Education Act were intended to ensure that inadequate financial resources would not limit access to college. Nonetheless, despite substantial investment in student financial aid not only by the federal government but also by state governments, colleges and universities, and other entities, college access and choice remain stratified by socioeconomic status (SES) and race/ethnicity. Although students received about \$122 billion in financial aid from all sources in 2003–04 (The College Board, 2004), individuals with low family incomes, individuals whose parents have not attended college, African-Americans, and Hispanics are less likely than other individuals to enroll in college. When they do enroll, these groups are concentrated in lower price institutions, such as public two-year colleges and less selective four-year colleges and universities (Baum and Payea, 2004; Ellwood and Kane, 2000; National Center for Education Statistics [NCES], 2003, 2004; Thomas and Perna, 2004).

For example, although college enrollment rates increased over the past two decades for 18- to 24-year-old high school graduates regardless of family income, college enrollment rates continue to be substantially lower for students in the lowest family income quartile than for students in the highest family income quartile (Mortenson, 2001). The current 30-percentage point gap in college enrollment rates between low-income and high-income students is comparable to the size of the gap in the 1960s (Gladieux and Swail, 1999). Descriptive analyses show that smaller percentages of students with low family incomes than of students with high family incomes expect to graduate from college, take a college entrance examination, apply to a four-year college, and enroll in a four-year college,

even when considering only high school graduates who are academically qualified to enroll in college (Fitzgerald, 2004). Other analyses show that, in 1999–2000, students from families with incomes below \$30,000 represented smaller shares of students at private four-year (19%) and public four-year (23%) institutions than at public two-year institutions (30%; Baum and Payea, 2004). In contrast, students from families with incomes of \$90,000 or more represented substantially higher shares of students at private four-year (30%) and public four-year (21%) institutions than at public two-year institutions (13%; Baum and Payea, 2004).

In terms of racial/ethnic group differences, enrollment rates also continue to be lower for African-Americans and Hispanics than for Whites. Only 52% of Hispanics and 55% of Blacks who completed high school in 2001 enrolled in college in the fall after graduating from high school, compared with 64% of Whites (NCES, 2004). Among those who enroll, both African-American and Hispanic first-time undergraduates are relatively concentrated in two-year rather than four-year institutions. African-Americans represented a higher share of first-time freshmen at two-year than at four-year institutions in fall 2001 (14.0% vs. 11.1%). Following a similar pattern, Hispanics represented 12.2% of first-time freshmen at two-year institutions in fall 2001, but only 6.6% of first-time freshmen at four-year institutions (NCES, 2003).

PURPOSE OF THE CHAPTER

Some observers (e.g., Advisory Committee on Student Financial Assistance, 2002; Fitzgerald, 2004; St. John, 2003) argue that continued gaps in educational opportunity are primarily due to the inadequacy of existing financial aid programs. Others (e.g., Ellwood and Kane, 2000; Perna, 2004a) acknowledge the importance of student financial aid but stress the barriers that are imposed by inadequate academic preparation. A third explanation for continued gaps in college enrollment may pertain to the adequacy of information about financial and academic requirements for attending college, as well as the availability of student financial aid to offset the costs of attendance (Kane, 1999).

One reason for disagreement about the relative contributions of financial and academic resources to the observed stratification of college access and choice is that researchers have used a variety of theoretical and methodological approaches to examine the problem. In an effort to bring order to the study of student college choice, this chapter provides a comprehensive review, synthesis, and critique of the approaches that researchers have used and offers recommendations, based on this review,

to guide future research. A primary contribution of this chapter is to propose a conceptual model for studying student college choice. Recognizing that neither approach alone is sufficient for understanding differences across groups in student college choice, the proposed conceptual model integrates aspects of economic and sociological approaches. The model assumes that an individual's assessment of the benefits and costs of an investment in college is shaped by the individual's habitus, as well as the school and community context, the higher education context, and the social, economic, and policy context.

This review provides an update to two outstanding literature reviews on this topic: Hossler, Braxton, and Coopersmith (1989) and Paulsen (1990). These reviews have served as the starting point for a generation of research on college access and choice. Despite the contribution of these reviews, however, an update is required because of changes in the nature of research on college access and choice in the 15 years following their publication. The most notable changes pertain to the theoretical and conceptual frameworks and the methodological approaches used, and the populations examined. Whereas Paulsen (1990) identified distinct disciplinary approaches (e.g., sociological and economic), more recent research draws on additional frameworks within these perspectives (e.g., social and cultural capital) and increasingly adopts a conceptual model that draws on multiple theoretical perspectives (e.g., Freeman, 1997; Perna, 2000). Moreover, virtually all of the studies reviewed by Hossler and colleagues and Paulsen employed quantitative analytic techniques, but recent research reflects the contribution of an increasing number of scholars (e.g., DeLarge, 2003; Freeman, 1997; McDonough, 1997) who use qualitative methodological approaches. Finally, in contrast to the research in the two earlier reviews, recent research includes attention to understanding the college-choice processes of particular groups, such as African-Americans, Hispanics, and students of low-family income and low SES.

Drawing on the Hossler and Gallagher (1987) three-phase model of college choice, this chapter uses the term "college choice" to refer to all phases of the process. Based on their review and synthesis of prior research, Hossler and Gallagher (1987) concluded that the three stages of the college process are predisposition, search, and choice. In the first stage, predisposition, students become predisposed toward or interested in attending college as they develop educational and occupational aspirations (Hossler and Gallagher, 1987; Terenzini, Cabrera, and Bernal, 2001). In the second stage, students search for information about colleges (Hossler and Gallagher, 1987; Terenzini, Cabrera, and Bernal, 2001). While still

less frequently researched than the other two stages, researchers who have examined this stage typically operationalize “search” in terms of the sources of college-related information that students and parents use (e.g., Hossler, Schmit, and Vesper, 1999) and/or the number of colleges that students consider or to which they apply (e.g., Hossler, Schmit, and Vesper, 1999; Hurtado *et al.*, 1997; Long, 2004c). In the third stage, students decide to enroll in a particular college or university. Little is known about the timing of these three stages for nontraditional enrollment. But for “traditional” college enrollment (i.e., enrollment into college immediately after graduating from high school), predisposition typically occurs between the 7th and 10th grades, search during the 10th through 12th grades, and choice during the 11th and 12th grades (Hossler, Schmit, and Vesper, 1999; Terenzini, Cabrera, and Bernal, 2001). This review includes attention to all three stages of the college-choice process.

Finally, research on college choice has long viewed student decision makers as faced with a variety of postsecondary schooling and nonschooling alternatives (e.g., Manski and Wise, 1983). Those students who are very certain that they will or will not attend college focus primarily on only the schooling or only the nonschooling options, respectively. However, many consider both schooling and nonschooling options and stand at the margin in their college-choice process, facing a decision between the options of attending or not attending any type of college. Policies that affect this type of college-choice behavior are often considered “access” policies. This chapter views both decisions about whether or not to attend college and decisions about which particular college to attend as important parts of the broader student-college-choice construct and process to be examined.

IMPORTANCE OF CONTINUED ATTENTION TO THEORY AND RESEARCH ON STUDENT COLLEGE CHOICE

College attendance imposes costs (e.g., tuition, fees, books, foregone earnings) and generates benefits for both individual participants and society. A gain in lifetime earnings is the most easily observed benefit that accrues to individuals who invest in higher education. In 2003, average lifetime earnings were 73 times higher for individuals who attained a bachelor’s degree than for individuals who attained only a high school diploma (Baum and Payea, 2004). A portion of the observed earnings premium may be attributable to other differences between high school and college graduates, including differences in ability and motivation. Nonetheless, research shows that earnings are higher for college graduates

than for high school graduates, even after controlling for these characteristics (e.g., Perna, 2003).

Society also realizes impressive gains from a student's investment in higher education. Among the societal benefits of higher education are increased national income and productivity, increased state workforce productivity, increased economic activity in the community in which the higher education institution is located, and reduced cost of taxpayer-funded social support programs (e.g., welfare, Medicaid), as well as lower crime rates, greater community service and civic involvement, greater improvements in knowledge and technology, and improved educational outcomes for future generations (Baum and Payea, 2004; Bowen, 1997; Fatima and Paulsen, 2004; Leslie and Brinkman, 1988; Paulsen, 1996a,b). These societal benefits provide one rationale for government intervention in the higher education market. Specifically, the benefits of an investment in higher education "spillover" beyond individual participants to nonparticipants, thereby justifying attempts by policymakers and practitioners to improve higher education opportunity (Paulsen, 2001b).

Experts frequently assert that college attendance is "essential to the nation's social progress and economic prosperity" (National Dialogue on Student Financial Aid, 2003, p. 4). Carnevale and Desrochers (2003) argue that postsecondary education is increasingly important to the nation's global competitiveness, given the shift from an industrial economy to an information and technology-driven economy. Their analyses of data from the Census Bureau and Current Population Survey suggest that new jobs increasingly require at least some postsecondary education and that the educational requirements of all jobs, including those that once required no more than a high school education, have been rising (Carnevale and Desrochers, 2003). For example, 69% of white-collar office workers, the largest, fastest growing, and among the highest paying categories of employment, had at least some college education in 2001, up from 37% in 1973 (Carnevale and Desrochers, 2003). Although the number of front-line factory jobs declined by 21 million between 1959 and 2001, the remaining jobs in this sector are increasingly held by workers who have at least some college education (31% in 2001 vs. 8% in 1973; Carnevale and Desrochers, 2003).

Projected demographic trends suggest that the demand for college-educated workers will continue to increase in the near future. Over the next 20 years, baby boomers will retire from the labor force, resulting in a substantial shortage of workers, especially workers with the most education and experience (Carnevale and Desrochers, 2003). Although the number of high school graduates is projected to increase by 2.5%

nationwide between 2001–02 and 2017–18 (Western Interstate Commission for Higher Education [WICHE], 2003), this growth will likely be insufficient to meet labor market demands (Carnevale and Desrochers, 2003). Carnevale and Desrochers (2003) estimate that, in 2020, the demand for workers will exceed the supply by 20 million overall, and by 14 million among workers with at least some college education.

One likely consequence of a demand for college-educated workers that exceeds the available supply is an increase in the college earnings premium, or the difference between the average earnings of college and high school graduates. Growth in the earnings premium, in turn, contributes to the continued economic and social stratification of American society. The earnings differential between those with some college education and those who graduated from high school also increased during the 1980s and 1990s (Carnevale and Desrochers, 2003). By building human capital, college enrollment enables individuals to earn higher incomes throughout their lifetimes (Becker, 1993; Paulsen, 2001a). Thus, policies that increase higher education enrollment equalize incomes more efficiently than other government interventions including direct transfers (i.e., annual income subsidies) to low-income individuals or individuals from underrepresented racial/ethnic groups (Paulsen, 2001b).

Identifying ways to close the gaps in college choice is also important because of projected changes in the racial/ethnic composition of the traditional college-age population. The number of high school graduates is projected to increase steadily until 2008–09, then decline through 2014–15, and then rise again through 2017–18 (WICHE, 2003). While growing numbers of high school graduates may challenge the capacity of the nation's higher education system to accommodate all potential students, college choice may also be affected by changes in the characteristics of high school graduates. Between 2001–02 and 2013–14, the number of White public high school graduates is projected to decline by 11%, while the numbers of other groups will rise, with increases of 73% for Hispanics, 44% for Asians, 16% for American Indians, and 6% for Blacks (WICHE, 2003). Specifically, the fastest growing racial/ethnic group—Hispanics—is the group that now has the lowest rate of college enrollment.

Current trends in the economy and financial policies and practices related to the affordability of college seem to be working in contradiction to intentions to close gaps in college choice. For the past two decades, tuition has grown faster than family income (The College Board, 2004). After controlling for inflation, average tuition increased between 1993–94 and 2003–04 by 35% at private four-year institutions and 44% at public

four-year institutions, while the median income for families with parents between the ages of 45 and 54 increased by only 6% over this period (The College Board, 2004). Because increases in tuition have exceeded increases in family income and inflation, affordability has declined (National Center for Public Policy and Higher Education, 2004). In its 2004 report card, the National Center for Public Policy and Higher Education awarded 36 of the 50 states an “F” for affordability, a category based on a family’s ability to pay for two-year and four-year colleges in the state, the availability of need-based financial aid and low-priced colleges, and the average student debt. Moreover, the performance of 17 states fell over the past decade on all 6 of the affordability indicators (National Center for Public Policy and Higher Education, 2004).

College choice must continue to be addressed in research, policy, and practice. Persisting gaps in college access and choice across income, SES, and racial/ethnic groups suggest that existing approaches are insufficient. Ensuring that all individuals have the opportunity to enroll in college is a critical step toward maximizing the private and public benefits that result from higher education, including state and national economic prosperity. Projected demographic changes and current trends in higher education finance further underscore the need for continued attention to theory and research on college choice.

THEORETICAL APPROACHES TO EXAMINING COLLEGE CHOICE

Hossler, Braxton, and Coopersmith (1989) and Paulsen (1990) agreed that two theoretical perspectives are useful for guiding research on college access and choice: an economic model of human capital investment and a sociological model of status attainment. A review of research published since 1990 illustrates not only the continued usefulness of these theoretical perspectives but also the appropriateness of a wider range of sociological constructs. Drawing on the strengths and weaknesses of these theoretical perspectives and incorporating what is known from recent research, this section proposes a conceptual model that integrates constructs from both economic and sociological perspectives. One particular strength of the proposed conceptual model is the explicit recognition of the influence on decisions of various levels of context, including aspects of schools and communities, higher education institutions, and the social, economic, and policy context.

ECONOMIC MODEL OF HUMAN CAPITAL INVESTMENT

A number of researchers (e.g., Kane, 1999; Long, 2004a; Manski and Wise, 1983) have used economic models of human capital investment to examine students' college choices. Human capital investments are designed to enhance individuals' "mental and physical abilities," in order to enhance their productivity (Becker, 1962). Human capital theory predicts that productivity increases are rewarded by higher earnings (Becker, 1993; Paulsen, 2001a), and that differences in productivity are attributable to differences in the investments that individuals make in their personal development, such as the quantity and quality of their education, the amount of their on-the-job training, their geographic mobility, and their emotional and physical health (Becker, 1962; Schultz, 1961). While other types of investments also improve human capital, among the most worthwhile of human capital investments are education and training (Becker, 1993). Human capital theory assumes that additional years of education raise productivity, and thus earnings, "mainly by providing knowledge, skills, and a way of analyzing problems" (Becker, 1993, p. 19).

Rational models of human capital investment assume that individuals decide to invest in additional education based on a comparison of the expected lifetime benefits with the expected costs (Becker, 1962, 1993; Ellwood and Kane, 2000; Paulsen, 2001a). Individuals are assumed to act rationally in ways that maximize their utility, given their personal preferences, tastes, and expectations (Becker, 1962, 1993). Human capital theory assumes that individuals consider both monetary and nonmonetary benefits in their calculation of the total expected benefits of higher education (Becker, 1993). Theory predicts, and research shows, that individuals realize a number of benefits from an investment in higher education. In addition to the increase in earnings described earlier, individuals realize other long-term benefits including more fulfilling work environments, better health, longer life, more informed purchases, and lower probabilities of unemployment. Individuals who attend college also realize such short-term consumption benefits as enjoyment of the learning experience, involvement in extracurricular activities, participation in social and cultural events, and enhancement of social status (Baum and Payea, 2004; Bowen, 1997; Leslie and Brinkman, 1988). The costs of investing in a college education include the direct costs of attendance (e.g., tuition, fees, room, board, books, and supplies), less financial aid, the opportunity costs of foregone earnings and leisure time, and the costs of traveling between home and institution (Becker, 1993).

Recognizing that differences in expected costs and benefits cannot completely explain observed differences in college choice, economists (e.g., Becker, 1993; Ellwood and Kane, 2000; Paulsen, 2001a) note that differences in college choice are also attributable to variations in the forces that shape the demand for human capital and the supply of resources for investing in human capital. Differences in the demand for higher education are expected to reflect differences across groups in academic preparation and achievement, while differences in the supply of resources available to pay the costs of higher education are expected to reflect differences in the availability of student financial aid, loan limits, and parental willingness to contribute to college costs (Ellwood and Kane, 2000; Paulsen, 2001a). Therefore, individuals with greater academic preparation and achievement (i.e., greater initial stock of human capital) and individuals with greater personal financial resources are predicted to be more likely to enroll in college (Catsiapis, 1987). College enrollments are also expected to be higher for individuals with greater academic preparation and achievement, since they are more likely to successfully complete the educational program and obtain a job that produces a future earnings premium (Catsiapis, 1987).

Numerous quantitative studies (e.g., Avery and Hoxby, 2004; Ellwood and Kane, 2000; Long, 2004a; Manski and Wise, 1983) use a human capital investment model to examine college choice. Most studies focus on the third stage of the process, examining the decision to enroll and selection of a particular institution to attend. A primary contribution of human capital approaches to college choice is their focus on the effects of “finances,” including family income, tuition, and financial aid, on enrollment (Terenzini, Cabrera, and Bernal, 2001). As a typical example, Ellwood and Kane (2000) used a human capital investment model to guide multivariate analyses of the relationship between family income and enrollment in college within 20 months of graduating from high school after controlling for measures of academic ability and achievement, tuition and financial aid, and tastes (measured by parental education).

Although a human capital investment model illuminates the effects of variables like family income and academic ability on college-related decisions, this approach has limited usefulness for understanding sources of differences in college choices across groups. A rational human capital investment model assumes that, even when the expected benefits and costs are the same, two individuals may make different college choices because of differences in their preferences, tolerance for risk, and uncertainty (DesJardins and Toutkoushian, 2005). While acknowledging that utility varies across individuals, “[e]conomists take preferences as given

and do not delve into how they are formed or why they differ across individuals” (DesJardins and Toutkoushian, 2005, p. 211).

When based on available information (regardless of its accuracy), an individual’s choice may be rational (DesJardins and Toutkoushian, 2005). Human capital models do not assume that individuals have perfect and complete information, but evaluate college options based on available information about the benefits and costs. DesJardins and Toutkoushian (2005) articulate the economist’s view of the relationship between “rational behavior” and “differential access to information” in the college-choice process in the following way:

While having inaccurate or incomplete information may affect a student’s decision, the decision would still be rational provided that it was based on a reasoned reaction to the information available to them at the time that they made the decision. (p. 218)

Recent college-choice research is consistent with this view of the roles of rational behavior and differential access to information about the benefits and costs of college in the college-choice process. Based on his review and synthesis of research, Heller (1997) observed that students “react differently to various forms of financial aid and tuition changes, even if the economic value of each is the same” (p. 632). Similarly, using a sample of high-aptitude 1999–2000 high school seniors, Avery and Hoxby (2004) found that college enrollment is influenced by nonpecuniary aspects of grants, including whether the aid is labeled “grant” or “scholarship,” and whether the grant aid is frontloaded. Inadequate knowledge and information about student financial aid may be a primary explanation for differences between students in their behavioral responses to what might objectively be viewed as similar dollar amount changes in costs and benefits of college attendance (Avery and Hoxby, 2004; Heller, 1997).

Potential students not only lack information about college opportunities but also have differential access to information (Kane, 1999). Unlike with many (but not all) for-profit firms in competitive industries, buyers of higher education are unable to obtain complete information about the “product” until they “experience” it (Winston, 1999). However, the cost of “experiencing” a college education is substantially higher than the cost of “experiencing” a pair of shoes or a restaurant meal. Potential first-generation college students, a large percentage of whom are Black and Hispanic (NCES, 2004), may be particularly disadvantaged by this characteristic of higher education markets if they are unable to obtain relevant information from their immediate family, school, or community context.

Research generally shows that many prospective college students are poorly informed about both the costs and the economic benefits of an investment in higher education, and that the lower observed enrollment rates for low-income students, African-Americans, and Hispanics may be attributable, at least in part, to this lack of information. Based on its review of research published between 1980 and 1989, the U.S. Government Accounting Office (U.S. GAO, 1990) concluded that students and their parents generally lack accurate knowledge and information about college costs and the availability of financial aid to offset the costs. A review of research published since 1985 shows the continued appropriateness of the GAO's conclusion (Perna, 2004c). Although research has not established the direction of causality between knowledge of college costs and financial aid and college-related behaviors, the lack of awareness and understanding about college costs and financial aid is evident even among students and parents who report that they expect to go to college (Perna, 2004c). Most studies show that parents and students overestimate college costs and lack accurate information about financial aid (McColloch, 1990; Ikenberry and Hartle, 1998). Research also shows that parents with lower incomes and lower levels of education know less about various types of financial aid (Olson and Rosenfeld, 1984) and that Black and Hispanic students and parents are particularly uninformed or poorly informed about college prices and financial aid (Horn and Flores, 2003; Immerwahr, 2003; Tomás Rivera Policy Institute, 2004; Tornatzky, Cutler, and Lee, 2002).

Although research consistently shows that many students and their parents lack accurate or complete knowledge and information about college costs and financial aid (Perna, 2004c), other research suggests that students are informed about the benefits of higher education (e.g., Paulsen, 2001a). Based on his review of relevant research, Paulsen (2001a) concluded that, on average, students "appear to be reasonably careful and accurate in their acquisition of information about earnings differentials" (p. 63) associated with higher education. In their examination of students' perceptions of college opportunities, Avery and Kane (2004) concluded that low college enrollment rates for low-income high school students are not attributable to lack of information about the benefits of attending. Their analyses show that students tend to overestimate both the expected wages of college graduates and the costs of attending college. Because of both errors, the net present value of completing a bachelor's degree was positive for about three-fourths of the students in their sample.

Nonetheless, other research suggests that the accuracy of the estimated benefits varies both within and across groups, with less accurate estimates by individuals from lower-income families than by other

individuals (Paulsen, 2001a). Dominitz and Manski (1996) found that, even in a sample of high school and college students with above average parental education and family income, estimates of the earnings of college graduates varied substantially. In his study of undergraduates at one university, Betts (1996) found that, even after controlling for gender, race, grade-point average, parents' education, and major field, students from lower-income families had significantly lower estimates of both the starting salaries of college graduates and the average salaries of college graduates between the ages of 25 and 34 who were working full-time. Moreover, the accuracy of estimates was greater for college seniors than for college freshmen (Betts, 1996), suggesting that individuals may have even less accurate knowledge and information before they enter college. From focus groups of Hispanic high school seniors in five states, Immerwahr (2003) concluded that one barrier to college enrollment for Hispanics is the lack of understanding about the long-term benefits of college.

In summary, although traditional human capital approaches are useful for conceptualizing the criteria that individuals consider and the effects of costs and benefits on students' college-choice behavior, they are insufficient for understanding all sources of observed differences in college choice across family income and racial/ethnic groups. Research shows that controlling for such demand-related forces as academic ability and such supply-related forces as the availability of financial aid accounts for some of the observed differences across groups in such outcomes as college enrollment (Perna, 2000). But these forces do not completely explain differences in college choices. Paulsen (2001a) notes that students' perceptions of the economic benefits and costs of higher education vary across individuals because of factors that are "often non-monetary, less tangible, and more difficult to assess or estimate" (p. 60). These include, for example, differences in expectations about benefits and costs based on differences in access to information about college or differences in some of the nonmonetary, intangible aspects of the family, school, or community context, the higher education context, and/or the social, economic, and policy context (DesJardins and Toutkoushian, 2005; Paulsen, 2001a).

SOCIOLOGICAL-CULTURAL APPROACHES

Sociological approaches to college choice typically emphasize the ways in which socioeconomic background characteristics influence student decisions (Terenzini, Cabrera, and Bernal, 2001). Sociological approaches have evolved from the traditional status attainment models developed in the 1970s and 1980s (e.g., Hearn, 1984, 1988; Sewell, Hauser,

and Wolf, 1986) to the models that emphasize the constructs of cultural and social capital (McDonough, 1997).

Traditional sociological status attainment models typically focus on the effects of students' SES on their educational and occupational aspirations. Such models posit that educational aspirations, a prerequisite to postsecondary enrollment, are determined by such behaviors as academic preparation and achievement and such demographic characteristics as SES (Hossler, Schmit, and Vesper, 1999). Status attainment models predict that individuals with higher levels of academic preparation and achievement receive greater encouragement from "significant others," including parents, teachers, counselors, and peers, and that this encouragement promotes higher aspirations. Higher aspirations, in turn, are expected to lead to greater educational and occupational attainments.

As an example, Hearn (1984, 1988) relied on a sociologically derived causal model to investigate the effects of SES and ascriptive characteristics (i.e., race/ethnicity and gender) on college enrollment. Using data from the High School and Beyond Longitudinal Study of 1980 high school seniors, Hearn (1988) argued that, if socioeconomic and/or ascriptive characteristics directly influenced institutional choice after controlling for academic characteristics (e.g., test scores, high school grades, high school curricular track, educational expectations), then the analyses would demonstrate the presence of structural barriers to attainment. After controlling for other variables, Hearn (1988) found that only one of four measures of SES, mother's education, was directly related to the cost of the institution that graduates attended after controlling for other variables. The other measures of SES were related to the dependent variable only indirectly through measures of academic preparation and achievement.

More recent research focuses on the ways in which the sociological constructs of cultural and social capital influence student college choice. Like human capital and physical capital, cultural and social capital are resources that may be invested to enhance productivity (Coleman, 1988) and facilitate upward mobility (DiMaggio and Mohr, 1985; Lamont and Lareau, 1988). Conceptualizations of cultural and social capital have at times overlapped (McNeal, 1999). Cultural capital refers to the system of attributes, such as language skills, cultural knowledge, and mannerisms, that is derived, in part, from one's parents and that defines an individual's class status (Bourdieu, 1986; Bourdieu and Passeron, 1977). Middle- and upper-class individuals possess the most valued forms of cultural capital (McDonough, 1997). Individuals who lack the required cultural capital may: (a) lower their educational aspirations or self-select out of particular situations (e.g., not enroll in higher education) because they do not know

the particular cultural norms; (b) overperform to compensate for their less-valued cultural resources; or (c) receive fewer rewards for their educational investment (Bourdieu and Passeron, 1977; Lamont and Lareau, 1988).

Social capital focuses on social networks and the ways in which social networks and connections are sustained (Morrow, 1999). In his comprehensive assessment of the origins and uses of social capital, Portes (1998) noted that social capital is acquired through an individual's relationships with others, particularly through membership in social networks and other social structures. A primary function of social capital is to enable an individual to gain access to human, cultural, and other forms of capital, as well as institutional resources and support (Coleman, 1988; Hofferth, Boisjoly, and Duncan, 1998; Lin, 2001b; Morrow, 1999; Portes, 1998; Stanton-Salazar and Dornbusch, 1995).

Coleman (1988) and Bourdieu (1986) offer somewhat different conceptualizations of social capital. Coleman's approach, the one most frequently used in educational research (Dika and Singh, 2002), stresses the role of social capital in communicating the norms, trust, authority, and social controls that an individual must understand and adopt in order to succeed. Coleman suggests that social capital is derived from two types of relationships: the relationship between children and their parents and relationships between a parent and other adults, particularly adults who are connected to the school that the child attends.

Bourdieu focuses on the ways in which some individuals are advantaged because of their membership in particular groups (Portes, 1998). According to Bourdieu (1986), the amount of social capital to which an individual may gain access through social networks and relationships depends on the size of the networks as well as the amounts of economic, cultural, and social capital that individuals in the network possess. Bourdieu views social capital as a mechanism that the dominant class uses to maintain its dominant position (Lin, 2001b).

While Coleman's perspective suggests that parents play a primary role in promoting the status attainment of their children, Bourdieu's approach describes the restrictions imposed by structural barriers (Dika and Singh, 2002). Structural barriers are often manifested in the form of differential access across racial/ethnic, gender, and other groups to institutional resources (Dika and Singh, 2002). Despite this and other differences (Dika and Singh, 2002; Lin, 2001b), both Coleman and Bourdieu recognize that "social capital consists of resources embedded in social relations and social structures, which can be mobilized when an actor wishes to increase the likelihood of success in a purposive action" (Lin, 2001b, p. 24).

Both Bourdieu (Bourdieu and Wacquant, 1992) and Lin (2001b) argue that an individual's actions cannot be fully understood except in relation to the social context in which the action occurs. Habitus, or an individual's internalized system of thoughts, beliefs, and perceptions that are acquired from the immediate environment, conditions an individual's college-related expectations, attitudes, and aspirations (Bourdieu and Passeron, 1977; McDonough, 1997). Thus, an individual's decisions about college are not based on rational analyses but are "sensible or reasonable choices" (McDonough, 1997, p. 9). Habitus is the internalized set of dispositions and preferences that is derived from one's surroundings and that subconsciously define what is a "reasonable" action (Bourdieu and Wacquant, 1992; Horvat, 2001; McDonough, 1997; Paulsen and St. John, 2002). Habitus reflects the internalization of structural boundaries and constraints and determines what is possible for an individual (Horvat, 2001).

Research (McDonough, 1997; Perna and Titus, 2005) demonstrates the ways in which both an individual's habitus and the aspects of the school context shape student college choice. McDonough's qualitative study of the college-related decisions of 12 White girls attending four high schools in California shows the roles of both individual and organizational habitus. "Organizational habitus is a way to understand schools' roles in reproducing social inequalities" (McDonough, 1997, p. 156). Organizational habitus shapes college choice by offering a class-based perspective on the process, thereby narrowing the range of possible options. Specifically, McDonough shows that college choices are narrowed by a student's personal circumstances, particularly academic performance and SES, as well as the characteristics of the school attended, especially the organization and structure of guidance counseling at the school. Her analyses reveal sharp differences across schools, particularly in terms of the time and resources that counselors have available for college counseling, the types of colleges emphasized by counselors to students, and the role of counselors in the college-choice process (e.g., reactive vs. proactive participant). Differences in the organization and structure of guidance counseling across schools are related to another layer of context, namely, the SES of communities in which the schools are based (McDonough, 1997).

Using multilevel modeling, Perna and Titus (2005) explore the ways in which the structural context, as measured by characteristics of the high school attended, shapes the college enrollment decisions of high school graduates. Focusing more specifically on the role of parental involvement as a form of social capital, Perna and Titus operationalize structural characteristics in terms of the extent to which the school encourages parental

involvement, the volume of resources that may be accessed via social networks at the school, and the homogeneity of the social networks at the school. Their analyses show that, regardless of an individual student's social, economic, cultural, and human capital, the likelihood of enrolling in a two-year or four-year college after graduating from high school is related to the volume of resources that may be accessed through social networks at the school attended. The volume of resources is measured by such variables as the average levels of parental involvement, family income, parental education, and parental educational expectations at the school the child attends.

Sociological approaches are useful for understanding the ways in which context, influenced in part by structural constraints and opportunities, shapes an individual's perspectives about and orientations toward college choice. Sociological approaches are also useful for exploring differences across groups in college choice (Horvat, 2001). Bourdieu argues that barriers based on race/ethnicity, class, and gender restrict access to institutional resources (Dika and Singh, 2002). An individual's habitus, as well as the types of cultural and social capital possessed, reflect, in part, an individual's race/ethnicity, class, and gender (Horvat, 2001). But despite these contributions, sociological approaches do not offer a framework for examining how individuals ultimately decide whether to aspire to postsecondary education, apply for admission to a set of colleges, or enroll in a particular college or university (Manski, 1993).

PROPOSED CONCEPTUAL MODEL

When considered separately, neither rational human capital investment models nor sociological approaches are sufficient for understanding differences across groups in student college choice. Manski (1993) argues that economic approaches offer a framework for understanding decision making, but are limited by their failure to examine the nature of information that is available to decision makers. On the other hand, sociological approaches shed light on the ways in which individuals gather information, but do not identify the ways in which individuals make decisions based on this information (Manski, 1993). In an attempt to enhance both economic and sociological approaches to decision making, Manski drew upon sociological notions of emulation and role modeling to develop the Social Learning Proposition. Although the Social Learning Proposition includes the role of only a narrow set of sociological constructs (i.e., emulation and role modeling) and is not specific to college-related decisions, Manski (1993) demonstrates the strengths of a

conceptual model that draws upon constructs from both economics and sociology. In short, the resulting Social Learning Proposition provides a more comprehensive and complete understanding of decision making (Manski, 1993).

Recent research on student college choice also stresses the strengths of models that incorporate aspects of economics of human capital models and sociological notions of cultural and social capital (e.g., Freeman, 1997; Paulsen, 2001a; Paulsen and St. John, 2002; Perna, 2000, 2004b; St. John and Asker, 2001; St. John and Paulsen, 2001; St. John *et al.*, 2004). Based on their review of the role of theory in finance-related analyses, St. John and Paulsen (2001) concluded that, “Social and cultural theories are also important for the study of higher education finance because they provide an alternative, more complete explanation of the role of non-monetary factors that foster and inhibit access” (p. 555).

A conceptual model that draws on both economic and sociological perspectives assumes that students’ educational decisions are determined, at least in part, by their habitus, or the system of values and beliefs that shapes an individual’s views and interpretations (Paulsen, 2001a; Paulsen and St. John, 2002; Perna, 2000; St. John and Asker, 2001; St. John, Paulsen, and Carter, 2005). A key strength of an integrated conceptual model is the assumption that the pattern of educational attainment is not universal but may vary across racial/ethnic, socioeconomic, and other groups (Paulsen and St. John, 2002; St. John and Asker, 2001). This approach addresses the concern raised by some scholars (Freeman, 1997) that policy interventions will not effectively close gaps in student college choice without recognizing the culture and circumstances of particular groups.

Both qualitative and quantitative research demonstrate the merits of using an integrated conceptual model for examining enrollment decisions. Freeman’s (1997) qualitative study revealed that African-American high school students believe that both economic and sociocultural factors restrict the college enrollment of African-Americans. Specifically, Freeman found that African-American high school students were uncertain about their ability to pay the short-term costs of attending and about whether the long-term economic benefits of attending would exceed the costs—i.e., elements of a human capital investment model. Interviewees also pointed to the potential influence of structural barriers (e.g., physical conditions of the schools attended by African-Americans), social capital (e.g., interest and assistance from teachers and counselors, African-American role models), and cultural capital (e.g., believing at an early age that pursuing postsecondary education is a realistic option).

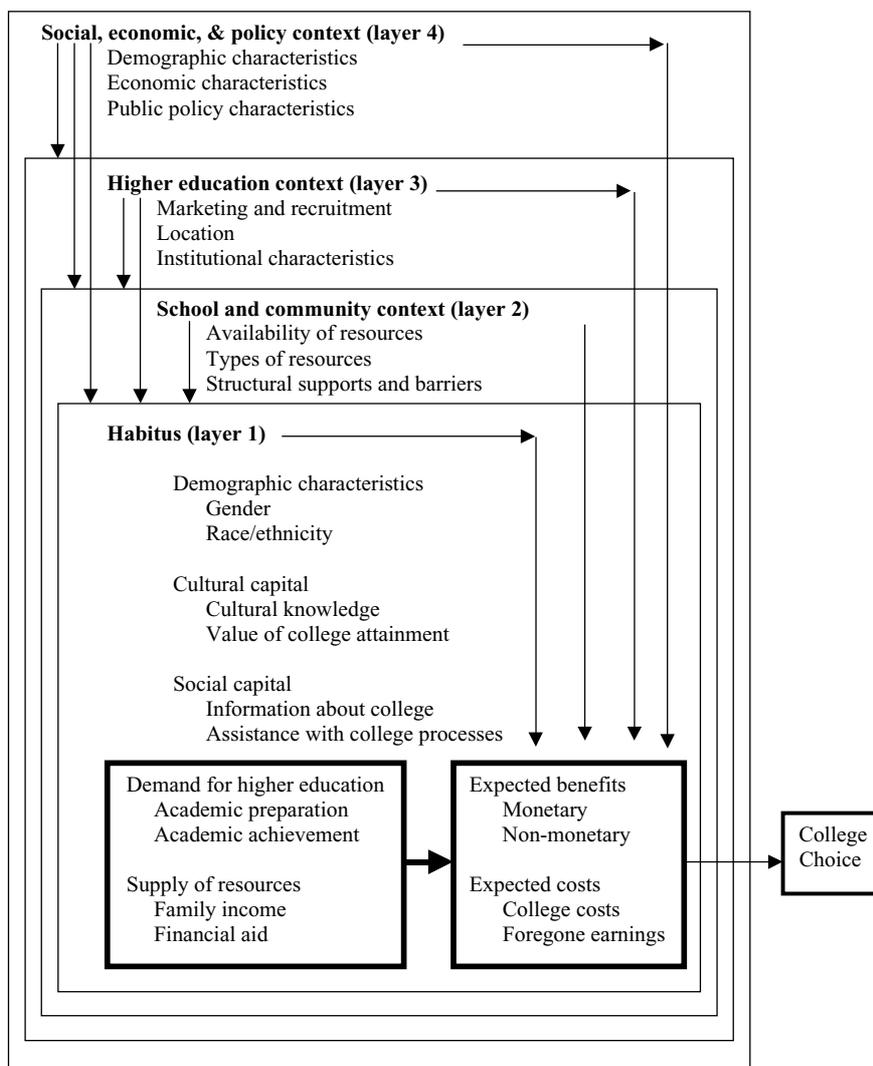
By reflecting differences in expectations, preferences, tastes, and certainty about higher education investment decisions, measures of social and cultural capital appear to be particularly important for understanding differences across groups in college enrollment decisions that are not explained by human capital investment models. Using logistic analyses of data from the National Educational Longitudinal Study (NELS), Perna (2000) found that measures of social and cultural capital improved the explanatory power of a traditional econometric model of college enrollment that included only measures of gender, race, financial resources, and academic preparation and achievement. Moreover, measures of cultural and social capital played a relatively more important role in explaining the college enrollment decisions of African-Americans and Hispanics than of Whites (Perna, 2000).

Figure 3.1 illustrates the proposed conceptual model for examining student college choice. This model draws on an economic model of human capital investment as well as the sociological concepts of habitus, cultural and social capital, and organizational context. Like “the student choice construct” (Paulsen and St. John, 2002; St. John and Asker, 2001), the proposed conceptual model assumes that college enrollment decisions reflect an individual’s “situated context.” Both the proposed conceptual model and the student choice construct assume that there is not one set course leading to college enrollment but that multiple routes are possible.

At the center of the proposed conceptual model is the human capital investment model in which college-choice decisions are based on a comparison of the expected benefits with the expected costs (see Figure 3.1). The expected benefits include both monetary and nonmonetary benefits, while the expected costs include the costs of attendance and foregone earnings. Also as predicted by human capital investment models, calculations of the expected benefits and costs are influenced by an individual’s academic preparation for college and availability of resources to pay the costs of attendance. But unlike human capital investment models, the proposed conceptual model shows that calculations of expected costs and earnings are nested within several layers of context.

The proposed conceptual model assumes that an individual’s college-choice decisions are shaped by four contextual layers: (1) the individual’s habitus; (2) school and community context; (3) the higher education context; and (4) the broader social, economic, and policy context. By emphasizing these layers of context, the proposed conceptual model recognizes differences across students in the resources that shape college choice (McDonough, 1997). As described in the previous section, an individual’s habitus regarding college choice (Figure 3.1, layer 1) is expected

Figure 3.1: Proposed conceptual model of student college choice



to reflect an individual's demographic characteristics, particularly gender, race/ethnicity, and SES, as well as cultural and social capital.

The school and community context (Figure 3.1, layer 2) reflects McDonough's (1997) notion of "organizational habitus," and recognizes the ways in which social structures and resources facilitate or impede student college choice.

Other research suggests that aspects of the school context may restrict college choice for low-income students and racial/ethnic minorities. Stanton-Salazar (1997) argued that such institutional agents as teachers, counselors, and middle-class peers provide access to resources and opportunities including information about college and help with college-admission requirements but that institutional structures limit the ability of working-class minority students to develop “trusting” relationships with institutional agents. Among the restrictive structures are a school focus on bureaucratic processes, the dual role of teachers and counselors as mentors and gatekeepers, and the short-term duration of interactions (Stanton-Salazar, 1997).

The next layer (Figure 3.1, layer 3), the higher education context, recognizes the role that higher education institutions play in shaping student college choice. Higher education institutions may influence the process in several ways. First, higher education institutions may be a source of information to students and their families about postsecondary enrollment options. Higher education institutions may convey information passively, through their location and geographic proximity to students’ homes (McDonough, Antonio, and Trent, 1997). Higher education institutions may also actively convey information to students through targeted marketing and recruiting efforts (Chapman, 1981). Second, the attributes and characteristics of higher education institutions also influence student college choice. Students prefer to attend colleges and universities with particular characteristics, especially characteristics that are consistent with their personal and social identities and needs for personal acceptance and institutional support (Nora, 2004). Higher education institutions also influence student college choice through their ability to select which applicants may enroll. Research suggests that students’ consider institutional admissions decisions in their college-choice behaviors, as students tend to self-select institutions with SAT scores similar to their own (Manski and Wise, 1983). Finally, higher education institutions influence student college choice through the availability of enrollment slots. Some (e.g., Perna *et al.*, 2005) have speculated that such forces as population growth and improved academic preparation for college may increase the demand for higher education beyond the available supply of enrollment slots at traditional colleges and universities. An excess demand for higher education may cause increased tuition and/or increased competition for available slots, actions that are likely to have the greatest negative impact on students from low-income families, African-Americans, and Hispanics (Perna *et al.*, 2005).

The outermost layer (Figure 3.1, layer 4), the social, economic, and policy context, recognizes that college choice is also influenced, directly and indirectly through other contextual layers, by changes in social forces (e.g., demographic changes), economic conditions (e.g., unemployment rate), and public policies (e.g., establishment of a new need-based grant program). Explicitly incorporating the social, economic, and policy context into the model recognizes the connections between policy and college-choice outcomes identified by other researchers (e.g., Kirst and Bracco, 2004; Paulsen and St. John, 2002; Perna and Titus, 2004; Perna *et al.*, 2005; St. John and Asker, 2001). For example, Kirst and Bracco (2004) argue that policy “signals,” emanating from elementary and secondary education and/or postsecondary education about college admissions and placement requirements, play a critical role in students’ knowledge about, and academic preparation for, college. Using multilevel analyses, Perna and Titus (2004) found that measures of four types of state public policies (direct appropriations to higher education institutions, tuition, financial aid to students, and elementary and secondary education) were related to the college enrollment patterns of 1992 high school graduates.

In addition to examinations of “college choice,” the proposed conceptual model may also guide examinations of such intermediate outcomes in the student-college-choice process as academic preparation and parental saving for college, or of such potentially parallel processes as the decision of bachelor’s degree recipients to enroll in graduate or professional education (Perna, 2004b). For example, some researchers (e.g., Cabrera and La Nasa, 2000) argue that, in order to enroll in college, students must accomplish such tasks as becoming academically prepared for college and graduating from high school. The proposed conceptual model may be used to test the hypothesis that a student’s habitus toward college enrollment influences a student’s decision to become academically prepared for college and/or graduate from high school.

In summary, the proposed conceptual model assumes that, although college choice is ultimately based on a comparison of the benefits and costs of enrolling, assessments of the benefits and costs are shaped not only by the demand for higher education and supply of resources to pay the costs but also by an individual’s habitus and, directly and indirectly, by the family, school, and community context, higher education context, and social, economic, and policy context. By drawing on constructs from both human capital and sociological approaches, the proposed conceptual model will likely generate a more comprehensive understanding of student college choice. Through its recognition of the multiple layers of

context, the proposed conceptual model incorporates the perspectives of four major stakeholders in the college-choice process: students (and their parents); K-12 institutions; higher education institutions; and public policymakers. The proposed model will likely be especially useful for understanding differences across groups in college-choice outcomes, because of its explicit recognition of the multiple layers of context that influence an individual's college-related decisions.

METHODOLOGICAL APPROACHES TO EXAMINING STUDENT COLLEGE CHOICE

Although college-choice research has traditionally been dominated by quantitative analyses, qualitative approaches are becoming increasingly common. This section describes the relative contributions of quantitative and qualitative approaches and discusses the strengths and weaknesses of existing sources of national data. The section concludes by identifying key variables that should be included in examinations of student college choice.

QUALITATIVE VERSUS QUANTITATIVE APPROACHES

While earlier reviews of prior research (Hossler, Braxton, and Coopersmith, 1989; Paulsen, 1990) show that examinations of student college choice are dominated by quantitative methods, a review of research published since 1990 demonstrates the growing contribution of qualitative approaches. Both approaches are critical to the development of knowledge on student college choice.

Quantitative methodologies are especially useful for testing and confirming theoretical propositions about college choice for a particular population. Qualitative methodologies are critical for developing theoretical understandings of student-college-choice processes and for understanding the ways in which college-choice processes play out for individual students (Gall, Borg, and Gall, 1996).

In both quantitative and qualitative research, the most common unit of analysis is the student. Such research focuses on the characteristics, understandings, and behaviors of individual students. Using the conceptual model in Figure 3.1 as a guide, a study of college choice that uses the student as the unit of analysis might explore the influence of student financial aid on student college choice in the context of the student's habitus (layer 1).

Quantitative approaches to student college choice typically utilize multivariate analyses to isolate the relationship between key independent variable(s) and the outcome of interest after controlling for other variables. Because many college-related outcomes are dichotomous (e.g., aspire to college, yes or no; apply to college, yes or no; enroll in college, yes or no), logistic regression is common in quantitative analyses of college choice. Multinomial logistic regression, a special case of the general log-linear model, is appropriate when the dependent variable has more than two categories (e.g., enroll in a four-year institution, enroll in a two-year institution, or do not enroll). A few studies (e.g., Hearn, 1988) use path analysis to model college enrollment as a process in which exogenous variables (e.g., SES, race/ethnicity) influence college enrollment directly and indirectly through measures of academic preparation.

Some quantitative research (e.g., Heller, 1999; Kane, 1999; St. John, Musoba, and Chung, 2004; St. John *et al.*, 2004) uses the state, rather than the student, as unit of analysis. As an example, controlling for state-level measures of demographic context and characteristics of the state higher education system and using fixed-effects ordinary least squares regression, St. John, Chung, *et al.* examine the relationship between state-level measures of public finance policies (e.g., tax rates, tuition, financial aid) and two outcomes: academic preparation for college (i.e., high school graduation rates) and college enrollment rates. Other researchers (e.g., Heller, 1999; Kane, 1999) model enrollment in a state as a function of such state characteristics as tuition, unemployment, and need-based grant spending.

Recognizing that student behavior is shaped by context, as illustrated in Figure 3.1, some multilevel analyses use both the student and the state as the units of analysis. Perna and Titus (2004) used multilevel modeling to examine the effects of various types of state public policies on the type of college or university that high school graduates attend after taking into account student-level predictors of enrollment. State-level variables included measures of state appropriations to higher education, tuition, availability of need-based and non-need-based student financial aid, K-12 education, and the availability of higher education in the state.

Other research uses the student and the school as units of analysis. For example, Perna and Titus (2005) use multilevel analyses of student- and school-level data from the NELS to examine the extent to which college enrollment is shaped not only by an individual's student's parental involvement but also by the volume of social and other forms of capital that may be available through social networks at the school. The analyses include such student-level variables as gender, race/ethnicity, family

income, importance of financial aid and college costs, academic preparation, and parental involvement, as well as variables that measure such aspects of the school structural context as the extent to which the school encourages parental involvement, the volume of resources that may be accessed via social networks at the school, and the homogeneity of the social networks at the school.

Other quantitative analyses explicitly recognize that student college choice is a series of related decisions (DesJardins, Ahlburg, and McCall, *in press*; Long, 2004a). For example, Long (2004a) examines the relationship between institutional characteristics and the likelihood of choosing to attend that institution (i.e., which choice to attend), conditional on enrolling at any type of postsecondary education institution (i.e., whether to attend). Asserting that prior research incorrectly assumes that decisions are independent, DesJardins and colleagues use a random utility model of student college choice to simultaneously estimate application, admission, and enrollment decisions while controlling for the nonrandom nature of financial aid applications and awards. The analyses first involve estimating the probability of being awarded financial aid, conditional on applying for aid, and the amount of financial aid awarded, conditional on applying for aid and being awarded aid. Then, the probability of admission is estimated, conditional on applying for admission to the institution. Finally, the probability of enrolling in an institution is estimated, conditional on the probability of admission. While more sophisticated than other statistical techniques, this approach may address the potential selection bias that may occur in a study that focuses on one college-related decision in isolation.

Qualitative approaches to student college choice utilize such methods as group interviews (e.g., Freeman, 1997), case studies (e.g., McDonough, 1997), and life history (e.g., González, Stone, and Jovel, 2003). For example, Freeman (1997) conducted 16 structured group interviews involving 70 African-American high school students in five cities with large African-American populations. González, Stone, and Jovel (2003) used life history to compare the effects of primary and secondary school educational experiences on the college choices of 12 low-income Latinas who were enrolled in a selective university and 10 low-income Latinas who were enrolled in a community college. Group interviews and life history approaches may be especially effective for giving voice to the experiences of students from underrepresented groups and for developing a greater understanding of the barriers to college enrollment for these individuals.

Qualitative approaches may also incorporate multiple levels of analysis. In her qualitative case studies of the college-choice processes of students at four high schools in California, McDonough (1997) demonstrated the ways in which both the student's habitus and the school context (i.e., "organizational habitus") influenced students' college choices. Seeking to inform theory about student college processes, McDonough used rich case studies of individual students and cross-case analysis across the four schools. To control for gender, race/ethnicity, and academic achievement, she selected 12 White average-performing, college-bound, high school seniors who attended four high schools in California. The four high schools varied in terms of students' average SES and the nature of college guidance systems. For each of the 12 selected students, the case studies also included interviews with a parent, best friend, and school advisor and a review of the student's transcript. These data were supplemented by questionnaires administered to all students in the academic curricular track at each school. Data from the questionnaires describe the organizational context of each school, providing information about peers' educational and occupational aspirations and plans and college-related activities. McDonough also collected data from guidance counselors about the structure and nature of college guidance at the school and college destinations of graduates, as well as from observations of bulletin boards, college counseling facilities, and computer resources, and documents.

Although a small number of studies (e.g., Hossler, Schmit, and Vesper, 1999) incorporate both qualitative and quantitative techniques, the vast majority of studies opt for one approach or the other. As Creswell (2003) observes, mixed method designs involve additional challenges, including the time required for collecting and analyzing the data and the required researcher expertise. In their eight-year longitudinal study of student college choice, Hossler, Schmit, and Vesper (1999) administered questionnaires to a sample of 4,923 students and parents eight times between 1987 and 1990 and interviewed a subsample of 56 students and parents nine times between 1989 and 1994. Students were high school freshmen in the first year of data collection.

Qualitative approaches are especially useful for discovering theoretical propositions to explain student-college-choice processes, developing in-depth understandings of student-college-choice processes for particular students, and understanding the influence of the context or setting on student college choice (Gall, Borg, and Gall, 1996; Marshall and Rossman, 1999). However, the results of qualitative research have

limited generalizability, as the samples involved are not representative of a particular population.

In contrast, the results of quantitative analyses, especially those using data that are representative of the college-going population nationwide, have high external validity. Quantitative analyses have other limitations, however, including the inability to describe the experiences of any particular individual. Moreover, quantitative researchers are typically challenged to identify appropriate proxies for complex constructs, particularly aspects of cultural and social capital. For example, researchers (Dika and Singh, 2002; Morrow, 1999; Perna and Titus, 2005) note that quantitative studies often measure parental involvement with variables that reflect the quantity rather than the quality of interactions.

Both quantitative and qualitative approaches have strengths and weaknesses. Therefore, qualitative research should be informed by the findings of quantitative research, and vice versa. Both approaches are important for developing a comprehensive understanding of student college choice in general, and of the student-college-choice experiences and processes of students of different groups in particular.

SOURCES OF NATIONAL DATA

Much of the recent quantitative research on student college choice utilizes data from the NELS, a database that is sponsored by the U.S. Department of Education's NCES. The NELS contains data for a cohort of students in the 8th grade (1988) and when most of the students were high school sophomores (1990), high school seniors (1992), two years after their scheduled high school graduation (1994), and eight years after their scheduled high school graduation (2000). The sample was freshened in 1990 and 1992 to ensure representative cohorts of 1990 10th graders and 1992 12th graders, respectively.

The NELS is the third in a series of longitudinal studies that is designed to provide data on students' transition from high school to postsecondary education. The National Longitudinal Study (NLS) of 1972 high school seniors followed students periodically through 1986. The High School and Beyond (HS&B) Study followed 1980 high school seniors periodically through 1986 and 1980 high school sophomores periodically through 1992. The Educational Longitudinal Study 2002 tracks the experiences of 2002 10th graders through high school and into postsecondary education and the workforce, with data collections in 2002, 2004, and 2006.

Each of these longitudinal data sets offers researchers the opportunity to examine the development of the college-choice process as a student moves through high school. Together, this collection of longitudinal data sets allows researchers to examine changes in the college-choice process over time from the 1970s through 2000s. The strengths of these data sets include large sample sizes, high response rates, and multiple data sources (e.g., student interviews, parent interviews, transcripts, standardized tests). One weakness of the NELS is that, because the sampling frame is based on the school attended in the 8th grade, the database includes small numbers of students enrolled at particular colleges and universities.

Other studies (e.g., McDonough, Antonio, and Trent, 1997; McDonough *et al.*, 2004) rely on data from the Cooperative Institutional Research Program (CIRP), sponsored by the Higher Education Research Institute at the University of California, Los Angeles. The Freshman Survey, an instrument that participating institutions administer to each year's freshman class, provides data on the characteristics of the entering class, with attention to reasons for attending college, as well as demographic characteristics, college-related expectations, high school experiences, educational and occupational goals and plans, college finances, and other attitudes and values.

Because the data are clustered by college or university and not elementary or secondary school (as for the NELS), the CIRP data may offer some advantages for researchers interested in examining the college choices of students at particular types of colleges and universities, including Historically Black Colleges and Universities (HBCUs; McDonough, Antonio, and Trent, 1997) and selective institutions (McDonough *et al.*, 2004). Nonetheless, the CIRP data have several disadvantages for studies of college choice. In particular, the data are limited to individuals who actually enrolled in college, retrospective about the college-choice process, and not representative of colleges and universities nationwide. Only a subset of four-year colleges and universities volunteer to participate in the annual CIRP data collection.

Researchers must also recognize other challenges and limitations associated with using any existing database (St. John, 2004). As mentioned earlier, secondary data sources that are based on survey instruments typically include limited measures of such complex constructs as cultural and social capital (Perna, 2000; Perna and Titus, 2005). Researchers must also make decisions about approaches to missing data (see for example Perna and Titus, 2005). Moreover, most existing national data sets include

limited numbers of students of particular groups, such as American Indians/Alaskan Natives.

DEPENDENT VARIABLES

As noted by others (St. John and Asker, 2001), the college-choice process may be understood as a series of choices. Among the choices are determining educational and occupational aspirations, which institutions to consider, whether attend college, and which college to attend.

Predisposition: Aspirations, Expectations, and Plans

Researchers typically operationalize “predisposition” in terms of students’ aspirations, expectations, or plans for college (e.g., Hossler, Schmit, and Vesper, 1999; Hossler and Stage, 1992; Kao and Tienda, 1998; Stage and Hossler, 1989). Others (e.g., Hossler, Schmit, and Vesper, 1999; Kao and Tienda, 1998) examine changes in predisposition over the high school years.

At least three challenges limit research on student predisposition toward college. One challenge is determining what students understand “college” to mean or require. In their exploratory study using data from eight focus groups of students attending two high schools in Chicago, Kao and Tienda (1998) found that many students had incomplete information about “college” including the level of education that was required for particular occupations. While Asians (who were generally of higher SES) generally had more accurate knowledge of the educational requirements for particular occupations, Hispanics tended to have less accurate knowledge and less information about differences among types of white-collar work or college and financial aid requirements. Similarly, using data from the National Longitudinal Study of Youth, Ludwig (1999) found that 81% of individuals between the ages of 14 and 21 underestimated the level of education required for the expected occupation. Individuals living in poor urban areas were less likely than other individuals to have accurate information about the labor market (Ludwig, 1999).

Second, research examining the predisposition stage of the college-choice process is limited by the absence of clear and consistent measurement of the dependent variable. Some researchers (e.g., Adelman, 1999) emphasize that educational plans are a more important predictor of college enrollment than educational aspirations or expectations. Adelman (1999) argues that “aspirations” reflect outcomes that are desired

regardless of how realistic, while “plans” reflect a more realistic appraisal of future behavior and a scheme for achieving the desired outcome. Despite these conceptual distinctions, however, researchers tend to use the labels aspirations, expectations, and plans interchangeably.

Third, examinations of students’ predisposition are also complicated by the extent to which students report what they perceive to be the expected response (e.g., at least a bachelor’s degree). Avery and Kane (2004) found that a substantial share of high school seniors indicated interest in attending a four-year college, but did not take the SAT examination or apply for admission. Avery and Kane speculated that the observed gap between stated educational expectations and actual behaviors may be attributable, at least in part, to the tendency of students to state high educational expectations in order to please their teachers and/or the researchers.

Search

Researchers have used several variables to operationalize outcomes in the second stage of the choice process, search. These dependent variables include the number of colleges which a student considers (e.g., Hossler, Schmit, and Vesper, 1999), the number of colleges to which a student applies (Hurtado *et al.*, 1997), the number of various types of colleges to which SAT scores are sent (Long, 2004c), the likelihood of applying to a particular institution (Weiler, 1994), the likelihood of applying to any four-year college (Cabrera and La Nasa, 2001), and the sources of information that students and parents use to learn about college and financial aid (Cabrera and La Nasa, 2001; Hamrick and Hossler, 1996; Hossler and Vesper, 1993; Tomás Rivera Policy Institute, 2004; Tornatzky, Cutler, and Lee, 2002).

Choice

Echoing the conclusion of others (Hossler, Braxton, and Cooper-smith, 1989), the third stage of the college-choice process continues to be the most frequently examined part of the process. Some researchers operationalize outcomes in the third stage using such dichotomous measures as whether or not a student enrolled in a four-year college or university (Perna, 2000), enrolled in any postsecondary institution (Ellwood and Kane, 2000; Kane, 1999), or enrolled in their first-choice institution (Hurtado *et al.*, 1997). Others utilize multinomial outcome measures including enrolled in a two-year institution, enrolled in a four-year institution, or

did not enroll (Perna and Titus, 2005; Rouse, 1994), enrolled at a four-year institution, enrolled full-time at a two-year institution, enrolled part-time at a two-year institution, or did not enroll (Plank and Jordan, 2001), or enrolled in an in-state public two-year institution, enrolled in an in-state public four-year institution, enrolled in an in-state private four-year institution, enrolled in an out-of-state institution, or did not enroll (Perna and Titus, 2004). Still others measure aspects of choice using continuous variables, such as the price of attending an institution (i.e., tuition and fees; Hearn, 1988).

KEY INDEPENDENT VARIABLES

Regardless of whether qualitative or quantitative methods are used, rigorous research is characterized, at least in part, by the ability to rule out alternative explanations for identified relationships. Thus, selecting appropriate independent and control variables is a critical step in the research design.

Researchers may rule out alternative explanations by either taking variables into account in the analyses or by controlling for particular variables in the sample selection process. For example, research on college enrollment frequently limits the analyses to high school graduates or, even more restrictive, to high school graduates who are academically qualified to attend a four-year college or university. Decisions to limit the sample to individuals with particular characteristics “controls” for the effects of those characteristics on the outcome. But such decisions may have other consequences for the interpretation of the findings of quantitative analyses, if the sample selection criteria ignore unmeasured differences between “selected” and “not selected” students. For example, Heller (2004) argues that limiting analyses to high school graduates who are academically qualified to attend college fails to account for possible differences between high school graduates who are and are not academically qualified. The two groups may differ in terms of their attitudes toward college, support and encouragement for college enrollment, and other characteristics. These differences may result in sample selection bias (Becker, 2004; Heller, 2004).

Quantitative researchers must also ensure that all relevant variables are included in the analyses to minimize omitted variable bias. One potential challenge pertains to financial aid variables. The NELS database has no financial aid data for students who do not attend college. But as noted by others (e.g., Becker, 2004; Fitzgerald, 2004; Heller, 2004; St. John, 2004), ignoring the role of financial aid in students’ college

enrollment decisions because of the absence of appropriate variables for all individuals may result in biased estimators (Becker, 2004; Heller, 2004). Becker's (2004) econometric analyses show that, since family income and financial aid are negatively related, omitting measures of financial aid from an analysis of college enrollment likely results in a coefficient that underestimates the effects of family income on enrollment.

Researchers using quantitative analyses should also keep in mind at least two other potential statistical dangers: endogeneity and collinearity. Endogeneity involves including in the model a regressor that is not only a predictor of the dependent variable but also predicted by other independent variables in the model (Becker, 2004). For example, analyses that include regressor measures of the steps required to enroll in college (e.g., aspire to college, take the SAT, become "college qualified") in an analysis of college enrollment likely result in endogeneity bias (Becker, 2004; Heller, 2004).

Nonetheless, completely avoiding endogeneity may not be possible, given the complexities of college enrollment processes. For example, in the following text, Ellwood and Kane (2000) allude to potential problems that are associated with endogeneity of test scores and high school grades in an analysis of the relationship between family income and college enrollment:

Potentially more problematic is the fact that test scores and grades at the time of high school graduation in part reflect students' efforts in preparation for college. To the extent that children from more poorly situated families realize that they are unlikely to go to college and therefore do not work as hard in primary and secondary school to prepare for college, lower scores and grades may actually be capturing some of the effects of parental resources on later college enrollment, obscuring the true impact of parental resources. (p. 289)

Collinearity, defined as high correlation among two or more independent variables, results in inefficient or unreliable estimators (Heller, 2004). Decisions to include related variables should be made based on a careful consideration of the correlation matrix as well as theory and prior research (St. John, 2004). For example, although family income and parents' education are correlated (Heller, 2004), the variables may be measures of theoretically distinct constructs, such as financial resources and knowledge and information about college (Ellwood and Kane, 2000; Perna, 2000). In their analyses of college enrollment, Ellwood and Kane (2000) included family income as a measure of financial resources and parents' education as a measure of "tastes," but noted potential implications

of the overlap between these two measures. Specifically, parents' education may reflect not only tastes for higher education but also a family's long-term financial well-being, thus resulting in a coefficient for family income that underestimates the effect of family income on enrollment. Similarly, family income may reflect both financial resources and tastes (Ellwood and Kane, 2000).

With these caveats in mind, a review of research published since 1990 reveals that much is known about the critical predictors of college predisposition, search, and choice. The following text summarizes what is known from prior research about the key variables in the proposed conceptual model (Figure 3.1).

Demand for Higher Education

Economic theory assumes that academic preparation and achievement not only represent an individual's initial stock of human capital but also influence a prospective student's assessment of future earnings (Catsiapis, 1987). Some (e.g., Cabrera and La Nasa, 2000; Ellwood and Kane, 2000; Perna, 2004c) argue that the single most important predictor of college enrollment is academic preparation.

Academic Preparation. Research has shown that the quality and intensity of the high school curriculum is among the most important predictors of college enrollment (Perna, 2004a). Although some studies show that college enrollment rates are higher for high school students who participate in academic or college preparatory curricular tracks than for other high school students (e.g., Hossler, Braxton, and Coopersmith, 1989; Perna, 2000; St. John, 1991), other research suggests that curricular track is an unreliable measure of academic preparation (Adelman, 1999; Stevenson, Schiller, and Schneider, 1994). Specifically, researchers (Adelman, 1999; Stevenson, Schiller, and Schneider, 1994) have found wide variation in the level of preparation among students in the so-called "academic" curricular tracks.

A better measure of the quality and intensity of academic preparation than curricular track is the highest level of coursework that is completed in particular subjects (Adelman, 1999). Because the hierarchical sequence of courses is clearer for mathematics than for other subjects, some researchers (e.g., Horn, 1998; Perna and Titus, 2004, 2005), measure the quality of academic preparation by the highest level of mathematics coursework that was completed at the time of high school completion (e.g., algebra I and geometry; algebra II; or at least one advanced math

course). Taking at least one advanced mathematics course has been shown to be associated with a higher probability of enrolling in a four-year college or university among students who are at risk of dropping out of high school (Horn, 1998) and among high school graduates (Perna and Titus, 2004, 2005) after controlling for other variables.

Academic Achievement. Prior research also consistently shows that individuals with greater achievement are more likely to: expect to attain higher levels of education (Hossler and Stage, 1992), enroll in either a two-year or four-year college or university (Ellwood and Kane, 2000), enroll in a four-year institution (Ellwood and Kane, 2000; Perna, 2000; Plank and Jordan, 2001; Rouse, 1994), and enroll in a high-cost institution (Hearn, 1988). Academic achievement is measured by test scores in some studies (e.g., Ellwood and Kane, 2000; Perna, 2000; Perna and Titus, 2004, 2005; Plank and Jordan, 2001) and high school grades in other studies (e.g., Ellwood and Kane, 2000; Hossler, Schmit, and Vesper, 1999; Hossler and Stage, 1992).

Supply of Resources

Reflecting human capital theory, the proposed conceptual model assumes that students consider their financial resources when determining the relative benefits and costs of investing in postsecondary education (Becker, 1962). Low levels of financial resources may constrain a family's ability to pay the costs of the investment and consequently realize benefits that exceed the costs.

Family Income. Although the relationship between family income and educational aspirations has not been consistently established, research shows that family income plays an important role in other college-choice outcomes. Some research suggests that family income is unrelated to educational aspirations (Hossler, Schmit, and Vesper, 1999; Hossler and Stage, 1992), whereas other research suggests that family income is positively related to both educational aspirations and stability of aspirations between 8th grade and subsequent grades (Kao and Tienda, 1998). These different findings may be attributable to differences associated with the samples (regional vs. national), the variables taken into account in the analyses, and researchers' and students' understanding of the dependent variable. Regardless, research consistently shows a positive relationship between family income and other indicators including: number of applications submitted (Hurtado *et al.*, 1997), enrollment in either a two-year or four-year institution (Ellwood and Kane, 2000; Hossler, Schmit, and Vesper,

1999; Kane, 1999), enrollment in a four-year institution (Ellwood and Kane, 2000; Perna, 2000), and number of years of schooling completed (Hofferth, Boisjoly, and Duncan, 1998).

With a few exceptions (e.g., Rouse, 1994), research generally shows that the enrollment of individuals with low family incomes is more sensitive to changes in college costs, as measured by tuition, student financial aid, and unemployment rate (Avery and Hoxby, 2004; Heller, 1997; Kane, 1999; Long, 2004a). Based on his comprehensive review and synthesis of prior research, Heller (1997) concluded that, although enrollment generally declines when either tuition increases or financial aid decreases, the effects of high costs are greater among students from low-income families than among other students.

Research also shows a positive relationship between SES, a composite of family income, parents' education, and parents' occupation, and such measures of college choice as application to a four-year institution (Cabrera and La Nasa, 2001) and enrollment in a four-year institution rather than enrollment in a two-year institution or no enrollment (Plank and Jordan, 2001). Based on their review and synthesis of research, Terenzini and colleagues concluded that SES plays a strong positive role in all three of Hossler and Gallagher's three stages: predisposition, search, and actual enrollment. Using data from the NELS:92/94, Plank and Jordan found that the positive observed relationship between the SES and the likelihood of enrolling in a four-year college was only partially explained by differences in other variables, including parent-student discussions about education-related topics, parent-school communication, preparation for college admissions tests, and assistance from the school with applications and financial aid information.

Quantitative researchers must consider whether to use family income or SES in their analyses. SES is typically measured using a composite of several variables including family income, parental education, parental occupation, and indicators of selected items in the home (e.g., daily newspaper, computer, atlas, more than 50 books). Some (Paulsen and St. John, 2002; St. John and Paulsen, 2001) argue that the components of SES should be included as separate variables to develop a clearer understanding of the ways in which particular components influence the college choices of different groups of individuals.

Others (e.g., Adelman, 2002; Perna and Titus, 2004; Terenzini, Cabrera, and Bernal, 2001) argue that a composite measure of SES is more appropriate than separate indicators of family income and parental education for both theoretical and statistical reasons. Although perhaps less commonly emphasized by policymakers than family income, SES has

other advantages. First, unlike income, SES may be considered a measure of wealth, reflecting a long-term and more stable assessment of resources rather than a snapshot at one point in time (Terenzini, Cabrera, and Bernal, 2001). Second, by representing measures other than family income, SES may better reflect an individual's habitus or orientation toward college choice (Perna and Titus, 2004; Terenzini, Cabrera, and Bernal, 2001). Finally, SES has several statistical advantages over family income. In particular, SES is less influenced by inconsistencies among its components, a substantially smaller share of data are missing for SES than family income, and SES is more strongly related to other measures of attainment including occupational status (Adelman, 2002; Terenzini, Cabrera, and Bernal, 2001).

Financial Aid. As Heller (1997) points out, examining the effects of "student financial aid" on college choice is complicated, at least in part, by the number of different programs covered by this label. Student financial aid includes need-based and non-need-based grants, subsidized and unsubsidized loans, work-study, and tuition tax credits. Research shows that an offer of financial aid is an important predictor of college enrollment among high school graduates (Catsiapis, 1987), college applicants (St. John, 1991), and high aptitude high school students (Avery and Hoxby, 2004), regardless of the type of aid (e.g., grant, loan, work; St. John and Noell, 1989).

Research shows that the availability of state need-based financial aid is positively related to the likelihood of enrolling in any type of post-secondary education within two years of graduating from high school (Kane, 1999) and to the likelihood of attending an in-state private four-year or in-state public four-year college or university (Perna and Titus, 2004). Other research (e.g., Dynarski, 2004) suggests that merit-based state aid may also promote college choice. Based on her examination of state-merit aid programs in seven states, Dynarski (2004) concluded that these programs increase the likelihood of enrolling in any type of college or university, increase the likelihood of enrolling at a four-year institution, and reduce the likelihood of enrolling at a public two-year college.

Researchers have begun to examine the effects of other financial resources, such as the federal Hope and Lifelong Learning Tax Credits (e.g., Long, 2004b). Using data from the Current Population Survey, Long (2004b) found that, after controlling for gender, race, age, income, state unemployment rate, and other characteristics, neither the likelihood of enrolling in any type of college nor the likelihood of enrolling in a four-year college were related to the availability of the Hope or Lifelong

Learning Tax Credits. The analyses are limited, however, by the use of cross-sectional rather than longitudinal data.

Expected Benefits

Only a few studies published since 1990 (e.g., Rouse, 1994) have examined the effects of expected monetary benefits on student college choice, and virtually nothing is known about the effects of expected non-monetary benefits. The limited amount of available recent research suggests that the benefits of higher education may play a greater role in the decision to enroll in a two-year college rather than a four-year institution (Rouse, 1994). Rouse measured expected economic returns to higher education based on the average wages of individuals between the ages of 24 and 54 in the same state who had a high school degree, some college, and a bachelor's degree. She noted, however, that her examination of the relationship between expected earnings and college enrollment may be limited by small variance in the earnings measures.

Comparing differences in benefits between women and men, some researchers (e.g., Ellwood and Kane, 2000; Perna, 2005) speculate that gender differences in benefits may be one cause of the higher observed college enrollment rates for women than for men. After controlling for differences in race/ethnicity and academic ability, Perna (2005) found that the return to attaining a bachelor's degree rather than a high school diploma was higher for women than for men in terms of several economic and noneconomic benefits. Specifically, net of test scores, women averaged higher annual incomes and greater likelihood of health insurance coverage, as well as reduced likelihood of smoking and increased likelihood of regularly voting.

Expected Costs

Although a central part of human capital models, expected costs of an investment in higher education have generally only been included in examinations of the third stage of the process, actual enrollment. Little is known about the relationship between college costs and earlier stages of the college-choice process.

College Costs. In order to identify more specific recommendations for public and institutional policy, researchers typically include separate measures of tuition and financial aid, rather than a composite measure of net price (e.g., Ellwood and Kane, 2000; Heller, 1997). A common proxy for tuition is the average tuition at public two-year colleges in the student's

home state (Ellwood and Kane, 2000; Kane, 1999; Rouse, 1994). Using data from the NELS:88/94 and controlling for race, parents' education, family income, test scores, and other variables, Kane (1999) found that the probability of enrolling in any type of postsecondary education institution was more sensitive to changes in tuition at public two-year institutions than changes in tuition at public four-year institutions.

Both the likelihood of enrolling in college (e.g., Avery and Hoxby, 2004; Kane, 1999, 2004) and the type of college in which a student enrolls (e.g., Perna and Titus, 2004) are related to tuition. Research shows that enrollment at public colleges and universities within a state declines when tuition increases (Heller, 1999; Kane, 1999), and that changes in tuition have a greater effect on enrollment at public two-year colleges than on enrollment at public four-year institutions (Heller, 1999; Kane, 1999; Rouse, 1994). Other research suggests that differences in tuition across sectors may influence the type of college or university in which students enroll (Perna and Titus, 2004).

Foregone Earnings. Foregone earnings, or the earnings that individuals would earn if they worked rather than enrolled in college, are a substantial cost of enrollment, especially for low-income students (Kane, 1999). A common proxy for foregone earnings, or the opportunity costs of attending college, is the state or county unemployment rate (e.g., Heller, 1999; Kane, 1999; Long, 2004a; Rouse, 1994). As the unemployment rate increases, foregone earnings (i.e., opportunity costs) are assumed to decline, and the likelihood of enrolling is assumed to increase. With some exceptions (e.g., Berger and Kostal, 2002), research generally supports this notion, showing a positive relationship between the unemployment rate and the probability that a student will attend a two-year or four-year institution (Long, 2004a; Rouse, 1994) and the unemployment rate and enrollment in public colleges and universities in a state (Heller, 1999).

Background Characteristics

Gender. Since the mid 1990s, college enrollment rates have been higher for women than for men. In 1967, only 25% of women high school completers between the ages 18 and 24 were enrolled in college, compared with 45% of men. During the 1970s, enrollment rates for men and women converged at about 30%. Beginning in the late 1980s, enrollment rates for both women and men began to rise, but at a faster rate for women than men. In 2001, 46% of women and 42% of men high school completers aged 18–24 were enrolled in college (NCES, 2004). Although women continue to be relatively underrepresented among recipients of bachelor's

degrees in such fields as engineering, computer and information sciences, and physical sciences, the share of women earning degrees in these disciplines has increased substantially over the past three decades (Freeman, 2004).

Despite these trends, few researchers have focused on differences in college choice based on gender. The available research suggests that the relationship between gender and college-choice outcomes is ambiguous. Some research shows that, net of other variables, educational expectations are higher for girls (Hossler and Stage, 1992), while other research shows higher educational expectations for boys (Hao and Bonstead-Bruns, 1998). Similarly, some studies show that women and men are equally likely to enroll in college after taking into account other variables (Perna, 2000), but other research shows that women are more likely than men to enroll in both two-year and four-year colleges and universities (e.g., Perna and Titus, 2005) and in-state public two-year institutions, in-state public four-year institutions, in-state private four-year institutions, and out-of-state institutions (e.g., Perna and Titus, 2004) in the fall after graduating from high school.

Some research suggests that the college-choice process is different for women than for men (e.g., Stage and Hossler, 1989). Using a sample of 9th grade students attending Indiana high schools in 1986–87, Stage and Hossler (1989) found that educational aspirations increased with the frequency of parent-child discussions about college for women, but were unrelated for men. Parental savings for college were lower for women, but not for men, when other children in the family were already enrolled in college.

RACE/ETHNICITY

A review of research published in the last 15 years shows increased attention to understanding racial/ethnic group differences in college choice. Taken together, the research shows differences in both the outcomes and the processes of college choice across racial/ethnic groups.

A few studies (e.g., Hurtado *et al.*, 1997; St. John and Noell, 1989) show that, after controlling for other variables, college-choice outcomes are lower for African-Americans than for Whites. For example, St. John and Noell (1989) found college enrollment rates to be lower for African-American college applicants than for Whites after controlling for background, ability, educational aspirations, and financial aid offers. Other

research shows that, compared with their White counterparts and after controlling for other differences, African-American high school students are less likely to attend their first-choice institution (Hurtado *et al.*, 1997).

Nonetheless, most recent research suggests that, after taking into account other variables, college outcomes are higher for African-Americans than for Whites. Net of other differences African-Americans have higher educational aspirations in the 8th grade and less change in aspirations during subsequent years of high school (Kao and Tienda, 1998), they submit a higher number of college applications than Whites (Hurtado *et al.*, 1997) and are more likely than Whites to enroll in college (Catsiapis, 1987; Kane and Spizman, 1994; Perna, 2000; Plank and Jordan, 2001), enroll in four-year rather than two-year college (Plank and Jordan, 2001; Rouse, 1994), and attend a higher-cost rather than lower-cost institution (Hearn, 1988). Perna and Titus noted that observed college enrollment rates are lower for African-Americans and Hispanics than for Whites because they possess less of the types of economic, human, cultural, and social capital that are valued in the college enrollment process, and because of the low levels of resources that are available at the school attended to promote college enrollment.

Less is known about differences in college-choice outcomes among other racial/ethnic groups. Some research suggests that, after controlling for other variables, Hispanics are as likely as Whites to enroll in a four-year college after graduating from high school (Perna, 2000), while other research using the same database but controlling for somewhat different variables suggests that Hispanics are more likely than Whites to attend a four-year college than to enroll full-time in a two-year college or never enroll in college (Plank and Jordan, 2001).

Research also suggests that student-college-choice processes vary across racial/ethnic groups (Heller, 1997; Hossler, Schmit, and Vesper, 1999; Perna, 2000; Perna and Titus, 2005). Based on his review and synthesis of prior research, Heller (1997) concluded that changes in tuition and state grant expenditures appear to have a larger impact on the enrollment of Asians, African-Americans, and Hispanics than of Whites. Hossler, Schmit, and Vesper (1999) concluded that their model explained less of the variance in educational aspirations for African-American men than for other Indiana high school students. Using data from the NELS:92/94, Perna (2000) found that, among 1992 high school graduates, measures of cultural and social capital made a relatively greater contribution to a traditional human capital model of four-year college enrollment for African-Americans and Hispanics than for Whites.

Cultural Capital

Cultural capital, a symbolic good, may provide students with access to resources that promote college-related behaviors and outcomes (McDonough, 1997). Cultural capital may be manifested in terms of cultural knowledge and the value placed on college attainment.

Cultural Knowledge. Students who possess the types of cultural knowledge that the dominant class values have greater access to the resources that promote college choice (McDonough, 1997). In her qualitative study, McDonough shows that aspects of students' search processes (e.g., number and nature of college visits, questions asked of college representatives) vary based on students' SES. She argues that students from high-SES families have more productive and sophisticated search processes than students from low-SES families, at least in part, because they are more likely to have had experience in similar situations.

Perhaps reflecting the limitations of quantitative indicators of such complex constructs, quantitative research examining the effects of cultural knowledge on college outcomes shows mixed results. When measured as a composite of cultural activities, attitudes, and knowledge, cultural capital has been shown to increase the frequency of interactions about postsecondary plans between high school students and "high-status" individuals, such as teachers, school counselors, and peers (DiMaggio and Mohr, 1985). Nonetheless, other research shows that an indicator of whether the student attends a music, art, or dance class at least once a week is unrelated to enrollment in either a two-year or four-year college or university in the fall after graduating from high school among 1992 high school graduates after controlling for other student- and school-level predictors (Perna and Titus, 2005).

Value of College Attainment. Parents' educational attainment may be a proxy for both cultural knowledge and values about higher education (McDonough, 1997; Perna and Titus, 2004). Research consistently shows that parental education is an important positive predictor of a variety of college-choice outcomes including educational aspirations and plans (Hossler, Schmit, and Vesper, 1999; Hossler and Stage, 1992; Kao and Tienda, 1998; Stage and Hossler, 1989), enrollment in either a two-year or four-year college (Ellwood and Kane, 2000; Hossler, Schmit, and Vesper, 1999; Perna and Titus, 2005; Rouse, 1994), enrollment in a four-year institution (Ellwood and Kane, 2000; Perna, 2000; Perna and Titus, 2005), distance from home of preferred college options (McDonough, 1997), and number of years of schooling completed (Hofferth, Boisjoly, and Duncan, 1998).

The value placed on higher education may also be measured by parental encouragement for college enrollment. Based on their longitudinal study of Indiana high school students, Hossler, Schmit, and Vesper (1999) concluded that parental encouragement is the single most important predictor of students' planning to pursue postsecondary education. When measured as parents' expectations for their child's educational attainment, parental encouragement is one of the strongest positive predictors of students' educational plans (Hamrick and Stage, 2004; Hossler and Stage, 1992; Stage and Hossler, 1989) and may be particularly important to African-American students' educational aspirations (Hamrick and Stage, 2004). Parents' expectations are also positively related to the probability of enrolling in college in the fall after graduating from high school (Perna, 2000; Perna and Titus, 2004). Some research suggests that high parental encouragement may raise students' educational aspirations without producing aspirations that are aligned with occupational aspirations (Schneider and Stevenson, 1999). Parents may promote "aligned ambitions" by ensuring that their children learn the relationship between educational and occupational aspirations and encouraging their children to make choices that will facilitate attainment of their aspirations (Schneider and Stevenson, 1999).

Social Capital

Coleman's (1988) conceptualization of social capital suggests that parental involvement is a form of social capital that may promote college enrollment because of the relationships between a student and her/his parents, between the student's parents and the school officials, and between the student's parents and the student's friends' parents. The availability of the types of social capital that promote college choice may be manifested through information about college and assistance from school officials with college-choice processes.

Information About College. As transmitters of social capital (González, Stone, and Jovel, 2003), parents play a critical role in students' college-choice processes. One way parents promote college choice is through their involvement in their children's education. Research consistently shows that the probability of enrolling in a two-year or a four-year college or university in the fall after graduating from high school increases with the frequency of parent-student discussions about education issues (Perna, 2000; Perna and Titus, 2005; Plank and Jordan, 2001). Using data from the NELS:88, Hao and Bonstead-Bruns (1998) found that both the levels of, and likelihood of agreement between, parents' and children's educational

expectations increase with parental involvement in their children's learning activities.

Parental knowledge and information that promote college enrollment may also be reflected by, and acquired via, parental contact with the school about education-related matters. Some research suggests that the likelihood of enrolling in a two-year or a four-year institution increases with the frequency of parental contact with the school about volunteering, as well as the frequency of parent-initiated contact with the school about such academic matters as academic performance, academic program, plans after high school, and college preparatory course selection (Perna and Titus, 2005).

Other studies attempt to model the effects of the characteristics of parents' social networks on college choice. Parent-to-parent involvement, an indicator of intergenerational closure, may be measured by the number of the student's friends' parents with whom a parent reports talking (Perna and Titus, 2005). However, after controlling for other student- and school-level variables, this indicator was unrelated to the probability of enrolling in either a two-year or four-year college in the fall after graduating from high school (Perna and Titus, 2005). Using data from the Panel Study of Income Dynamics, Hofferth, Boisjoly, and Duncan (1998) found that both the number of years of schooling completed and the likelihood of attending college were positively related to whether parents had a friend or relative whom the parent could ask for assistance in the form of time or money (a measure of the nature of social networks). But this positive relationship held only for individuals from high-income families, suggesting that social networks are more beneficial for those with high incomes than for those with low incomes (Hofferth, Boisjoly, and Duncan, 1998).

Peers may also transmit necessary social capital. Research shows that students are more likely to plan to attend a selective four-year institution (González, Stone, and Jovel, 2003) and enroll in college (Hossler, Schmit, and Vesper, 1999; Perna and Titus, 2005) when their friends plan to attend college. Having friends with high educational expectations may be especially effective in raising the educational expectations of low-SES students (McDonough, 1997). Students may also acquire information about college through their involvement with peers in high school activities (Hossler and Stage, 1992).

By interrupting a parent's relationships with other parents and school officials, geographic mobility may disrupt the transmission of social capital (Hofferth, Boisjoly, and Duncan, 1998). When measured as the number of times that a student's family moved between the student's 8th and 12th

grades, disruptions to social capital have been shown to reduce the likelihood of enrolling in either a two-year or four-year institution, rather than not enrolling in the fall after graduating from high school after controlling for other student- and school-level variables (Perna and Titus, 2004).

Assistance with College Processes. Counselors and teachers may also transmit necessary college-related social capital to students. Counselors and teachers at the school attended are potential sources of encouragement to attend college and assistance with college-choice processes (González, Stone, and Jovel, 2003; McDonough, 1997; Perna, 2000). High school counselors and teachers may also play a role in defining postsecondary education as an acceptable and viable option for students (McDonough, 1997). Some research suggests that support from counselors and teachers may play a relatively more important role in shaping students' actual postsecondary educational decisions, such as the choice of college to attend, than in the formation of students' predisposition toward college (Hossler, Schmit, and Vesper, 1999).

School and Community Context

The proposed conceptual model (Figure 3.1, layer 2) incorporates Bourdieu's (1986) and Lin's (2001a,b) assumptions that an individual's behavior cannot be understood except in terms of the social context in which the behavior occurs. In addition to describing the effects of families, friends, and other influences on student college choice, McDonough (1997) demonstrates the ways in which schools define student college choice through various organizational structures.

Both qualitative (McDonough, 1997; Mintrop *et al.*, 2004; Schneider and Stevenson, 1999) and quantitative (Perna and Titus, 2005) research shows that aspects of the school context shape college choice. Schneider and Stevenson found that the percentage of students whose educational aspirations matched their occupational aspirations was higher in high schools that assisted students with planning their high school curricular choices, urged students to consider their career aspirations when making high school curricular choices, and ensured the availability of high school staff who were knowledgeable about curricular requirements and paths. McDonough (1997) showed that the school guidance process influenced student college choice through the quantity and quality of information provided, as well as the postsecondary options that counselors encouraged and discouraged. A high school's orientation toward college was communicated to students, at least in part, through the organization

of guidance, including the amount of time counselors devoted to college counseling, and the school's mission and structure of the curriculum (e.g., whether college preparation is the "default" curricular track). Other research (Mintrop *et al.*, 2004) demonstrates the negative consequences of college advising that result, in part, from high ratios of students to counselors and the absence of college-related expertise among teachers beyond their personal experiences.

Other structural characteristics of the school attended shape student college choice. Based on life history analyses of 22 Latinas, González, Stone, and Jovel (2003) conclude that participation in a gifted and talented program results in substantial advantages in terms of the type of college attended, especially when compared to participation in a general curricular program, English as a second language track, or special education track. Advantages include access to more rigorous curricula, more encouraging teachers, more involved guidance counseling, and additional supplemental programs and services.

Quantitative research has also begun to examine the ways in which the family, school, and community context influence student college choice (e.g., Perna and Titus, 2005). Using multilevel modeling, Perna and Titus found that college enrollment rates are positively related to the volume of economic, cultural, and social capital that is available through social networks at the school attended. They measured quantities of resources by the average levels of various student-level measures (e.g., family income, parental education, and parental involvement) for students at the same school.

Higher Education Context

As suggested by the proposed conceptual model (Figure 3.1, layer 3), research suggests that various characteristics of the higher education context also influence student college choice. While earlier research examined the effects of institutional marketing on student college choice (e.g., Chapman, 1981), more recent research points to the roles of institutional location, characteristics, and competition.

Researchers have assumed that both region (McDonough, Antonio, and Trent, 1997; Perna, 2000; St. John, 1991) and high school location (Catsiapis, 1987; Rouse, 1994) reflect variations in the availability of information related to the presence of HBCUs and the relative concentration of colleges, respectively. Others (Hearn, Griswold, and Marine, 1996; Perna and Titus, 2004) assume that region is a proxy for unmeasured differences

in a region's tradition and philosophy toward both higher and K-12 education. The composition of a state's higher education system (e.g., availability of different types of colleges and universities) contributes to the distribution of students at different types of colleges and universities in a state (Perna *et al.*, 2005; Perna and Titus, 2004). The capacity of a state's higher education system also appears to matter, as some research shows that a state's college enrollment rates increase with the shares of students enrolled in public two-year institutions and private institutions net of other variables (St. John *et al.*, 2004). Competition for enrollment at elite institutions is one cause of the increased use of private college counselors, especially among students with high SES (McDonough, 1997).

Social, Economic, and Policy Context

The proposed conceptual model (Figure 3.1, layer 4) also assumes that student college choice is shaped by the social, economic, and policy context. The social context may include demographic characteristics of the population, while the economic context may include characteristics of the local labor market, and the policy context may include policies and structures that discourage, or encourage, college enrollment.

Social Context. A review of research shows limited attention to the effects of the social context on student college choice. Moreover, the available research shows conflicting results about the roles of such measures as educational attainment of the population. In their state-level analysis of college enrollment rates, St. John *et al.* (2004) found that state college enrollment rates were positively associated with the percentage of the population that held at least a bachelor's degree and negatively associated with the state poverty rate and the share of Hispanics in the population. Using multilevel analyses, Perna and Titus (2004) found that the share of the population with a bachelor's degree was unrelated to college enrollment, net of other variables.

Economic Context. As described above, unemployment rates are typically used as proxies for the foregone earnings of an investment in higher education. Some qualitative research (e.g., Bettis, 1996) suggests the contribution of considering additional aspects of the economic context. Bettis (1996) used the anthropological and sociological construct of liminality to explore the ways in which the macroeconomic context and other social changes influence the educational aspirations of students attending one high school. The school was located in an urban area that was undergoing

changes associated with a shift from industrial to postindustrial economy, including the disappearance of good-paying jobs that required no education beyond high school. The analyses suggest that, because of the changes in the economic and social conditions of their community, many high school students are uncertain and anxious about their future lives, including work- and college-related outcomes.

Policy Characteristics. Although economists have traditionally included such measures of public policies as student financial aid and tuition in analyses of college enrollment, the proposed conceptual model suggests that a broader range of policies also influence student college choice. A review of recent research supports this assumption.

For example, some recent research (Perna and Titus, 2004; St. John, Musoba, and Chung, 2004; Venezia, Kirst, and Antonio, 2003) suggests the importance of considering the effects of K-12 educational policies when examining student college choice. Using multilevel analyses, Perna and Titus (2004) show that aspects of K-12 education, including a state-level indicator of K-12 resources, influence the likelihood of college enrollment for high school graduates. Based on case studies of selected regions within six states, Venezia and colleagues concluded that the lack of alignment between K-12 and postsecondary education in terms of curricular requirements and assessments likely reduces students' educational aspirations. One consequence of the lack of alignment is that, in many states, a student may fulfill the curricular requirements for graduating from high school but not for entering a public four-year college (Venezia, Kirst, and Antonio, 2003). Fixed-effects regression analyses by St. John, Musoba, and Chung suggest that K-12 educational reforms indirectly reduce college enrollment through their effects on high school graduation rates, but indirectly increase college enrollment through their effects on academic preparation.

Research also demonstrates that affirmative action policies influence student college enrollment behavior. Using a random sample of 10% of SAT I test-takers for each year between 1996 and 2000, Long (2004c) found that the number of SAT score reports sent to selective in-state public institutions in California and Texas by African-Americans and Hispanics declined during the late 1990s after the elimination of affirmative action in these states net of other variables. During the same period, Asians and Whites sent more of their score reports to selective in-state public institutions and fewer to nonselective in-state public institutions. Other research examines the effects of state responses to changes in affirmative action, including percent plans (e.g., Horn and Flores, 2003).

DIRECTIONS FOR FUTURE RESEARCH

In addition to enhancing examinations of the sources of observed gaps in college choice described in the introduction, the proposed conceptual model may also be useful for addressing some of the understudied aspects of student college choice. Although numerous studies have been published on some aspect of college choice, much is still unknown. In particular, the proposed conceptual model should be used to guide examinations of: (1) additional dimensions of the college-choice process, (2) the experiences of more narrowly defined populations, and (3) the effectiveness of policies and programs that are designed to promote college access and choice.

DIMENSIONS OF THE COLLEGE-CHOICE PROCESS

This review of research shows that multiple dimensions of college-choice merit investigation. Although Hoxby (2004) discounts access as an important area of future research, persisting gaps in college enrollment across socioeconomic and racial/ethnic groups suggest that more needs to be known about the most effective ways of promoting college access for all groups. As noted by Hoxby (2004) and others, more also needs to be known about other aspects of the college-choice process, including the types of colleges attended, the timing of enrollment, and the consequences of different enrollment decisions, as well as variations in these outcomes across different groups.

For example, little is known about the process of deciding to enroll in a less than four-year postsecondary educational institution. Some researchers (e.g., Perna, 2000) define enrollment as attending a four-year college or university (yes or no) only, arguing that the predictors of four-year enrollment are likely different than the predictors of enrolling in a less than two-year institution and that the expected monetary and nonmonetary benefits of enrolling likely vary based on type of institution attended. Nonetheless, as others (e.g., Heller, 2004) note, by ignoring enrollment in a two-year or less than two-year institution, researchers fail to examine a substantial percentage of the postsecondary enrollment decisions.

Additional research is also required to understand the timing of the enrollment decision (Hoxby, 2004). Likely reflecting the design of such large-scale national databases as the NELS, virtually all recent research examines the experiences of traditional-age students transitioning immediately from high school to college. Although others (e.g., Hossler, Braxton, and Coopersmith, 1989; Paulsen, 1990; Paulsen and St. John,

2002; St. John and Asker, 2001) have noted the paucity of research on non-traditional enrollment, little is known about the experiences of students who delay entry into college beyond one or two years of graduating from high school, or the decision of students to enroll in less than four-year institutions, including community colleges and proprietary schools.

With its assumption of multiple possible paths, the proposed conceptual model may be appropriate for understanding the decision to enroll in a less-than-four-year institution and the college-choice processes of students who enroll in college more than two years after completing high school. In fall 2001, one third (32%) of all undergraduates was over the age of 24, and 39% of all undergraduates were enrolled part-time rather than full-time (NCES, 2004). Clearly, focusing only on the college-choice processes of individuals who enroll full-time in a four-year college immediately after graduating from high school ignores a substantial portion of the college-going population. Many of the variables (e.g., parental encouragement) that are suggested for the proposed conceptual model are likely relevant only to traditional college choice. However, the broader elements of the proposed conceptual model may be useful for examining nontraditional student college choice. Future research should test the appropriateness of the proposed conceptual model for examining nontraditional college enrollment.

EXPERIENCES OF MORE NARROWLY DEFINED POPULATIONS

Although prior research suggests that college-choice processes vary by race/ethnicity and family income, more needs to be learned about variations in college choice across groups (Paulsen and St. John, 2002; St. John, Paulsen, and Carter, 2005). Although qualitative methods are becoming more common, prior research on college choice continues to be dominated by quantitative studies using large-scale national databases. Consequently, little is known about the experiences of groups that are typically represented by small numbers of students in any particular sample. For example, reflecting their small numbers in the U.S. population, such national databases as the NELS include too few American Indians/Alaskan Natives for detailed examinations of their college-choice decisions and behaviors.

In addition, with only a few exceptions (e.g., Hao and Bonstead-Bruns, 1998), researchers have largely ignored variations in the experiences of groups within the “Asian” and “Hispanic” categories. Qualitative research may be most appropriate for probing the experiences of

these more narrowly defined groups, as suggested by Ceja's (2001) study of 20 first-generation Chicanas who attended one large, inner-city high school. Among other findings, Ceja's study highlights the complex ways in which parents communicate messages to their children about the importance of college even when parents lack knowledge about college-choice processes.

Future research should also examine the ways in which race/ethnicity intersects with income, SES, and/or gender to influence college-choice decisions and behaviors. Several recent studies begin to examine sex differences within racial/ethnic groups (e.g., Kao and Tienda, 1998; McDonough *et al.*, 2004; Hamrick and Stage, 2004; Zarate and Gallimore, 2004). As an example, Zarate and Gallimore (2004) explore the experiences of Latinas and Latinos through a 15-year longitudinal study that tracks students from kindergarten through one year after high school graduation. Other research begins to examine the intersection of race and income, exploring the college-related decisions of low-income African-Americans (DeLarge, 2003).

EFFECTIVENESS OF POLICIES AND PROGRAMS DESIGNED TO PROMOTE COLLEGE CHOICE

The proposed conceptual model should also be used to guide examinations of the effectiveness of policies and programs in increasing college access and choice. Among the policies and programs that warrant regular attention of researchers are affirmative action, student financial aid programs, and precollege outreach programs.

Regular research on the effects of public policies on college choice is required, at least in part, because of continual changes not only in aspects of the policies and programs but also in the social, economic, and political context that shapes the effectiveness of the policies and programs. Research shows that the effects of particular policy variables on college choice change over time. For example, using data from the NLS of the class of 1972, High School and Beyond Longitudinal Study of 1982 high school seniors, and NELS, Long (2004a) found variations across the three cohorts in the predictors of college enrollment. Long (2004a) showed that the magnitude of the negative effect of tuition on enrollment declined between 1972 and 1982, and declined again between 1982 and 1992.

The relevance of prior research on the effectiveness of student financial aid is limited by continual changes in both the criteria to receive the aid and the characteristics of particular aid programs. Since the 1980s,

the share of student financial aid awards in the form of loans has increased faster than the share of aid in the form of grants (The College Board, 2004). In addition, the emphasis of federal and state student financial aid programs has shifted over time, away from reducing financial barriers to college attendance for low-income students toward increasing the affordability of college for middle-income students. This shift is indicated by the increased consideration of characteristics other than financial need in awarding student aid, the establishment of federal nonrefundable tax credits, and the establishment of state-sponsored prepaid tuition and college savings plans (The College Board, 2004; Thomas and Perna, 2004).

Examinations of the effectiveness of policies and programs should also include attention to differences in effectiveness across groups. Moreover, effectiveness of particular policies and programs (e.g., student financial aid) should be assessed in terms of a broad range of student-college-choice outcomes including not only actual enrollment but also aspirations, academic preparation, search for information, applications, and type of college attended (Clotfelter, 2004; St. John and Asker, 2001).

CONCLUSION

College-choice outcomes are part of a broader educational pipeline. Some (e.g., Venezia, Kirst, and Antonio, 2003; Turner, 2004) argue that policymakers should be most concerned not with access to college, but with success in college. By focusing on research designed to close gaps in college access, this chapter is not intended to minimize the need for attention to closing gaps in college persistence. Attention to improving equity in college completion is also important, as some data suggest that college participation rates increased faster than college completion rates for individuals born between 1960 and 1980, and that the gap between participation and completion rates was especially large for Blacks (Turner, 2004).

Nonetheless, although college completion is critical to fully realizing the public and private benefits of higher education and achieving equity in higher education opportunity, degree attainment is not possible without “college choice.” Moreover, as some researchers demonstrate (e.g., Paulsen and St. John, 2002), college choice has an impact on student persistence. In their “financial nexus model,” Paulsen and St. John (2002) show that student persistence is influenced not only by the actual amounts of financial aid that a student receives but also by a student’s perceptions of the importance of college costs in the college-choice process.

Through additional research in the areas described in this chapter, using the proposed conceptual model, researchers will help inform institutional leaders and public policymakers about the most effective approaches for closing gaps in college-choice outcomes.

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4. THE STUDY OF ACADEMIC CAREERS: LOOKING BACK, LOOKING FORWARD

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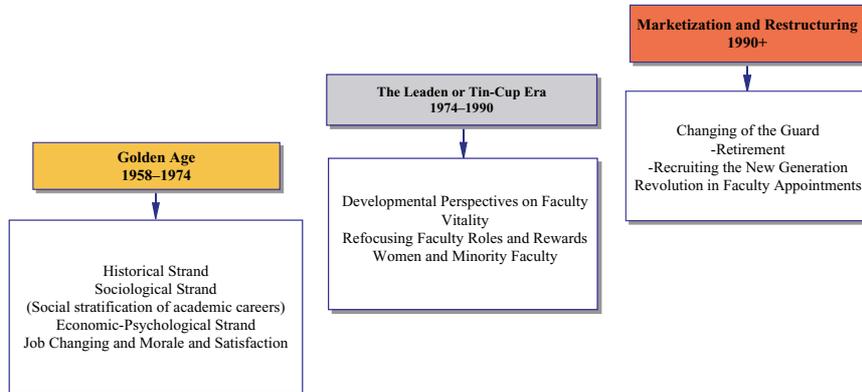
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INTRODUCTION

In many respects, the study of academic careers is quite new (in “academic” time)—certainly, no more than half a century old. It coincides largely with the emergence to global prominence of the American university and the explosive growth of American higher education following World War II (WWII). As higher education transitioned from an elite to a mass system (Trow, 1973), and as a federally subsidized, university-based research and development enterprise was constructed as a bulwark of the national defense, the academic professions came to be perceived as a vital national resource and a worthy object of empirical study (see Bowen and Schuster, 1986; Finkelstein, 1984). Stimulated by the publication of Logan Wilson’s pioneering volume, *The Academic Man* (Wilson, 1942, 1979), the pace of empirical inquiry slowly gathered steam in the 1950s and literally mushroomed by the late 1960s, attaining a critical mass by the mid 1970s in terms of an identifiable repertoire of conceptual frameworks, theoretical propositions, and descriptive generalizations (Finkelstein, 1984).

From the perspective of 2005, one can look back and discern three distinctive, and nearly self-contained, eras of empirical research on academic careers. The first era, a kind of golden age celebrated by Jencks and Reisman in *The Academic Revolution*, was launched by publication of Logan Wilson’s *The Academic Man* and spans a period from the Second World War to the early 1970s. The second period, from the early or mid 1970s to the early 1990s represents one of increasing economic constraint and steady-state, marked by retrenchment, and stability in the faculty ranks at a time of the twin triumphs of free markets and affirmative action. The third era of research into academic careers began in the early

Figure 1: The three eras of research on academic careers.



1990s and continues to this day. It is an era of educational restructuring (perhaps unprecedented since the emergence of the American university in the late 19th century) and uncertainty with increasing dominance of market forces in the development of higher education. Figure 1 above graphically depicts the three eras.

While this second half of the 20th century can then be logically sliced into three relatively self-contained segments, it nonetheless represents a period of overall coherence, of development and differentiation of a model of the *modern* academic man that had clearly emerged in germ in the 1960s, and was evolving continuously *sui generis* for nearly half a century. The old verities about academic careers, and the associated continuities, however, may be changing—if not wholesale, then certainly in significant ways. Indeed, following the map we draw of those verities, we argue that the chapter may be closing on the ascent of Logan Wilson’s prototypical academic man, that we are witnessing in Darwinian terms, a significant mutation in *homos academics* that represents nothing less than an evolutionary watershed in American academic history. Academics are increasingly, in 2005, no longer who we have conventionally thought them to be; they are no longer pursuing the career trajectories we came to expect by the late 20th century, nor are they even engaged in the same mix of work activities. We are in the early stages of witnessing a new academic revolution—and academic careers may be sporting a very different “look” in the near future. In this last section, then, following an empirical glimpse of that new look, we attempt to speculate on where this transformation may be leading—and most particularly on how these developments will shape the future of research on academic careers.

Let us begin, however, with the retrospective—in three parts.

THE GOLDEN AGE: 1958–74¹

The study of the modern (post WWII) academic career developed with astonishing rapidity in the 1950s and 1960s, drawing upon scholars and frameworks in a wide variety of social/behavioral science disciplines and professional fields, including history, sociology, social psychology, psychology, economics, anthropology, religion, political science, business, and education. Most generally, one can attribute this surge to the rise of science's public profile post WWII (an effort to understand and support the nation's scientific enterprise) and the rise of higher education's public profile (enrollment surges driving the demand for qualified faculty). In the midst of this surge, one can discern three dominant strands. The first was defined by Logan Wilson's *The Academic Man*, and conceptualized higher education as a social stratification system, with reputation and/or prestige as the chief arbiter of status within the system (Wilson, 1942). Academic careers could thus be thought about in terms of how the social system of universities and academic disciplines determined an individual's point of entry into the system and then shaped movement within the system. This strand drew strength in the 1960s and 1970s from the sociology of science research program of Robert Merton and his colleagues at Columbia University as well as those engaged in studying the sociology of professions and occupations. The intent was initially to describe how the social system worked and then to trace how these elements affected system outcomes, usually defined as publication productivity (see Blackburn, Behymer, and Hall, 1978) and/or the position of the individual faculty member within the stratification system.

To this basic sociological framework, economists added the concept of academic labor markets and human capital theory to explore the flow of academic professionals through an increasingly segmented (by discipline), albeit, nationally bounded (and even international) academic labor market (Breneman and Youn, 1988; Brown, 1967; Cartter, 1976; Freeman, 1978). Some works, such as Caplow and McGee's classic on the "academic marketplace," in effect melded the operation of prestige into the dynamics of labor market models (Caplow and McGee, 1958). Interspersed with this more theoretical mobility focus was a body of work by psychologists such as John Stecklein and Ruth Eckert at the University

¹In some sense, these bookend years are arbitrary. Nineteen fifty-eight was the year of publication of Caplow and McGee's (1958) classic work on the academic marketplace. We could, of course, have gone back to 1942, the year of publication of Logan Wilson's pioneering work, but that seems misdirected insofar as Wilson's voice was relatively isolated for more than a decade. As for 1974, that is the year that the golden age of the 1960s seems to have moved decisively southward.

of Minnesota, focusing more operationally on the attraction and retention of faculty (as well as their satisfaction) in the seller's market of the 1950s and 1960s. What were the "push" factors that led the faculty to leave their current positions? What were the "pull" factors that brought them to vacant positions? Ultimately, this strand was rather directly focused on how government and institutional policy might optimize the adjustment of labor markets to wide fluctuations in supply and demand.

These first two strands drew a portrait of the emergence of a new kind of academic career—in some sense captured most fully in Jencks and Reisman's *The Academic Revolution* (1968). The third strand addressed the question of origins. For most of our lifetimes, we have viewed this rise of the professional, university-based scholar exclusively engaged in the concurrent tasks of teaching, research, and service, as the apogee of academic development—the "self-actualized" academic man. Conceding that a new model of academic man was upon us, historians in the golden age sought to trace the evolution of that new model at once to understand its genesis (a slow, gradual evolution vs. the academic equivalent of a "big bang" theory) and to illuminate how careers responded to social needs and the imperatives of new organizational forms as they developed in the indigenous American context.

What have these three strands yielded? Let's begin with origins.

THE HISTORICAL STRAND

Five key historical studies provide us with a chronicle of the etiology of the post WWII academic career. Carrell's (1968) work surveys developments before 1800. McCaughey's work on Harvard (McCaughey, 1974), Tobias' work on Dartmouth (Tobias, 1982), and Creutz's work on the University of Michigan (Creutz, 1981) provide case studies of the generational shifts in the faculty at multiple time intervals at three key institutions over a significant portion of the 19th century. And Finkelstein (1983) adds analyses of generational shifts at Bowdoin, Williams, and Michigan. What do these works tell us about the emergence of the modern academic career?

Academic Careers Pre-1800

To speak about an academic *career* before 1800 in the United States is something of a misnomer. During the 17th and first half of the 18th century, the teaching staffs of American colleges had been composed entirely

of tutors, prototypically young men, often no more than 20 years of age who had just received their baccalaureate degree and who were preparing for careers in the ministry (Morison, 1936). Their responsibilities were both pastoral-custodial as well as pedagogical in nature. Ideally, a single tutor was assigned to shepherd a single class through the prescribed four-year curriculum. In reality, however, the tutorship during this era functioned more as a “revolving door,” with average tenures of two to three years at most institutions (Finkelstein, 1984, pp. 8–9).

During the second half of the 18th century, these staffs of tutors began to be supplemented by a small cadre of “permanent” faculty: the first professors. Carrell (1968) identified only 10 professors in all of American higher education in 1750. By 1800, while the number of colleges had doubled, *professorial* ranks had multiplied 10-fold to more than 100. All in all, by the onset of the 19th century, some 200 or so individuals had served as professors in 19 American colleges.

While these professors discharged very similar responsibilities to the tutors in terms of supervising recitations, study halls, chapel, and discipline, they were distinguishable from the tutors in at least three crucial aspects. First, professors did not take general charge of a whole class of students; rather they were appointed in a particular subject area such as natural philosophy, divinity, or ancient languages and, for the most part, provided instruction in that area of specialization. Second, they were generally older than the tutors (by at least 5 to 10 years) and more experienced (the majority had some postbaccalaureate professional preparation in theology, law, or medicine). Third, they stayed on—that is, they were relatively permanent.

Carrell’s (1968) analysis of 124 biographical sketches of professors during the second half of the 18th century illuminates the particular meaning of a “permanent” appointment prior to 1800. First, a professorship implied a career at a single institution, most frequently one’s alma mater. Nearly 40% of Carrell’s sample taught at his own alma mater (there were no “hers”), ranging from just over one third at the College of Philadelphia (later the University of Pennsylvania) to five sixths (83%) at Harvard. Indeed, seven out of eight taught at only one institution during their careers, and a practically invisible 1 in 40 had taught at three or more institutions. Second, although often enduring, a professorial position was typically a “nonexclusive” career. In analyzing the lifetime occupational commitment of his sample, Carrell reported that about 15% identified themselves exclusively as professional teachers, roughly 20% described themselves *primarily* as professional teachers but with a secondary occupation in the ministry, medicine, or law, whereas over half ($n = 68$)

identified themselves primarily as practitioners of one of the traditional professions but only secondarily as professional college teachers (often having taken up professoring after a lengthy stint as a minister or a practicing physician).

If college teaching typically was not an exclusive career, or even the first choice, of a majority of 18th century professors, it became a long-term commitment for many—once the move had been made. In analyzing indicators of the extent of professors' occupational commitment *during their teaching tenure*, Carrell found strikingly varied results: 45% identified themselves as college teachers exclusively, while about one quarter identified themselves, respectively, as college teachers only primarily or secondarily. In the latter two categories, clergy were heavily represented in the first, while physicians and lawyers made up the greater portion of the second, suggesting that clergy were more likely than the other learned professions to develop a primary commitment to the professorial role, once assumed.

To what extent were these two statuses (tutor and professor) part of a single, definable academic career or simply two alternative tracks for more transient and less transient college teachers? In fact, the tutorship remained a separate, temporary career track, rarely leading to entry into the professorial ranks. The professors were typically drawn from outside the ranks of the tutors (Finkelstein, 1983). Indeed, by 1800, college teaching was becoming a *bifurcated* occupation. The majority of college teachers were still young, inexperienced tutors, providing general custodial supervision as well as instruction to students for what would be a brief postbaccalaureate engagement before they, the tutors, moved on with their lives and into other careers. An emerging minority were more experienced professionals drawn from other fields (ministry, medicine, law) who moved into professorships in a teaching field following a career in their profession, often at their alma mater, and who typically continued in the faculty role as a second and/or secondary career.

Nineteenth Century Professionalization

The professionalization phase proceeded in two relatively distinct stages—two mini-revolutions separated by a half century. The first quarter of the 19th century witnessed the ascent of a core of permanent, specialized *professors* as the centerpiece of academic staffing, independent of the tutorship and quickly supplanting it as the modal appointment type at the leading institutions. The majority of professors, however, continued to be drawn to their initial appointments from nonacademic jobs, primarily in

school teaching or the ministry, secondarily in law or medicine. Any semblance of a career grounded in their academic discipline typically ended with their *institutional* career, i.e., most moved into nonacademic careers following their stints, however lengthy, as college teachers. And irrespective of their length of institutional service, most faculty in the first half of the 19th century still evidenced relatively low engagement with a field of study in terms of their scholarly publication patterns and associational involvements. Their public, extrainstitutional role was instead devoted to church-related and/or civic activities, including the holding of political office (Historical Catalog of Brown University, 1905; Packard, 1882; Tobias, 1982). By the second half of the 19th century, increasing secularization, incipient industrialization, and the growth of science were shaping the emergence of the *university* as an organizational form. The university had the capability of producing graduate-trained specialists and created clear career opportunities for the specialists thereby produced. And thus the impetus was provided for furthering—completing in some respects—a second-order restructuring of faculty careers. This second-order shift, as noted, saw the emergence of the faculty role as specialist in a discipline. Advanced graduate training in a discipline (in contradistinction to professional training in theology, law, and medicine), together with scholarly publication and participation in the activities of learned societies, were already evident, well before 1850, at a few institutions, most notably Harvard. It was not, however, until the 1860s and 1870s that most institutions began basing appointments on discipline-related credentials and began hiring individuals directly out of graduate school (Finkelstein, 1983). And it was then, too, that one discerns the emergence of interinstitutional mobility: faculty, trained in a discipline, moving to more attractive positions at other institutions as emergent disciplinary loyalties supplant historically local institutional commitments.

The professorial role as expert as it began to take form in the immediate pre-Civil War period gave rise to two significant, interrelated shifts in the professors' institutional careers during the last quarter of the 19th century. First was the emergence of new academic ranks (assistant and associate professor) and the forging of these new roles into a career sequence that at once gave shape to the career course and regulated movement through the junior ranks to a full professorship. Concomitantly, there was an expansion and professionalization of the junior faculty. Together, these developments served to integrate into a seamless structure the dual career track system (temporary tutors and a small core of permanent professors) that had characterized the early part of the 19th century.

While the instructorship and assistant professorship made their appearance quite early in the annals of some institutions, they did not become standard practice anywhere until the last quarter of the 19th century; nor did they serve as feeders to the senior ranks initially. These “junior” faculty roles, however, came to represent not merely changes in nomenclature, but rather significant departures from the tutorship—leading at some institutions to the disappearance of the tutorship and at others to its transformation into an instructorship. Most critically, they came to serve by the 1870s and 1880s at most institutions as feeders to the full professorial ranks. By 1880, the junior faculty grew to parity or surpassed in size the senior faculty at many institutions; and they were increasingly entering their academic careers directly from graduate training in their specialties or from junior appointments at other institutions. The essential features of the 20th century faculty role were becoming the norm—a far cry from the composition of faculties in the first quarter of the 19th century.

Consolidation and Elaboration in the Early 20th Century

The two-decade period between the World Wars was largely one of consolidating the gains of the preceding quarter century (Veysey, 1965). Discipline-based graduate study and research grew at an unprecedented rate. The annual production of doctorates increased fivefold: from 620 in 1920 to nearly 3,300 in 1940. More discourses and pronouncements on graduate education were published than in any previous or subsequent 20-year period, excepting the present era. A cycle of intense, second-order specialization was evident in the differentiation of yet more specialized subareas within the disciplines. To illustrate, the social sciences spawned in quick succession the Econometric Society (1930), the American Association of Physical Anthropologists (1930), the Society for the Psychological Study of Social Issues (1936), the American Society of Criminology (1936), the Rural Sociological Society (1937), the Society for Applied Anthropology (1941), and the Economic History Association (1941), among others. And these societies, in turn, sponsored more specialized scholarly journals, for example, *Journal of Personality* (1932), *Econometrica* (1933), *Sociometry* (1937), and *Public Administration Review* (1940). By the mid 1940s, the dominance of the graduate research model as we know it was clearly established, as was the professoriate’s claim to that crucial desideratum of professionalization or specialized expertise (Berelson, 1960).

On campus, that recognition of disciplinary expertise as the *sine qua non* of faculty work translated into gradually relieving the faculty of

oversight responsibilities for student discipline; this had been, after all, the major noninstructional function of the faculty during the 18th and 19th centuries. While the first deans of students emerged with the advent of the university in the last quarter of the 19th century (Brubacher and Rudy, 1968, p. 322), what became known as the “student personnel movement” began in the 1920s, gaining momentum throughout the 1930s and 1940s. The movement established on campuses across the nation an infrastructure designed to address the nonintellectual, nonacademic needs of college students. While such infrastructures, featuring deans of students, counseling, student health services, career development, and so on, were, to be sure, a response to a broad array of convergent forces—such as the tremendous growth and diversification of student bodies, a reaction against the more narrow German influence on higher education, and an expression of John Dewey’s educational philosophy—it nonetheless coincided with an historic responsibility of the faculty that by the interwar period had grown anachronistic and provided the occasion (and organizational means) for them collectively to shed those nonacademic responsibilities.

The faculty’s disciplinary expertise expressed itself on campus not only in the shedding of old responsibilities, but in the addition of new ones. Organizationally, the increasing recognition of the faculty’s claim to professional expertise brought an enhanced role in campus decision making (Cowley, 1980). Perhaps even more fundamentally, professors’ expertise translated on their own campuses into leverage that enabled them to win tenure rights. Throughout the 19th century, the professoriate had labored without provisions for job security, as mere employees of their campuses who were subject to the will of presidents and trustees. While many full professors were on *indefinite* appointments, the definition simply meant that no length of term had been specified in their contract. Indefinite appointments were never the equivalent of *permanent* appointments, either in intent or law; and individuals on such appointments could nevertheless be dismissed at any time (Metzger, 1973). Moreover, for junior faculty, neither a recognized set of procedures nor a timetable was yet established for attaining even these indefinite appointments that were the reward of a full professorship. An individual faculty member might serve his institution for 15 or 20 years and be dismissed at any time—without reason and without a hearing. And this possibility was realized time and again, even at those institutions with a tradition of faculty power, such as Yale and Wisconsin (Orr, 1978). In its historical 1940 Statement of Principles of Academic Freedom and Tenure, culminating 14 years of negotiation, the AAUP articulated the concept of *permanent* faculty tenure,

designed a means for regularizing the flow of tenure decision making (i.e., by stipulating a six-year probationary period), and endorsed procedures to ensure due process on nonreappointment. By that time, the AAUP had sufficient stature to gain widespread institutional acceptance of its pronouncement and by that time, too, most institutions had already formalized the system of academic ranks to provide the infrastructure for career progression (Orr, v = 5).

Off campus, that recognition of the faculty's specialized expertise brought them into public service on a scale heretofore unknown. Although the discipline-based "public service" role of the professional scholar had germinated during the Progressive era and World War I, the number of faculty involved had been relatively small and their national exposure highly circumscribed. The national "Brain Trust" assembled by President Roosevelt to address the social and economic dislocation wrought by the Depression provided, on an unprecedented scale, a highly visible public showcase for faculty talent. Between 1930 and 1935, 41 independent and state-supported universities granted nearly 300 leaves to full-time faculty for the express purpose of serving the federal government (Orr, 1978). A much larger number of faculty served state and local governments "on overload." In the early 1940s, it was to academics that the federal government turned once again in support of the national defense effort associated with the Second World War. The Manhattan Project, which gave birth to the atomic bomb, is only the most dramatic and famous of innumerable faculty-assisted wartime projects. After the war, this newfound visibility contributed to the legitimation of the professional role of the college teacher. The esteem in which members of the academic profession were held by the public increased, as did the prestige attached to an academic career.²

The growing recognition of faculty as professionals served not only to elevate the profession but also to broaden entry into it. Professionalization permitted (although it by no means assured) the introduction of achievement-related criteria of success and a concomitant reduction in the salience of the ascriptive characteristics of social class and religious preference. Thus, by 1940, Catholics and Jews surged to constitute nearly one quarter of what had been an exclusively Protestant profession; the sons of farmers and manual laborers were increasingly joining the sons of businessmen and professionals; and *daughters* were now joining the sons, comprising fully 13% of a sample of faculty affiliated with institutions

²Bowen (1978) has documented the close association of public attitudes toward academe and levels of faculty salaries. He pinpointed World War II as marking a major upturn in both the level and rate of real growth in faculty salaries.

accredited by the North Central Association (Kunkel, 1938; Lipset and Ladd, 1979).

By the Second World War, the various components of the contemporary academic role had thus crystallized into the highly differentiated model we became familiar with at the close of the 20th century—teaching, research, institutional and public service, as a full-time commitment, all rooted in the faculty member's disciplinary expertise. The “modern era” of faculty careers had begun.

THE SOCIOLOGICAL STRAND: SOCIAL STRATIFICATION IN ACADEMIC CAREERS

And it was to the mapping of this new prototype that sociologists during the 1960s and early 1970s addressed themselves. They sought to explain three sets of outcomes of the academic stratification system: an academic's position with the institutional prestige hierarchy (the prestige of an academic's employing institution within the national system of colleges and universities); an academic's notoriety within his or her academic discipline (as reflected in the visibility and recognition accorded their work); and an academic's status *within* his or her employing institution. They sought to determine the extent to which the norms of science valued and rewarded research performance and disciplinary achievement as compared to the individual scientist's social and academic origins (ascriptive rather than achievement characteristics). They sought to learn as well of the extent to which the two reward systems that shape an academic career were congruent or divergent (Parsons and Platt, 1968). Do institutional norms reinforce or mitigate disciplinary ones?

Prestige of Institutional Affiliation

Two clearly distinctive sets of findings emerge from these investigations: one set of studies (Allison, 1976; Cole and Cole, 1967, 1973; Danziger, 1978; Hargens and Hagstrom, 1967; Hargens, 1969) found that one's publications and the prestige of one's terminal degree were equally important factors in securing a prestigious academic appointment; the second set of studies (Crane, 1965, 1970; Lightfield, 1971; Long, 1978; Reskin, 1979; Youn, 1981), on the other hand, reported that the prestige of one's terminal degree and of one's graduate sponsor were significantly more likely to bring a good job than either the number or critical acclaim of one's research publications.

On what basis are we to evaluate these conflicting findings? The major distinction between the two groups of studies appears to reside in how they assess scholarly productivity; the first examines publication at the time of the investigation, the second at the time of appointment. As Hargens and Hagstrom (1967) suggest, in assessing the limitations of their own work, measuring publication at the time of the study rather than at the time of appointment tends to overemphasize the importance of scholarly productivity insofar as the prestige of one's institutional location has an independent effect on publication activity between the time of appointment and the time of the study. Indeed, Long (1978) has neatly demonstrated the magnitude of such overestimation by separately regressing the prestige of one's terminal degree and graduate sponsor on publication productivity at the time of initial appointment *and* six years after the initial appointment. In this analysis, the import of publication productivity nearly doubled over the six-year period ($\beta = 0.15-0.27$), while that of doctorate prestige and sponsorship were slightly reduced. In light of these findings, it would appear that *at the time of initial appointment*, it is much more the prestige of one's terminal degree and one's graduate sponsor than one's scholarly productivity, which will lead to a good academic appointment. Moreover, insofar as one's scholarly productivity counts at all, it is the quality, or frequency of citation, of one's publications rather than their sheer number that makes the difference (Cole and Cole, 1973; Lightfield, 1971; Long, 1978; Reskin, 1979). Even the effect of publication quality, however, is not direct but is mediated by "visibility" and "the perceived quality of one's work"; and these are, to a considerable extent, a function of previous institutional affiliation (Cole and Cole, 1973).

This leads to a critical qualification. The relative salience of scholarly productivity and ancestry for securing the right position seems to vary over the course of the academic career. In securing the first position, prestige of the terminal degree and the graduate sponsor clearly overshadow training and productivity. For second and later jobs, the residual effect of doctorate prestige and sponsorship remain, but are attenuated. Their salience is almost entirely mediated by their effect on the first academic appointment, which in turn is a powerful determinant of subsequent ones—both independently and via the effects of prestige of institutional location on early career scholarly productivity (Cole and Cole, 1973; Crane, 1970; Danziger, 1978; Hargens and Hagstrom, 1967; Long, 1978; Reskin, 1979). Once having secured the right initial appointment, which is more a function of prestige than demonstrated competence, and more a function of residual, unexplained factors than anything else, subsequent appointments are determined by the prestige of that

first appointment and the quality of scholarly work, which is itself, to a considerable extent, a function of the prestige of the initial institutional appointment. In many respects, then, Caplow and McGee (1958) said it best over two decades ago when, after examining the process of filling academic vacancies, they concluded: "Hiring decisions are not based on the actual evaluation of the applicant's work, but rather on the prestige of the candidate's graduate department, the eminence of his sponsors, and chance"—or, at least, unknown factors.

Advancing in the Discipline

How does the fashioning of a disciplinary career compare with the process of securing a good academic appointment? To what extent are they relatively independent stratification systems? Or are they the two sides of the same coin? Investigators have examined three yardsticks of disciplinary achievement and recognition: receipt of honors and awards, visibility of one's scholarly work to colleagues (recognition as "familiarity"), and actual use of one's scholarly work by colleagues in their own research (as evidenced by citations). The findings permit two broad generalizations. In the first place, disciplinary recognition is more predictable than the prestige of one's institutional affiliation; and among the yardsticks of recognition, visibility or familiarity to one's colleagues is the most predictable of all [Cole and Cole (1973) were able to explain just over 60% of the variance in visibility and about one third of the variance in receipt of honors and awards; Reskin (1977, 1979) and Long (1978) were able to explain between one quarter and one half of the variance in citations to scholarly work]. In the second place, scholarly research performance overall emerges as a more important and academic ancestry as a less important arbiter of disciplinary recognition than of securing a good position (indeed, the effects of prestige of graduate sponsor and of doctoral department are largely indirect, mediated by their influence on initial job placement and early scholarly productivity, as these affect disciplinary recognition).

Advancing in the Organization

Two preliminary observations on the determinants of organizational advancement (i.e., promotion through the ranks and salary increases) are in order. First, organizational recognition is much more predictable than disciplinary recognition. Studies of the determinants of academic compensation managed to explain between 55% and 85% of the variance

in salary increments and absolute salary levels, depending on the number and nature of independent variables considered (Tuckman, 1976). Second, unlike the various forms of disciplinary recognition, the determinants of organizational advancement are relatively stable or consistent across forms of recognition; the most important determinants of salary are also the most important determinants of promotion.

What are these most important arbiters of organizational advancement? The vast majority of studies suggest that they are performance factors—research productivity, attainment of the terminal degree, and relative emphasis on components of the academic role (especially time spent in administration and, to a lesser extent, institutional service). Faculty who publish, who assume administrative responsibilities, and who serve on committees are rewarded for their efforts with promotion and salary increments.³

Rewards for an individual faculty member's performance were shaped, however, by institutional affiliation, disciplinary field, and academic rank. At more prestigious institutions, faculty are more likely to receive higher salaries, especially at the higher ranks (Muffo, 1979), but are at the same time less likely to be promoted or, at the least, likely to be promoted more slowly (Astin and Bayer, 1973; Cohn, 1973; Muffo, 1979; Tuckman and Hagemann, 1976). Faculty salary scales tended to be lower at church-related institutions (Cohn, 1973) and, to a lesser extent, at private colleges and universities generally⁴ (Astin and Bayer, 1973; Tuckman and Tuckman, 1976), and tend to vary across geographical regions, reflecting cost-of-living adjustments (Lewis, Wanner, and Gregorio, 1979; Tuckman and Hagemann, 1976). Individual academic disciplines boast very different supply-demand situations, reflecting differential opportunity structures and salary scales outside academe. Both promotion rates and salary levels tend to be slower and lower, respectively, for faculty in the humanities (Cartter, 1976; Katz, 1973; Tuckman and Hagemann, 1976; Tuckman and Tuckman, 1976). Finally, academic rank importantly affects salary insofar as most institutions operate with a system of salary grades defined by rank, thus effectively rewarding differential performance primarily within ranks (Astin and Bayer, 1973; Cohn, 1973; Koch and Chizmar, 1973; Lewis, Wanner, and Gregorio, 1979).

³ Only one study (Koch and Chizmar, 1973) reported significant recognition for teaching effectiveness. While it is not clear how the increasing rhetorical attention to teaching over the past decade has actually affected the institutional reward system, the findings reported by Fairweather (1996) suggest the contrary.

⁴ How things have changed on this score. See, for example, Schuster and Finkelstein, chapter 8 (in press).

The findings of Astin and Bayer (1973), Katz (1973), Hargens and Farr (1973), Siegfried and White (1973), Tuckman (1976), and Lewis, Wanner, and Gregorio (1979) collectively suggest, however, that longevity of service, both at the employing institution and in the professoriate generally, whatever its quality, may be nearly as important a determinant of advancement as performance. Institutions of higher education are apparently similar to other types of bureaucratic organizations in not being impervious to the claims of *seniority*. The longer a professor remains on the scene, the more likely he or she is to attain higher rank and salary (although this may be less true for those who have remained at the institution from which they received their terminal degree). However, productive a faculty member may be, he or she must generally wait a minimum time before being eligible for promotion to a higher rank (in the case of assistant to associate professor, typically a six or seven year probationary period), and during this waiting period must remain subject to the limitations of salary grades.

Quite beyond performance or seniority, advancing in the organization is subject to ascriptive influences—most notably those of gender. Both Stewart (1972) and Astin and Bayer (1973) found that gender affected salary and promotion prospects for the most part indirectly via its association with research productivity, institutional location, disciplinary affiliation, and seniority; both Katz (1973) and Tuckman (1976), on the other hand, reported a strong, independent gender effect on salary level, which later studies appear to confirm. It would appear, then, that sex may operate both directly and indirectly—via its association with the major determinants of organizational status—to bias the allocation of organizational rewards (see discussion below on the status of women faculty).

CAREER ADVANCEMENT: SOME CONCLUDING REMARKS

On the basis of our discussion of disciplinary and organizational recognition, it seems useful to conceptualize the academic reward system as two interacting subsystems: the somewhat mysterious, loosely organized stratification system of the academic professions, that allocates peer recognition, professional honors, and appointments to prestigious positions; and the more rationalized, predictable stratification system of institutions of higher education that differentially allocates salary and promotion through the ranks to more or less “deserving” faculty. Both subsystems operate on the basis of meritocratic and particularistic criteria. They both attribute importance to academic accomplishment as a

criterion of advancement—although, ironically, the evidence suggests that institutions of higher education may adhere more conscientiously to the criterion of scholarly merit than the academic professions. The major difference between the two subsystems hinges on the nature of the particularistic criteria applied. For the academic professions, prestige, as reflected in one's academic ancestry, current institutional affiliation, and formal receipt of awards, rivals scholarly merit as a prime determinant of recognition; for institutions of higher education, seniority proves second in importance only to scholarly merit and administrative work as a determinant of promotion and salary. Neither of these particularistic criteria has much exchange value in the other subsystem. Mere longevity in the absence of continued productivity and visibility does not bring with it disciplinary recognition (Cole and Cole, 1973), nor do disciplinary prestige and visibility unaccompanied by research production, institutional service, and waiting translate into institutional status.

In a very real sense, the individual faculty member's disciplinary and institutional affiliation serve as the points of intersection between the two subsystems. The disciplinary market situation (supply relative to demand and opportunities for meaningful and profitable extra-academic work) shapes the promotion opportunities and salary scale at an institution; the status of the institution shapes the opportunities for visibility and recognition within the discipline. The two subsystems, nonetheless, remain distinct in their contradictory pulls and pushes on the individual faculty member. Managing an appointment at a prestigious institution promises the increased probability of visibility within one's discipline at the same time it promises lower probabilities of promotion or higher probabilities of slow promotion and no real salary advantage until one reaches the senior ranks. Conversely, moving to a less prestigious institution decreases the likelihood of disciplinary visibility while raising the probability of promotion and ultimate salary disadvantage.

THE ECONOMIC-PSYCHOLOGICAL STRAND

In the mid 1960s, 8% of doctorate-holding faculty changed their institutional affiliation annually; by 1972, this percentage had decreased to 1.4% (Carter, 1976). In the mid 1960s, nearly 3.5% of the professoriate left academic employment annually. That percentage was cut in half by the mid 1970s—reflecting the sharp reversal from a seller's to a buyer's market in the early 1970s. While the lion's share of studies of job changing

were the product of concern during the late 1950s and early 1960s for ensuring an adequate *supply of* qualified faculty and focused principally on interinstitutional mobility within faculty ranks (Eckert and Williams, 1972), the results of these studies together with the few more broadly conceived recent studies of job changing suggest some basic common denominators that underlie faculty choice patterns. For faculty, changing jobs or careers appears to be a function primarily of (1) the structure of the academic career, that is, rank structure and tenure system, especially as they operate in a declining job market, and (2) faculty interests and values, especially as they change over the course of an academic career.

Career Structure Determinants of Job Changing

Baldwin and Blackburn (1981) in a study of faculty at 12 liberal arts colleges identified three career stages at which faculty were most likely to consider job changes.⁵

1. *Just before coming up for tenure.* The assistant professor with more than three years of experience, while seeking the recognition and security symbolized by tenure, may be dissatisfied with his or her career insofar as it does not measure up to original expectations or insofar as he or she fears a negative tenure decision. This leaves such faculty, quite naturally, to question their future in higher education and to seek out alternative career options should their bid for tenure fail.
2. *Just before coming up for promotion to full professor.* Experienced associate professors find themselves in much the same position as the experienced assistant professors. They are coming up for promotion to the final career plateau, which they may or may not reach. Should they fail to be promoted at the expected time, they may feel that they have reached a dead-end to which they are locked in by age and economic security needs.
3. *Just after promotion to a full professorship.* Having secured the top promotion, the new full professor has reached a career plateau from which there is nowhere else to go professionally. Full professors can look forward to more than two decades with no change in responsibilities.

⁵This study, strictly speaking, does not fall with the temporal parameters of our period. Insofar as it illuminates retrospectively a number of studies that do, we include it here and return to it later.

These structural choice points in the academic career reappear again and again. Caplow and McGee (1958) found experienced assistant professors to be the most mobile subgroup among faculty, followed by recently promoted full professors; and indeed, virtually all available evidence confirms that the tendency to change academic positions is highest among experienced assistant professors (Aurand and Blackburn, 1973; Brown, 1967; Clark and Larson, 1972; Fincher, 1969; Marshall, 1964). Although these studies also suggest that interinstitutional mobility within the professoriate decreases with age and higher rank or the attainment of tenure, the hypothesis of structurally related career choice points still seems sound. Indeed, McGee (1971) found that the attainment of higher rank and tenure affected the tendency to move, but did not affect the involvement of faculty in job market activity. That more senior faculty are actively involved in the job market but are less likely to move reflects less the nonoperation of career reassessment than the operation of other structural constraints at the more senior levels. One is institutional promotion practices (e.g., the preference for hiring at lower ranks and promoting from within), such that all but the most exceptional older faculty effectively price themselves out of the market (Caplow and McGee, 1958), and another is the phenomenon of being locked into one's position by virtue of age and economic security needs.

The Normative Determinants of Job Changing

If the structure of the academic career determines the timing of job changes, then ingrained faculty values and interests determine the nature of those job changes. Studies of faculty attrition, retention, and job choice attest to the formative role of work-related values. Stecklein and Lathrop (1960), Brown (1967), Fincher (1969), Nicholson and Miljus (1972), Aurand and Blackburn (1973), McGee (1971), and Ladd and Lipset (1976) all reported that the nature of prospective job duties, the competency and congeniality of colleagues, and the opportunity for research and professional development emerged as the most important factors in job changing decisions, and this held most true for those faculty at the highest levels of professional achievement and at the most prestigious institutions (Ladd and Lipset, 1976).

The studies noted above report only on those faculty who actually changed jobs—a very small group indeed compared with those who were active in the job market (McGee, 1971). When this select group is compared with those who are active in the market, receive offers, but do not move, the critical role of values in job changing is placed in even sharper

relief. McGee (1971) examined the sources of dissatisfaction of those faculty who changed jobs and those who stayed despite attractive outside offers. What appeared to separate movers from those who decided to stay despite attractive offers were considerations related to institutional philosophy and educational policy and mundane factors such as geography, location, and climate. Oddly enough, faculty-administration relations and working conditions were considerably less important, and ironically, among those dissatisfied with salary, rank, and promotion prospects, no one moved. These findings led McGee to conclude that a faculty member will leave his or her current institution only for a much, much better opportunity to realize his or her professional aspirations.

Beyond general academic values and interests, two value factors that affect job changing merit special treatment: salary and prestige.

The Salary Factor

Brown (1967) alone examined the relationship between the rated importance of salary and current salary level and found them to be inversely related, that is, the salience of the salary factor decreased as respondents' current salary level increased. Thus, beyond a certain "critical" level, the promise of a higher salary ceased to function as a real inducement to move. Similarly, McGee (1971) reported that those liberal arts college faculty who commanded the highest salaries showed the lowest level of market activity and further tended to reject outside offers twice as often as the sample as a whole; the lowest salaried faculty together with higher (but not the highest) salaried faculty tended to be most mobile. It would seem reasonable to conclude, then, that for the highest salaried faculty, salary level may be either important or unimportant in retention: important in a negative fashion insofar as the level of their salaries may "price them out of the market," unimportant insofar as the performance which presumably led to a high salary level would enable these faculty members to command high salaries anywhere (so that factors other than salary become more important). As one descends the salary scale, however, salary level would appear to function as a "pushing" force. In their study of faculty at the University of Minnesota, Stecklein and Lathrop (1960) qualify their findings of the relative insignificance of the salary factor with the proviso that "their University of Minnesota salary was comparable to salaries offered for other positions." In this case, then, the relative import of the salary factor was low because of the net difference between current and prospective salaries. In sum, the salary factor would not appear to operate uniformly; rather its importance would appear to

vary by the current salary level of an individual as well as the net difference between the individual's current salary and that of other prospective positions.

The Prestige Factor

Prestige (at least in the sense of perceived power and status) appears to be a significant motive force behind the decision to move into administration (Snyder, Howard, and Hammer, 1978); the significance of prestige as a motivator for job changing has been most thoroughly tested, however, in the realm of interinstitutional mobility. These inquiries suggest two broad generalizations: (1) the quest for prestige is clearly secondary to the quest for satisfying work and stimulating colleagues (Brown, 1967; Ladd and Lipset, 1976; Nicholson and Miljus, 1972; Stecklein and Lathrop, 1960) and (2) much like the salary factor, prestige operates as a "nonuniform" motivator. Its salience appears to vary, in the first place, by career stage. Thus, for example, Caplow and McGee (1958) found younger faculty to be significantly more prestige conscious, while older faculty were more likely to trade off prestige for autonomy or security. In the second place, the nature of the motivating power of prestige appears to be contingent on the relationship between the professional prestige of the individual faculty member and the prestige of his or her employing institution. McGee (1971) found that prestige proved a powerful stimulus to faculty as both a retention factor and an attrition factor. If the level of institutional prestige was on a par with, or higher than, the level of the individual professor's professional prestige, it tended to function retentively; however, if the individual faculty member's professional prestige was higher than the level of institutional prestige, then it appeared to function in quite the opposite fashion.

Insofar as faculty do pursue prestige to varying degrees, to what extent is their quest successfully consummated in moving to another faculty position? The evidence suggests considerable movement among institutional prestige strata though primarily downward—whatever the measure employed for assessing institutional prestige. In all studies, except Caplow and McGee (1958), at least one half of all job changes resulted in concomitant changes in location on the institutional prestige ladder. The direction of one's movement on that ladder appeared to depend, in the first place, on where one started. A faculty member who left a position at a highly prestigious institution was more likely to move downward, if he or she changed prestige strata at all—there is nowhere else to go. In the case of

new doctorates, descent was especially likely, since the plurality of doctorates are produced by a relatively small group of research universities that cannot absorb all of their own graduates. Conversely, it would appear that the lower the point in the prestige hierarchy at which one began, the greater the likelihood of moving upward—once again, to the extent one moves at all.

In addition to the absolute and relative prestige of the institution from which one moves, determinants of the prestige level of the new institution include variable conditions of the academic labor market, generally, and of the disciplinary labor market, in particular. Cartter (1976) compared the hiring pattern of new doctorate-holding faculty in 1968 and 1973, two years distinguished by relative looseness and tightness, respectively, in the academic labor market. Although Cartter found no significant differences in institutional hiring patterns—departments continued to tap much the same sources for their new faculty—he did find significant differences in institutional hiring rates: in the “bad” year of 1973, lower-prestige departments tended to do a disproportionately high share of the hiring. In that year, then, there tended to be a general downward movement in prestige for newly hired faculty. Similarly, Brown (1967) reported that idiosyncratic conditions in disciplinary labor markets can influence the direction of migration. The higher the rate of a discipline’s expansion, that is, the greater the demand for its practitioners, the higher the probability of an individual’s moving up the ladder; the lower the demand, the higher the probability of moving downward.

Finally, there is some evidence that scholarly achievement may have a role to play in ascent or descent. Brown (1967) found that the higher the scholarly credentials of his movers, the greater their probability of moving upward, and vice versa. The findings emerging from studies of disciplinary advancement and recognition, however, suggest that the productivity effect may indeed be both quite small and indirect, mediated primarily by the effect of previous institutional location on productivity.

The Job Search Process

In searching out another position, faculty employ two broad types of approaches. “Informal” methods involve the use of contacts not specifically developed for the job search effort, such as graduate professors and colleagues. “Formal” methods involve the use of agencies and procedures specifically geared to job seeking (institutional and professional association placement offices, blind letters, and so forth). Informal methods are far and away the norm; indeed, formal methods are usually resorted to

when informal means do not get results, or when the individual has no contacts on which to capitalize. There does appear to be systematic, and not altogether unexpected, variation in the use of informal versus formal methods of job search. (1) Faculty at the higher ranks tend to use informal methods most frequently, although as career age increases, reliance shifts from former teachers to professional colleagues. (2) New doctoral degree holders, nondoctorates, and aspirants to lower-rank appointments, generally, tend to use formal methods (particularly blind letters) more frequently. (3) The more “desirable” the position, the more likely that it will be obtained by informal contacts (Brown, 1967). In sum, the findings may be encapsulated by the observation that the higher the individual’s qualifications, the greater the likelihood that he or she will resort to informal measures, and these are more likely than formal measures to prove effective in securing the best positions.

Brown (1967) sought to go beyond an examination of the methods used for securing academic employment to a more generalizable theory of job search. According to Brown, an individual will continue a job search and use those search methods for which “expected gain” is largest as long as the expected benefits (in terms of the value of the job that might be landed) exceeds the expected costs of the search. Thus, the less desirable one’s current position, the longer one is likely to search. A recent doctoral graduate with no job is likely to search long and hard and to use as many methods, both formal and informal, as possible. On the other hand, the individual with high visibility is likely to have a considerably shorter search, although the person may spend more time “looking at” than “looking for” a job. Brown’s theory appears to explain variation in the academic job search pattern reported by his sample of “movers,” but the theory remains untested with that larger group of faculty who, though active in the job market, never move and with that group of faculty in search of nonacademic employment.

Some Concluding Observations

The first general proposition about job changing to which the data point is that faculty are subject to the laws of inertia and do not change their jobs impulsively. Even in the seller’s market of the early and mid 1960s, only a minuscule proportion of faculty who received outside job offers actually moved to another position. While this decreased job changing is no doubt a function of the limited opportunities within the academy as well as the uncertain state of the economy, it is also a function of faculty’s historic inertia (McGee, 1971).

When faculty do change jobs, they do not conform to the rational economic labor market model; that is, they do not seek to optimize prestige and income. Indeed, more often than not, faculty reject academic job offers that promise more money, prestige, and advancement opportunities (McGee, 1971; Snyder, Howard, and Hammer, 1978). Rather, their job changing decisions seem to be determined by the principle of optimizing interests and values, that is, seeking opportunities for professional growth through compatible work activities and colleagues. This is not to suggest that prestige and remuneration are not important motivators—and indeed for some groups of faculty, especially nontenured faculty at the lower end of the salary scale, they may be of primary importance at a given career stage; but overall, their import is secondary to intrinsic motives.

One final point. To the extent that the nature of job and career change decisions are predicated on matters of value, their timing is shaped by the structure of the academic career. Thus, interests and values appear to vary predictably over the course of that career. Moreover, that structure appears to give rise to predictable periods of career reassessment when consideration of job changes, if not actual moves, are most likely to occur. In working with college and university faculty on career planning, both the structural and normative bases of career decisions will need to be taken into account.

THE LEADEN OR TIN-CUP ERA: RESEARCH ON FACULTY CAREERS IN THE LATE 1970S THROUGH THE EARLY 1990S

By the mid 1970s, faculty vacancies were diminishing and the growth of the general economy (wracked by stagflation) and of (public) higher education moderated significantly (Kerr, 1991). The dominant academic staffing issues switched from scavenging for qualified faculty and promoting scholarly productivity in a seller's market to managing an increasingly tenured, stable, and dispirited faculty (Bowen and Schuster, 1986) in a buyer's market, and especially to harnessing their energies in an entirely new set of directions—focusing on universal access and emphasizing at once the quality of teaching as a key to student success, and faculty diversity as a key to addressing the needs of a student body that was rapidly diversifying not only demographically but in terms of levels of academic preparation. All of this within the context of a new emphasis on the virtues of the market (and the student consumer) as arbiter of quality.

This emerging context provided a new “twist” on the issues of the academic reward system and faculty recruitment and retention. Scholars

focused now on how to modify the academic social system which developed to reward research to one that would focus more on teaching and responsiveness to the needs of students. In that connection, there were increasing efforts to understand faculty motivations over the span of an academic career and develop approaches to individualizing academic work and rewards in better alignment with what we were learning about adult development (Levinson, 1978; Neugarten, 1976) and changing institutional needs/priorities (e.g., Baldwin and Blackburn, 1981). Other scholars focused on the diversity issue: the status of women and racial/ethnic minorities on the faculty, recruitment of these same groups to academic careers, and their impact on students. We address each of these themes in turn.

THE ACADEMIC CAREER IN DEVELOPMENTAL PERSPECTIVE

If one had to capture the literature on academic careers between the mid 1970s and about 1990 in a single phrase, that phrase would be “faculty development (Centra, 1976),” “faculty responsiveness and productivity” and “faculty vitality (Maher, 1982; Rice, 1985).” Building on the earlier, relatively “isolated” work of Nevitt Sanford, Mervin Freedman *et al.* in the late 1960s (see for example, Bloom and Freedman, 1973; Freedman *et al.*, *Academic Culture and Faculty Development*, 1979), and the then newly published and pioneering work of psychologists including Levinson (1978), Baldwin and Blackburn (1981) ushered in that era with their classic work on the developmental stages of an academic career. While we have already alluded to that framework “in preview” in our preceding discussion of faculty mobility, we return to it now as the conceptual centerpiece of an emerging research focus on promoting vitality and productivity in an era when interinstitutional mobility could no longer serve as the primary source and driver of career development. Investigators were turning inward to determine how the faculty’s developmental needs might be supported within the self-same organization and job—balancing changing institutional needs with changing developmental needs of the individual faculty member.

Beyond the concept of career stages, the concept of faculty *vitality* (or its lack) shaped the questions faculty researchers were addressing. At least three subgenres can be identified. The first includes biographies and autobiographies of high achieving or highly successful academics. Historical examples of this genre include biographies and autobiographies of figures such as William James (Santayana, 1920) and Einstein (Frank, 1947), recent autobiographies by McGrath (1980) and Gould (1993),

recent biographical sketches by Weiland (1994) and collections such as Epstein's *Masters: Portraits of Great Teachers* (although the latter may be more focused on the work role than the career, 1987). A second genre is a variant on the static group comparison of survey research (Denzin, 1970), which compares high achieving and highly successful academics with less active colleagues—in terms of their attitudes, orientations, backgrounds, and career experiences. The prototype for this approach is the work of Clark and Corcoran (1980) reported in the Lewis and Clark volume, *Faculty Vitality and Institutional Productivity* (Clark and Lewis, 1985). Their comparative studies of the University of Minnesota faculty were supplemented by Boice's (1993) comparative studies of mid-career faculty at an east coast and a west coast university. Similarly, LaCelle-Peterson and Finkelstein (1993) conducted career retrospectives on senior faculty at 11 institutions including community colleges and liberal arts colleges as well as research universities.

The third genre of studies brings career and adult development theory (Levinson *et al.*, 1978) to bear on questions of vitality throughout the lifespan. These efforts include retrospective analyses of faculty initial expectations colliding with the realities of midlife exemplified by Rice's study of Danforth Fellows and the study of mid-career faculty at the University of Michigan (Bieber, Lawrence, and Blackburn, 1992). Related to this thrust is Blackburn's (1985) attempt to relate critical career events reported by faculty to various life stage theories and his subsequent studies of perceptions of self-efficacy among college and university faculty (hinted at in Cares and Blackburn (1978) and ultimately reported in Blackburn and Lawrence, 1995)—how responses to career opportunities and transitions are mediated by the individual's sense of an internal versus external locus of control.

Beyond these direct attempts to get at the faculty vitality issue *per se*, there is a definable strand of inquiry into the effect of aging on faculty career performance. Blackburn (1972), Lawrence and Blackburn (1986), Creswell (1985), and Finkelstein (1984) studied the effects of aging on faculty research performance—drawing on archival data as well as data from national faculty surveys. Ultimately, the findings of these studies suggest that the effects of aging *per se* are marginal: faculty who are highly active early in their careers tend to remain highly active, although the focus of that activity might shift. Similarly, those who are less active remain less active. The old adage: past behavior is the best predictor of future behavior—as Blackburn (1972) put it.

The second set of vitality-relevant or related studies have been those focused on faculty morale and satisfaction. These include many *ad hoc*

surveys as well as secondary analyses of various items included in national faculty surveys by the American Council on Education (Bayer, 1973), the Carnegie Council on Policy Studies and later the Carnegie Foundation for the Advancement of Teaching (Clark, 1987; CFAT, 1989; Trow, 1975), the National Center for Research on the Improvement of Postsecondary Teaching and Learning (NCRIPAL) (Blackburn *et al.*, 1991), the Cooperative Inter-institutional Research Program at the University of California, Los Angeles (UCLA) (Astin, Korn, and Dey, 1991), and the National Center for Education Statistics (U.S. Department of Education, 1988, 1993, 1999). These efforts have focused more generally on overall morale and satisfaction with particular aspects of job (workload) and career (compensation, job security, etc.), often as these relate to “intentions to leave academic employment” or move to another college or university (for a fuller discussion, see Clark, 1992).

What have we learned about faculty vitality through the life cycle? While there have been no formal and widely accepted readings taken of the “pulse” of the faculty, we can make some inferences that involve leaps of faith of varying magnitudes. For example, we might begin by observing that faculty in the 1990s were, as a group, older than they had been since the 1960s and therefore more likely to manifest the physiological and developmental concomitants of aging. Age operates as an independent variable, i.e., independent of individual differences in vitality.

Secondly, we might observe that the majority of faculty in the late 1980s entered the profession in the late 1960s and early 1970s, and this generation qua generation is vulnerable to the great expectations/shrinking opportunity structure mismatch that Rice (1980) so clearly associated with his mid-career Danforth Fellows, and Blackburn *et al.* (1991) and Bowen and Schuster (1986) corroborated in their own larger scale studies.

Perhaps, Wilbert McKeachie said it best when, at a 1993 working meeting on research on academic careers cosponsored by the National Center for Teaching, Learning and Assessment and the New Jersey Institute for Collegiate Teaching and Learning, he identified three categories of mid- and late-career faculty:

1. The vitals, who were actively engaged with their work on multiple dimensions;
2. The “solid citizens,” the uncelebrated majority who work hard, but who are no longer inspired and are frequently overlooked; and
3. The “derailed” (Robert Boice’s middle-aged disillusioned faculty), who in the early years did not build the necessary

career infrastructure and who are not meeting their institution's expectations.

His consensus judgment was that about 20% of the overall faculty population could be characterized as "vitals," about 60% as solid citizens, and about 20% as derailed.

What accounts for observed differences in faculty vitality? While we have already alluded to the concepts of "self-efficacy" and locus of control, the literature is quite clear here. First and foremost is the individual; vitality is, to a great extent, a matter of individual differences. When Clark and Corcoran asked their "highly active and successful" group the reasons for their success, they most frequently mentioned "hard work" and "personal factors." Indeed, Clark and Corcoran (1985) reported that 80% of their "highly active" faculty saw no decline in productivity over the years and fully half never felt stuck or never experienced a decline in energy. Individual differences were, however, not the full story. Significant proportions of faculty in Clark and Corcoran's sample found institutional and colleague support to be key factors. This is confirmed by Boice (1993) and LaCelle-Peterson and Finkelstein (1993). We have known for some time of the strong positive association of collegial support to research productivity (Creswell, 1985; Finkelstein, 1984; Lawrence and Blackburn, 1986). Moreover, Boice's work (1991, 1992, 1993) has shown how relations with colleagues were a critical differentiating factor between high achievers and those faculty who seemed headed for mid-career disillusionment. High achievers were able to command recognition and validation from their colleagues and develop collegial networks to support their work, while middle-aged "disillusioned" faculty had experienced less recognition and validation and were characterized by isolation from colleagues during their formative career years. This key role of colleagues was confirmed by Clark and Corcoran (1985) and LaCelle-Peterson and Finkelstein (1993) at various types of institutions. An alternative, albeit, related view is that too many faculty operate in relative isolation. This is the essence of the message that individuals like Parker Palmer, a sociologist and advocate of learning communities, spoke about with great resonance in the higher education community during the 1980s (see for example, Palmer, 1993, 1997). Research has shown that many faculty experience colleagues as competitors for rewards and resources rather than as collaborators (Austin and Baldwin, 1992). Moreover, at all institutional types, students were also an important source of stimulation to faculty (LaCelle-Peterson and Finkelstein, 1993).

Beyond colleagues and students, the available research identifies another form of institutional support. That includes opportunities for faculty to take on new responsibilities or work in new settings off campus; it includes time and money to pursue their interests as they arise. Vital faculty create opportunities for themselves or manage to find opportunity in their immediate environment when they feel competent and an internal locus of control. Nonvital faculty typically see obstacles rather than opportunities. They are less likely to see themselves as competent and more likely to see themselves as powerless. Perceptions of “locus of control” emerged in several studies of the period as key predictors of faculty career performance (Blackburn *et al.*, 1991; Perry, 1993).

REFOCUSING FACULTY ROLES AND REWARDS

Perhaps no single piece of work on faculty roles and academic careers left a more distinctive mark on this era than Boyer's (1990) *Scholarship Reconsidered: Priorities of the Professoriate*. This volume placed squarely on the national agenda the issue of an academic reward system valorizing research at the expense of teaching and spawned a stream of inquiries on the academic reward system and its reform. This volume inspired what can only be described as a “movement” to broaden conceptions of scholarship via the support of communities of practice focused on the scholarship of teaching (Huber and Hutchings, 2005) and that work has been extended by individuals such as Robert Diamond to include disciplinary associations' efforts to promote field-specific standards for assessing scholarship that extend beyond traditional experimental and survey research (Diamond, 1999; Diamond and Adam, 1995). In terms of research, however, the impact has been a more modest one. One such strand included efforts to develop ever more precise quantitative evaluations of the academic reward system. Most prominent among these was the work of Fairweather (1996). Drawing on the national faculty surveys, Fairweather demonstrated through sophisticated multivariate analyses the significantly greater financial returns to faculty of publication versus teaching and other activities.

Perhaps, no strand of research has been more important than that on faculty appointments. Initiated largely through the work of the American Association for Higher Education's Forum on Faculty Roles and Rewards, this strand, labeled the New Pathways Project, generated more than a decade of investigation of alternatives to tenure, new forms of faculty appointments, the service role (see Chait, 2002). While the agenda emerged in germ during this second period, much of that work came to be reported

throughout the 1990s—and we will consider it more fully in our analysis of the past decade of faculty research.

WOMEN AND MINORITY FACULTY

The late 1970s and the 1980s witnessed a heightened consciousness of the status of women and minorities in academe—a function of the joint women's and civil rights movements begun a decade earlier. While this self-consciousness was translated more broadly into government policy and legal mandates (antidiscrimination legislation, affirmative action regulations), it also intruded directly (and indirectly) into academic structures. On campus, women and minority studies programs grew, as did Black student unions, campus resource centers and affirmative action offices. Off campus, we saw the emergence of women and minority caucuses in most major professional associations, new national research and support organizations, such as HERS, as well as new professional journals, such as *Sex Roles*, *Journal of Educational Equity*, *Blacks in Higher Education*, and special issues of mainstream journals such as *Harvard Educational Review* (1979) and the *Educational Researcher* (October 1980).

As the academic arm of the women's and civil rights movements, women's and minority studies programs have sought to develop a knowledge base to form the intellectual foundations of the movement. In the case of the women's movement, in particular, there has been a massive effort to direct social science inquiry toward an understanding of biological and psychological sex differences, socialization, and gender roles, the relationships among gender, race, and class, the historical roles of women and minorities, women and minorities in the labor force and before the law (Howe, 1979). Most immediately, investigators have sought to develop a knowledge base on women and minority professionals in higher education. This knowledge base includes at least three components:

1. "N of 1" autobiographical accounts of life as a woman or minority professional (e.g., Abramson, 1975; Nielson, 1979) that draw on subjective experiences to illuminate the trials and tribulations of being different in academe;
2. Opinion and hortatory pieces that provide armchairs analyses of discrimination; and
3. Broader-based empirical studies of women and minority professional and their academic careers.

We focus here on the third of these components. They include a diverse array of status reports initiated by individual institutions and

professional associations, independent studies of women and minority professionals, as well as national surveys of new doctorates, scientists, and university faculty that employed gender or race as control variables (e.g., The National Research Council's Annual Survey of Doctorates, the CFAT's and UCLA's HERI surveys of faculty, and the National Center for Education Statistics Study of Postsecondary Faculty and IPEDS). All of these have focused on the status of women and minorities vis-à-vis a matched sample of majority males. Salary has been the primary career-related variable examined followed by promotion and tenure, work assignments, and location within the institutional stratification system. The results of these studies suggested that:

1. The representation of women in faculty ranks had increased slowly during the 1970s, and women were overrepresented at community colleges and underrepresented at research universities, and tended to be overrepresented in a small cluster of women's fields (and seriously absent from the natural sciences and the learned professions (Finkelstein, 1984)). There was some evidence of a shift in institutional location of "new hires" between 1969 and 1973 (Bayer, 1973). And Centra (1974) and Cartter (1976) both found, between 1967 and 1973, that the proportion of women among new hires had increased two to five times at the most prestigious research universities. Moreover, Cartter (1976) documented a progressive convergence in first job placements of male and female doctoral holders during the 1970s (a convergence achieved by a steady downturn in job opportunities for males as women held their own). Among minority, i.e., Black faculty, while there was much less overall growth, there was a tremendous shift in institutional venue during the 1970s. Historically located primarily at HBCUs in the South (estimates are about 75–85%; Freeman, 1978; Mommsen, 1974) during the first half of the 1970s, that proportion declined to about half, while the proportion at predominantly White universities increased by about 10%; and these shifts were most visible among the youngest age cohorts.
2. In terms of their institutional status, both women and minorities were concentrated in the lower-academic ranks and that concentration was highest at research universities. In terms of compensation, 50 major studies reached a common conclusion: women were paid less (about 20% less Astin and Bayer, 1972; Gordon, Morton and Braden, 1974) than men, even after controlling for rank, institutional type, and academic field (the major

determinants of faculty salary, v. Hansen in Bowen and Schuster, 1986). Moreover, the evidence suggested that these salary disparities tended to widen over the course of an academic career (Bayer and Astin, 1975). Indeed, Centra (1974), Johnson and Stafford (1974), Fulton (1975), and Tuckman (1976), all showed a pattern of near equity during the early career years, followed by an increasing gap, which, however, appeared to be attenuating—at least in absolute dollars—by the early 1980s (Finkelstein, 1984, p. 185). Minority, i.e., Black faculty fared much better in terms of compensation. Tuckman (1976) found no significant Black/White salary gap for males, but Black female faculty significantly out-earned White female faculty; and those findings were largely corroborated by Freeman (1978).

Beyond overt discrimination during the career, differentials in performance and the choice of less valued activities, investigators examined several aspects of the career context that might explain the differentials in the status of women faculty. These included differential training and sponsorship opportunities during graduate school, constraints on job mobility imposed by family obligations, including enforced mobility when a spouse moves, as well as immobility owing to spouse's employment (Blackburn, Chapman, and Cameron, 1981; Cameron and Blackburn, 1981; Gappa, St. John-Parsons, and O'Barr, 1979; Gappa and Uehling, 1979; Marwell, Rosenfeld, and Spilerman, 1979; Rosenfeld and Jones, 1987).

If marriage and family responsibilities constrain the career mobility of female faculty and increase the stress level under which they operated, the evidence suggested that the family role may not directly account for gender-related differences in performance, especially in the area of research. Nine studies during this period examined the relationship between marital and parental status and the research productivity of female faculty (Astin, 1969; Astin, Folger, and Bayer, 1970; Astin and Hirsch, 1978; Centra, 1974; Cole and Cole, 1973; Ferber and Loeb, 1973; Freeman, 1977; Hamovitch and Morgenstern, 1977; Simon, Clark, and Galway, 1967; Weidman and Weidman, 1975). Seven of these studies found no significant difference in research productivity between married and unmarried women; and two others found that married women were actually more productive than their single counterparts (Astin and Hirsch, 1978; Freeman, 1977). In summary, the studies of this period, while documenting clearly overt discrimination in the hiring process, also suggested that differential performance reflecting different gender preferences may be responsible for status differentials between academic men and women.

While family and parental role responsibilities clearly increase stress, there was no clear evidence that they hurt performance *per se*.

In some sense, these studies represent only the preliminary volleys in a line of research that over the next generation has grown yet larger; and it is to the most contemporary line of research on academic careers that we now turn.

FACULTY RESEARCH OVER THE LAST DECADE

Since the early 1990s, faculty research has adjusted itself to the extraordinary demographic changes in the faculty as well as demographic projections of impending faculty shortages. Finkelstein, Seal, and Schuster (1998) reported a dramatic shift in the demographic profile of new entrants to the faculty ranks in the early 1990s. The new academic generation was heavily female (and these females were more likely than their senior female counterparts to be married); they were increasingly minority and counting an increasing proportion of foreign nationals among their ranks, especially in the natural sciences and engineering. Moreover, given the widespread aging of a faculty hired right out of graduate school to staff the higher education boom of the 1960s and early 1970s, many were predicting large-scale retirements (despite an end to mandatory retirement) and a wholesale changing of the guard. These developments not surprisingly spawned major lines of inquiry focusing on: (1) the changing of the guard, i.e., the preparation and recruitment of the next generation of college faculty (Gaff *et al.*, 2000; Wulff and Austin, 2004) amid assessments of the scope and pace of the exodus from academic careers; (2) a reconsideration of the structure of academic careers in light of the incipient “new majority,” married women struggling to balance professional career and family life—all the while with a janus-like gaze focused at once on the tenure and the biological clocks; and (3) the reexamination of tenure and the general restructuring of academic appointments.

THE CHANGING OF THE GUARD

By the late 1980s, conventional wisdom was anticipating by the late 1990s and early 2000s a mass exodus from the ranks of the American faculty of that large cohort hired in the 1960s to staff higher education’s post WWII expansion (Bowen and Schuster, 1986)—just at the moment when demographers were projecting a mass influx of traditional undergraduate students, the sons and daughters of the baby-boomers (Frances, 1998). To

what extent will higher education be able to compete with medicine and law and business in recruiting the “best and brightest”? And was the very definition of just what constitutes the “best and brightest” changing as our colleges and universities were recalibrating their missions to broader goals of access and equity? (Keller, 2001) Moreover, with the end of the mandatory retirement at American universities scheduled for 1994,⁶ would the projected mass exodus of the post WWII professoriate become instead a glorious bottleneck—as individual faculty decided en masse to stay on the job—in effect, freezing out that new academic generation?

As it turns out, a decade of research suggests that neither the concerns about a bottleneck freezing out a new generation nor the concerns about a return to the 1950s and early 1960s when academic position lay vacant for want of qualified applicants (or graduate students were plucked from their doctoral studies to fill full-time faculty roles) were well-founded.

Faculty Retirement

Federal age discrimination legislation in the late 1970s and early 1980s ushered in a new era of concern about, and study of, faculty retirement—intruding as it has into a rather stagnant academic marketplace major concerns about the increased costs associated with senior faculty staying on “indefinitely” as well as the resulting diminished opportunities for young scholars. Thus, more than anything else, the “timing” of faculty retirement decisions in an era when those decisions have been transferred from the institution’s discretion to that of the individual faculty member has become the focus of empirical attention. Thus, Hansen and Holden (1981) were commissioned by the U.S. Congress to study the possible repercussions for colleges and universities of raising the mandatory retirement age from 65 to 70. And, indeed, subsequent systematic studies of retirement in the 1990s were commissioned as a result of temporary faculty exemptions from then new federal legislation ending mandatory retirement and the attempt to determine whether that temporary exemption needed to be made permanent or might be relinquished. These include the studies undertaken under the aegis of the National Academy of Sciences (Hammond and Morgan, 1991), including the North Carolina Studies (Clark and Hammond, 2001) and the Faculty Retirement Survey

⁶ The age discrimination legislation in the 1980s eliminating mandatory retirement provided a 10-year exemption for college and university faculty so that the impact of uncapping on higher education might be studied. Several studies cited below were conducted and concluded that effects would be minimal. The exemption was to expire in 1994; and the attempt was to determine whether that temporary exemption needed to be made permanent or might be relinquished.

of research universities and elite liberal arts colleges undertaken initially by Albert Rees and Sharon Smith (1991) and later by Orley Ashenfelter and David Card for the Andrew Mellon Foundation (Ashenfelter and Card, 1998, 2001). Both of these, like the Hansen and Holden study before them, were focused specifically on the timing of the retirement decision and the impact of legislative changes relative to other institutional policies and individual variables in shaping that timing.

The concern, of course, was that the uncapping of retirement would now transfer what had heretofore been an institutional decision into the hands of individual faculty; and in so doing, effectively extending their tenure benefits indefinitely, thus placing heavy financial burdens on institutions and preventing them from infusing new blood into their faculties. All of these studies together provide remarkably consistent conclusions: that faculty generally retire around 65 years of age *irrespective* of the existence of any mandatory retirement policy; that uncapping affects primarily the retirement decisions of that small contingent of faculty who continue their employment to age 70 (clearly encouraging much lower retirement rates at age 70 and beyond, but having little impact on that large contingent who retire earlier); that those faculty most likely to continue their employment are located at private research universities and elite liberal arts colleges with relatively light teaching obligations and relatively rich research opportunities and are those who are most professionally active and productive; and finally, that “incentive programs” could be designed by institutions, either stand-alone or as one piece in a larger posttenure review initiative, that would encourage the departure of less productive faculty beyond the normal retirement age. And for the most part, experience to date post uncapping suggests that these conclusions hold up well (Holden and Hansen, 2001). Moreover, the retirement decision has been shown to be quite a complex one involving the assessment of many potential tradeoffs of the benefits and costs of remaining employed versus retiring (for model, see Keefe, 2001)—as these may change for any given individual over time.

Preparing and Recruiting the New Academic Generation

Beginning in 1993, with the support of the Pew Charitable Trusts, the Association of American Colleges and Universities and the Council of Graduate Schools launched a national project to restructure (reform) the preparation of future faculty. In particular, these efforts were intended to prepare individuals for careers outside research universities teaching students with a wide variety of backgrounds and preparation and for the

full panoply of responsibilities in the faculty role (Austin, 2002; Gaff *et al.*, 2000). In some sense, it provided another outlet for needs first addressed by the development of the Doctor of Arts degree in the 1970s (Glazer-Raymo, 1993). Together with the Forum on Faculty Roles and Rewards, and in particular, the New Pathways Project, these efforts spawned a number of examinations of graduate education and preparation for college teaching (Nyquist, 2000, 2002), the concerns and challenges facing new faculty as they embarked on academic careers (Menges, 1999; Rice, Sorcinelli, and Austin, 2000), and a variety of efforts by professional associations and agencies such as the National Science Foundation to prepare, in particular, the next generation of faculty in STEM fields. Taken together, these studies provide both hopeful signs and warning signals. Academic careers continue to attract individuals of extraordinary talent (Schuster and Finkelstein, 2006), but these individuals, especially the female majority, are now asking hard questions about the personal costs of succeeding in academic careers and the challenges in achieving a balance between work and family.

A Career Fitting the New Majority

Earlier studies of academic women reported that while they were more likely than men to interrupt their graduate study for childbirth and other domestic responsibilities (Patterson, 1974; Strober, 1975), they tended to complete their degrees about as quickly (Strober, 1975) if at a slightly later age (Tuckman, 1976). Moreover, upon degree completion, they typically plunged right into an academic career (Gappa and Uehling, 1979). Once having embarked on an academic career, career experiences are less clear (Sorcinelli and Near, 1989). While some earlier national surveys reported that women were no more likely than men to interrupt their careers for personal and family reasons, several more recent studies provide a more complex picture. McElrath (1992) found that women who interrupted their careers were less likely to achieve tenure. Harrigan (1997) examined retention after 10 years among new faculty cohorts between 1978 and 1991 at the University of Wisconsin-Madison. While female faculty showed lower 10-year survival rates than men during the early period (1978–84)—about 43% survived compared to 59% of the men—those differences in 10-year survival rate disappeared among new cohorts hired after 1985. Moreover, when Tamada and Inman (1997) examined gender differences in attrition among multiple cohorts of female faculty at a selective liberal arts college between 1960 and 1994, they found no significant gender differences in survival rates at

all. These analyses did not permit any inferences re: reasons for attrition, however.

Most recently, Mason and Goulden (2002) used data from a national longitudinal employment database on Ph.D. recipients, the Survey of Doctorate Recipients, sponsored by the National Science Foundation, to examine the effect of parenthood on the careers of male and female faculty. They reported a large and consistent “baby effect” and a “timing of baby effect.” There was a consistent and large gap in achieving tenure between women who have “early” babies and men who have early babies (defined as a baby within the first five years post receipt of Ph.D.)—and this gap persists across academic fields and institutional types. In the sciences and engineering, there was a 24% gap between men’s and women’s rates of achieving tenure 12–14 years after Ph.D. receipt; the gap was 20% in the humanities and social sciences. The effect of having “late” babies (those that arrive more than five years post Ph.D. receipt) was far less dramatic. Overall, women with late babies and those without children demonstrate about equal tenure rates. Overall, women who attained tenure were unlikely to have children in the household and were more likely than men to remain single.

Studies of faculty a generation ago, when the initial rise of marriage rates among academic women emerged, reported greater conflict between work and family roles for academic women than for men (Finkelstein, 1984, p. 211). These conflicting pressures, as well as the increasing social acceptance of divorce, may indeed help explain the fact that academic women are now twice as likely as academic men to report one or more divorces (Finkelstein, Seal, and Schuster, 1998; Wolf-Wendel, Twombly, and Rice, 2003).

Moreover, according to more recent estimates (Astin and Milem, 1997), more than one third of college and university faculty who are married or in a marriage-like relationship have spouses/partners who are also academics—and that proportion increases to nearly two in five among married academic women (Wolf-Wendel, Twombly, and Rice, 2003). Although women faculty are somewhat more likely than men (15% compared to 8%) to be single, married women faculty are more likely than men to be partnered with other academics (Astin and Milem, 1997). Nearly 20 years ago, Burke (1988) concluded from her study of the academic labor market at research universities that “the spouse employment issue [is] now much more pronounced than it was in the 1950s” (p. 78). Burke continues, “Spouse employment was a factor in almost 20% of the appointments and resignations” (p. 78). It is safe to say that the “the spouse employment issue” is now even more significant than it was in 1988; and

will pose substantial challenges to academic institutions' ability to recruit and retain faculty members (Wolf-Wendel, Twombly, and Rice, 2003).

THE REVOLUTION IN FACULTY APPOINTMENTS

Concerns about new faculty recruitment and changing expectations of the “cost-benefit” of academic careers are operating in the context of a very new set of structural arrangements: the development of fixed-term contract systems which, in addition to part-time staffing, are developing as a parallel system to the traditional tenure track system. Baldwin and Chronister (2001) provided the first comprehensive snapshot of the varieties of nontenure eligible full-time appointments in their national study of 84 institutions. They identified several types of off-track appointments, including: the teaching-only appointment in the lower-division service courses (introductory foreign languages; English composition; introductory mathematics, etc.); the “clinical” appointment of established professionals without traditional academic credentials; research-only appointments and what amount to administrative, program-director type appointments (pp. 97–112).

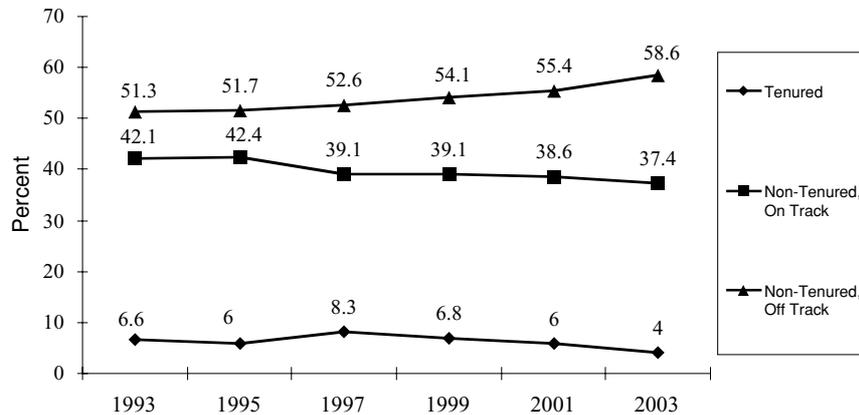
Schuster and Finkelstein (2006) provided some of the best available estimates of the scope of the appointments revolution. Table 1 shows the

Table 1: Percent Full-Time Faculty Nontenure Eligible, 1969–1998

Characteristics	Year						
	1969	1975	1984	1987	1992	1997	1998
All faculty	3.2	13.2	9.0	9.1	10.3	14.2	14.5
Not on tenure track/although institution has a tenure system, among all institutions	—	—	—	7.9	9.0	—	13.1
Not on tenure track/although institution has a tenure system, among institutions with tenure system	—	—	—	9.1	10.3	—	14.5
Not on tenure track, because institution has no tenure system, among all institutions	—	—	—	12.7	12.4	—	10.0

Source: Carnegie 1969, 1975, 1984, and 1997 Faculty Survey; 1988 National Survey of Postsecondary Faculty, NCES; 1993 and 1999 National Study of Postsecondary Faculty, NCES. An earlier version of this table appeared in Schuster and Finkelstein (2006).

Figure 2: Appointment status of new hires, full-time Faculty, 1993–2003.



Source: IPEDS Fall Staff Survey, Section G, 1993, 1995, 1997, 1999, 2001, 2003
 An earlier version of this figure appeared in Schuster and Finkelstein (2006).

growth in the proportion of full-time faculty who were in fixed-contract (nontenure eligible) positions over the past 30 years. What these data make clear is that the bulk of these off-track appointments are *not* due to institutions with tenure systems abandoning those systems, but rather due to their development of parallel systems of term appointments (Schuster and Finkelstein, in press). That these aggregated data represent a serious underestimate of the phenomenon is demonstrated when we look explicitly at the growth of fixed-term contracts only among “new hires”⁷ over the same period (Figure 2). The fact is that the *majority* of newly hired full-time faculty in American higher education is now part of this parallel nontenure system and has been so for at least the past decade—and there is no sign of decline.

With a calculator, it is possible to estimate, albeit crudely, the implications of these trends for the character of the academic workforce. Consider the following: If 4% of the current tenured faculty retires annually over the next 20 years (i.e., if 80% of current tenured faculty, who constitute 40% of the total full-time faculty, depart), they will leave 20% of the current full-time faculty (10% of all faculty) tenured. If they are replaced by a cohort of full-time faculty evenly divided between tenured/tenurable and off-track appointments (i.e., that 40% of all full-time faculty are now

⁷ IPEDS’ glossary defines “new hires” as “persons who were hired for full-time permanent employment for the first time, or after a break in service, between July 1st and October 31st of the survey year. These do not include persons who have returned from sabbatical leave or full-time faculty with less than 9-month contracts/teaching periods.”

only half tenured) and if current full-time staffing patterns are continued at 50/50 over those 20 years, the percentage of full-time faculty who are tenured will shrink steadily to about 30%, and only 15% of the headcount faculty will hold tenured/tenureable appointments (50% of headcount faculty is part-time).⁸

THE TRACKS/TROUGHS OF THE “NEW” ACADEMIC CAREER

Early evidence suggests that the new appointments are reshaping academic careers as we came to know them over the past half century. Over that period, a singular, predictable, lockstep academic career track developed in the four-year collegiate sector in the United States as follows (Light *et al.*, 1972; Breneman and Youn, 1988):

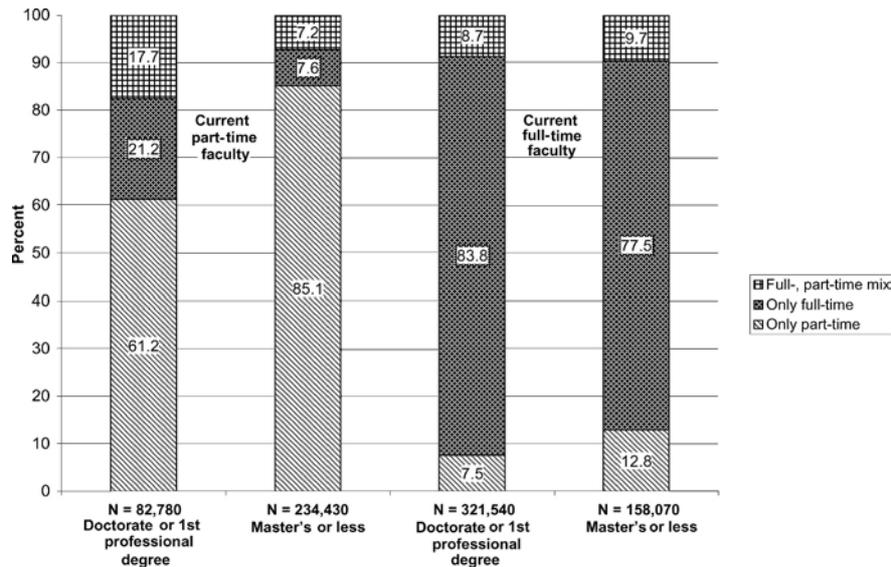
- Ph.D. receipt
- Initial appointment to full-time, tenure-ladder rank position (assistant professor)
- Review for tenure after a 6–7 year probationary period
- Tenure review based on success in trinity of teaching, research/publication, and service (institutional and external)
- Promotion to associate and full professorships.

Newly available evidence from the U.S. Department of Education's National Study of Postsecondary Faculty suggests that this modal, homogeneous pattern is fast becoming a thing of the past. Figure 3 compares the previous work experience reported by then current full-time and then current part-time faculty in 1998. What is clear from these bar graphs,

⁸These calculations make a number of assumptions, including that the turnover rate for contract faculty roughly equals that of full-time faculty. Were contract faculty shown to have significantly higher turnover rates, then it is indeed possible that the number of *positions* held by individuals on fixed term contracts might not substantially exceed those for lower turnover and tenure-track faculty. However, the available evidence does NOT suggest that the turnover rate for term faculty is significantly higher than that for tenure-track faculty at the institutional level (however, counterintuitive that may sound!). About 2% of tenured/tenureable faculty retire annually (vs. closer to “0” percent for term faculty who tend to be younger and at an earlier stage of their careers) and perhaps, as many as 10–20% of all on-track faculty who come up for tenure each year are denied. In addition, there is a not insignificant percentage of on-track faculty, especially women and minorities who depart BEFORE they come to the tenure decision. If you add these up, there is at least a 5% turnover in the tenured/tenureable faculty on an average at most institutions (it is no doubt a bit lower at the research universities).

It should also be understood that a lack of difference in turnover and *ipso facto* the magnitude of shrinkage of the tenured/tenureable faculty may result in patterns in the aggregate that do not reflect the idiosyncratic experiences of individual institutions. Indeed, we note differences by type of institution in staffing configuration in the discussion that follows.

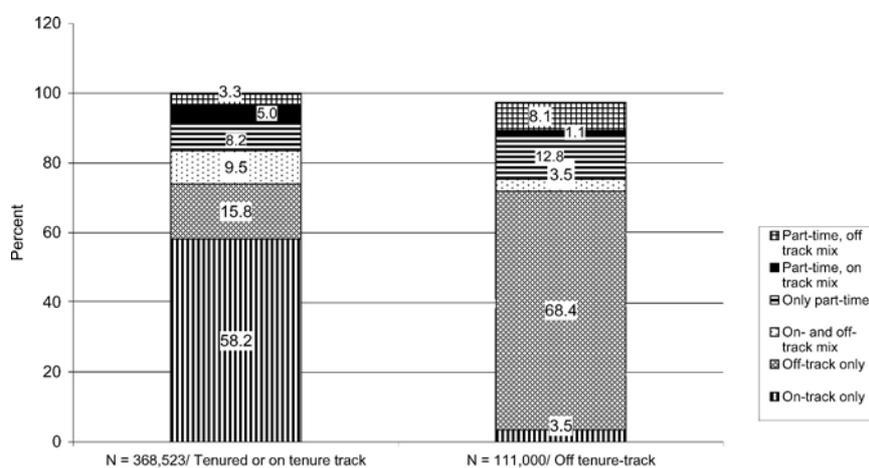
Figure 3: Previous academic work experience by current employment status (part- or full-time) and highest degree, all faculty, 1998. Data from: 1999 National Study of Post-secondary Faculty (NSOFP-99).



is that among part-time faculty, the vast majority of previous work experience is also part-time; and for full-time faculty, primarily full time. When we control for highest degree, the relationships are even more pronounced. Among Master's degree holders, part-time work constitutes what amounts to a separate career track, i.e., 85% of current part-timers have always worked exclusively on a part-time basis. Among doctorate holders, part-time work can serve as a temporary stepping stone to full-time work. Among those who held full-time appointments in 1998, 8 of 10 had always worked exclusively on a full-time basis.

Figure 4 examines only current full-time faculty and compares the work experience of fixed-term contract appointees with tenured/tenure-track appointees. The data suggest clearly that current tenured/tenure track faculty usually start out that way—about 3/5 had reported only previous tenure-track/tenured experience. At the same time, 2/3 current fixed contract faculty typically pursued their careers entirely in fixed contract positions. While there is some permeability between fixed contract and regular tenureable full-time appointments (about 1/4 move from fixed term to tenure track), the two have come to constitute for the majority of American faculty quite independent career tracks. It should be noted that these data are retrospective—supplied by “survivors” reconstructing

Figure 4: Previous academic work experience by current appointment status (on- or off-track), full-time faculty, 1998.



Data from: 1999 National Study of Postsecondary Faculty (NSOFP-99). An earlier version of this figure appeared in Schuster and Finkelstein (2006).

their career trajectory. It is not possible to estimate the proportion of individuals who began their careers in part-time and/or fixed contract appointments and subsequently abandoned their academic career. If we assume that many of these were unable to “cross” tracks, then our data likely underestimate—perhaps considerably—the independence of these alternative career tracks. Table 2 summarizes the findings for those 1998 faculty who reported one or more job changes during their career.⁹

QUO VADIS?

What have we learned from this review about the structure of academic careers and the trajectory of research about them over the past half century? Let me begin with the following propositions:

1. *The structure of academic careers in the United States has changed considerably over the past two centuries.* Generally speaking, career structure and trajectory have adapted to changes in the size or growth rate and purpose of the enterprise, which have typically shaped who was recruited to academic careers and the types

⁹ That is, those faculty who remained in their first teaching appointment beyond graduate assistant are excluded from the analysis here.

Table 2: Movement Between Tracks/Statues by Highest Degree, Current Full-Time Faculty Who Reported One or More Job Changes, 1998

Movement Between Tracks/Statues	All Faculty N (%)	Degree Held	
		Doctorate or 1st Professional Degree N (%)	Master's or Less N (%)
All faculty	317,815 (100.0)	225,759 (100.0)	92,312 (100.0)
Moved from part-time to full-time	87,570 (27.6)	51,890 (23.0)	35,683 (38.7)
Moved from on to off track	9,103 (2.9)	6,226 (2.8)	2,875 (3.1)
Moved from off to on track	105,929 (33.3)	86,402 (38.3)	19,446 (21.1)

Source: 1999 National Study of Postsecondary Faculty (NSOPF-99). An earlier version of this table appeared in Schuster and Finkelstein (2006).

of responsibilities which they have performed (the nature of the role). What began as a temporary job compatible with different stages of a variety of external careers (physician, farmer, lawyer, minister) in the 18th century, became the equivalent of a standard prelude (stepping stone) to the ministry (the equivalent of the modern postdoc type of apprenticeship) by the early 19th, then bifurcated into two tracks—a vestigial temporary one including fledgling minister-in-training and temporary jobs of other learned professionals and a growing professionalized one, the professors, culminating with the emergence of the American university into an exclusive, professionalized, and largely standardized career—typically, however, undertaken within the confines of a single institution. It was in the early 20th century, roughly paralleling a period of remarkable growth and the emergence of the American Association of University Professors, that an interinstitutional career, anchored in the independent life of an autonomous discipline became possible—not becoming the “norm” until the post WWII period—again ensconced on a foundation of growth (Trow, 1973). For nearly half a century, the discipline-anchored, interinstitutional career remained of a piece, the prototype for what we think of as *the* academic career.

2. Just as commentary and inquiry on higher education spiked at the turn of the 20th century in proportion to its growth and emergent

importance to the economic order, it literally boomed in the second half of the 20th century in response to the emerging centrality of universities to the economy and national defense—in terms not only of workforce training, but in terms of research and development as the foundations of America's economic growth and global power. The “newly important” academic professions became a clear focus for such inquiry for the first time. How did we characterize that inquiry? Most generally, we can make the following observations. First, inquiry was largely shaped by the particular political and economic contexts of the day and the role of higher education therein. Thus, in the 1950s and 1960s, inquiry focused on recruitment to academic careers and understanding academic careers as a means of optimizing the flow of scientific talent and its productivity. Those public policy concerns piggybacked on disciplinary concerns in sociology on understanding scientific productivity and the workings of the scientific community, as well as the learned professions which were emerging with so powerful a shaping influence in American life. They piggybacked as well in the disciplinary concerns of economists and psychologists concerned about the operation of academic labor markets and recruitment to the professions as well as the optimal flow of human capital within the labor market.

3. During the 1970s and 1980s, the context of higher education and the American academic professions changed in fundamental ways. Growth gave way to stabilization and even retrenchment amid economic stagflation. Concerns about faculty recruitment, retention, and optimal distribution within the national system gave way to concerns about stability, sustaining individual professional vitality as well as corporate institutional faculty vitality amid diminishing resources and opportunities. Piggybacking on the emergent research on adult development, these concerns expressed themselves in research on the stages of faculty careers and optimizing individual growth within the context of institutional needs. Piggybacking as well as on the culminations of the women's and civil rights movements and the emergence of affirmative action in college admissions and employment, research focused on demographic diversification of the faculty as well as on reengineering the faculty role (and rewards) to address the needs of an increasingly diverse student body.
4. Research on academic careers in the 1990s addressed yet a new public policy context. The very success of efforts to diversify the

faculty, in particular its increasing feminization, was exacerbating the constraints of what has become the traditional academic career. The demands of the traditional tenure clock, and their timing, were coming up against the equally unyielding demands of the biological clock and the “new” American family (Ferber and Loeb, 1997). To what extent, and in what ways, could the traditional academic career accommodate these new demographic realities? An emerging, albeit secondary concern, centered on faculty appointments and the traditional centrality of tenure to the academic career. Not only was there increasing attention to the ascent of part-time appointments, but new kinds of attention were focused on “alternative” full-time appointments—variously labeled, “off-track,” fixed term, etc. Evidence suggested that these appointments were spreading and questions were being raised about their implications not only for academic work and careers, but also for educational quality. Finally, despite the ending of mandatory retirement, demographic realities including the increasing age structure of the American faculty in the face of the impending wave of new students (the baby “boomlet”) gave rise to renewed (second order) concerns about recruitment of the next generation faculty—a particularly complex question in light of the changing realities of faculty appointments and demographics.

So where does the recent research agenda leave us in light of the emerging new realities of American higher education in a global, knowledge-based economy? Most fundamentally, even current research takes as its point of departure and reference what we have described as the traditional academic career characterized by a terminal degree in the discipline, and then a career lockstep largely defined by a probationary, pretenure period, and movement through the academic ranks to a full professorship. While we continue to build our knowledge base on that foundation, our analysis suggests that the ground beneath our feet is shifting—in a way it has not, in perhaps a century. The data we presented here, and in much greater detail in Schuster and Finkelstein (2006) suggests that largely underneath our collective radar screens, a new “model” or prototype of the academic career has emerged—or more accurately, a multiplicity of such models has emerged. While the tenure-based prototype continues to exist (tenure systems have not been, and are not being, replaced by term appointment system in a process of one-for-one substitution), there has emerged a *parallel* system of full-time faculty, term appointments that have become the modal prototype among new hires

for more than a decade and, if present trends continue, will become the prototype of full-time faculty work. Moreover, the available evidence—however preliminary—suggests clearly that these new types of full-time appointments differ both in the nature and scope of work responsibilities, the demographics of their incumbents, and also in the career paths in which they lead. For the most part, at least two separate career tracks exist among full-time faculty (a term and a tenure track)—each of these further differentiated by one or more different, specialized roles i.e., teaching OR research OR administration. Moreover, the evidence we have presented from NSOPF99 quite conclusively demonstrates what earlier research (Gappa and Leslie, 1993; Gahn and Twombly, 2001) had merely suggested: that part-time teaching, with a few notable exceptions, constitutes largely an independent—and alternative—career track for those typically, but not exclusively, with the Master's as the terminal degree—especially so in the two-year community colleges and in the professions. Reinforcing the shaping influence of the new appointments on academic careers is, of course, the increasing majority of “professional school” faculty in American higher education—supplanting the modal “arts and sciences” professor. Professional schools have always departed from the norms of the traditional liberal arts in terms of the faculty role and its rewards; and that only reinforces current movements toward greater specialization in the academic role.

So, what are the implications of these developments for the future of research on academic careers? In the first place, the available evidence suggests that future research will need to diversify its assumptive foundation. That is, we will need to assume that there are multiple models of academic careers and at once be more precise in distinguishing one from another at the same time that we continue to consider the relative independence or permeability of these tracks. That requires, we would argue, that we undertake a basic mapping process for these alternative (and emergent) careers in the 21st century much as we did for the tenure-track, liberal arts-based model of the academic career in the second half of the 20th century (we have tried to begin that process here). How are careers pursued off the tenure track? And who pursues them? How do different career tracks support academic work in the professional versus liberal arts fields? How are part-time careers shaped? How do “new providers” and new modes of teaching and learning shape these new career racks?

A related set of assumptions concerns the boundaries or scope of academic labor markets. Traditional academic careers have been shown to operate in national, discipline-based markets. Is this still true? And what about the “nontraditional” full-time term and part-time faculty careers?

Emerging evidence suggests that academic labor markets are at once becoming both more *local* and more *international*, that is, less bounded by national borders. Preliminary empirical as well as impressionistic evidence has suggested that part-timers and some varieties of full-time term appointments operate in decidedly local or, at most, regional markets. Moreover, the increasing presence of foreign-born faculty, especially in the natural sciences and engineering, amid declining native-born doctoral production, suggest that supply in certain high demand fields has expanded globally. While the United States has benefited substantially from this “brain drain” from the developing world, new evidence suggests that formerly sleeping giants in Asia, especially China and India, are now seeking to develop the institutional infrastructure to attract native sons and daughters to academic opportunities in their native countries. What this suggests, is that in addition to mapping the career trajectories of new types of academic appointments, the study of academic careers will need to distinguish more clearly among academic disciplines (perhaps, even as arenas within the various new appointments) as venues for academic careers that differ not only in degrees of employment opportunity, but in their geographic boundedness.

While we can continue to use the knowledge we have learned about traditional academic careers in the liberal arts and sciences, a new map on academic careers is demanding to be built—on a foundation of the new and discontinuous realities of American higher education in a global, market-driven, knowledge-based age.

Indeed, as we look ahead 10 years, most of the macro forces operating on higher education will only accelerate the restructuring of academic careers that we have described.

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5. INSTITUTIONS OF ACADEMIC GOVERNANCE AND INSTITUTIONAL THEORY: A FRAMEWORK FOR FURTHER RESEARCH

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INTRODUCTION

For the scholar of organizations, higher education is the scene of repeated paradox. Universities and colleges can range in their behavior from among the most munificent of organizations to expressing some of the worst impulses of organizational behavior. The field coalesces around a notion of shared governance, but administrators often complain that faculty members mostly ignore their opportunities to be involved in decision making and only become involved when they object strenuously to a particular proposal (Association of Governing Boards, 2001; Birnbaum, 2004). Faculty who are active in governance echo the view that their colleagues do not offer enough support and are not involved enough, but they also complain about administrative encroachments on their prerogatives (Rhoades, 2005). Higher-education organizations can both require and resist the imposition of decision hierarchies.

Understanding the behavior of organizations like this constitutes a multidisciplinary challenge but one that is likely to be of increasing importance in an economy in which knowledge work and the production of knowledge are increasingly the drivers of economic advancement and growth. Already, there are numerous instances of modern corporations that refer to their headquarters as campuses. The rise of team production in a corporate context has stimulated discussions about collaborative governance models (Ackoff, 1994; Freeman, 1984; Senge, 1990).

To a large extent, the decisions of such organizations are very much shaped by external exigencies. Colleges and universities, whether public or private, are embedded within market and political environments that

place certain demands and expectations upon organizational participants. The constraints from outside the organization are significant and real. But so too are the constraints from within, for a variety of institutional stakeholders have keen interests in the options, preferences, and choices these institutions make.

This chapter represents an extended essay and critique of extant research and an exercise in theory development. Its purpose is to develop the conceptual underpinnings for a model that explains decision outcomes in colleges and universities in terms of the academic institutions' structures of shared governance. The model presented in this chapter will look quite familiar to many higher-education scholars because much of the current research already operationalizes key elements of the analytic framework. For instance, the model allows one to ask and conceptualize what factors affect particular outcomes such as college effects on students or institutional performance under assessment measures. What is distinctive about the presentation here is that (1) the framework focuses on the internal structure and norms of governance and their effects and (2) I conceptualize the role of governance through a systematic exploration of the institutionally based lenses present in political science and organizational-theoretic literatures. My purpose is to systematically unbundle the theoretical rationale underlying the assertion that institutional governance *matters* by identifying and examining how structures of governance operate as institutional frameworks that shape college and university decision making. The goal of this chapter is to examine the factors which shape the political and social disputes within universities and the features of the institution described by the phrase governance, by employing prominent models within political science and organizational theory that emphasize the role of structural context in collective decision processes.¹

The study of governance, generally, requires thinking about two separate orders of decisions. The first order consists of the structures, rules, and hierarchies by which the parties in a decision-making process agree to abide. It also consists of the organizational context, the social norms, organizational culture, and participant expectations which individuals possess within a particular university or college (Kalt and Cornell, 1994). The second order consists of the decisions that need to be made on an on-going basis to steer the organization and keep it running. How much money should be allocated to salaries? Who should run one or another

¹ Decision making in higher education is described by the terms *governance*, *shared governance*, or *academic governance* (Cameron, 1984; Clark, 1983; Duryea, 1973; Peterson, 1991) .

department? Should this or another degree program be approved? Understanding governance as on-going decision-making process, however, is likely to elude the analyst until the first-order sets of decisions and frameworks are themselves understood.

As scholars recognized that the study of second-order decisions within markets, political settings, and organizations required an identification of the first-order decisions which structure social interaction, they turned their attention to older traditions in economics and public administration. Commons (1924) argued that focusing on the forces that structured transactions would do economists more good than making presumptions about individual behavior. Within public administration and organizational sociology, Merton and Selznick pointed out that the focus on rules often eclipsed attention to an organization's stated purpose (Scott, 1994). The strands of inquiry that emerged from these disparate threads were woven together into a multidisciplinary fabric of analysis and theorizing called *institutionalism*. The components of this approach add considerable value to the study of academic governance.

Two kinds of analytic approaches in particular can be brought to bear on the behavior of complex organizations and each can usefully be applied here. Rationalist models of institutionalism start from the presumption of the self-interested pursuit of personal welfare; they then model behavior as the result of constraints, incentives, and opportunities presented by the structure of the environment (Shepsle and Bonchek, 1995). I characterize such rationalist study of institutions *political institutionalism* because the focus is on the structures that regulate how self-interested individuals interrelate within an organizational environment that constrains options through rules, regulations, and distributions of authority. The rules that form the governance structure of an organization, particularly in the context of higher education, play the key role of distributing participatory powers to various stakeholders and regulating how they involve themselves in the organization. As most observers and participants know, universities and colleges can be highly political places (Baldrige, 1971). Political institutionalism, then, may prove useful in studying and understanding how the political institutions of governance may shape resource allocation, strategic direction, or organizational performance at colleges and universities. (Shepsle and Bonchek, 1995; Shepsle and Weingast, 1987). Within the rationalist framework, the structures that regulate and constrain decision, what we refer to in higher education as the governance structure, comprise the hard institutions that shape collective decision making.

Social constructivist models of institutionalism focus less on the explicit rules and legal requirements and attend to the norms, expectations, and beliefs of the actors, tying the structure of these social realities to the behavior of individuals in their milieu (Giddens, 1984; Zucker, 1977). Sociologists, psychologists, and others remind us that individuals pursue multiple goals and objectives that are not neatly reduced to monetary units or goods that are tradable in the market place (March and Olsen, 1989; March and Simon, 1958; Tolbert and Zucker, 1996). They maximize other objectives than financial gain, and they may not even maximize at all (Simon, 1976).

The new institutionalism in organizational studies, or *neo-institutionalism*, is concerned with demarcating and disentangling the influence of market forces and the processes by which societies ratify and legitimate organizational behaviors and forms (Scott, 1995). As such, it represents an alternative but related view to the perspective of rationalist models like political institutionalism. Adherents to this approach draw a distinction between “institutionally accepted” as opposed to “technically efficient” forms (Brint and Karabel, 1991; DiMaggio and Powell, 1991). Institutional effects upon the decision-making processes of universities and colleges can be expressed in various ways and are distinguished from the hard institutions focused on by economists and political scientists such as the written and implied rules governing interaction. These *soft* institutions can be expressed through the norms of the social order and the cognitive maps of participants (Scott, 1994; Zucker and Tolbert, 1996).

The study of academic governance then, is likely to benefit from a consideration of the role that both hard and soft institutions play in the decision-making process. This chapter integrates two divergent approaches to the study of institutions and examines how each can enlighten the study of shared governance. The theories considered here suggest that political and organizational struggles over resources, strategy, and benefit allocation will be shaped by structural features of the organization, the organization’s relationship to its environment, and the social environment in which its participants are embedded. Drawing from these theoretical approaches may help us to better understand how the outcomes that we observe in higher education are related to the structure and process of governance as it is understood on a particular campus.

The chapter is organized into three parts. In the first part, I describe features of academic governance and explore the traditional approaches to studying higher-education decision structures and processes. I argue that even those studies that concentrate on features of governance fail to provide a systematic framework that can explain behavioral

variation across the sector and over time. In the second part, I introduce the institutionalisms of political science and organizational sociology as a framework for understanding how governance could be related to organizational outcomes. I examine how institutions are defined and come to shape behavior within a collective context. In part three of the chapter, I discuss the empirical implications for studies of academic governance and explore how scholars can surmount the challenges of evaluating the hard and soft institutions of governance through the frameworks of political institutionalism and the neo-institutionalism of organizational theory. Throughout the discourse, two lines of analysis predominate—insights drawn from political economy and from organizational sociology.

PART I: ACADEMIC GOVERNANCE AND ITS SCHOLARSHIP

CONTEXTUAL BACKGROUND

There is a long-standing and widely held tradition of shared governance among participants in the organization (Duryea, 2000). As is often noted in governance scholarship, American colleges and universities are the modern descendants of the *collegia* of the Middle Ages. This tradition is often invoked to underscore the long tradition of shared governance in academe and the strong roles accorded to faculty and students by tradition. Indeed, Lohmann argues that Paris served as an archetypal antecedent for faculty-oriented models of governance; while in Bologna, foreign students asserted their rights within the Bologna Commune which stimulated a student-centered model of governance (Lohmann, 2004). Yet this period was perhaps the high point of student and faculty autonomy and self-government and successive centuries told the tale of constant incursions and claims upon the institution from the outside by kings, popes, businesses, and local authorities. As a result, Lucas argues, “The case for faculty governance . . . is poorly served by appeals to history” (Lucas, 1994, p. 303).

In the American context, the college president, with the support of a board of trustees, essentially had absolute powers throughout the antebellum period. Faculty did resist this autocratic practice of governance but rarely with much success. Nevertheless, general compromise emerged on many campuses in which control and responsibility over admission standards and curriculum rested with the faculty. Everything else of operational significance remained in the hands of the boards and they typically deferred or designated these powers and responsibilities to the president or asked him to designate it to others (Lucas, 1994). Traditions

of shared governance as we know them today only began to emerge with the institutionalization of tenure and academic freedom as operational concepts after the First World War (Berdahl, 1989; Veysey, 1965). In fact, the practice of shared governance, to the surprise (and skepticism) of many advocates has probably never been more widespread than, nor as generous in its scope, as it is today (Kaplan, 2004a,b).

ACADEMIC GOVERNANCE IN PRACTICE

Organizations of all types confront the difficulty of governance. How they address this challenge will depend upon their legal status: whether they are public or private, whether they operate for profit or not, and the legal requirements placed on them by their charter and the contracts into which they enter (Weeks and Davis, 1982). By itself, the term governance describes the action of deciding important matters of policy and strategy for a collective entity. But among scholars of higher education, the issue of governance denotes the study of how institutional decisions get made; hence, consideration of the process and procedures of decision precedes an understanding of the overall policy decisions themselves. The design of a governance structure represents decisions about how to make decisions. The problem of governance, therefore, represents a first-order problem for higher education. Policy matters such as curriculum and admission are understood as second-order problems since they proceed from the process erected to govern decision making. Curriculum decisions, for instance, proceed only after a decision structure is in place. The concept of academic governance encompasses the explicit and, occasionally, the implicit arrangements by which authority and responsibility for making decisions concerning the institution is allocated to the various parties who participate in it (Hirsch and Weber, 2001). In higher education, the governance system is understood to consist of “the written and unwritten policies, procedures, and decision-making units that control resource allocation within and among institutions” (Benjamin, 1993, p. 5). In this chapter, the focus is on the culture of governance at an institution—the attitudes and norms about how decisions ought to get made—as well as on the actual choice structures that are selected and that facilitate the implementation of decisions.

In the for-profit setting, the study of governance is generally limited to the study of the governing board and its dealings with top corporate executives (Blair, 1995; Fama and Jensen, 1983a,b; Lorsch, 1989). In higher education, the board’s delegation of its authority to parties such as faculty, students, alumni, and others requires a more expansive analysis that

encompasses the institutions of decision that both convene the various parties and confront the numerous managerial choices that an organization must make (Kaplan, 2004b). Within higher education, therefore, the institutions of governance exist at many levels of the system and often, decision mechanisms can consist of numerous layers of participation.

Although the practical realities of governance in academia distinguish it from the governance practiced in the corporate world, the underlying corporate charter is essentially the same for both. In fact, some of the corporate forms in higher education are among the oldest of the type found in the country (Hermalin, 2004). All legal authority rests with the board of trustees. Hence, although participants often speak as if the ownership of higher-education institutions is unclear, the legal reality is that the ownership status of these organizations is often specified under state statute. In the case of private institutions, legal responsibility for the welfare of the institution rests with the governing board and responsibilities are outlined in the nonprofit sections of the U.S. tax code. Public higher-education institutions are legally understood to belong to the state and, by extension, to the people of those states.

Despite such legal provisions, however, the ownership and governing structure of these institutions is rarely as clear (or clearly hierarchical) as it is in a for-profit, owner-managed firm. Over half of the institutions that provide higher education in the United States are nonprofit organizations and many of these private institutions are viewed as having no owners at all (Hansmann, 1996). While legally responsible for the welfare of the organization, the board is merely a fiduciary. Nonprofit status does not mean that such institutions cannot make a profit. Rather, it means that the organization cannot distribute any profits to controlling persons. Hansmann, a leading scholar of the legal and organizational implications of ownership forms, concludes, "Thus, by definition, a non-profit organization cannot have owners" (Hansmann, 1996, p. 17).

The public institutions themselves are further divided among a number of structural forms. Many public institutions are organized in such a fashion that they begin to resemble nonprofit organizations—private firms in the pursuit of a public purpose—while others appear to be not much different from state agencies (McGuinness, 1997). The states have chosen a wide array of structures for governance and management. Some states organize the schools loosely, with only a planning agency or advisory panels overseeing the group of institutions. Other states have a coordinating board that supervises the activity of several governing boards, each of which oversees one or a group of institutions. A final group of states place all institutions in the state under the control of a single governing board

(Berdahl, 1971; Knott and Payne, 2004; McGuinness, 1997; Zwingle and Rogers, 1972). Furthermore, states can organize the campuses in a variety of ways. Each campus can be an autonomous institution with its own head, its own budget, and its own governance structure. It can be equally autonomous yet be embedded within a system of schools headed by a single board with an administrative arm. Or it can be merely a branch campus of a single institution. A study of academic governance, then, must identify structures of authority and loci of power by separating out how much of the actual decision making takes place beyond the confines of the boardroom or the state capital.

There are multiple parties with a stake in the performance and decisions of the institution. On the one hand, academic governance consists of the president, the board of trustees,² and the external monitors, stakeholders and political authorities. On the other hand, it also includes internal stakeholders such as students, staff, and faculty. Although the board of both public and private nonprofit institutions possesses all legal authority and responsibility, they often have neither the expertise nor the incentive to play the role of active monitor, so they typically delegate much of their authority to faculty and administration. This creates higher education's version of the tension any board-driven corporate entity must negotiate between the responsibilities of governing and the practicalities of managing (Hermalin, 2004).

Despite the rhetoric of academic governance as a shared enterprise among various stakeholders, in reality, it is a combination of internal hierarchy and collaborative governance practices.³ Hierarchy resides in the chain of command (and power of appointment) that runs from the president to the provost to the deans and down to the department chairs. But tenured faculty make important decisions with organizational implications that go beyond curriculum content. They often play the dominant role in decisions concerning tenure track hires and promotions. They approve new majors and degree programs. They help set admission standards and frequently have responsibilities that go beyond this. Often, administrators will consult with faculty and others before they make a decision and in many cases, their involvement of faculty extends beyond

²In the public sector, the board is often called the Board of Regents, Board of Governors, Board of Supervisors, Board of Curators, Board of Visitors, or Board of Directors (Education Commission of the States [ECS], 1997).

³The rhetoric of the Supreme Court majority in *NLRB v. Yeshiva* (1979) indicates that the Justices accepted the view of faculty influence in governance in arguing that private institutions were not required to recognize faculty unions. In that decision, Justice Powell assigned a managerial role to faculty, while Justice Brennan, in dissent, stressed that the faculty influence was attributable solely to their expertise and not to managerial authority.

consultation. Two surveys that have examined the question indicate that faculty, over the last 30 years, regularly play a joint decision-making role on campus across a host of issues beyond academic policy. These include budgetary policy, resource allocation, and building plans. Indeed, in a few instances, the faculty role can extend to having full determinative authority on a host of issues (American Association of University Professors [AAUP], 1971; Kaplan, 2004a).

Much of this decision making takes place within the context of the department and college or school. In other words, it is decentralized within the campus itself. The organization of the institution is not a trivial feature in considerations of governance (Hammond, 2004). Much of the governance activity in a small college happens at the institutional level and cuts across all the functions and departments of the institution. Larger institutions will distribute the departments and disciplinary activities across a range of organizational subentities. On some campuses, these are called colleges while others favor the term school or faculty, such as the College of Arts and Science, the School of Business, or the Faculty of Medicine. Another way of dividing a larger institution is into functional areas. For instance, many schools organize their hierarchy into functional areas such as administration and finance, information, athletics, student affairs, and academic affairs with a vice-chancellor or vice president in charge of each.

Universities that subdivide into different schools can keep budget matters centralized within the hierarchy and close to the president. Alternatively, they can decentralize many of these organizational aspects down to the division level. The latter approach has been popularized as “each tub on its own bottom,” while the academic term is *responsibility center management*. How a university arranges the divisions and allocates authority to them can be significant, for they will present different sets of choices to administrators and shape the levels at which governance activities occur.

Size very often shapes whether faculty and staff governance is expressed through a plenary style or through a representative system. Under the first, faculty will meet as a large body to discuss policy matters, while under the second approach they elect, select, or have their dean appoint representatives to a faculty or academic senate or similar representative body. But the organization of the campus can shape how governance occurs on campus since distributing responsibilities to the division level narrows the focus and reduces the number of people involved in a decision, making plenary governance as feasible as representative governance. Under representative systems of governance, senates can consist of tenured and tenure track faculty only or they can be constituted as academic senates comprising faculty, staff, and students. Students can participate in

governance separately through the student government or they can also play a role within the senate. Staff can have their own representative body or they can participate in the academic senate.

Which of these two models an institution practices will typically depend on certain characteristics of the school. Smaller schools favor faculty meetings or academic councils consisting of all tenured and tenure track faculty. Larger schools will shift to representative structures such as senates (Kaplan, 2004a). If the school is large enough to be broken into schools or colleges, the governance structure may devolve to that level or may reside simultaneously at the division and campus level. For instance, a faculty council of all professors may speak for the faculty in a school of business, but they may also elect representatives to an institution-wide campus senate. At Harvard University, the Faculty of Arts and Sciences (FAS) comprises the faculty of both Harvard College and the Graduate School of Arts and Sciences. Their voice is expressed in meetings of the full faculty. But there is no campus-level governance body of the faculty. The FAS does not speak for the Law faculty, for the faculty at the Business School, for the Kennedy School, or for the School of Education.⁴ But on other campuses, there may be a senate for each school as well as one for the institution as a whole.

If an institution is spread across several campuses—i.e., a multicampus system—each often has its own governance structure. Hence, at the University of Colorado, there are four campuses, three distinct institutions of higher education, and four separate governance structures for the faculty. In addition, there is one governance body at the University level for all three institutions. The Health Sciences campus has its own governance structures, the Denver, Boulder, and Colorado Springs campus their own structures, and there is also a governance body for the entire University of Colorado system. In addition, the colleges and schools that comprise each campus also have governance bodies of their own. The staff of each campus have their own council, and students on each campus have their own student government. As a result, governance is taking place simultaneously at multiple levels of the institution on any given day.

Table 5.1 displays the points by which governance can vary across higher-education institutions. The points of variation are highlighted by descriptions of the features and forms that governance can take within higher education in the United States. On the left are described tightly coupled forms of organizing a decision feature—the relationship between

⁴Because Harvard governance follows the “each tub on its own bottom” approach, campus-wide structure is less necessary.

Table 5.1: Points of Variance in Higher Education Governance—Degree of Coupling

	Tightly Coupled →	← Loosely Coupled
Ownership	Public—owned by the state and its citizens	Nonprofit—owned by no one
State structures	Centralized, single governing board	Planning agencies only
Statewide organization of schools	Single entity, single campus	Regulatory coordinating board over multiple schools with autonomous boards
Organizational structure	Functional divisions (finance, academics, athletics, grounds and maintenance, etc.)	Single entity, multicampus
Boards of trustees	What powers reserved to the board?	Disciplinary divisions (Faculty of Arts and Science, College of Business, etc.)
Faculty	Authority over day-to-day management (shared with admin. or complete)	What powers delegated to other stakeholders? (faculty, students, staff, alumni, public)
Budgetary processes	Centralized in administration	Authority over budget and planning
Governance bodies	Faculty only	Decentralized schools and divisions
Faculty governance bodies	Plenary—all faculty	Faculty, students, and staff Representative
Locus of activity	Centralized close to administration	Decentralized within department, division, or functional unit

the authority of an actor and the outcomes that actor might desire is generally tighter than the form of organizing the particular governance feature described on the left-most column of the table. In many ways, academic governance resembles the federal structure of the U.S. political system—a decentralized system with separated powers such that governing activities take place simultaneously at numerous levels. However, as we shall see, in many ways campus governance is far more complex and difficult to understand systematically than public sector governance. Therefore, applying the models of political science and in particular, political institutionalism proves challenging but highly appropriate.

TRADITIONS OF GOVERNANCE SCHOLARSHIP

An impressive number of organizational theorists have sharpened some of the field's fundamental theories by studying universities but systematic, theory-based study of the governance systems of academic institutions has been less frequent. The 1970s witnessed a profusion of studies about institutions of higher education, most of them under the sponsorship of the Carnegie Foundation for the Advancement of Teaching (see Blau, 1973; Bowen, 1980; Clark, 1987; Darkenwald, 1971; Perkins, 1973). Universities and colleges provided a fertile ground for exploring fundamental theoretical issues concerning the relationship of the environment to the organization and problems of organization, control, and cohesiveness (see Baldrige, 1971; Cohen and March, 1986; Pfeffer and Salancik, 1974; Salancik and Pfeffer, 1974). Recent supplements to these theoretical paths in organizational theory have also considered the university as a realm for expanding knowledge about organizations (see Ashtar and Shapiro, 1988; Hackman, 1985; Kraatz, 1998; Kraatz and Moore, 1998; Kraatz and Zajac, 1996; Pfeffer and Davis-Blake, 1987; Pfeffer and Langton, 1988).

Such studies often take as given the decision-making features of the organization, the ownership form, and the governance structures that are in place. This scholarship lacks a model of decision processes that both incorporates ownership and structural aspects of the decision process while acknowledging the important role played by environmental pressures in shaping options and constraints. The goal of this chapter is to outline such an approach. For this reason, a review of existing limitations in extant research is in order.

The political model of higher-education governance asserts that authority is distributed and power is wielded by various parties to the organization and its activities. In many cases, institutional policies emerge from

a political process characterized by compromise, consensus, and conciliation (Baldrige, 1971). Baldrige's thesis, that a political model best describes higher-education management and decision making, emerged from a case study of an urban institution during the height of the 1960s social conflict and at a time when interest in governance and decision making among all campus participants peaked. His work highlighted that faculty and student objections and concerns did have an effect on the decision process and on the outcomes.

The importance of politics in the functioning of higher-education institutions justifies the study of academic governance. As key traditions in political science show, understanding political processes requires a full understanding of the governing structures that shape their function. Colleges and universities operate with a degree of democracy combined with bureaucratic and managerial elements of the corporate setting. Yet even at the most bureaucratic of colleges and universities, administrators speak of constituents and stakeholders rather than clients and workers. And among all constituents, the faculty body typically has the greatest stake in the organization and plays a key role in the processes by which decisions get made. Governance structures comprise the institutions of decision in the higher-education setting.

The Absence of a Focus on Ownership and Governance

The political model had an enormous impact on the study of higher-education institutions and organizations generally 30 years ago. But most studies of academic decision making since then have glossed over the role of governance structures and institutional norms. Much of the previous work in this area would suggest that outcomes are idiosyncratic. For example, one of the most influential works in the field of organizational studies emerges from a study of decision making among university presidents and has suggested that an apt metaphor for such processes was "organizational anarchy" (Cohen and March, 1986). Cohen and March's study of the work lives of university presidents pointed out the chaotic nature of the job. From this they developed the *garbage can model* of organizational choice. For Cohen and March, policies within an institutional setting such as the university lie around amid a host of possible choices and policy alternatives. Solutions are drawn from the garbage can as circumstances warrant.⁵ However, their resulting algorithmic model

⁵ Interestingly, this work has been influential in political studies of the policy process within governments (Kingdon, 1990; McLendon, 2003).

of decision making ignored the possibility that structural features of the decision process might vary across institutions and account for variance in the outcomes observed.

The scholarship on higher education that emerged in the 1970s, 1980s, and 1990s did acknowledge that decision-making structures could be related to decision outcomes, but most of the studies looked at changes in the sector broadly or at a very close level, focusing on decision processes within the institution, and they mostly ignored the role of ownership, decision rights, and the ordering of participants' powers (i.e., the features of governance). For example, Darkenwald (1971) examined the incidence of conflict within universities and related it to the degree to which decision making was differentiated, either highly centralized or diffused down to the lowest levels of the institution. He found that conflict was highest in those institutions that could be categorized as having medium levels of differentiation. Blau (1973) found a negative correlation between centralization and participation in the faculty senate, suggesting that such structures were used to curb centralization but otherwise ignored. Hackman (1985) emphasized the importance of a unit's centrality to the institution's mission—the degree to which unit objectives matched the institution's central objectives in her study of which units did best in resource allocation. The centrality of a unit's purposes to the organization's purposes, she found, affected the resources that unit received, in conjunction with environmental power and institutional power. Bowen (1980) implicitly recognized the role of decision structures in cost escalation by positing a "revenue theory of costs," ascribing the growth in institutional expenditures to pressure from faculty and administration for more resources when resources are available (Bowen, 1980). Yet Bowen did not specify why or which structures might account for this phenomenon. Massy and Zemsky (1997) argued that institutional cost expansion over the previous 10-year period could be described with two metaphors that illustrate the expansion of administrative support systems (the "lattice"), and the tendency for faculty members' commitment as a group to institutional goals to decrease as their individual commitments to research and personal goals increase (the "ratchet") (Massy and Zemsky, 1997). They suggest that decentralization over much of the decision making creates a dynamic in which costs are "ratcheted" up at the departmental-level lattice. More recently, Ehrenberg's (2000) broad review of rising college costs blames lax trustee oversight, particularly in private institutions.

These arguments are suggestive but rarely explicit about the relationship among the decision-making structures, the patterns of resource allocation, and the important institutional decisions. None of them trace

back to existing theoretical work about the key role that decision structures and norms can play in organizational and collective settings. Much of the work supporting these ideas has been anecdotal in nature or drawn from case studies (Chaffee, 1984; Gumpert, 1993; Leslie, 1996; Schuster *et al.*, 1994).

Existing accounts do not provide a systematic heuristic for understanding why institutions do not all behave similarly, nor do they identify structural features of the college or university that shape institutional behavior. Many of these accounts describe the pursuit of individual goals by administrators and faculty; but they ignore the need for institutions to consider the claims made by others such as students, parents, staff, taxpayers, and alumni. While these works usefully illustrate a few of the internal pressures acting upon the institutions, they fail to identify institutional characteristics that may lead to variances in outcomes.

Political Models of Decision in Organizational Theory

Organizational theory, of course, has had a long tradition of arguing that decision making in organizations was inherently political in nature. Taylorism's top-down view of the organization was subsequently challenged by research that demonstrated the complexity involved in deciphering and understanding how organizations in any context decide on their direction or settle important policy questions (see Cyert and March, 1992; March and Simon, 1958; Simon, 1976). Organizations studied by these scholars were often unable to accumulate sufficient knowledge to optimize. Organizational conflicts and human limitations led managers to "satisfice" and act uncertainly or haltingly (Simon, 1976). Self-interests were often not aligned. Participants in the decision process were selectively exposed to and selectively drew from environmental stimuli, allowing different conclusions to form and different interpretations of appropriate action to develop. Managerial decisions were often a subject of debate (Cyert and March, 1992). Further empirical work highlighted that power within the organization was often a function of technical expertise or control over various features of the organization rather than a strict expression of the owner's preference for maximal profit (Crozier, 1967).

The basis of much of the power studied in these accounts, however, could be traced to technological aspects of the production process rather than from authority and explicit hierarchies implied by structure and ownership (Blau, 1973; Crozier, 1967; Cyert and March, 1992; Pfeffer, 1981; Selznick, 1953). Crozier's (1967) work in a French cigarette factory highlighted that struggles for control over production and work among

the different groups within the firm played out less often according to divisional structures than according to delineations of tasks and skills. Selznick's studies of organizations such as the Tennessee Valley Authority (TVA) and other New Deal bureaucracies illustrated how managers responded to pressures that surrounded the organization and molded it in response to various external political stimuli (Selznick, 1953, 1957). Cyert and March's work suggested that power formed and political lines developed according to the allocation of tasks and the divisional organization of the firm. They saw units competing against each other. The employees they studied rarely aligned across divisions to confront workers within their production unit (Cyert and March, 1992).

Another approach connects sources of power to control over resource flows. Resource-dependence theory traces allocations of formal authority and informal power to individuals' or groups' abilities to garner resources for the organization (Pfeffer and Salancik, 1978). If an organization depends on resource flows that are uncertain or that rest in the control of certain groups, then resource dependence predicts that the power of those groups will be elevated within the organization (Pfeffer and Salancik, 1974; Salancik and Pfeffer, 1974). Pfeffer and Salancik showed in two separate studies how patterns of allocations among university departments at a large state-owned research institution reflected the power of those departments and this power was directly related to the research money those departments delivered (Pfeffer and Salancik, 1974; Salancik and Pfeffer, 1974). Instead of using discretionary money to balance out inequities created by success at attracting research dollars, the institution they studied used the money to reward those departments that were the best at attracting outside sources. Resource-dependence theory, though, leaves us no means of expecting whether or why ownership forms and structures of decision may have their own effects, independent of resource flows.

If decision making on campuses is indeed so political, then this gap in applying models that put structure and context front and center in the study of higher-education signals a fruitful area for further research. Such approaches, collectively called *The New Institutionalism*, argue that structure and context are primary factors to consider when studying collective behavior. Various works from the fields of political economy and the economics of organization highlight the relationship among the rules for decision making, the allocation of decision rights, and the decisions that get made (Shepsle and Weingast, 1987). Organizational sociology has underscored the frequency of norm-based decisions and blind mimicry in the collective context. Economic theories of organization focus attention

on the allocation of incentives, particularly on who profits from the activities of the organization. Much of this research, however, has derived from studies of for-profit organizations. Much of the work of political scientists is directed toward the decision making of collective bodies in the public sphere and examines how and why senates, congresses, and parliaments choose the public policies that they select. Studies of the social context in which choice takes place and the normative frameworks that participants use require further empirical specification.

THE PRINCIPAL-AGENT PROBLEM AND ITS IMPLICATIONS FOR GOVERNANCE SCHOLARSHIP

Rationalist approaches such as the property rights, transaction costs, or agency costs literatures in organizational sociology and institutional economics provide a useful starting point for a discussion of the significance of ownership, decision, and control rights for organizational performance. Although ownership entitles parties to receive benefits and rewards that are generated by the assets of an organization, the property rights tradition reminds us that ownership can be contested, unclear, or divorced from legally specified property relations (Barzel, 1997; Coase, 1937; Hansmann, 1996; Williamson, 1985).⁶ Most importantly, it lays the groundwork for a study of governance that specifies the important mechanisms of decision that might influence group choices and how they can influence outcomes.

Connecting Decisions, Ownership, and Decision Structure

The development and diffusion of the public corporation in the late 19th century represented an unbundling of the rights of ownership and control that typically accrued to the owner-manager of the small firm and initiated a line of scholarship focusing on the potential performance problems from separating ownership of the enterprise from its management (Berle and Means, 1932). The emerging body of research highlights that

⁶ The property rights view stands in contrast to the neoclassical or Walrasian view of most economists. Such a framework assumes that there are zero transaction costs and that rights are delineated perfectly. Under such a framework, price is the principle, in fact the only allocative mechanism, for study. With perfect information, variation along the dimension of price expresses all the variation in an item and transmits the signals of sellers and buyers perfectly. However, since information is not perfect, there are numerous ways for a seller to adjust value without adjusting the sticker price. The incentives attendant to ownership provide a useful way of conceptualizing the actions sellers take to capture value for themselves.

shareholders, owners, managers, workers, and middle managers do not all share the same goals all the time. They may be unable to agree on organizational objectives. They may be limited in their capacity to respond to the environment because of their own cognitive limitations or because of structural features of the organization. The organization of the firm does not provide employees, shareholders, and managers with the same incentives, and their interests do not always align (Fama and Jensen, 1983a,b; Jensen and Meckling, 1976).⁷

Rationalist approaches to organizational study argue that the creation of value can leave a portion of the benefits created by the organization unclaimed (Miller, 1992; Williamson, 1981). The more value that lies within the public domain, the larger the associated internal transaction costs and the more likely that competition over the resources will ensue among organizational participants. These *agency costs* represent the lost value that might be created by the organization if managers (the agents) would perfectly represent the interests and objectives of the shareholders (the principals) (Fama and Jensen, 1983a,b; Jensen and Meckling, 1976). How the surplus produced by an organization gets distributed among its participants can become a function of each group's access to information, ability to coerce others, and legal rights to participate in decisions. Although one's position and power in the market influences opportunities to exercise such capacities, one's structural position within the decision process determines the scope of involvement as well.

The principal-agent literature suggests that various features of ownership and governance will influence how much power will be wielded by employees, by managers, by the board, and by the rightful owners. Power over the distribution of the resources of the firm and the benefits it produces helps determine organizational decisions. When agency costs are high, more resources and benefits are expected to flow to the managers or the employees and less are expected to accrue to the shareholders.

Applying Agency and Transaction Cost Theory to the Public and Nonprofit Sectors

While public and nonprofit organizations may encounter similar kinds of agency problems as the for-profit firm, we should expect differences in the way and the degree to which these costs are expressed. The differences in ownership form are likely to result in differences in

⁷Most efforts in this area focus on aligning managers' incentives with those of the owners so that managers' pursuit of self-interest also meets the self-interest needs of shareholders.

the way public and nonprofit institutions of higher education organize the rights of parties that participate in the organization. In the case of higher education, these are the faculty, students, administrators, donors, and the public. Evidence from other fields where public and nonprofit organizations are common indicates that organizational form can significantly shape outcomes (Krashinsky, 1998; Mauser, 1998; Newhouse, 1970; Pauly, 1987; Schlesinger, 1998). Nonprofit and public sector organizations embody a somewhat looser definition of ownership rights so decision making is likely to be more subject to internal politics and internal decision structures.

The literature on agency costs theory suggests that we should observe differences in the decision making of public and private nonprofit organizations that are rooted in internal and external factors. Agency theory prepares us to expect that individual pursuit of self-interest within an organization will be shaped by features of the organizational form including its market, its relationship with external entities, and the way it allocates rights of participation and decision to various participants. In other words, agency theory implicitly suggests that outcomes can be constructed by the way decision structures are arranged (Blair, 1995; Fama and Jensen, 1983a,b; Jensen, 2000).

Institutional Approaches as a Solution to Agency Theory's Limitations

Much of the power imbalances described in agency theory result from two sources. First, technologies surrounding the production process can grant control of information to particular individuals or groups (Crozier, 1967; Cyert and March, 1992). Second, and most relevant to our concerns here, the authority specified in the organizational structure can grant considerable power to managers who can mislead boards and exploit employees. These problems lead to the focus by agency theorists on improving corporate governance by ensuring that the owner has the right to access the value the company creates. Hence, much of the attention focuses on how boards of directors can better control managers and deliver value to shareholders.

There are significant reasons to think that arrangements for decision and distributions of power will be and perhaps should be significantly different in public and nonprofit organizations. Yet the literature fails to specify where, precisely, one should look in nonprofit and public organizations for the key powers that will influence decision-making processes. Nor does the literature suggest how power might be arranged and why it might vary in its distribution under different ownership forms. For this

reason, the agency literature needs to be adapted to nonproprietary forms for it to provide a good foundation for thinking about the arrangements by which decision and control rights are specified. A scholarship of *academic governance* should specify aspects of the decision process that most shape decision outcomes.

A good deal of the practice of governance in higher education occurs below the surface of institutional governance structures, consisting of decisions that happen at the department level and that transpire informally (Dykes, 1968; Ryan, 1972). Some colleges and universities are strongly hierarchical, almost corporate in their structure, while others are highly participatory and democratic in their governance. Many of the behaviors exhibited by colleges and universities, the decisions and choices they have made reflect the interests of a number of parties. Benefits flow to faculty, staff, students, and society as a result of the school's activities. These parties are not innocent of these benefits and the colleges and universities cannot alter their delivery without facing a good deal of upheaval. The fact that the board has fiduciary responsibility and complete authority but delegates much of both complicates assessments of where power lies.

Systematic study of structures of governance and the decision context constructed by the social culture within and around the organization is largely a neglected topic in higher-education research. But it has a rich tradition in studies of political systems and for-profit firms. Since so much decision making in academic circles takes a political character, it makes sense to seek to extend this literature into the study of higher education and adapt it accordingly. I now turn attention to institutional theory's perspectives on the characteristics of higher-education institutions, which may structure choice opportunities and decisions.

PART II: INSTITUTIONAL THEORIES OF POLITICS AND ORGANIZATION

In this section of the chapter, I describe and juxtapose two major theoretical approaches to the study of decision structures within collective settings and the social context around organizations: *political institutionalism* and *neo-institutionalism*. The study of these topics has been described as the study of institutions because the attention focuses on aspects of the environment that are seen as more permanent than the operational decisions which confront a collective decision process. As a result, they play a particularly influential role in such decisions. Here, I examine the development and differing assumptions of these theoretic

perspectives because they seem to hold the most promise for understanding how academic governance—the decision structures and rules as well as the social environment of colleges and universities—affects decisions. I then proceed to examine the implications of each approach for the study of governance in higher-education institutions.

POLITICAL INSTITUTIONALISM

Political institutionalism relates public sector outcomes to the constitutional processes of decision making, the self-interest of actors, the limits and opportunities afforded by positions within a decision structure, and the mechanisms that regulate the interactions of individuals so that they behave in predictable ways.⁸ This approach presumes that individuals are cognizant of their interests and seek to maximize their welfare within the constraints of their environment. Constraints come in various forms but the ones of particular interest here are the governance structures at a particular institution and the way they distribute rights of decision and participation among stakeholders (McCubbins, Noll, and Weingast, 1987, 1989; Moe, 1990). It emphasizes that rules, procedures, and the assignment of authority play a key role in shaping the kinds of collective choices yielded by political structures. Political institutionalism posits that these structures shaping individual interaction should be identifiable, that they should vary in predictable ways that are related to the outcomes we observe, and that they should help explain the observed outcomes. Much of this research has been confined to governmental bodies and rarely have associated predictions been extended to other democratic participatory structures, such as those common at institutions of higher education (Lowry, 2001). This perspective holds important implications for conceptualizing decision making in colleges and universities.

If political institutionalism rests on the assumptions of the rationalist model, its foundation rests with the insights of Kenneth Arrow. The problem of resolving disagreements over policies and over the allocation of rights within a collective setting are subject to the well-known difficulties of social choice and strategic bargaining (Arrow, 1951; Miller, 1992; Sen, 1970). One enduring problem suggested by studies of social choice mechanisms is that a collective decision process is subject to cycling preferences, in which the group shifts from one set of preferences to another

⁸ Scott (1995), in an effort to provide a unifying framework for all kinds of institutional approaches that encompasses the disciplines of economics, political science, and organizational sociology, labels this *regulative institutionalism*.

or from one set of policies to another (Arrow, 1951). Drawing from the Condorcet paradox, Arrow showed that no social choice rule can exist, which simultaneously meets the following six conditions:⁹

1. All possible alternatives can be compared by the group (Completeness).
2. If there is unanimous agreement, then the group should choose that option (Unanimity).
3. No one person can dictate to the rest of the group (No Dictator).
4. If option A is preferred to option B, and option B to option C, then A should be preferred to C (Transitivity).
5. The collective choice mechanism must be able to rank all possible options according to each member's preferences (Universality).
6. The group's choice between A and B should not be affected by the option C. If the group prefers A to B, than having C as an option should not make B preferable (Independence of Irrelevant Alternatives).

Arrow's proof settled a long-standing question among economists about interpersonal comparisons of utility, but it suggested a number of problems with social welfare functions or democratic choice rules that aggregate individual welfare.¹⁰

When political scientists looked at the actual practice of such rules within contemporary government, they saw much more stability and persistence in policy choice than was suggested by Arrow's presentation that groups should cycle among policy options and frequently adopt contradictory policies.¹¹ Further investigation revealed that the institutions

⁹ Condorcet described a situation in which three parties might each have different preferences over a policy. Party 1 might prefer A over B over C, while Party 2 might prefer C over A over B, and Party 3 might favor B over C over A. The problem with these preferences is that the three cannot agree on a preferred approach. The favored choice will depend on which two choices are paired together. If offered a choice between A and B, they will choose A. If offered a choice between A and C, they will choose C. But if offered a choice between C and B, they will choose B. This violates the dictate of rationality, which requires that, if C is preferred to A and A is preferred to B, then C should be preferred to B.

¹⁰ Another basic assumption of the Arrow formulation is that social choice will be made on the basis of personal preferences rather than the dictates of one person, a code of morality, or a set of guiding principles that are unanimously shared. This has significance for the neo-institutional response of organizational theorists to the application of political institutional premises within an organizational setting.

¹¹ For an example of Arrow's theorem in action, simply look to any state that uses a referenda process. California, for instance, adopted Proposition 13, which limited the growth of property taxes, and then passed a referendum that called for increased funding of public schools, which are primarily funded from property taxes. California is hardly alone in passing contradictory policies in this way—witness

of governance provided mechanisms of stability within collective choice settings. Institutions, political institutionalists found, resolve some of the dilemmas of collective decision making, such as the difficulty of achieving consistency in preferences (McKelvey, 1976; Shepsle, 1979; Shepsle and Weingast, 1987; Snyder, 1991; Weingast, Shepsle, and Johnsen, 1981). Such institutions maintain what is called a *structurally induced equilibrium*. Shepsle and Weingast (1987) demonstrated that committee power within the Congress provided a corrective mechanism for cycling problems by regulating the order in which options might be presented to the group. The stability of committee arrangements and power meant that adopted policies tended to remain in place for some time. Organizations as well as governments can attempt to limit cycling problems by limiting access to the domain of choice. In fact, the legislative process consists of numerous veto points and allocations of power, which shape how a bill passes through the legislature (Shepsle, 1986; Shepsle and Weingast, 1981). These points, these rules, and these structural arrangements constitute the institutions that are the concern of scholars of political economy. The brand of institutionalism, which emerged from this interest among political scientists has focused on the role played by the rules of the game—procedural rules and decision structures of governments (DiMaggio and Powell, 1991; Thelen and Steinmo, 1992). Institutions represent the context within which politics come to decisions about policy. Institutions make certain outcomes possible and stable and render other outcomes unlikely.

Scholarly attention in recent years has underscored the role that institutions play in facilitating and influencing deliberative processes of collective decision making (Bawn, 1995; McCubbins, Noll, and Weingast, 1987, 1989; Shepsle and Weingast, 1994). Their prediction that institutions matter has been taken up in a variety of empirical work. A large body of literature from political economy reveals that the organization of decision processes account for significant variations in the performance of national economies, national budgets, and similarly constructed political outcomes (Alesina and Perotti, 1996; Shepsle and Bonchek, 1995; Shepsle and Weingast, 1987). Research into a variety of political phenomena within public sector organizations and among different governments highlights the influence of institutional arrangements and the structural features of government on explaining variations cross-nationally (Alesina and Perotti, 1996; Alt and Lowry, 1994).

the popularity of antigrowth measures in the western states, and the favor that the same voters show toward measures to preserve private control over private property.

But if institutions control and shape outcomes, they also award certain advantages to some groups over others (Baron, 1991; Bawn, 1997; Epstein and O'Halloran, 1995; Moe, 1990; Niskanen, 1971). Systems with many branches and levels of government and a network of checks and balances may make it harder to change policies or overturn legislation passed in previous years. Centralized decision processes with clear rules can make it easy to change policies when governments change hands. Political institutionalism suggests that we can understand why some groups dominate collective decision making if we understand the structures that regulate it.

Organizations need to resolve who gets what. Without a penultimate authority, disputes over the allocation of resources have to be settled through a process of conflict and negotiation. While political processes are understood to be important in organizational contexts, political scientists have confined much of their analysis to the importance of rules and structure for governmental decision making. Organizations such as higher-education institutions provide an opportunity to observe how governance structures can influence decision outcomes much in the same way rules and constitutions may impact other governing bodies such as parliaments, senates, or congresses. Universities and colleges can be highly political places. Indeed, we might consider them miniature polities or voluntary societies that govern themselves through political processes (Lowry, 1998; Masten, 1998).

Higher education remains a fertile field for institutionalist studies, but the few such studies that exist focus exclusively on public higher education at the state level and have rarely delved below the level of state systems of governance (see Lowry, 2001; Toma, 1990). One such investigation, by Lowry (2001), examines the role of state-level institutions that govern and regulate public universities and finds that greater political control—operationalized in the form of regulatory coordinating boards—leads to lower university prices. Toma (1990) looks at these same state-level institutions and assesses the degree to which they balance the preferences of faculty and those of external stakeholders such as citizens and elected officials.

Applying some of the analytic models and premises of political institutionalism to the study of organizations represents a fruitful and novel approach to examining organizational behavior. One such example is McCormick's and Meiners' (1988) study of higher-education governance structures and the role they play in shaping academic quality at both private and public universities. Their study used data from a 1971 survey of higher-education governance that had been conducted by the AAUP. They

found that schools with greater levels of faculty governance were likely to have lower levels of faculty productivity and lower levels of student performance. The authors did not see this as a sign that faculty influence and power were associated with shirking so much as a result of a self-selection process in which faculty with lower teaching or research skills would gravitate to schools that required more participation in governance. Masten (1998) looked at similar survey data and concluded that the degree of centralized authority versus faculty participation in governance would be a function of the size and heterogeneity of the institution and its relationship to external interests. Masten argues that faculty participation served as a commitment mechanism and deterrence to appropriation when an institution needed to assure various parties of the credibility of decisions and promises. The homogeneity of the institution's population and its reliance on external patrons were shown to be predictors of autocratic decision modes.

Transferring this type of analysis to decision making in higher education is not a simple matter. For one thing, a university or college is not a pure democracy nor is it like any of the oligarchic systems that are also common in political studies. Secondly, there is rarely an elaborated set of clear decision rules and choice systems in university settings. In analyzing a government, one typically looks for veto points, rights over decision, procedures for initializing, considering, and passing legislation. Constitutions can provide much of the data for cross-national comparisons of the effects of decision structure but institutional bylaws are rarely so transparent and often mask actual decision processes with formalized procedures. Indeed, much of decision making on campuses may be informal (Birnbaum, 1989; Cohen and March, 1986).

Our interest, then, becomes discovering how distributions of power within organizations, in particular, colleges and universities, explain variance in organizational outcomes. What are the organizational structures that account for the elevation of the rights of one group of participants in an organization over the rights of others? Do these differences persist at the institutional level? Do colleges and universities that have different mechanisms for making decisions, different institutions of decision, and different approaches to the decision process also demonstrate predictable and patterned kinds of decisions?

Identifying the structures of governance that are associated with particular outcomes can suggest whether the decision to allocate authority to the faculty or the administration matters and which particular structures seem especially influential in decision making. If faculty and other stakeholders such as students, administrators, and boards have opposed

interests, then the allocation of authority within the governance structure could influence the direction the institution takes in numerous policy areas.¹² But if culture and ideology within an institution bond stakeholders together within a common view, then divergent patterns of allocating power should not be associated with significant patterns in outcomes. For instance, two very different institutions might both choose to allocate most of the authority within the hands of the administration, but one institution might make decisions that are sympathetic to a faculty viewpoint while at the other the administration consistently antagonizes the faculty.

Millett (1968) and Pfnister (1970) encouraged the view that faculty and administrators were worlds apart and likely to interpret similar events differently. This suggests that governance scholarship should focus on the divergence of authority among faculty and administrators. And indeed, some studies have focused on identifying where faculty predominated and where administrators held sway (AAUP, 1971). But it may also be the case that administrators and faculty and even board members have more in common within an institution than faculty have across institutions.

NEO-INSTITUTIONALIST APPROACHES TO THE STUDY OF GOVERNANCE

This last point is important because it cuts into the core matter concerning how power in social settings is constituted. The rationalist family of approaches, such as political institutionalism or resource-dependence theory, presumes that groups are sufficiently organized, homogenized, and motivated to pursue actions which benefit them and that predictions about the relationships between the possession of power and the observed outcomes are possible. The interests of each group are assumed. Ownership and governance effects are predicted to be a product of power crossed with self-interested action on the part of different groups.

Several challenges can be raised against the rationalist, objective-oriented models of human behavior. For one thing, individuals may not be fully rational nor might they be motivated entirely by their self-interest. The claim that individuals are rational requires that individuals can identify their self-interest and pursue it in a consistent fashion. Under the political institution/agency costs view (i.e., the structuralist approach), the rules of the game structure and regulate their behavior. According to the resource-dependence approach, the environment constrains what they can do by increasing or decreasing their power relative to other

¹² Table 5.1 below lays out many of the points of variation that can exist within higher education governance.

participants. Neither approach addresses where people derive their sense of self-interest but imply that they discover it inside themselves. Although people may be focused on objectives, their sense of interests may not be what we think they are, nor might their goals produce the results that rationalist theories predict. Preferences and interests may emerge from and be shaped by an environmental context. They might be the product of developments in the world at large which shape the beliefs and expectations of organizational participants. Individuals may care as much about certain means as they do about obtaining particular ends (March and Olsen, 1989). Sociologists approaching the nature of power and authority in organizational settings have pointed beyond the physical structures of decision to norms and beliefs, the invisible structures that often guide behavior in social settings. Much of this work has been labeled the *neo-institutionalism* in organizational analysis and has concerned itself with demarcating and disentangling the influence of market forces from the processes by which societies ratify and legitimate organizational behaviors and forms (DiMaggio and Powell, 1991).

Neo-Institutionalism in Organizational Theory

Neo-institutionalism marks an approach that is useful for exploring how logics of organizational behavior might extend across groups but not across different organizational fields. The neo-institutionalism of organizational theory may yield very different predictions from the institutional approaches of political economy discussed above (DiMaggio and Powell, 1991). Neo-institutional theory holds that power may be tied to more than the regulative aspects of the social order. It also highlights the relationship between, on the one hand, the development of normative views of acceptable organizational behaviors and the depth of cognitive frameworks for understanding and reacting to the world and, on the other hand, the powerful dominance of particular organizational practices in a field (DiMaggio and Powell, 1991; Scott, 1995).

This neo-institutional literature contrasts with the approach of political institutionalism by reminding us of the broader forces at work in the society in which organizations are embedded and to consider what values, expectations, and beliefs participants may bring to organizational decision making (March and Olsen, 1984). This approach views institutions through a sociological lens.¹³ Borrowing from an older, German

¹³ Institutions, according to an older tradition in sociology, represented the process of instilling value. An organization became institutionalized when it became infused with values beyond its strictly technical purpose (Selznick, 1957).

tradition, contemporary approaches see the process of developing an institution as a process of creating reality (see Berger and Luckmann, 1967; Scott, 1995). An institution can be said to operate in an organizational field when a common reactionary impulse on the part of organizational participants is generated by an environmental stimulus. Institutionalization is initiated when a functionalist rationale is decoupled from the rule. In such cases, action replicates unless collective human action is initiated to stop it (Jepperson, 1991). An institution is more than a habit but something different than a norm. Most precisely, an institution may represent a shortcut, a taken-for-granted behavior or rule that is applied consistently to particular situations without a careful analysis of what is appropriate to the particular situation (Tolbert and Zucker, 1996). Central to institutional theory is the focus on rituals, myths, and symbols within organizations and the idea that institutional rules are not simply functional ends in and of themselves (Meyer and Rowan, 1977). Although a functionalist rationale for a legitimated rule may have existed at one time, by the time the rule reaches the level of myth and symbol, its "taken-for-grantedness" overwhelms its functional imperative (Zucker, 1991).

Institutional effects upon the decision-making processes of organizations can be expressed in various ways. They can be expressed through the norms of the social order; they can be realized in the cognitive schemas individuals apply to the sector; and they can be brought to bear upon the organization through the actors outside and inside of it (DiMaggio and Powell, 1983; Scott, 1994; Tolbert and Zucker, 1996). Institutional effects may be apparent in the legal frameworks of the state or in the political pressures that are brought to bear by the polity directly upon the institutions themselves. But neo-institutionalism draws a distinction between structural effects as causes and structural effects as a reflection of basic values and beliefs. Institutional action is at heart a cognitive process since what connects the enforcement power of an institutional regime with the perception of particular norms is a shared cognitive sense of what is correct or appropriate. Institutions comprise the knowledge systems which people draw from to make sense of their everyday world. These are the facts that people accept without question, the mechanisms by which information is ordered, processed, and used to stimulate and coordinate action. Institutions infuse value and shared judgments on action and regulate organizational forms and behaviors without obliging the application of state or group power.

This great emphasis on shared beliefs yields a central prediction of isomorphism within organizational fields. DiMaggio and Powell (1983)

argue that in fields with such characteristics, organizations look to others in their own field for clues on proper behavior and seek to mimic those institutions they consider to be successful. "Best practice" is determined by looking at the richest or most powerful institutions. This process, "institutional isomorphism," may help explain a sector's convergence on particular organizational models. Neo-institutionalism does a good job at explaining persistence and convergence upon common behaviors. The theoretical implications of neo-institutional theory emphasize the rigidities implied by institutional forces.

These socially embedded influences on behavior, then, exist not as the hard institutions of decision structures but within the soft institutions of rituals, norms, values, and expectations (Cornell and Kalt, 1995, 1992; Kalt and Cornell, 1994). Although scholars tend to make strong distinctions between the hard institutions of economics and political science and the softer institutions of the sociologist or social theorist, the link between them may be deeper than previously imagined (Powell, 1991; Scott, 1994). The genesis and functioning of hard institutions would seem to depend on certain principles of social behavior including the homogeneity and strength of beliefs about others who are inside and outside of a group, about the relationship between the authority and the individual, and about the appropriateness of particular behaviors (Kalt and Cornell, 1994). While such expectations can be a product of structures and rules, their very function depends on their ability to reproduce the belief systems that support them among the members of the group.

Neo-Institutionalism Within Higher Education

If the structure of decision and allocations of power and authority within a college or university by themselves do not explain the differences in organizational outcomes within higher education, as I have suggested in the previous sections of the chapter that they may not, then the structure of authority operating on participants may not be observable in the rules of procedure, the bylaws, or organizational hierarchy. Administrators with equal endowments of power in two separate schools may choose completely different courses of action. One may seek to protect and preserve faculty prerogatives, enlarge the scope of the institutions, increase the distribution of resources to the factors responsible for the production of knowledge or of educated students. The other may seek to hold costs down, may look to offer education at a low cost, or may attempt to move the institution toward the provision of practical preprofessional education over a broad tutelage in the liberal arts.

The written rules of an organization may provide little clue about who wields power and whose interests the institution is seen as serving for several reasons. First, the law regarding higher-education institutions is as much driven by the common law as it is by the legal actions of legislative bodies. Courts have often ruled that an implied contract may exist if, in a particular area, an organization has persistently behaved in a particular way or if oral statements regarding employment terms have ever been made. A leading text on higher education law summarizes the breadth of factors that may influence the decisions of an organization. "Employee handbooks and oral promises have been ruled to create binding contracts in some states, while other state courts have rejected this theory" (Kaplan and Lee, 1995, p. 151). The dominance of common law suggests that participants can distill particular principles of governance and share them even if the institution has never incorporated such an idea in the organizational chart and texts.

Second, higher education provides repeated evidence of the power of custom. The guild model of training that developed in the Middle Ages persists to this day in the training of doctoral candidates and junior faculty (Lohmann, 2004). Many participants share the notion of the academy as a world apart from the practical world, governed by different concerns and independent of the restrictions or requirements that might be imposed on lay employees outside of this sphere (Nelson, 1999). The presence and the prevalence of certain practices suggest the pervasiveness of a particular view of how higher-education institutions should be run and to what ends they should be directed. However, the variety of outcomes in higher education suggests that the paradigm of governance implied in this view may not be as dominant as we would think. Other factors may regulate how strongly participants adhere to and insist that the organization follow a particular distribution across the institution.

Higher education exemplifies a field in which such *soft institutional forces* might operate. Market forces are attenuated in their ability to enforce a logic of technical efficiency. The process of producing outputs is difficult to monitor. Education in the classroom happens under the autonomy of the instructor. Nor is it clear what *good education* would look like. This presence of loose coupling is considered a common feature of institutionalized fields (Kraatz and Zajac, 1996; Weick, 1976). Institutions are staffed by instructors who work for a period of years as academic apprentices to senior scholars, becoming acculturated to the rhythms and rituals of academic life. This professionalization of sector members often serves as a vehicle for establishing institutional processes (Scott and Meyer, 1983). Such environments allow the older members of

the organizational field to indoctrinate junior members in the norms of the culture and communicate “how things are done.”

Scott and Meyer (1983) predict that the environment in which the organization is embedded will shape the kinds of controls developed and the processes of control for the field. When authority is diffuse, the requirement of order and coordination impels the development of control mechanisms that can exist outside the exercise of authority—mechanisms that can exist within individuals without an enforcement mechanism (Scott and Meyer, 1994). We recognize an institution of higher education not just by its adoption of the term college or university but by a set of signs communicated by the professions that staff the organization, the division of knowledge into a common set of disciplines, an organizational structure that attempts to mimic this disciplinary taxonomy, and a host of other symbols, rituals, and myths common across the sector.

It may be that different models of behavior exist within subsectors of the field and these directly shape the way participants interpret and react to the actions of their organizations and view alterations in their environment. The subsectors represent partitions of the field into groups that share many characteristics but that also evince distinctions from the other sets of organizations in the field. Within the 50 states, for instance, different conceptualizations of the relationship between a public college and the public can exist and can be expressed in the state system of organizing higher education (Hearn and Griswold, 1994; McGuinness, 1997; McLendon, 2003). Such subsectors may carve out among participants different realms in which similar actions are viewed in divergent ways. Each subsector may share a common sense of what behaviors or logics are appropriate and which are inappropriate. They may even witness the development of different expectations for the organization, different organizational cultures, and different conceptions among participants about what is acceptable for the subfield. The orientation of management in each subsector may shift accordingly.

In a sense, what we would be observing is the development of various conceptualizations of the *principals* to which these agents see themselves as being responsible.¹⁴ The recognition of the legitimacy of such principals can cut across group boundaries within the organization while not being shared across the boundaries laid by different missions or ownership forms. Such subsectors might be outgrowths of the history of the institution. They may come from the organization’s position in the marketplace

¹⁴The use of the word *principal* rather than *principles* is self-conscious as the former refers to the actor in whose interests organizational agents are supposed to direct the organization.

and power relative to consumers and supplier of inputs. They may be related to the wealth of the organization and the consistency with which they can depend on various revenue streams. Yet, nowhere would one find written down the characteristics and standards on which these subsets exist. They would operate within the minds of organizational participants.

The neo-institutional approach to organizational behavior, therefore, underscores the importance of the mental models that individuals use in organizational contexts. It emphasizes the distribution of models and paradigms of organizational action and reaction rather than the distribution of rules, rights over and procedures of decision, and structures for approaching the task of management and strategizing. In contrast to the rational individuals who pursue self-interested goals in structuralist models, it stresses that individuals may share a concern about the means of goal attainment and may act more from reflex than an assessment of their self-interest or a pursuit of rational and efficient actions and policies.

These ideas suggest that, within the field, different institutional paradigms may exist, which instill different orientations in participants. Faculty and administrators at one kind of university might have a particular sense of the organization's mission and the kinds of decisions the organization will reach, while at another university, they may feel entirely differently. Faculty, then, can have more in common with the administrators at their school when it comes to thinking about organizational actions than they would with the members of their own discipline at other schools. These paradigms may operate as institutions in the sociological sense, unquestioned practices that are understood as the appropriate way for the organization to behave, given its environment. Identifying these paradigms from the opinions and ideas of the actors may provide a better insight into the nature of the public and private distinction than trying to evaluate the rules and structures of decision. If this is so, then neo-institutional theory may tell us more about the behavior and distinctions among public and private colleges and universities than the political institutions suggested by rationalist approaches.

PART III: APPLICATION OF INSTITUTIONAL THEORY TO THE STUDY OF ACADEMIC GOVERNANCE

The argument I have developed thus far in the chapter suggests that the hard institutions of rules and governance structure suggested by the literature on political institutionalism and the soft institutions of norms

and cognitive frameworks emphasized by neo-institutionalism may both have an important role in shaping organizational outcomes. Yet, they are hardly the sole factors. My initial discussion conceded a strong role for environmental factors related to the market and to the political sphere. Can governance effects be integrated within a framework that allows analysts to simultaneously examine how forces inside the university and factors outside it influence organizational outcomes? How do the effects of governance fit into a study of higher-education organizations?

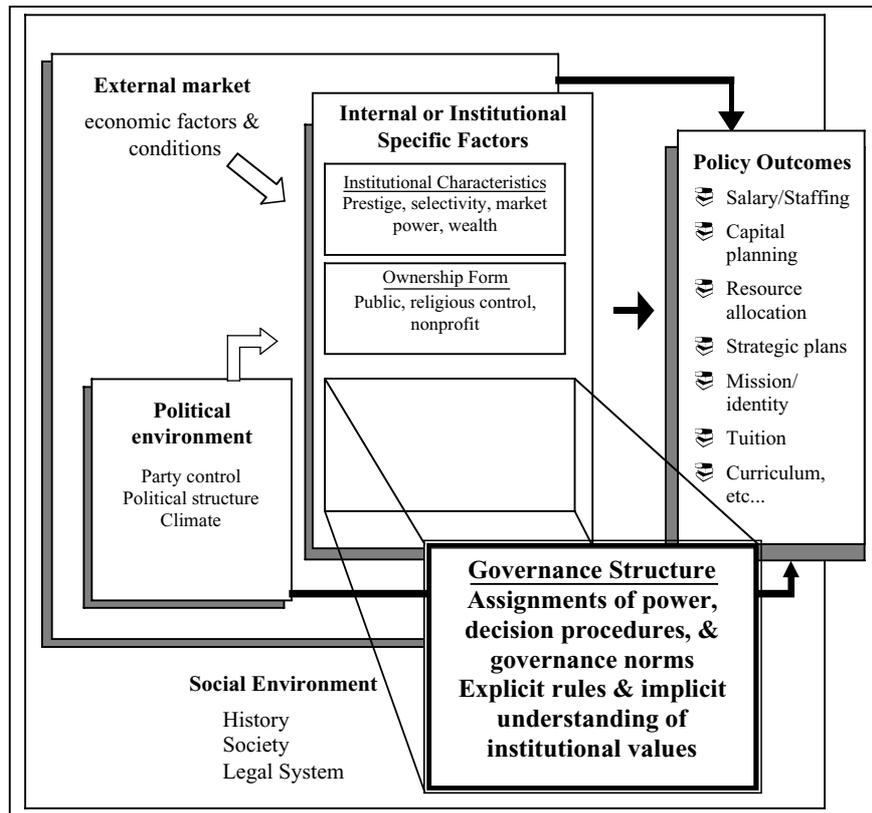
Up until now, my purpose has been to critically examine the theoretical underpinnings of the following proposition: governance matters. Thus far, this chapter has been a critical review of the published literature from two traditions with different perspectives regarding precisely which aspects of organization and governance matter in decision outcomes. In this final section of the chapter, I will build upon those arguments in order to build a general model of decision outcomes in higher-education institutional settings. Using this framework, I identify ways in which scholars might empirically study governance effects.

AN INSTITUTIONAL FRAMEWORK

I propose an integrative model that attempts to conceptualize how the study of governance structures fits into a study of the various factors that shape the behavior of colleges and universities. Figure 5.1 below provides an illustrative representation of the interrelationships among existing analytic approaches: economic, political/structural, and sociological. It illustrates how they can be synthesized to provide a compelling set of accounts for patterns of decision outcomes in higher education. The scheme explains organizational outcomes such as changes in costs, tuition, strategic direction, and other areas by taking into account both external and internal or institutional-specific characteristics.

The diagram portrays the direct and indirect pressures that can act upon institutions of higher education and affect their outputs. Institutions must react to developments in external markets. The framework pictured here acknowledges the direct effects of economic and political forces on the outcomes of any organization. External markets and politics affect the pool of resources that institutions can draw from when deciding how much to spend. Political forces in the broader environment shape what is possible. External developments, however, are not sufficient by themselves to explain all decisions and outcomes. At the same time, political and market factors are passing through the university or college. The decisions reached on campus get reflected through the prism

Figure 5.1: A model of organizational outcomes in colleges and universities



of the organizational mission, the school's commonly shared values, and its ownership and governance arrangements.

As the framework shows, the political environment and the higher-education market also act through the institution to drive the incentives of individuals, the way they conceptualize their self-interest and the way they interpret environmental change. The influence of external market factors also interacts with the institution's market power and exposure to competition from other institutions, its wealth and ability to insulate itself from tough economic times, its prestige among faculty and students, and its ability to command high-quality inputs. Political pressures are not the same on all institutions and depend on the organization's legal exposure and structural relations with the state. Nonprofit and public institutions do not share the same legal obligations nor do state officials play the same role in them (Brody, 2006; Fremont-Smith, 1965). Even among state

institutions, the elected officials of different states can play different roles and wield different influences on institutional behavior depending on state governance arrangements over public institutions.

Institutional characteristics will be important in shaping how the institution responds to market pressures and pressures from the political environment. But its ownership form becomes important as well because it constructs the rights of parties to participate in the decision-making process and to control outcomes. The governance structure assigns decision rights and, in a sense, determines how much of an ownership claim each party has. According to the model outlined here, factors such as external market conditions and the political structure and environment flow through institutional governance structures.¹⁵

Of course, the rules may not tell the full story. Such rules are generally assumed to govern a competitive and antagonistic process in which groups with clearly specified interests compete for influence over the direction of the organization and over the allocation of organizationally created benefits. However, there may also be few fixtures of governance that grant clear power to one group such as the faculty, and yet they may seem to derive large benefits from organizational decisions. For this reason, norms and expectations about governance and policy are likely to be crucial as well.

HOW TO STUDY POLITICAL INSTITUTIONAL MODELS IN GOVERNANCE

Political institutionalism's success in the field of political economy suggests a similar approach may prove useful in the arena of institutional comparisons in higher education. It requires that we identify the structures through which decisions are made and the groups to which power is distributed. How is authority over key issues divided? Does each stakeholder have an actual vote in decisions or are their views merely represented by others? Is the campus senate made up of faculty alone or does it include staff and students? Does the institution have collective bargaining and tenure protections? Are there many schools or divisions each with their own authority centers, or is control tightly held in the office of the president?

It also propels a consideration of the dynamics of the decision process. Are there veto points accorded to one group or another? How is each group involved in decision making? Do they contribute to policy

¹⁵ Imputed in the concept of the market environment is the institution's position within that market.

formation? Do they ratify policies delivered? Which groups have powers to set decision agendas? Who controls budgets and budgetary decisions?

The structures that regulate interaction and decision processes in a collective setting may empower participants in different ways. Hence, an important feature of governance involves how it allocates power within the institution and how it delegates who has responsibility and authority for what kinds of decisions. In the case of institutions of higher education, there seem to be no end to the parties that claim to have a right to be heard in any decision facing the institution. Who actually gets to participate may provide clues about whose interests will be served by difficult decisions. For this reason, a political institutionalist approach must look at how governance is experienced by various parties in higher education, administrators, faculty, and board members, and how governance is related to observable outcomes in the sector.

Applying political institutionalist theory to higher-education governance requires that we find the institutions of governance on campus that award power to different groups, limit how outcomes may unfold, and shape the way they participate in the decision process. To begin, we need to identify the different groups of stakeholders who will be important. We need to ask what their interests will be and what preferences they are likely to have. And we need to ask how the governance structure situates them in the decision process and empowers them. Having identified these aspects in higher education, we can begin to make predictions about how particular institutions of higher-education governance are likely to allow different groups to bend the university or college toward their sets of preferences.

The empirical techniques used in political institutionalist analysis are typically quantitative methods such as multiple linear regression and more advanced econometric techniques. Scholars typically compare the performance of states or nations. Data may be cross-sectional or of a panel form. An assortment of variables that might explain an outcome from a policy process are included in a regression model and several are specified as measures of one kind of political institution or another—such as the power of the governor, whether both legislative houses are divided or held by one party, or if the governor of the central bank enjoys autonomy from politics. In higher education, similar techniques can be adapted. Quantitative and categorical data gathered from survey instruments can provide variables that assess characteristics of the governance structure or process. Subsequent analysis can determine whether these structures or practices function as political institutions within the context of academic governance. These can be employed in different statistical approaches

such as ANOVA, MANOVA, multiple linear regression, probit or logit regression, event history analysis, or multilevel modeling to assess their contribution to organizational outcomes along with other institutional or market-based characteristics that might explain behavior. Alternatively, scholars who wish to take a closer look at a smaller number of institutions can utilize a case study of one institution or qualitative comparisons of several institutions selected for a particular trait. But what should such studies look for?

This subsection of the chapter consists of an effort to characterize the structural aspects of governance that may shape campus decision making. I break down the attempt to examine higher-education governance through the lens of political institutionalism into four parts. Rather than considering all the structural components of governance that can exist on a campus, I consider the major stakeholders of interest and how their participation within governance can be arranged. Studying higher-education governance in such a methodical way turns out to be quite difficult. Governance on campus is rarely as systematic and formal as it is in a government setting and decisions can be reached along a variety of permutations with different end points. Formal rules may not capture the informal realities of governance on campus. Focusing on the strongest interests of the parties involved and mapping the scope of their participation presents one approach to this problem and the one I employ here.

Identifying Stakeholder Interests

Political institutionalism predicts that structures will shape the outcomes of competition among groups with different interests. Governance structures in higher education can be said to matter in a predictive fashion only if they distinguish between faculty and other stakeholders, and stakeholder groups have divergent interests over certain issues. Identification of interests can suggest dependent variables that would measure a stakeholder's influence in a particular area. Identifying stakeholder interests may not be easy, though, since these can vary across institutions. On one campus, the board may, in general, want to pursue the faculty's objectives, while at another it may prefer more consistently those of students and their families.

There are two keys to identifying interests correctly. First, one must identify the stakeholder groups that are relevant, for instance, faculty, administrators, politicians, or board members. Then, one must find issues where one group is likely to have consistent preferences on the issue across higher education. Class size is one issue, which illustrates the problem.

While faculty may be assumed to prefer lighter teaching loads, they can accomplish this in two ways. One way is to make class sizes larger. But faculty at a teaching-oriented institution may prefer smaller class sizes, so that they may lighten teaching loads by increasing the number of class sections. The preference for a lighter teaching load may be consistent across the sector, but the preference for particular class sizes would not be.

The most obvious stakeholder groups to begin with are the faculty, the board of trustees, and the administration. Since each group has different responsibilities and responds to different sets of incentives, we cannot assume that their interests are aligned across the board. Nor can we assume that their interests will always be opposed as many in higher education are wont to do (Pfnister, 1970; Snyder, 2003).

When faculty have a formal role in the budget process, they can use this to further personal or collective goals. Budgetary decisions require discretionary allocation among various expenditure pots. Faculty would be assumed to place primary emphasis on remunerative rewards over budgetary decisions that favor students or administrative causes. For instance, if asked to choose in a given year between a marginal but costly upgrade to the teaching and technology center or an increase in salary levels, faculty would be expected to prefer a salary increase, all other things being equal. Only in the wake of continued neglect of the technology center would faculty begin to feel that the utility derived in the classroom from enhanced technology outweighed the cost of foregoing a salary increase.

Faculty with power should be interested in preventing the closure of their programs and departments and successfully defending the programs of others as well. Programs of competitive reimbursement are viewed with suspicion by national faculty groups but, judging by the number of state systems that have adopted them, are popular among politicians and the public (AAUP, 1995). Selecting leadership from the ranks of the academy serves as a mechanism to ensure that faculty values will be embraced and promoted at the highest level. Selecting presidents from outside of academe threatens faculty by importing a culture of operation hostile to the decentralized nature of academic life and decisions and unsympathetic to the norms of faculty achievement. Each of these ideas suggests some variables to measure outcomes where faculty may have shared interests—such as salary, expenditures, teaching load, department closures, and operating policy.

Administrator interests can be more difficult to identify. An administrator may feel that her job is to work for the faculty and help them to achieve their goals. Or she might feel she is the boards' designate and must

represent their views. Administrators will seek to pursue their personal preferences and vision for the institution. But they will also respond to the incentives of the job. They will need to balance their books, placate external stakeholders, and make an impression of success by improving some aspect of the institution, which may require subtracting from another part. Students and administrators would be expected to favor enhanced amenities and capital expenditures. In the case of the choice between salary and technology, the first preference of these two groups might be technology. Only in the wake of foregone salary increases that threatened institutional and instructional quality would they be likely to favor attention to remuneration.

Board interests present a challenge as well since some boards may seek to promote the faculty's ability to do research as the best way to promote their institutions, while others may feel that the institutions should focus on other areas and on other activities. First and foremost, boards have a fiduciary duty to the financial health of the institution. Administrative appointments of individuals with strong business skills and perhaps weaker academic credentials are most likely an indication that the board has different interests than faculty and a good deal of influence as well. Board members may have different interests in a public institution than in a private institution. It is possible that an elected regent to the board of a public university has different interests than a member appointed by the sitting board to a private nonprofit university. The upshot of all this is that divergent interests among key stakeholders cannot be assumed. Rather, the scholar should think carefully and work to identify those decision areas where the preferences of different stakeholders are likely to diverge between groups but remain consistent within them.

Governing Boards

Legally, authority and responsibility for all decisions rest with an institution's governing board (Association of Governing Boards, 2001). The governing board, then, marks an obvious point at which to begin the inquiry. By and large, most boards delegate many functions and decisions to other groups such as administrators, faculty, and staff. They possess veto authority over decisions but rarely intervene. Yet such consideration requires some care. Separating out the board's formal authority over everything on campus and what it chooses to delegate can be difficult. On some campuses, the faculty make hiring decisions but the board makes the final official appointment and decisions so that different people can answer differently if asked, "who does the hiring around here."

Nevertheless, the board's inclination to intervene, the manner in which it delegates responsibilities and abdicates certain authorities, and its inclination to passively preside over most decision making is likely to be a function of institutional circumstances and the composition of the board. Boards are the trustees over the institution, but the parties to whom that trust is delegated can vary by ownership form and by state.

The first question to ask, then, when looking at the board, is what powers does it preserve for itself and which does it delegate to administrators and staff? Faculty authority may be stipulated in the faculty handbook. There may be a constitution for governance bodies such as a senate. The board itself may have a statement on policies. The designation of authority areas may be less formal or it may be shared.

The corporate governance literature gives primacy to boards and the rules governing their function. The governing board in a corporation serves as the vehicle by which the owners' representatives interface with and provide direction to the managers of the firm. Theories about effective board practices suggest a number of independent variables to explore how board structures influence outcomes in higher education. Research in this area has focused on the size of boards, the rules of selection, the exclusion or inclusion of internal stakeholders, and the frequency of meetings (Blair, 1995; Lorsh, 1989).

Typically, the governance literature from the for-profit world favors smaller boards in order to render board processes more coherent and effective. It is easier for such boards to reach consensus, to operate, and to function with high levels of participation. Larger boards should be less tractable and less useful for making important strategic decisions, as any large group is less wieldy than a smaller group. Relationships between the administration and executives are likely to be more manageable with smaller boards. Smaller boards are thought to do a better job of representing the owners' interests rather than internal interests among staff or executives.

In higher education, an unequivocal claim of a relationship between size and performance is more difficult because of the large number of nonprofit institutions and their reliance on outside funding. Many board members of private institutions are significant contributors and board membership is an important perquisite to be handed out in fundraising efforts. Placing wealthy individuals on a board is one way to cultivate large donations from them—people value the symbolic importance of board membership. Board size may provide an indication of the degree to which the board is seen as an important governance tool or if it serves more symbolic functions. More frequent meetings can be interpreted as a sign

of a more activist and involved board. Boards that meet more frequently should be better able to monitor their managerial agents. Those that meet less frequently are likely to have a more symbolic function.

Issues around nonprofit board composition highlight the problematic and broad nature of the ownership claims over nonprofit institutions. Many constituencies have reasons to express ownership claims over the institution and the board's composition is likely to reveal how those claims are negotiated through the institution. Among public institutions, we expect to see signs of clearer public ownership and among private institutions, we expect to see signs of more diffuse claims and greater internal as opposed to external control.

Selection processes and membership can communicate vital information about an institution's approach to governance. Governance advocates have called for excluding internal stakeholders such as employees from board membership so that boards do not neglect their fiduciary duties in favor of a particular group (Association of Governing Boards, 2001; Peregrine, 2004). For this reason, student and faculty membership on a board can be significant both for the direct pressure they can exert on outcomes and for the signal sent that an institution is committed to faculty and student views on managerial matters. The presence of faculty and students on a board suggests these groups possess elevated levels of power. The presence of students rather than faculty is indicative of an institution that is oriented toward student needs. Hence, it is likely that such institutions will be public rather than private due to the public's greater ownership role.

Governance experts typically argue that properly insulated boards select their own members and preserve their disinterested position (Peregrine, 2004). Self-perpetuating boards are likely to be more homogeneous and consistent. But their policy significance could vary depending on whether board members tend to bring a market sensibility to their task or tend to be more deferential to the requirements of the academic enterprise. In either case, the result of self-perpetuation is expected to be consistency of preferences. Among state boards, members selected by the governor are expected to be more attuned to public sensibilities and to push an institution away from academic norms and toward those that are more common among the general populace. Absent such policies, boards are thought to be likely to cede their authority to parties with greater information and organizational control such as faculty and administrators.

Procedural rules can also provide an indication of a board's likely role at an institution. The president's voting participation on the board

is not universal. It should be viewed as an indication of the degree to which the president is seen as an equal member or merely a functionary of the board's will. Given their informational advantages, voting presidents are more likely to exert sway over the direction of board affairs and such boards are more likely to be, to paraphrase one governance scholar on the matter, pawns rather than potentates (Lorsch, 1989). So a political institutionalist approach to academic governance that looks at board structure should consider the following questions: (1) Are larger boards less wieldy and more prone to managerial guidance (and capture)? (2) Do self-perpetuating boards lead to greater stability? (3) Are boards with student or faculty members more likely to favor those groups over the interests of other stakeholders?

Administrative Influence

Arrow's famous results regarding collective decision making indicate that rational, in the sense of consistent, collective choices are not guaranteed unless the group appoints a dictator (Arrow, 1951). Many institutionalists see the investment of authority and power in a CEO in the corporate world as the attempt to resolve such collective action problems (Miller, 1992). But while the CEO's authority can be both broad and deep, as a matter of law, the CEO might find that executive powers only extend so far as a matter of fact (Crozier, 1967; Cyert and March, 1992). In the case of higher-education institutions, executives can wield a great deal of authority, but few would confess that their power is absolute. A corporate CEO may also have an easier time discerning objectives. Characterizing the objective functions of such organizations as colleges and universities is fraught with complications. Indeed, Li and Hoenack (1997) maintain that postulating utility functions for such institutions that assume employees share common preferences is of limited use because of a lack of consensus common within schools. Representing the objective function of the university in general form exemplifies in their view a clear application of the "potential aggregation problems brought to attention by the [Arrow] Impossibility Theorem" (Li and Hoenack, 1997).

However, examining the power of the chief executive of the institution, such as the president, represents an important step in understanding how power has been allocated and what kinds of decisions the institution will favor. Institutions with strong presidents may be more likely to produce one set of outcomes than another. While boards and faculty often contest the direction of the institution, it is the administration that

is charged with the day-to-day operation and general planning for the institution.

Of course, even among institutions where the president's power appears great and deeply established, we may still detect differences in the types of decisions and who gets favored. Administrators often must balance their obligations to the board while maintaining the satisfaction and support of the faculty. This is no easy task. It also makes predictions about the relationship between the position of administrators within decision processes and institutional outcomes difficult. Administrators may feel themselves to be the agents of the board or they can act as if they were the agents for the faculty before the board. Hence, even after we identify the powers of administrators and their positions and roles within the decision structure, making predictions about their behavior and its implications for the institution can prove difficult.

Administrative roles in governance are likely to vary a good deal across institutions. In particular, a bright line may exist between faculty functions in governance and administrative functions. Among some institutions, governance bodies for the faculty such as representative senates may be comprised entirely of faculty. At other institutions, administrators such as deans, provosts, or presidents may serve as the chairs of such bodies and control agenda and procedure. Defenders of shared governance argue that administrative participation can potentially inhibit faculty expression (AAUP, 1995). The AAUP strongly advocates that administrators not serve in faculty governance bodies, let alone chair them. Administrative chairmanship of governance bodies can potentially quell faculty voices inclined to dissent. Administrative voting rights might be seen in the same way. But *a priori*, the direction of the effect is not immediately clear. Administration voting rights could also be indicative of an administration drawn from and sympathetic with faculty values and views. If faculty have confidence in administration views, they are more likely to accord higher levels of influence to administrators.

Colleges and universities can choose to reserve all budgetary authority for administrators or they can involve faculty in these decisions to varying degrees. The greater the role of faculty in budgetary processes, the more likely that schools will resist strategic restructuring, prefer across-the-board allocations and cuts over strategic allocations, and stand in the way of program elimination (Kaplan, 2006). Even in those instances where the administration reserves for itself all authority over the budget, faculty influence can still be apparent in the level at which this authority gets allocated. Specifically, increased levels of centralization in budget processes establishes greater distance between the administration and the

faculty in the budget process and is more likely to reflect a more fiscally oriented, strategically minded view. When budget processes get decentralized, faculty preferences are more likely to dominate decisions about how cuts will be taken and where increased resources will get allocated. For instance, if such decisions get decentralized to the department level or to the dean's level, faculty can have a greater ability to influence decisions than they would if the decisions are reserved at the level of the president and vice-chancellor of finance.

Finally, another area worth investigating concerns situations where administrators possess veto authority over faculty decisions and recommendations. At some institutions, a tenure and promotions committee may recommend promotion to tenure, but this decision needs to obtain the president's approval. If the president frequently gives this consent, then faculty clearly influence the process more than the administration. When administrative vetoes are more common, faculty voice is less significant.

Faculty Influence in Governance

Measuring faculty power is not straightforward since it requires measuring both faculty influence on a decision and faculty preference. The case of tenure illustrates the point since schools that give tenure to almost everyone might be said to be captured by faculty, while schools that give tenure to almost no one are often the most elite institutions with the most powerful faculties. In addition, faculty interests may not be uniform across higher education.

Nevertheless, there are several objectives that faculty are likely to prefer over other possible goals, regardless of their circumstance. Political institutionalism suggests that mechanisms that empower faculty should be associated with a greater likelihood of institutional pursuit and recognition as an elite institution, lower teaching loads, higher salaries, and greater expenditures. The mechanisms which express faculty influence can award power to faculty in different ways and at different levels, thus determining how much power faculty ultimately possess.

When boards delegate their authority to other stakeholders, their options project along several dimensions. They can decide which parties will have power over what areas. And, they can decide how formal that authority will be. For the first option, they can decide which parties will participate in decisions and they can decide at what level of the institution those decisions will take place. Regarding the second option, faculty members can go about their jobs without formal day-to-day authority and

intervene only when the party designated to decide a matter is perceived to overstep its bounds. Alternatively, faculty can be formally designated with authority in a few or many areas.

The level at which faculty influence operates may indicate the degree to which some governance decisions are decentralized. The locus of faculty authority can rest at the department level, division level (such as college or school), institution-wide level, or at the union level. If Massy and Zemsky (1997) are correct, decentralization of decision making to the department level is one of the mechanisms responsible for ratcheting up costs. Hence, we should expect that the broader and higher the level at which governance takes place, the less likely that parochial faculty interests will dominate and the more influential will be those who take a broad view of the institution's welfare. Faculty meetings are also potentially more clumsy mechanisms for governance, since both the probability of disagreement and the time for decision resolution are expected to rise with an increase in the number of faculty participating in decisions. From an institutionalist perspective, faculty meetings are unlikely to be a practical means of expressing faculty voice. Divisional-level bodies may encourage parochial views that make it difficult for faculty to place institutional interests over divisional interests.

When the designation of faculty authority is more formal, faculty voice needs a mechanism by which it can express the views of the faculty body. Hence, formal designations of authority tend to be associated with the establishment of various mechanisms for assessing and expressing faculty opinion on matters. The resulting formal structures elevate the power of faculty by creating both procedural channels that must be followed and legally enforceable expectations about privileges and responsibilities (Weeks and Davis, 1982). More formal decision structures might be expected to be more facile and less parochial in nature, while those with a broader range of participants might be less focused on faculty-specific concerns. Faculty power can become routinized and institutionalized, facilitating a change in the expectations of all parties regarding who should be consulted on matters and whose opinions will count. This suggests that formalized systems of faculty influence in governance should be associated with more favorable outcomes for faculty than more *ad hoc* decision systems that devalue formal faculty participation in decision making.

Many institutions establish faculty governance bodies to serve as representatives of the faculty. Others merely convene campus-wide meetings of the faculty, but the formality with which these arrangements are vested plays a large role in determining whether they have actual or merely

symbolic authority. On many campuses, faculty decide curricular and related academic matters at the department level, and this amounts to their participation in shared governance. At other institutions, the bodies that represent faculty are not only more formal, but they have a voice in a wider array of organizational topics. The faculty can play an advisory role through a representative body that serves to communicate faculty views to administrators or boards. Or the faculty can have a more determinative role in which they help to decide major matters. The 1971 AAUP study of academic governance (and the 1977 and 2001 follow-ups) classified the roles faculty play into five categories listed below (AAUP, 1971):

Determination: The faculty or its representatives have final legislative or operational authority with respect to the policy or action, (any other technically required approvals or concurrences are only pro forma).

Joint Action: Formal agreement by both the faculty and other components of the institution is required for confirmatory action or policy determination.

Consultation: A formal procedure which provides a means for the faculty to present its judgment prior to the actual making of the decision in question without the judgment being ultimately determinative.

Discussion: Faculty or individual faculty members provide only informal expressions of opinion; or a formally expressed opinion is the purview of an administratively selected committee only.

None: There is no faculty participation in governance.

Assessing which of these classifications applies to a particular campus can proceed in one of two ways. First, the researcher can ask campus participants to assess campus decision making themselves. This is how the AAUP survey approached the problem, consulting with administrators and faculty through separate surveys to assess the governance style on campus. A second approach is to examine the extent of faculty influence on a number of policy questions that any college or university will face from time to time. Who appoints the dean? What role do faculty and departments play? What role does the faculty have in the budget process? Do they sit on an advisory budget policy committee, or do they have a formal role in the budget process? For instance, do they have to ratify the budget? What role does the faculty play in setting salary levels or in determining the allocation of raises?

Most survey work has shown that faculty authority, when it is determinative, is confined to academic issues. If the faculty role extends

beyond decisions about curricula and admissions standards, then faculty could be said to be more powerful on a campus. One question of particular interest concerns whether public and private institutions have distinct approaches to governance. If private and public universities, for instance, make clearly different choices in one policy area, this may be because of clear differences in the governing institutions they employ and the way they distribute powers to all stakeholders, especially the faculty.

Summary

A number of stakeholders need to be considered beyond the boards, the administrators, and the faculty bodies. Included in this are students, parents, taxpayers, elected officials, and the general public. The means by which their voices get expressed in governance matters are also crucial to governance scholarship. Within state institutions this may be through the state governance structure such as a coordinating board. It may also come through the voice of the legislature and governor in the budget process or over legislation affecting higher education.

The great unknown, at this point, however, regards whether board and administrative control is likely to be associated with reduced levels of expenditure and greater expectations placed on faculty for teaching and service. If boards fulfill their mission of monitoring a public trust and if administrators feel they represent the board in their work, then when greater levels of control rests in their hands, we should expect to find slower expenditure increases and greater demands for service and teaching placed on faculty (Ehrenberg, 2000).

However, as the governance work from the corporate sector makes clear, giving large amounts of power to the board is not enough to ensure that the corporation represents the shareholders interests in its actions. If directors and managers collude to direct the corporation in pursuit of their own interests, and if managers and board members are networked through cozy arrangements and relationships, shareholder interests can very much fall by the wayside, even when power is centralized.

Hence, beyond centralization and high levels of administrative and board control, we should also look for evidence about the board and the administration's selection processes, independence, and perspectives. Some of these aspects will be a function of personality and identification among board members and administrators and become subject to more sociological analyses of culture and social structure, as discussed below. But if selection mechanisms and other structural aspects indicate

that board composition is designed to reflect particular interests, then organizational behavior can be as much a function of structural processes as social processes outside of the organization.

Selection mechanisms are crucial because we cannot always assume that administrators, faculty, and boards have opposed interests that uniformly run in the same direction on all campuses. Identification with a particular group is not always a simple matter of revealing one's professional position in the organization. In fact, in higher education, having power is not always the same thing as pursuing one's interests or as pursuing interests opposed to other groups. The case of administrators makes this especially plain. The role of identity and of social structures such as values and belief systems becomes the subject to which we next turn.

HOW TO STUDY THE EFFECTS OF THE SOFT INSTITUTIONS OF NORMS AND CULTURE: WHAT TO LOOK FOR

Variation in the investments of authority and distributions of voice and power among campuses are predicted to be one source of variation in campus-based outcomes. The model I present here also suggests that the social expectations of the parties may be crucial as well. Colleges and universities are embedded in broader social webs that, to paraphrase Weber, spin their own versions of reality for institutional participants (Weber, 1947).

Kaplan (2002a,b) found that the presence of a college or university president with a liberal arts background in academia is associated with an increase in the per-student spending at the school. This finding is relatively unsurprising if we expect that such individuals bring with them into their role as executive a whole host of values and beliefs that they have assimilated during their professional career. Individuals who are socialized by the academic context tend to inculcate the costly values of excellence and expansion over other competing values. But note that this runs contrary to a possibly political-institutionalist view of the goals administrators should and will pursue, particularly in regard to decisions affecting operating costs. If he or she was interested in containing such costs to keep tuition affordable, then we might predict adversarial relations with faculty. Although many presidents do assume their position with the full intention of placing the institution's welfare beyond any previous allegiance, their definition of this welfare will emanate from a belief structure that has permeated them deeply as a result of previous affiliations and experiences.

Neo-institutional theory is therefore particularly apt as a tool of analysis in this realm since so much of individual behavior grows out of a broadly shared and occasionally disputed set of cultural norms and ideas in higher education. Institutional pressures are likely to shape two aspects of participant characteristics. First, the soft institutions examined here are comprised of constructs which shape one's identity in social space, and the intensity of these institutions is a function of the degree to which individuals identify with one group or with a set of particular beliefs about higher education and about the role and mission of a college or university. Second, such institutions gain their power by the sway they hold over individual action and by the degree to which particular beliefs are shared across group and organizational boundaries. Culture represents shared beliefs at an organizational level. When such beliefs are shared across a sector or segment of society, such ideas move from being particularities of the culture within an organization and become institutions that operate at a broader level, across an organizational field (Scott and Meyer, 1983; Zammuto and Krakower, 1991). The more boundaries that a belief transgresses, the more uniformly it is shared among members of a society, and the more determinative that institution is with respect to collective and individual action (Tolbert and Zucker, 1996).

Ownership forms may carve out different logics and expectations of appropriate behavior for campus members and these different understandings of acceptable behavior, alternative expectations of reasonable responses in the face of environmental pressures, and diverse views regarding who should wield authority could explain variations or uniformity in outcomes across campuses. But how could we measure such soft institutions? How could we evaluate their impacts? These are questions that neo-institutional theory has struggled to answer (Powell, 1991). For this reason, research on higher-education governance and the normative and cognitive expectations of institutional participants may yield important contributions that enrich the new institutional literature (Kaplan, 2002a,b).

Empirical Problems in New Institutional Theory

Research in this vein on higher-education governance would need to specify the soft institutional variables of relevance by taking into consideration the expressed beliefs of participants in the decision process. Thus far, unfortunately, beliefs are typically inferred and institutional forces presumed. Higher-education scholars who want to investigate the presence and influence of soft institutional forms will have to break new ground

in empirical approaches to neo-institutional theory. This kind of research specification has, until now, been rare.

Since institutional theory has been used to explain similarity of organizational forms and behaviors in certain social and economic sectors, the typical empirical tools of social science are at a disadvantage. Many statistical models are based on explaining variation by looking at variation among other variables. The degree of influence wielded by an institution is difficult to gauge because neo-institutional theory typically suggests the presence of homogeneity rather than variance within institutionalized fields. Since institutions are supposed to explain conformity rather than variance, the usual quantitative models have limited applicability. A measure of homogeneity that is invariant as an independent variable will not explain variation in a dependent variable (Mohr, 1982).

One empirical development in this area has been to specify institutional forces as the residual in an equation. When all the other variables cease to explain a behavioral outcome, it is said to be institutionalized. The limits of this approach are best seen in Tolbert and Zucker's (1983) study of the adoption of civil service practices. These analysts argued that, because the measures that rationalist theories posit for the adoption of civil service reforms in the 19th century failed to explain the phenomenon, institutional forces must be the answer. Unfortunately, this reasoning reduces institutional effects to the residual in regression and inverts the social scientist's paradigm: the inability to reject the null hypothesis is held up as evidence of institutional action.

A more typical empirical approach has been to correlate an organization's adoption of a form or practice with a variable measuring the proportion of organizations employing a particular policy or strategy. This is argued to reveal the degree to which the adoption reflects institutional pressures. As the proportion of adopters goes up, the practice is said to be more and more institutionalized. Hence, most of this empirical work has been limited to the evolution and adoption of practices or forms that are viewed as institutions within a field (see Burns and Wholey, 1993; D'Aunno, Sutton, and Price, 1991; Leblecici *et al.*, 1991; Mezias, 1990; Palmer, Jennings, and Zhou, 1993). Organizational changes can be recorded, and we have tools such as event history or survivor models to analyze such changes.

But utilizing prior adoptions as a measure of institutionalization is to use action to explain action (Green, 2001). Rather, actor beliefs should be tied to their actions (Weber, 1947). Limiting our measure of institutionalization to the proportion of prior adoptions minimizes the broad scope of institutional theory's explanatory power. Institutional theory is largely

a theory about how beliefs shape actions. Indicators like prior adoption infer a thought process and intent from an observed action. If we are to take seriously Weber's challenge that social theory must explain how beliefs have shaped action, then we must find better ways to link cognitions to behavior (Green, 2001).

Another approach has been to assume the institutionalization of a belief. For instance, the inclusion of ownership variables by themselves is presumed to provide a test of institutional theory since different ownership forms are presumed to exist in different institutional settings (Kraatz and Zajac, 1993). In another study, Kraatz and Zajac raise questions about institutional theory by demonstrating the pervasive spread of business programs among small liberal arts colleges (Kraatz and Zajac, 1996). But they essentially assume that liberal arts beliefs held institutional status in the field. Unless we know how widespread and deep such beliefs are, unless we have evidence of their official sanction, and until we can demonstrate that such beliefs are taken for granted, making claims about their degree of institutionalization will remain problematic.

Since institutional action is essentially cognitive, it is difficult to peer into the minds of participants in an organizational field and examine why they take the actions they take. Rather than positing that isomorphism of organizational form and action exists across the higher-education sector, we should seek to establish that different kinds of higher-education institutions are characterized by homogeneity of distinct belief systems and that these appear to be correlated with the distinctions we observe in their general behavior. Ownership effects among public and private institutions, for instance, can be attributed to two sets of beliefs and expectations about how an institution should and will respond to particular developments in its environment. Textual content analysis probably affords the best means of establishing whether taken-for-grantedness has driven particular behaviors but has seen limited application in this area (for exceptions see Tolbert and Zucker, 1983; Green, 2001). By surveying attitudes and establishing the existence of institutionalized sets of expectations, we can then study their correlative properties.

This subsection puts forward two solutions grounded in neo-institutional theory to suggest innovative empirical approaches to evaluating the role soft institutions can play in outcomes. First, the empirical emphasis on homogeneity that dominates much of current neo-institutional research is far narrower than institutional theorists have intended (Scott, 1995). Instead, different sets of institutions can exist side by side but impel different imperatives. Identifying the institutional realms which dominate actors' conceptualizations of appropriateness is a primary challenge.

Second, consensus among participants in a single organization may mean that individuals within socialized fields may choose not to identify closely with their group but instead with some higher ideal that cuts across groups. For instance, faculty might share more in common with administrators and board members of their campus than they do with faculty at other schools. Various analytic techniques, such as multilevel modeling, can then facilitate an assessment of different (and possibly conflicting) institutionalized belief systems within higher education.

Identity and Institutional Realms

An alternative approach to the focus on homogeneity and isomorphism suggests that institutional systems are not all aligned in the same direction (Scott, 1987).¹⁶ Such an approach implies that organizational fields can be segmented. Different organizational forms can exist side by side within a field, yet still operate under different institutional regimes. Institutions of higher education can all share the institutional forms of departmental organization, principles of academic freedom, or other practices. But the participants in private and public institutions may have different expectations regarding governance and decision making, depending on whether their organizations are private or public.

Neo-Institutional theory emphasizes that organizations may operate under a logic of appropriateness rather than a logic of rationality (Brint and Karabel, 1991; DiMaggio and Powell, 1991). Hence, different senses of appropriateness may be constructed within one field. In this sense, an organization's ownership form or Carnegie Classification may signal what actions are possible to participants. It may construct a field of expectations. Should structures, rules, and resources hold little power in explaining variance in resource allocation patterns, shared cognitions within ownership types emerge as more important considerations.

The degree to which administrative decisions benefit different parties may result from the degree to which they identify or assimilate an ethic that the institution exists to serve either the students, the public, or knowledge generation. Hence, administrators' goals may not match the predicates of a rationalist model of intra-organizational competition. A logic of appropriateness within a field niche would explain why two institutions with different loci of power, one at the faculty level and the other at the administrative level, could both manifest outcomes that reflect faculty values. In one institution, the faculty might dominate the

¹⁶ See Brunsson (1989) and D'Aunno, Sutton and Price (1991) for examples.

decision making and their interests could be predominant. In the other institution, administrators might have a good deal of power but might share faculty values. Administrators may have been drawn from the ranks of faculty. The school's funding base may depend upon faculty efforts to secure research dollars or to maintain the prestige of the school and keep alumni donations flowing. If alumni or the public have the view that the university exists to advance the interests of the faculty and the faculty's interests in advancing knowledge, the board can pursue such an ethic, even to the detriment of parsimony and affordability. In other words, decisions can reflect faculty interests and preferences regardless of where the power lies because of the institutional values shared across the organization.

To identify whether such mechanisms are at work and result in varied outcomes, we need to collect data at the institutional level on which logics and ethics characterize the organization. We need to ask questions about the sentiments and ideas people hold about governance. To explain outcome variation within the sector, we would want to connect particular outcomes to different kinds of institutional expectations on the part of participants. To date, such research has not been pursued within the institutional-theoretic tradition.

Colleges and universities can be grouped and categorized on the basis of a variety of organizational features, creating fields in which individuals share expectations and tolerances for organizational behaviors that are different from those of the other portions of the field. Some campuses focus on research, others on practical training, and others on teaching of the liberal arts. Some schools strongly identify with the centuries-old Scottish and German traditions of academia, while others see their campus in a more practical or vocational light. Rather than upholding the institution as an ivory tower apart from society, they see it as open to and integrated with the community that surrounds them. A typology or framework of institutional types may allow us to correlate particular kinds of decisions on the basis of participants' understandings about the kinds of decisions that are appropriate in particular circumstances.

This suggests that we may be able to trace differences in campus outcomes to different organizational cultures and frames that shape how organizational participants interpret the mission of their school and their loyalties. The individuals who populate a public university, for instance, may share an understanding that the state and its citizens are the ultimate stakeholders which in turn shapes their participation in policy debates and their role in academic governance. At a private institution, the lack of an ultimate stakeholder may allow faculty and others to preserve a more faculty-oriented view of appropriate action. Private colleges and

universities, for instance, may be more likely to exhibit faculty-centered norms and cultures and to pursue faculty interests, holding other factors constant, than public institutions. We might observe such beliefs in practices or decisions about appointments or professional policy, finding that public institutions are less disposed to support traditional academic values. We might observe that organizational members share a similar sense of where authority over particular decisions should lie, with members of public universities finding it appropriate for administrators to wield power for the public good and members of private institutions feeling that the institution operates for faculty interests.

The institutional approach can be consistent with rationalist approaches if each group's professional identity is dominant over other identities. The soft institutions associated with these identities then might trump other allegiances and impel members of the groups to pursue a course that benefits their fellow members. Identities, however, can exist on multiple levels. Concurrent with a narrowly drawn professional identity can be an individual's identity within a nation, a community, or a familial group. The way these identities fit together and manifest themselves in individual and group behavior depends on the social structure surrounding the organization and the way it organizes member identities, establishes boundaries and expectations, and sets up a hierarchy of identification. Identity then, does not just structure action but emerges from the structure and the actions of others—of the society that surrounds the individual (Giddens, 1984). The degree to which identification and expectations are shared across individuals and particularly within an organization dictates how organizational differences can emerge and also suggests that parties within an institution of higher education may share with each other as much as they share with others in their profession.

Taken together, decisions on the appointment of chief executives, on salary, promotion and personnel policy, and on strategic direction tell much about an institution. In particular, they help to situate the institution along a fault line in higher education among those who press for strict adherence to academic values and traditions and those who act as proponents of modern management techniques and the importation of business-like practices. By examining how a college or university decides such matters, we can gain a picture of the school's commitment to each of these two visions of higher education. Since a marker of institutional pressure is the pervasiveness of beliefs and homogeneity of perspectives, an organization with a high level of institutionalization in beliefs should demonstrate a shared commitment to one or another dominant idea in the field of higher education.

Another area where we might observe the influence of different norms and how they affect organizational action is professional recruitment. One way to enhance institutional prestige is to improve faculty quality by attracting well-regarded scholars. However, it is sometimes necessary to pay these individuals more than other department members and this can engender organizational problems. Schools can address these by redressing pay imbalances, but this becomes an expensive proposition if attracting a faculty member at a higher salary forces wage increases across the board to reduce salary dispersion. Some schools will therefore forsake such recruitment efforts, others will allow salaries to rise across the board, and others will decide to tolerate inequalities in pay. The professional ethic that dominates a campus may determine whether a school decides to forego such recruitment, or to increase salaries for all.

Different institutional realms can dominate different campuses. The challenge for a neo-institutionalist conducting empirical research in academic governance is to find a way to identify and measure the kinds of institutional logics that are present in the field of higher education. One approach is to indirectly infer logics through the use of proxies—for instance, the background of a president or the university's institutional advancement strategy. Another approach is to ask members of the campus community for their estimate of the institutional values that predominate in decision making (see Zammuto and Krakower, 1991).

Probing organizational goals may also reveal the cognitive and normative frames that guide decision making. These goals may cross professional boundaries, resulting in coalescence around organizational objectives rather than around the objectives that might be suggested by one's own background or professional identity. In such cases, faculty and administrators may see things more similarly than would faculty at different institutions. Hence, an institutional norm might emerge for particular policies at a particular class of school that transcends the kinds of professional norms one might import from training or service at another institution. However, such circumstances will pit an individual's professional identity against his or her organizational identity. In such circumstances, competing institutional frames may vie for support. Whether individuals identify with their professional values or their organizational commitment, then, might become a question of the degree to which organizational culture taps into different institutional sets that exist in society. In the case of higher education, there is likely to be a set of institutions surrounding the academic profession and shaping the belief systems of faculty. However, a set of institutions surrounding how particular types of colleges or schools should be run may also exist. Faculty identification with a framework that

legitimizes certain managerial practices may overwhelm personal loyalties to professional norms concerning faculty prerogatives. So a second challenge for neo-institutionalist empirical research is to assess the degree to which one institutional logic or another pervades a campus or remains subject to campus dispute.

Consensus and Institutional Action

The possibility of multiple identities competing for the loyalties of members of the academy underscores the need to distinguish among the differing concepts of power, authority, and consensus. Power and authority are not always the same in an organization. Power is the ability to influence events, while authority can be defined as the opportunities that exist for an individual to express influence under a legal framework or set of rules. Pfeffer (1981) states that power represents the ability to use political capital to get what one wants. Authority can be defined as the power to get what one wants without expending political capital. Because authority is the legitimate exercise of power, it is less depleting of political capital (Pfeffer, 1981). This distinction echoes Arrow's distinction between personal authority and impersonal authority in organizational settings (Arrow, 1974). Under this formulation, the key structures of agency theory, ownership and governance, represent impersonal power. They exist regardless of the individual who holds the position in the organization. Power from possessing control over marginal resource flows, the source emphasized in resource-dependence theory, represents a form of personal authority.¹⁷

Arrow (1974) argues that the opposite of authority or impersonal power within organizations is consensus. Authority coerces action from others, while consensus represents a harmonized blend of shared perspectives that result in collective cooperation toward a common purpose. Consensus exists when all participants share a sense of what is appropriate. Consensus represents an aligning of interests and information. Consensus is difficult to achieve but when it operates it is superior to any expression of authority (Arrow, 1974). Not only do participants agree on a policy, but also they can anticipate what will be agreed upon by the organization. Regardless of who heads the organization, we expect it to pursue the same strategy. In the United States, it is understood that bonuses consisting of stock options will comprise most of the compensation package for executives. Overturning this expectation in executive compensation

¹⁷ Weber might have called this kind of personal power “*charismatic authority*” (Weber, 1946[0]).

will require both legal and social change. Consensus can operate outside of any power directly applied by one individual or a group pursuing self-interest in a conscious manner. Of course, consensus is rarely untouched by the social fabric's tendency to reflect the power interests of groups within society or social systems (Perrow, 1986). Such significant shared consciousness, what Giddens called *practical consciousness* (Giddens, 1984), is likely to reflect distributions of power within the society. But the consensus acts outside of any actor's agency.

Consensus then, can explain organizational action, but it implies a uniformity and homogeneity of conduct. How does it explain variation among the outcomes or decisions of organizations within the same organizational field? Taking the example of resource allocation in higher education, the pattern of allocation that we observe may reflect certain realities woven into the social fabric. Different subsectors within a field may generate different identities, but the degree of consensus around such an identity within an organization from a particular sub sector might vary. Different situations may awaken different identities. One might imagine three campuses: one with high levels of faculty authority and a faculty dominated ethic, another with lower levels of faculty authority but a faculty dominated ethic, and a third with low levels of faculty power and contention over the appropriate organizational ethic. The outcomes for each campus can be a function of authority allocations and the degree of campus consensus about the organization's goals and mission.

The soft institutions of interest here gain their power by the breadth of their social scope and the degree to which they penetrate organizational barriers. When such institutional sets come into conflict with each other, organizational consensus is likely to be a function of the degree to which individuals of different professional identities align under the same set of soft institutions. For instance, at a wealthy, elite school such as Harvard, the university is insulated from market pressures and this autonomy may allow faculty, administrators, and others to coalesce around the goals for the institution set by faculty. A high level of consensus that the institution's prestige is the main goal can emerge. A set of institutions oriented toward the advancement of knowledge and supportive of faculty can pervade this setting. Likewise, at a school facing particular economic challenges or at a public institution with a strong service or teaching culture, faculty and other groups may identify with public service or market-oriented goals. In such cases, regardless of where power lies in decision making, consensus around decisions that are taken for the benefit of the school but perhaps at the expense of a group such as the faculty can also emerge. These two competing visions of campus goals would be more than just matters of

culture if they are broadly shared among particular classes of colleges and universities such as private universities and public comprehensives.

Consensus on campus, however, is unlikely to emerge if professional identities overpower any organizational-specific set of goals and circumstances. We might then observe two groups of schools. In one set, various kinds of consensus around campus goals, appropriate behavior, and organizational orientation may emerge. In the first group, authority may prove less important than institutional values. In the second set of schools, no consensus may emerge among the participants and instead conflict can exist. In this last group, power and authority allocations might be the determinative factors shaping the decisions that get made and who benefits from the policies chosen. In other words, convergence around a set of *soft* institutions may mitigate the influence of *hard* institutions that award raw power to stakeholders.

How would a scholar try to separate instances where a collective consensus renders structure and authority allocations irrelevant from instances where consensus is absent and the vestment of power shapes the decisions reached? A measure from multilevel research can be used to gauge the degree of within-group agreement. The measure r_{wg} is a common means in the organizational literature for assessing the degree to which the responses provided by members of one group are more similar than responses provided by chance. “The r_{wg} is calculated by comparing the observed group variance to an expected random variance” (Bliese, 2001, p. 351).¹⁸ A study of academic governance could seek the views of a variety of members from different stakeholder groups to measure the degree of consensus on campus regarding how to cope with particular issues that face the school. Multilevel models, then, can assess the extent to which the answer of respondents from the same campus are more similar to each other than those of respondents of the same professional class across different campuses. Such models tell us if faculty on one campus

¹⁸The r_{wg} represents the agreement among respondents from the same group and is calculated for specific variables. For instance, if a survey asks respondents to characterize the organizational culture among a variety of styles, the r_{wg} would compare the variance among the responses of individuals on one campus to the expected random variance—the variance among responses we would observe if individuals responded to the question randomly. The main methodological problem with the r_{wg} revolves around the problem of calculating the expected random variance. One option is to use the uniform distribution and assume that the likelihood of any one response is equal to the likelihood of another. This presents certain problems if there is bias in the response range from which individuals are likely to select. Few individuals, for instance, tend to select from the ends of a distribution of response options. Random group resampling represents one (more complicated and sophisticated) response to this problem from multilevel research practitioners (see Bliese and Halverson, 2002, for a full exposition of the technique).

are more likely to answer in the way other stakeholders on campus answered than in the way faculty on other campuses responded.

CONCLUSION

In this chapter, I have argued that, although a large body of scholarship exists on the organization and governance of higher education, institutional approaches may afford a unique purchase on the question of why governance, structure, and organization matter in the context of organizational-level outcomes in higher education. In staking this claim, I have appealed to two streams of literature that commonly are grouped under the banner of “new institutionalism.” The first, political institutionalism, argues that hard institutions such as rules, procedures, and the distribution of authority are likely to shape the nature and the range of organizational outcomes by influencing how different stakeholders affect decisions. The second, the neo-institutionalism of organizational theory, suggests that soft institutions such as cognitive frameworks, mental maps, and group norms are also likely to explain outcomes by defining what is viewed as appropriate or within organizational norms on a particular campus.

Although each approach places the emphasis on different aspects of the governance process (and adherents to each theory often think of the other as an intellectual rival), there are several reasons to think that the two approaches provide complementary rather than competing frameworks (Cornell and Kalt, 1995). First, both of the perspectives focus their attention on the ways in which first-order sets of decisions and circumstances shape second-order decision processes and policy outcomes. Rather than study the gamesmanship of academic governance, both groups of new institutionalists agree that the game can only be understood when the rules by which players conduct themselves in social settings are articulated and their influence described.

Second, political institutionalism and the new institutionalism in organization theory concern themselves with very different conceptions of *institution*. Hence, one might be tempted to see this divergence as a point of conflict that empirical evidence may resolve. Indeed, it may be that further research in academic governance and other fields suggests that one of the approaches, either the focus on rules and procedure or the concern with norms and cultural understandings, may emerge as a superior explanation for organizational performance or collective behavior. But it may also be that the two different sets of institutions interact in complex ways so that the two theoretical approaches complement each other. Structural rules

and authority allocations may be less significant in the context of highly socialized environments where soft institutions dominate the behavior of all. Strongly socialized organizational contexts that are governed by an institutionalized notion of appropriateness may render rules and power allocations irrelevant. The same types of decisions would result regardless of where power lay. But if the organizational context is the scene of some dispute about the appropriate institutional logic, if contention over policy marks decision making, then the allocations of power may better explain why the university or college did what it did. The challenge for scholars now is to unpack these possibilities in the context of higher-education institutions. In other words, this chapter provides some new ways of thinking about governance variables that might explain organizational decision making.

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6. TO USE OR NOT TO USE THEORY: IS THAT THE QUESTION?

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Many kinds of thinking and heuristics have come to be called theory. But why should they be entitled to this guise? It is like wanting to call a pig a cat. A cat certainly is a more elegant animal than a pig, but it is no reason to call one's pig a cat.

(Thomas, 1997, p. 2)

“Theory” is one of the most commonly used terms in academic research. Faculty extol the value of theory, critics rail against it as a constraint, and practitioners often believe it is useless. Students attempt to learn theories as undergraduates, and graduate students create and apply them. Authors of research texts, journal articles, and books all refer to their theoretical underpinnings and assert their work to be of superior quality because of this foundation. Professionals refer to their own theories of “how things really work.”

Given the common usage and significance of theories, one would expect a clear understanding of the term “to exist.” However, theory is one of the most misunderstood concepts both inside and outside the academy (see Thomas, 1997 for a detailed account of the way theory is misunderstood). Scholars tend to be familiar with the specific theories they use in their own research. Yet, rarely do they think about the purpose, definition, or meaning of theory itself, especially in fields such as education that lack well-defined theoretical traditions to undergird the work (Lagemann and Shulman, 1999). This deficiency in scholarly understanding becomes apparent in selective moments, such as when a challenging student implores a faculty member to explain why theory is so important to research, or when a student presents an alternative definition of theory to the faculty member's view. At these moments, faculty often begin to question whether they really understand what they are professing. The student's definition

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also makes sense, so what is going on? But these interruptions into our underlying assumptions are infrequent; so scholars can often continue for long intervals without recognizing that they lack a basic understanding of a primary concept of academic work.

Remedying this problem is not easy. A quick review of the theory literature would confuse any scholar, even the experienced academic. First, as Thomas (1997) notes, most texts begin with a list of vastly different definitions for theory, including: a hunch, the opposite of practice, an evolving explanation, a practical theory or reflective practice, a hypothesis, a model or heuristic, a clearly developed argument that has evolved under the pressure of rigorous critique, or an interrelated set of propositions or empirical connections between concepts, to name a few. These vastly different definitions and descriptions beg the question, what really is theory? Since some of the descriptions contradict one another, readers often become confused. Also, the reader will find that the term theory is often used when the author is talking about a related concept, such as a theoretical framework, a theoretical hypothesis, theorizing, or theoretical models, all of which mean something slightly different than theory. Each is a distinctive term, but they are often lumped together under the definition of theory, which only creates more confusion for the reader. People also commonly refer to the levels of theory (meta, grand, middle, etc.) and use different levels interchangeably. For example, in discussing a metatheory (such as critical theory) an author might describe racial identity theory in the same sentence and use the term theory for both (Bailey, 1994; Carr, 1995; Thomas, 1997). This problem becomes even more severe in educational research where theory is rarely defined and where findings from studies are commonly called theory, even when they share none of the properties of theory as traditionally defined in most disciplines (Thomas, 1997). Furthermore, educational research has been critiqued for lacking robust theory development and for poor or inappropriate use of theory within any research paradigm (e.g., interpretive or positivist) (Kezar and Eckel, 2000; Lagemann and Shulman, 1999). Whether these critiques are valid or not, being sure that a field is developing rigorous norms of inquiry is important and should be revisited from time to time. Many of the concerns with the quality of educational research might be addressed by more careful attention to, and a deeper understanding of, theory.

In this chapter, I hope to help both experienced and emerging scholars in higher education better understand the confusing landscape of theory. One of the first areas I would like to clarify is the area of defining theory. I propose to move beyond the simple definitions that are offered in many education texts to a new understanding of theory as a social

and institutional construction whose meaning changes over time and has always been contested. Theory is a very simple concept that can be found with an elegant definition in several texts, but it is also highly complex in use and has evolved historically. Second, I want to move beyond the polarized debate of theory as inherently helpful/good or constraining/bad. I will present both the values and the constraints of theory within education. I will not argue for a particular definition of theory (scientific or interpretive, for example), another common discussion in the literature. Instead, I will present various definitions of theory and will argue that a scholar should develop his or her own position on how he or she plans to define and use theory. Careful consideration of the definition and use of theory might improve the quality of scholarship in higher education. This consideration involves decisions on a host of important issues that will be outlined in the chapter, such as whether theory is universal or context dependent, value laden or neutral, or a guide for action or a predictive system. Whether people are creating, critiquing, or testing theories, it is important to make conscious choices about what theory means in their work and to be explicit about their assumptions so that their work can be judged appropriately for quality. In addition, failure to be explicit can result in scholars holding contradictory assumptions that can weaken their work. However, this is not to say that research that does not strive to create or use theory is not useful or of quality, but if one is working to develop or use theory then the process of development or use should be rigorous.

In this chapter, I also want to review and address some of the criticisms of theory that are important and persuasive. Various critics advocate for abandoning theory based on its affiliation with positivism, which constrains the meaning of theory and is posited to exact a toll on researchers, making their work less creative and less insightful (Feyerabend, 1988; Foucault, 1980; Thomas, 1997). Yet, the notion of theory has been around for hundreds of years and has been part of academic and public discourse before positivism, which represents only one way of thinking about theory. I would like to place this recent critique of theory within a broader historical context than most critics have considered. Other scholars argue that theory has lost its meaning because the term has been expanded in recent years to include so many different concepts. Confusion, loss of meaning, and constraint on the imagination of researchers are among the many reasons given for why theory is no longer useful to inquiry. By providing historical context and examining why theory has been meaningful to people over time—as a guide for action and as an understanding of received wisdom—I recommend that theory remains a useful element of scholarly work. Theory will be most effective if scholars become familiar

with the debates surrounding the ways in which theory has constrained inquiry, such as when it has been used uncritically or when researchers have not openly examined contrary evidence. I argue for a middle ground in which theory is used as a contingent set of ideas to guide action and future research. Coupled with a very healthy dose of critique and skepticism, this approach offers a balance between what has made theory meaningful and what has produced problems.

The argument I make is similar to that of Thomas Kuhn (2000) who revolutionized our understanding of theory by reviewing the history of science to demonstrate that most major discoveries have occurred during breakdowns of what is called “normal science,” in other words, when scientists have worked outside received knowledge and wisdom. Kuhn’s work underpins many of the current critiques of theory since he demonstrated that theory historically tends to constrain science. Yet, Kuhn does not see theory as useless; he has recently begun to use the term *evolutionary theory*. Because theory has long been associated with a sense of valid or certain knowledge, contrary evidence was not given as much credence. Kuhn hopes that by qualifying theory as evolutionary and by opening it to change, the benefit of theory (which he also demonstrates in his review of science) can be maintained and its problems can be tempered. In *Decolonizing Methodology*, Smith (1999) makes a similar argument for maintaining theory, even though it has presented some problems:

Theory enables us to make assumptions and predictions about the world in which we live. Theory enables us to deal with contradictions and uncertainties. Perhaps more significantly, it gives us space to plan, to strategize, and to take greater control over our resistances. The language of theory can also be used as a way of organizing and determining action. (p. 38)

Smith’s remarks come as part of a consideration of the way traditional social science theory has been used to oppress marginalized groups. Despite this highly problematic use of theory, Smith still sees value in theory for marginalized groups as a way to organize their resistance toward Western countries that have previously oppressed them. I, too, believe that theory, stripped of some of the problematic assumptions, can serve a valuable role in research and life.

This chapter will proceed as follows. I first provide some common ground by offering a few definitions of theory and other terms used within these definitions and review some common characteristics of theories such as type or level of theory. Next, I present how the term theory has changed over time and that it has always been contested. In particular, I focus on

the scientific definition of theory that was developed under the influence of positivism, empiricism, and rationalism and on some of the immediate critiques launched by those with different perspectives on theory, such as C.W. Mills. In the next section, I present the three main alternatives to scientific views of theory (interpretive, critical, and participatory) that have emerged in the last 40 years, since these are the predominant competing views of theory at this time. I also compare these three traditions to the scientific/positivist definition of theory. I then briefly review the way that theory has been used within the field of higher education to demonstrate that the same struggles within other disciplines are often more extreme within the field of education. After presenting competing definitions of theory, I describe another trend—predominantly within postmodernism, but also prevalent in the history of science and philosophy—a movement to abandon theory. In this section, I review critiques of the use of theory within scholarly inquiry.

The latter portion of the chapter moves from the conceptual level to the practical level, examining why theory might be useful to the practice of inquiry. I review a set of questions for scholars to ask themselves related to defining and using theory within their work to ensure that they are conducting quality scholarship. The chapter ends by considering some issues scholars will likely face, such as the commensurability of different definitions of theory, as they determine how theory will be used in their own work. This section problematizes the use of theory by offering questions that have no immediate answers, but are important for scholars to consider, and that represent areas for future writing and thought. I hope that some individuals reading this chapter will take up the task of continuing my examination of how theory can be used meaningfully within inquiry.

A glossary appears at the end of the chapter for readers unfamiliar with various terms. I should note that I will not be discussing methodology in any detail in this chapter. Denzin and Lincoln (2000) provide a very thorough review of different conceptions of methodology in *The Handbook of Qualitative Research*. I will briefly remark on how different views of theory relate to different ways to approach research or methodology. However, given that so much detailed work has already been conducted related to methodology, the focus will remain on the notion of theory. In addition, I will not engage the debate on whether research that is not theory driven is useful (Lynham, 2000). This debate has a long history within many disciplines and fields (see Lynham, 2000 or Bailey, 1994). Instead, I am examining the value of theory in its many forms and interpretations.

WHAT THEORY IS AND ITS RELATED TERMS

Often when we ask what a so-and-so is, we expect a clear and definite answer. If, for example, someone asks me what a rational number is, I may give the simple and precise answer that a rational number is the ratio of two integers. The kind of question I want to discuss does not fit this pattern. Theory is not like rational numbers. To the question what is theory, there is no simple and precise answer.

(Suppes, 2000, p. 161)

Despite Suppes' suggestion that such an approach is difficult and problematic, I first offer some simple definitions of theory to begin a discussion and dialogue that will become more complicated in subsequent sections of the chapter. I present some commonly accepted definitions of theory and then describe how these common definitions are often confused with related terms. Next, I proceed to demonstrate how notions of theory have also evolved over time and how they have come to be defined distinctly within different research paradigms. At a generic level, theory has been defined as (Bailey, 1994; Schwandt, 1997; Sklar, 2000a; Weick, 1989)

1. a set of interrelated constructs, definitions, and propositions that present a systematic view of a phenomenon;
2. a coherent description or explanation of observed or experienced phenomenon;
3. an organizing tool for facts, laws, concepts, constructs, and principles into a meaningful and manageable form; and
4. a unified, systematic explanation of a diverse range of social phenomena.

WHAT THEORY IS—REPRESENTATIONS OF KNOWLEDGE

These four different definitions share some common characteristics. Theory refers to a specific outcome of the research process that has a certain character/nature—it is a *noun*. Theory, in essence, is a form that knowledge takes; it is a representation of knowledge. In the physical/natural sciences, theory has become the prevailing form in which knowledge is represented. In the last century as the physical/natural sciences became the dominant way of thinking about science, this notion of theory became the dominant representation of knowledge across all disciplines and academic areas of study (Skidmore, 1975). Yet, theory is just one of many ways to represent knowledge. For example, a novel or

poem might also be a representation of knowledge (this is not to say that a novel cannot be a theory as well).

Among the many alternative views of theory that I present in this chapter, there are two aspects of theory that are present in almost all schools of thought. First, theory is about putting concepts together—ordering, systematizing, and adding coherence. Much scientific work boasts to be theory but is missing this element of coherence. As one author puts it, “Much of the official sociological theory consists in fact of concepts and their definitions; it provides the dictionary of a language that possesses no sentence” (Weick, 1989, p. 516). Theory is the sentence. Second, theory is about relationships, connections, and interdependencies. The ordering and systematizing happens around complex phenomena that have more than one part or component. Many people often mistake a concept for a theory. A concept is a single notion; when various concepts are interrelated, they may become a theory. Theory focuses on ordering and relating. Explanation or description is common, but it does not cut across all definitions of theory, rather only the simple and elegant definitions of theory. The term theory is used in many other ways that cause confusion. To address this confusion I will review three main areas in this section: theorizing, levels of theory, and types of theory.

RELATED TERMS—THEORIZING

Theory is an important component of the research process. *Theorizing* is a term often used interchangeably with theory, but it is distinctive. Theorizing is a *verb* that refers to the process of logical reasoning for the purposes of scientific inquiry, whether it be developing a hypothesis, interpreting data, or developing implications from the data. Essentially, theorizing refers to applying forms of abstract thinking and logic within the inquiry process. Theorizing emerges throughout the research process and is related to various terms used in inquiry. For example, theoretical hypotheses that are generally developed at the beginning of a study are created through logical deduction (a form of theorizing) or through the review of existing research or knowledge on a given topic. These are the concepts that will be tested through inquiry. Theoretical concepts are parts of a theory that may be reviewed as one is developing hypotheses or interpreting data. Theoretical concepts are the building blocks of theory.

As one collects and reviews data, literature refers to being *theoretically sensitive* and generating *theoretical memos* (Strauss, 1987). Theoretical sensitivity implies thinking about the data collected in theoretical terms and trying to make logical abstractions or implications from it, while

theoretical memo refers to the questions, hypotheses, and summary of codes written by researchers for the development of theory from data (this is often a process conducted within grounded theory). *Theoretical models* are also an outcome of the research process, but they represent an even narrower outcome than a theory. A model is a particular way to view or represent a theory. For example, I might have a theoretical model for student retention. The model refers to the drawing or picture of the theory. Another term commonly confused with theory is *theoretical framework*. A theoretical framework is the bringing together of different sets of concepts or theories to study a phenomenon. The relationships among these concepts have not been tested; thus, it is not yet a theory, but a step toward building one. The research literature also refers to *theory building* (closely related to the notion of a theoretical framework), which is the process in which such representations are generated, tested, and refined. Scholars examine areas where there may be a set of concepts, but the concepts have not been integrated into a theory. We still do not know how these concepts are linked or how they affect a phenomenon. In the process of theory building, relationships between concepts are tested, which contribute to the development of theory. However, some authors see the product and process aspects of theory more dynamically. These are just a few samples, but they help the reader see how theory is used as a verb or an adjective; in other words, how logic and abstract thinking can be brought into different parts of the research process.

Kaplan (1964) presents theorizing in a slightly different manner and suggests that theory is simultaneously a product and a process. Rather than separating the terms theory and theorizing, he refers to *theories in process*. He describes a dialectic relationship between theory—as the final product—informing the process of theorizing, and the theorizing process resulting in the final product. Whether they see theory as product and process simultaneously or separately, most authors agree that there is a strong relationship between theory as product and theory as process. Within the interpretive paradigm, which will be described later in the chapter, theorizing is used more commonly than the term theory because the product and process are seen in dynamic relationship.

CHARACTERISTICS OF THEORY—LEVELS

Another source of confusion surrounding the meaning of the term theory is that there are various levels of theories (Bailey, 1994). People refer to the levels of theory (meta, grand, middle, local, etc.) and often use different levels interchangeably. For example, in discussing a metatheory

(such as interpretivism) one might use the term theory, but then refer to a psychological theory of attribution in the same sentence also using the term theory. Metatheories usually refer to what is called a *paradigm* such as positivism, interpretivism, critical theory, or participatory theory. People use the terms paradigm and theory interchangeably, perhaps because both are systematic frameworks for understanding social phenomena. Paradigm, however, refers to fundamental beliefs and assumptions, and most scholars would not use that definition to refer to theory, which for many people refers to verified knowledge or at least tested. Therefore, paradigm is a better word to use, rather than metatheory.

Grand theory, on the other hand, is considered a unifying theory that helps us understand a vast area of study (such as anthropology) or one that encompasses large-scale topics such as society or organizations (Skinner, 1985). An example of a grand theory is systems theory. Systems theory attempts to explain broadly how organizations and society work, and it can be applied within all societies and organizations, irrespective of context (Bailey, 1994). Theories developed by Marx, Comte, Spencer, and Weber have been identified as grand theories. The goal of grand theory in the human sciences is to develop a systematic theory of the nature of man and society (Malinowski, 1944). There has been a recent reemergence of grand theory with the use of Marxism, Psychoanalysis, the Frankfurt school, Critical race theory, Feminist theories, and others (Skinner, 1985).

Next, there are middle-level theories that explain a broader topic area across a range of settings and contexts (Sklar, 2000a). Theories of the middle range provide operational links between grand theories and daily events, for example, violence in organizations. Low-level theories, in turn, explain a specific phenomenon or case at hand such as voting behavior in a certain region or bullying in urban schools. Middle-level and local-level theories differ in both generalizability among contexts (organizations being a very broad context vs. schools being a very specific organization) and specificity of the phenomenon (violence being a very broad phenomenon vs. bullying in schools being a very specific form of violence). Urban schools are a specific context and organization. Local-level and middle-range theories are noted as more immediately relevant to the work of practitioners. Sometimes these theories are described hierarchically; local-level theories may build up to middle-level theories, which might eventually be expanded to grand theories. Other times the various levels of theory are seen as more fluid, with grand theories inspiring middle-level theories or not seen as governing middle-level theories (Weick, 1989). Grand, middle level, and local level are usually referred to

in the positivist paradigm (to be explained more in the next section). In general, higher-level theories tend to explain a greater range of cases and to be more generic and generalizable to more situations and phenomena. I should also note that the distinctions among grand, middle-level, and local-level theories are debated and are not easily made. Some authors refer to the notion of level as an explanatory shell to describe how far a theory explains whether it is at the micro level or the macro level, using the example of micro- and macroeconomics (Kaplan, 1964).

The following table attempts to capture the distinctions among these three levels of theory.

CHARACTERISTICS OF THEORY—TYPES

Another source of confusion is that scholars have begun to categorize or subdivide theories into different types, not just levels (although levels represent different types of theories as well). For example, Strauss (1987) makes a distinction between substantive theory (or empirical areas of inquiry), such as patient care, professional education, and industrial relations, and formal theory developed for a formal or conceptual area of inquiry, such as stigma, formal organizations, and socialization. This may be an artificial distinction, as everything is conceptual—patient care, for example, is a social construct. Why is patient care or professional education seen as less socially constructed than socialization? But those who follow grounded theory use these distinctions among types of theory, noting that both exist at different levels of generality (substantive theories can be middle-level theories, for example). The difference in developing formal theory as opposed to substantive theory lies in the theoretical

Table 6.1: Levels of Theory

Level of Theory	Universal or Grand	Middle Level	Local Level
Examples	A broad phenomenon like culture or nature of man or learning; across all contexts and cases	A more focused phenomenon like critical thinking; relates to many different cases or contexts	Specific phenomenon such as critical thinking among first year students in college; relates to a specific case or context such as liberal arts colleges or a specific institution such as University of Washington

sampling procedures that are followed in many substantive areas to develop formal theory, and the open coding and sensitizing that is done at distinctly more abstract levels than with substantive theorizing.

Types of theories are often qualified by adjectives that are related to different properties or characteristics. Theories that predict are often referred to as *causal theories*, whereas *axiomatic theories* refer to theories derived from deduction and axiomatic statements, not from data or instances. Another type of theory commonly referred to is *concatenated theory*, for which component laws become a network of relations and form an identifiable pattern. These are often theories that consist of tendency statements, but that only make sense in their joint application together. Examples of this type of theory are the Big Bang theory of cosmology, the theory of evolution, and the psychoanalytic theory (Kaplan, 1964). The component laws work together to develop a more complex picture. A hierarchical theory is one whose component laws are deductions from basic principles. The law is explained by illustrating that it is a logical consequence of the principles. The term *hierarchy* is useful for understanding this type of theory because as the researcher deductively moves through the logic of the principles we are left with fewer laws and ultimately a more general law. The theory of relativity and Keynesian economics are examples of hierarchical theories (Kaplan, 1964). Others have suggested a difference between theories in which the elements emerge from empirical evidence (principle theories) and those that are developed from hypotheses or conceptual evidence (constructive theories) (Kaplan, 1964).

Our understanding of the term theory becomes confused when scholars use it to speak about aspects of the inquiry process leading up to theory—paradigms and levels and/or types of theory. Yet, some people are merely misusing the term altogether. For example, when people call a hunch or hypothesis a theory, they are using the term incorrectly (Sklar, 2000b). Others have identified very different ways that theory as a representation of knowledge has been defined. Thomas reviews a host of research books and texts and determines that theory is used in four specific ways: theory as the opposite of practice, theory as explanation, theory as hypothesis, and scientific theory. He goes on to explain that although these various references can be found, the most common usage is simply theory as critical thinking, or as being thoughtful in the process of conducting research or in ordering and systematizing thinking. Given all this confusion, some have argued that theory is no longer a meaningful term (Thomas, 1997). Rather than abandon it too offhandedly, as some recent critics have done, I would like to dig deeper into the confusion over the term theory.

CONTEXT AND HISTORY OF THEORY: ANTIQUITY, THE ENLIGHTENMENT, SCIENTIFIC THEORY, AND BEYOND

As I have noted in the beginning of the chapter, I argue that the term theory is a social construct and that this term has changed in meaning over time according to the various social and cultural influences that have become institutionalized. Kuhn (1962) and Foucault (1972) provide important reviews of theory as an institutional construction that developed among particular individuals who were situated within the academy. Foucault, in particular, documents how dominant social and cultural influences affected views of science and inquiry and became embedded within academic institutions, even though these institutions often saw themselves as independent of cultural influences. For example, a preference for theories that catalog patterns is part of the Western language and approach to cognition, and not inherently a part of knowledge construction. As cultural and social norms change, views of inquiry change. Because culture is fluid, many competing views of inquiry such as the nature of reality and epistemology (and theory) have emerged over time and are likely to continue to evolve. As a result, no single definition of theory is accurate since people have fundamentally different views about the nature of research. The confusion over the meaning of theory, noted in the introduction, is largely a result of these different fundamental assumptions about knowledge production that have rapidly expanded in the last 40 years, as scholars have critiqued the scientific definition of theory. The definition of theory has changed over time, partly as a result of changes in science/inquiry, as new paradigms have emerged, and as social influences have affected the academy. For notions of theory to be assessed, they must be articulated and compared. Because they have remained mostly implicit, this important work of analyzing competing notions of theory has not occurred among individual scholars. A table at the end of the section on alternatives to scientific theory provides an overview of the way theory has been defined differently based on research assumptions or paradigms. I encourage the reader to review this table to orient himself or herself as he or she read the next two sections.

HISTORICAL ORIGIN OF THEORY

Many of the ideas about theory, like other aspects of research (such as epistemology and ontology), can be traced back to antiquity (Sklar, 2000b). The term theory has a long tradition in academic research.

Aristotle referred to *theoría* as the activity of contemplation of *necessary objects* that are universal concepts. Theory is an investigation concerned with explanations and contemplation; it focuses on *why* questions, and the answers to these questions do not necessarily have practical consequences. The separation of theory and action/practice also goes back to the time of Aristotle, as he considered praxis that required knowledge of contingent objects and was related to action and human affairs. In opposition to theory, praxis focused on practical knowledge related to more specific situations, such as what might be the best approach to math with fourth graders at a particular school. Theory focused on broader knowledge that transcended particular situations or even topics. Theory was not concerned with action or affairs of human beings and was distinctive from praxis. During the enlightenment, two dominant views of theory development emerged. Following the Aristotelian tradition, deductive views of knowledge encouraged a logical derivation of theories from assumed relationships and laws (Sayer, 1992; Willer, 1967). Scholars developed logic statements that were then tested through experimentation (Sklar, 2000a,b). A second perspective was an inductive view of knowledge, for which scholars recommended that theory be derived from observed patterns in nature (Sklar, 2000a,b,d). There has never been absolute agreement on the value of theory and there have always been skeptics of theory, as it often focused on and used the language of the unobservable. During the enlightenment, however, there was more support for theory than during the early part of the 20th century when many skeptics of theory emerged. For example, empiricists during this period claimed that all knowledge should be explained through observation of the natural world and discouraged the use of theory, which they associated with interpretation and logic, rather than verified patterns.¹

SCIENTIFIC VIEWS OF THEORY

The definition of theory that became dominant in the 20th century was developed under the influence of several schools of thought, including positivism, empiricism, and rationalism, and has become known as the “scientific view” of theory (this paradigm is often referred to generically in the literature as *positivism*). To characterize this as a uniform definition is inaccurate, as different scholars within the positivist or rationalist schools

¹ Please note that although I review scientific views of theory first this does not mean that I agree with this definition of theory or I am advocating for it. In fact, I am arguing for understanding theory through multiple paradigms.

had varying views of theory. However, I will broadly sketch some of the trends in the literature, with the caveat that there is no *one* scientific view of theory. The scientific view of theory was first used in the hard sciences and then was exported to the life sciences, social sciences, and even humanities. The definition of theory that emerged was related to the goals of positivist science, which was to develop a universal, value-free, valid form of knowledge that could predict future outcomes and provide society with tools to control the world. Some examples of scientific definitions of theory include

1. a set of variables that explain a phenomenon;
2. a set of interrelated constructs, definitions, and propositions that present a systematic view of a phenomenon;
3. a logically interrelated series of propositions that are used to specify the empirically meaningful relationships among a set of concepts (Weick, 1989).

Scientific views share many of the characteristics of the generic definitions of theory offered earlier (Barnes, 1974). For example, they focus on a systematic approach to explanation and involve a comprehensive and detailed explanation. They focus on relationships and are made up of component parts. However, these simple definitions of theory already hint at some differences. Additionally, when people actually develop a theory, there are a set of practices around theory development that add additional meaning to what the theory really is. In other words, we can only understand a theory when we see the practices undertaken to develop it. Many other assumptions are important to describe and reflect an understanding of scientific theory “in use.”

Let me review some of the main characteristics of scientific theory that make it distinctive, and which are usually only identified when one examines researchers using scientific theory. Scientific theory is about explanation. While description is interesting for positivists, what sets theory apart is its ability to explain (Barnes, 1974; Sklar, 2000a,b). When researchers refer to explanation they are usually referring to cause. Why did something occur? This is why cause and effect relationships are so central to many lines of inquiry within various disciplines (Braithwaite, 1953).

One of the main characteristics of scientific theory is that it is universal or grand (reflecting the Aristotelian roots of *theoria*). For many scientists, a theory by definition explains a phenomenon in all instances and circumstances (Colodny, 1977). Under positivism, an explanation

of a phenomenon that does not hold under certain circumstances would not fit the definition of theory. The goal of a theory is to identify laws—regularities and patterns—that can predict behavior and are usually causal relationships (Sklar, 2000a,b). Since the goal is to be universal, theory strives to be free of context or contingencies. Prediction became an important part of theory within the scientific tradition. To explain was important, but to predict future activity was even better (Colodny, 1977). Not all explanations yielded predictions about future behavior or activities over time; greater value was placed on predictive theories.

The notion of building blocks is also critical, insofar as a theory is made up of component parts such as variables, constructs, concepts, and/or propositions (Sklar, 2000a,b). In scientific views of theory the component parts tend to be defined more narrowly as variables, concepts, or propositions (Colodny, 1977). Generic definitions usually allow for a broader understanding of the component parts of a theory such as conditions or experiences. Concepts are critical within theories; they are an abstract, symbolic representation of an idea or phenomenon. Concepts are the building blocks of theory, and their careful definition and operationalization is key, particularly as a way to measure the concept. The focus on making concepts measurable is characteristic of scientific views of theory (Sklar, 2000a,b).

Positivist views of theory are based on observation and experimentation; theoretical concepts should emerge from observation with minimum interpretation (Achinstein, 1983; Colodny, 1977; Grandy, 1973). Rationalists, in contrast, saw value in abstract contemplation and did not work exclusively with observation or data for theory development. Human perspective, they believed, was distorted and usually did not perceive the higher, universal laws, so the senses were to be regarded with suspicion (Grandy, 1973). Theory also reflects a sense that there is an objective, knowable reality, but one that might be beyond existing facts. For example, Aristotle and, subsequently, the rationalists believed that a superstructure of reality exists that may not be perceivable by the human senses (e.g., the discovery of the atom). This is where the notion of fact versus theory became dominant. Empiricists and positivists, for their part, distrusted the idea of a superstructure and sought theory in terms of phenomena that could be accessed by the senses. Unobservable phenomena were considered theoretical (and this was not necessarily a positive attribution), but things that could be observed became knowable facts (Sklar, 2000a,b). Positivists believed that interpretation and human thought created bias. Human values and emotions clouded one's ability to identify

universal knowledge or theory. Scholars strove to derive “value-free” theory.

Verification is a key aspect of scientific theory (Grandy, 1973). Theory is something that has been held to tests and has demonstrated that ordered relationships are not chance or accidental. Scientific theory initially held the standard of “truth” for validation/verification (Achinstein, 1983; Colodny, 1977). However, critics attacked this definition of theory, as it often takes years (often hundreds) for knowledge to be found to be incorrect. Popper (1959) altered the definition of theory to suggest that information in a theory is contingent until falsified and verification is seen as probabilistic.

Positivists and rationalists believe that a finite set of laws describe the natural and human world. The goal of theory building is the process of reduction and unity, such that fewer theories and fewer concepts within a theory are better (McGrath, 2002; Sklar, 2000c,f). Theory refinement is seen as an important task, focusing on providing more evidence and greater validity. Theory development is extremely important but seen as less commonplace than theory refinement. The nature of a positivist theory is to be succinct and precise. Thus, the complexity found in other versions of theory is seen as a deficit and as representing poorly executed research (Sklar, 2000a,b).

The process of developing theory is usually a deductive process of creating hypotheses from existing reviews of the literature, called the logico-deductive approach (Pomper and Shaw, 2002; Shavelson, 1988; Smith and Glass, 1987). The researcher reviews existing literature and theory. Hypotheses are derived by selecting specific variables as likely causes of some designated effect since the focus is on prediction and cause and effect relationships. Hypotheses are tentative statements that extend prior theory in a new direction, propose an explanation of a perceived gap in existing knowledge, or set up a test of competing possible explanations for relationships. Data are collected with instruments, and procedures are designed according to the hypotheses that have been formulated. Variables, categories, and hypotheses remain constant; the researcher does not consider new information while conducting the study. Changing procedures may introduce bias, interpretation, and perspective. The result of these processes is either the verification or falsification of the hypotheses, with theory building occurring through the incremental revision and extension of the original theory. The hypotheses (which have not been falsified) are then extended into proposition statements. As one changes the definition of theory, the entire process of research also changes, as we will see when alternative definitions of theory are presented.

Thus, determining how one defines theory is critical to the conduct of inquiry.

CHALLENGES TO SCIENTIFIC VIEWS OF THEORY

Even as the scientific view was emerging in the social sciences, certain philosophers and thinkers were skeptical of whether the notion of theory defined through the positivist paradigm would be helpful for advancing knowledge and understanding. Dewey (1916), for example, notes his concern about the effect of excluding values and personal experience from theory development. He advocates for specific inquiries into many different types of context and for the development of local knowledge rather than abstract, general theories. Theories should not drive the development of research; rather practical problems should be the focus. In short, Dewey criticizes the focus on universalism, the separation of theory and practice/experience, and the value-free notion. Kuhn (1962) demonstrates (through a review of the history of science) that science does not progress in an orderly fashion, building on prior knowledge, but that instead real breakthroughs come from ideas that exist outside our given understanding. Thus, received knowledge came to be seen as constraining rather than producing breakthroughs, as was previously believed. Kuhn also demonstrates that our access to facts is always filtered through our existing paradigms or frameworks of understanding. Based on Kuhn's work, the positivist notion of theoretical progression or theory building and refinement came under scrutiny, as did the ability to provide value- or interpretation-free theory. Kaplan (1964) also challenges the application of the positivist paradigm as the only logic for conducting research in the behavioral sciences. He argues that in many instances positivism can be used to develop sound theory and studies, but that other forms of logic can be used and need to be used for the study of certain human phenomena and issues. Kaplan critiques the overemphasis on empiricism and the decline of conceptualization, symbolism, imagination, and intuition in the conduct of inquiry and in theory development. In relation to theory, he uses the philosophy of instrumentalism rather than realism as the logic to guide theory. He also suggests that a theory may differ from observation and empirical evidence, which are often the focus of positivism. C.W. Mills developed one of the best-known critiques of the scientific notion of theory; a more detailed review of his concerns will be used to better understand the challenges that were launched against the scientific views of theory. His ideas also demonstrate the degree to which the notion of theory has been constantly debated and contested.

The Quintessential Critic

C.W. Mills (1959) argues that generalizable, universal theory is generally not a possible outcome of the social sciences, given that knowledge changes as conditions change and the social world is constantly changing (see table at the end of this section for a summary of the critiques of scientific theory). People are historically and culturally located, and there are constraints on how universal any theory can be. He notes that

The basic cause of grand theory is the initial choice of a level of thinking so general that its practitioners cannot logically get down to observation. They never, as grand theorists, get down from the higher generalities to problems in their historical and structural contexts and as a result do not create a useful form or representation of knowledge. (p. 33)

He uses social systems theory as an example of abstraction that becomes devoid of any real meaning. Grand theory, which is considered the best form of knowledge within positivism, has no examples or data to support or connect the data to. Grand theory loses touch with human problems and situations, and the explanations and theory developed have little, if any, use for guiding social life. For Mills, theory must have some practical utility. He also suggests that unifying and grand theories are an attempt to limit thought and to prevent the pluralization of knowledge. If all ideas must conform or relate to grand theories to be considered important or relevant, then ideas are constrained.

Mills saw an opposing trend within the social sciences that was just as problematic—abstracted empiricism. Abstracted empiricism focuses solely on the collection of data surrounding definable human problems. Theory is not used to derive hypotheses; research is not grounded in any previous research or conception of man or society, but instead the research is problem focused. Mills argues that the lack of any theory is as problematic as the narrow use of grand theory. He worries that the scientific method of positivism constrains the imagination of researchers. He notes that “social science of any kind is advanced by ideas; it is only disciplined by fact” (1959, p. 71).

Mills argues that through a bureaucratization of the research process abstracted empiricism has been used strategically by the state to develop “ideological and value-free” knowledge that will serve the capitalist state. Theory becomes problem focused and free of conceptions that might challenge capitalist leanings. Mills sees an alignment of prediction with the capitalist state and with other states that want to control people and

social processes. Theory building that is focused on prediction and control without regard for how this knowledge might be used is reckless and unethical. As examples, Mills cites the many atrocities of science such as atomic weapons. He sees this move toward prediction and control in theory as one that does not serve the public good. Such theory narrowly serves the interests of researchers who are rewarded by the state with grants and rewards for research that only further serves the controlling interests of those in power. In Mills' words, "what is at issue seems plain, if social science is not autonomous, it cannot be a publicly responsible enterprise" (1959, p. 106). He implores scientists to examine the ethics of a value-free belief in theory, as defined by positivists and empiricists.

Mills questions the ability of inquiry and theory to be value free and neutral, drawing a necessary connection between choice of topics researched and key conceptions used to formulate problems. He criticizes academic jargon for trying to create an illusion of being value free; for example: "the question is whether he/she faces this condition (values in research) and makes up his or her own mind, or whether he or she conceals it from himself/herself and from others and drifts morally" (1959, p. 79). Mills argues for a different definition of theory and a different approach to science. Researchers should be upfront about values and should carefully reflect on their value system; they should be interdisciplinary, as theory is not bound by scientific disciplines; they should operate between history and biography—a level between grand theory and abstract empiricism; they should be historically grounded and not assume to transcend history; they should not serve power interests exclusively; they should engage order and disorder (complexity); and they should be imaginative, not rigidly methodological or procedural. Therefore, Mills wrestles with many notions related to theory—whether it is universal, practical or useful, value free, concept rich or depleted, complex or simple, or inductively or deductively derived, and whether it should be interdisciplinary. He attempts to establish a different position from the leading social science position of theory, which is dominated by the scientific view of theory. But Mills is not alone; many scholars have wrestled with these questions over the years in an attempt to develop their own definitions of theory. This is the task I believe the readers of this chapter should also undertake.

Recent Critiques of Scientific Views of the Theory

Over the last 40 years, in particular, the definition of theory has changed and expanded (some say it has been confused). Scholars have

advanced two major critiques of theory, one from an interpretive tradition and one from a postmodern approach (although others exist). These two schools of thought argue that the definition of theory used within the physical sciences and within the positivist paradigm is not adequate or appropriate for the study of human behavior. The value-free, universal, objective, context-free view of theory has been shown to be problematic. As I have described, scholars such as Dewey (1916) and Husserl (1936) challenged scientific views of theory early on. In more recent years, a stream of arguments against scientific theory followed these initial criticisms. Goffman (1959), Kuhn (1962), Sartre (1963), Kaplan (1964), Gadamer (1975), and Feyerabend (1988) demonstrate that tacit knowledge, prior theory, and metaphysical commitments influence the process of observation and that it is impossible to develop facts; everything is interpreted. This position challenges the priority of observation over theory in terms of representing knowledge. These critiques collectively argue that

1. theory is not always best if more general and universal, and middle-level and local-level theories are valuable;
2. context is significant for understanding phenomena;
3. people do not often operate in law-like or regular ways and the physical sciences notion of laws within social science theory is problematic;
4. causation, prediction, and control are not the most important focus for theory; instead theory should also focus on understanding meaning, experience, empowerment, and challenge existing causes or situations;
5. theory can be based on abstract thinking or involvement in practice, not just on observation and experimentation;
6. new standards of verification are advanced (utility, plausibility, or trustworthiness) and verification is not conceptualized as the overriding goal. There is a move away from the notion of testing and measurement as the primary standard for verification. Theory can be more tentative and still be valuable;
7. unification or theory reduction is no longer a central goal; instead, proliferation of theories is seen as productive and useful;
8. theories are not best if succinct and elegant—complexity of theory is embraced;
9. values are considered important for theory development, not a hindrance;

10. the emergence of new theory is seen as more commonplace, rather than just refinement of theory or gradual accretion, as is the norm in positivist views of theory;
11. an objective and distant stance is not best for developing theory; one can derive theory by having a relationship and personal interaction with the phenomena.

These are some of the ways that the definition of theory has been changed or altered that will be described in the chapter. As a result of these collective criticisms, positivists have modestly altered the way they define theory. For example, postpositivists now acknowledge the role that values and *a priori* assumptions play in inquiry (Haack, 2003).

SOCIALLY CONSTRUCTING THEORY

HISTORICAL AND CULTURAL INFLUENCES ON THEORY

It should also be noted that the United States has long been skeptical about theory and has had a decidedly pragmatic orientation (Dewey, 1916; Guest, 1995). Theory is a privileged form of knowledge. Because the United States was a colony and had to fight for its freedom, some argue that it maintains an undercurrent of suspicion of elitism and hierarchy, especially by the professional class (Guest, 1995). While theoretical research is clearly conducted, many academics have had a hard time gaining credibility if their research is not seen to have practical merit (Barrow, 1991). Thus, the social construction of theory has also been affected by the historical-cultural context. While there has long been an antitheoretical bias in American higher education, European countries have strongly favored and supported the development of theory. Many non-Western societies (e.g., Japan, China, Brazil, and Chile) have also been open to theory, for reasons based on historical development (Storkerson, 2003). Therefore, many of the critiques of theory described below have emerged within the United States or have swiftly found an audience in this country. Many developing countries also share this concern with privileging theory; for example, the participatory paradigm (described later) emerged in India and South America.

DISCIPLINARY INFLUENCES ON THEORY

Another way that theory has been socially constructed is within the realm of academic disciplines. The physical sciences, dominated by the

positivist paradigm, maintain a scientific view of theory. Each discipline within the social sciences has a unique history. Psychology, for example, has developed a notion of theory that closely matches grounded theory (described below), while economics has followed positivism in large measure. Sociology and anthropology, in contrast, have adopted a definition of theory from the interpretive paradigm. The physical science model of theory has not influenced the humanities as heavily. For example, within literature and history, theory generation has not been a goal or preoccupation (although this is not to say that theories are not developed in the humanities). Instead, knowledge is represented in the form of insights into human nature that generally are not represented in the form of theory (Eagleton, 1983). Theories, instead, are used to interpret. For example, grand theory, such as Freud or Marx, is often used to interpret literature and has attracted great interest in recent years (Eagleton, 1983). Over the years there has been resistance to theory in music, literature, and the arts, where knowledge is perceived to differ in form, nature, and character from the knowledge typically created within the sciences. Gadamer (1975) promotes the argument that a different type of knowledge is represented in the humanities than in the natural sciences in his book *Philosophical Hermeneutics*, a treatise that supported the humanities as a unique area of study where the scientific approach was not appropriate. Therefore, a scholar in the social sciences might encounter theory defined under any of the four paradigms (discussed next), but each field tends to be dominated by a particular view.

Certain disciplines have stronger norms regarding theory development. There has been significant debate about whether the social sciences and the humanities can develop theory as defined by positivism and whether this is an appropriate goal. Rabinow and Sullivan (1988) describe this struggle

As long as there has been a social science, the expectation has been that it would turn from its humanistic infancy to the maturity of hard science, thereby leaving behind its dependence on value, judgment, and individual insight. The drama of modern western man to be freed from his passions, his unconscious, his history, and his traditions through the liberating use of reason has been the deepest theme of contemporary social science thought. (p. 1)

Postmodernists and interpretivists have built a strong case to argue that the approach to theory in the physical sciences is neither an adequate nor a relevant approach. If the physical sciences' definition of theory is not adequate for the social sciences, then what is?

ALTERNATIVES TO SCIENTIFIC THEORY

Although scientific theory is the dominant approach, other definitions of theory have been asserted historically, and several alternative views of theory are prominent in the scholarly dialogue today. I review three well-articulated alternatives (interpretive, critical, and participatory theory), but the reader should understand that there are many other alternative views on theory that are not presented here. I have chosen these three major alternatives because they have been described by various scholars and represent substantial schools of thought (Denzin and Lincoln, 2000). They also share a common critique of the scientific theory that was outlined above in bullets 1 through 11. Other views of theory, represented by a few scholars, might also have value, and the reader is encouraged to seek them out. In addition, these are not monolithic definitions that are embraced by all scholars within these paradigms. As with scientific views of theory, individual scholars have developed unique interpretations that match their belief system.

INTERPRETIVE PARADIGM

Many different researchers have presented alternative views of theory from the interpretive paradigm. As early as the turn of the last century, phenomenologists, in particular, began to critique positivist views of inquiry and to suggest that there is no objective understanding of reality that can be discovered or codified into theory (Guest, 1995; Schwandt, 1997). Instead, knowledge takes the form of subjective experience and the goal of theory is to understand and appreciate a phenomenon, not to control or explain it (Llewelyn, 2003). Rather than focus on explanation, description is considered a valid form of theory and a legitimate goal of inquiry. The goal of theory building in the interpretive paradigm is to “generate descriptions, insights, and explanation of events so that the system of interpretations and meaning, and the structuring and organizing processes are revealed.” (Gioia and Pitre, 1990, p. 588) Also, local-level theories are seen as more reflective of insight and the appropriate level for theory building. In addition, given context’s importance for meaning, theories developed on an abstract level are viewed with suspicion and are not believed to be reflective of human behavior and experience.

Some interpretivists have suggested that the terms theorizing and *conceptual framing* are more meaningful, since the term theory has become too closely associated with positivist assumptions (Llewelyn, 2003;

Schwandt, 1997; Weick, 1989). Theorizing is seen as the way in which people make sense of the ambiguity and complexity of the world by imposing a degree of order and systematic analysis. Theories are resources that people draw upon to work out an opinion, to determine how to act in a situation, or to decide how to conduct themselves in a relationship (Llewelyn, 2003; Schwandt, 1997). Rather than mirroring the world or some objective reality, knowledge is seen as a map, a recipe, or an instruction manual to help people cope with events. Also, rather than describing theory, interpretivists use the term conceptual framework to distinguish from the notion of theory under positivism. The result is similar, though a group of concepts have been put together in an organized or systematic and related fashion.

Theory building within the interpretive tradition is developed through a unique process. Instead of stressing procedures and verification, interpretivists emphasize imagination, speculative thought, insight, information gathered from data, experience, and abstract thinking (Weick, 1989). Rigid rules are de-emphasized and conceptual development through speculation is seen as a valid approach. Speculative deductions that cannot be tested or verified are still seen as legitimate products of the theory-building process. Some theoretical statements, while impossible to test, might still be of value. Within the interpretive tradition validation is often not the ultimate test of theory. Interpretive scholars are wary of the linear and rigid logico-deductive process. They choose instead to proceed in a much more creative and nonlinear fashion for theory development (Kaplan, 1964; Weick, 1989). The metaphor here is the disciplined imagination as opposed to the positivist paradigm's image of the technician. Rather than develop hypotheses to be tested, the interpretive scholar develops a puzzle, problem, question, or anomaly that he or she will explore. Often this is done through interaction with practitioners or by drawing on experience. This is not to suggest that all interpretive scholars do not develop hypotheses or follow some of the techniques within the scientific method; however, they take a distinctive approach in that they utilize many of the principles described in this section (Kaplan, 1964). Again, values and personal insights are highly regarded in such theory development. Many interpretivists develop theory inductively—more from experience and data than from prior theory (Lynott and Birren, 1996; Schwandt, 1997). Some methodological approaches focus on induction, while others focus on deduction. But for interpretivists who stay close to experience, context and subjective understanding is critical, which many find is best accomplished through inductive processes.

In the interpretive paradigm, it should be noted that theory is not necessarily privileged as it is in the scientific paradigm and there are various representations of knowledge: (1) metaphor; (2) pairings and word contrasts; (3) concepts; and (4) stories or narratives. Metaphor acts as a framework for capturing experience and ordering it. Morgan describes how organizations can be seen as machines, organisms, cultures, or political systems, all of which help to shape and order how we think about these phenomena (Weick, 1989). Pairings and contrast words—such as object/subject, mind/body, and presence/absence—also help to provide meaning and can be used to represent a theory. Concepts such as socialization, culture, or ideology are another form of knowledge where the concept can be broken down into constructs and a system of meaning can be developed for a phenomenon. Stories can capture and describe various phenomena and ideas and yet maintain the complexity inherent in many social systems.

CRITICAL PARADIGM

Within the critical approach a theory is not adequate if it simply helps to explain or understand a phenomenon. Instead, the fundamental role of theory is to critique and to act as a guide for effecting change (Apple, 2001; Kincheleo and McLaren, 1994). Researchers within this paradigm believe, with C.W. Mills, that theory and science have become a mechanism to serve the interests of the elite by favoring explanations that favor the *status quo* and maintain the current social order. A well-developed theory would help uncover the structures, processes, and cultural artifacts that support domination by certain groups and would examine ways that oppressed social groups can become emancipated (Kincheleo and McLaren, 1994). Some researchers have commented that the goal of critical theory is quite different from that of traditional scientific theory, but that they share more similarities in terms of what the theory looks like than with the interpretive paradigm. For example, theory within the critical approach often takes the form of *grand theory*. As noted earlier, Marx and Habermas promote theories that try to explain human behavior on a grand scale. Social structures tend to operate in law-like, monolithic ways; therefore, the theories that emerge also take on a representation that suggests that the social world operates according to broad general principles. Lastly, critical theorists are concerned with *why* questions; merely describing reality, as many theorists do in the interpretive paradigm, is not considered true theory (Apple, 2001). Theory focuses on questions such as: Why do institutions disempower some groups and not

others? Why do white males have greater political power than women of color?

Yet, theory within the critical paradigm also differs from scientific theory in very significant ways. Not only is openness to values considered important in the critical paradigm, but also having an explicit political agenda is an expected part of the theory-making process (Kincheleo and McLaren, 1994). In fact, the metaphor of developing a political agenda would be an accurate representation of the theory-building process. An objective stance *vis-à-vis* the phenomena of study is neither required nor deemed desirable for developing theory (Kincheleo and McLaren, 1994; Lather, 1986). Theory comes from engagement with people and from a deep understanding of, and empathy for, their social conditions. Critical theorists rely less on existing theory and literature as they see it as representing the *status quo*. The scholar's goal is to build new theory and offer new perspectives on the world. Research questions do not take the form of hypotheses to be tested because hypotheses are generally based on prior thought; critical theory, in contrast, emerges from insight, experience, or data.

Unlike in other paradigms, theory development within the critical paradigm focuses on some very specific theoretical concerns, such as power relationships, domination, and emancipation (Apple, 2001). The theory-building approach within the critical approach is often criticized for lacking procedure. Within the scientific paradigm, in contrast, there is a very specific set of procedures—review literature, develop hypotheses, test hypotheses, and theorize from results. Similarly, within the grounded theory approach there are detailed steps to generate hypotheses from the data, field techniques for collecting data, data analysis guides, and theory-building approaches. However, researchers using a critical approach do not focus their efforts on developing procedures for critical analysis or for verification (Giroux, 1983; Kincheleo and McLaren, 1994). Instead, the insight that emerges from the theory represents more of a focus: does the theory actually appear to shed light on the phenomenon studied? The focus is placed on outcomes and action rather than on procedure. Like scholars from an interpretive perspective, critical researchers also embrace complexity in theory. Kincheleo and McLaren note

critical researchers respect the complexity of the social world. Humility in this context should not be self-deprecating, nor should it involve the silencing of the researcher's voice; research humility implies a sense of the unpredictability of the sociopolitical microcosm and capriciousness of the consequences of inquiry. (p. 151)

PARTICIPATORY PARADIGM

Another view of theory is participatory or action research. Lather (1986) describes the purpose of theory in the participatory paradigm in the following way: theory must illuminate the lived experience of progressive social groups; it must also be illuminated by their struggles (p. 262). By connecting to people and their problems and experiences, researchers in this tradition hope to produce guides for action. An interconnection of experience and theory is present in the participatory paradigm. In the scientific view of research, theory and practice are seen as polar opposite phenomena. However, in this research approach, theory and practice are seen as continuous and interrelated and are often referred to as praxis. As noted earlier, John Dewey questioned the separation of theory and practice. Habermas' *In Knowledge and Human Interests* and *Theory and Practice* (1971) argued that the social sciences must maintain an attachment to theory, but one that is grounded in practice and deeply connected to values.

The goal of theory development within this approach is to capture experiential knowledge and understanding (Argyris, Finn, and Schon, 1978; Balasubramaniam, 1987; Carr, 1995; Whyte, 1991). In opposition to the scientific paradigm that sees theory as something beyond the layperson's knowledge and developed by researchers through abstract deduction and testing of hypotheses, participatory researchers believe that everyday people have important theories (guides for working in the world) that should be captured in the research process (Carr, 1995). Theory is the capturing of people's practical knowledge about an orderly, systematic, and complex way of understanding and addressing an issue. People reflect on their experience, make observations, conduct experiments in the world, and develop notions and understandings about how things operate and how to act in the world (Argyris, Finn, and Schon, 1978). This conceptualization of theory challenges the notion that only researchers develop theory; it demonstrates the ways in which individuals develop complex formulations in their everyday life that can be equivalent to the theory developed by researchers. Theories can even be the implicit belief systems that people hold, an unconscious form of knowledge (Lynham, 2000; Weick, 1989).

In addition, theory should "encourage self-reflection and deeper understanding on the part of the persons being researched" (Lather, 1986, p. 266). Theory then develops an evocative power by resonating with people's concerns, fears, and aspirations and serves to energize and create change (Lather, 1986). Theory becomes an expression of politically progressive popular feelings and sentiments rather than an abstract framework that is not understandable to lay people.

One of the most detailed accounts of theory within the participatory paradigm is presented by Paolo Freire (Fals-Borda and Rahman, 1991).² He critiques the separation of learning/knowledge and experience, demonstrating that people learn when teaching is connected to experience and developing theories of the social world. In *Pedagogy of the Oppressed* (1970), Freire describes a teaching technique that develops theory through the generation of themes from a group discussion of the problems faced in the social world (concepts), group analysis, and drawing connections from themes (proposition statements) to determine how themes are interconnected in a systematic way. Theory is developed in dialogue with a community about the social world, not by experts who come into communities and use knowledge to create an order that serves their power interests. Theory construction tends to be collective, involving the community that is part of the research process. This method represents a deviation from most other paradigms or approaches (traditional inquiry is collective in the sense that a community of scholars reviews work—peer review—but this is different in that it includes the people that are typically the *subject* of the research in the research process).

The approach to theory construction and building in the participatory paradigm is quite different from other paradigms in that it involves a close connection with communities of practice—essentially, people working on a common issue, problem, or area (Gaventa, 1988). Urban educators would represent a community of practice. Research is conducted in collaboration with communities and each party is considered a coresearcher. In addition to focusing on experience and working *with* people, theory involves a solid value commitment, usually to work with disenfranchised groups (although this is more typical in participatory than in action research—both of which are traditions within the participatory paradigm) (Balasubramaniam, 1987).

Similar to the critical paradigm, criticizing existing systems, creating empowerment, and consciousness raising are important aspects of working with people to develop participatory theory (Brown, 1993). Theory may take the form of an insight by low-income persons about the way the social structures work to disempower them. This insight represents a theory about the social world. Theory development does not end with the insight, however; it also involves collective action based on the insights into the social world derived through theory. If the group determines that changes need to be made at a women's shelter for it to more appropriately meet the needs of clients, then the changes must be enacted as part of

²Freire is also considered to share assumptions of the critical paradigm.

the theory-building process. The adequacy of the theory (verification) is then determined by the outcome of the change process (Fals-Borda and Rahman, 1991). Is the social world better for the women at the shelter, for example? Change and action are considered integral parts of theory in the participatory paradigm.

The simplicity and rationality of scientific theory is seen as a false portrayal of reality, which can be complex and irreducible to certain laws or regularities. The various complex situations and interactions within the social world make elegant, simple theories unlikely. Since the social world is also dynamic and changing, theory is contingent upon these ongoing changes. Context is important for illuminating complexity; local- and middle-level theories are often favored for demonstrating social conditions that are important for truly developing understanding.

Because theory development within the participatory paradigm focuses on change, emancipation, and experience, theory is assumed to be value laden. Researchers are encouraged to discern their stance toward the topic of study and to conduct reflexive writing to keep their research open to the voices and experiences of those with whom they are conducting the research. By being aware of one's assumptions and biases, one can better avoid the hubris of being supposedly "neutral." Lastly, rigid methodological concerns and guidelines are not emphasized for theory development. Instead, it is acknowledged that people develop sophisticated theories without methodological designs or procedures.

Within education, the participatory paradigm is the most discussed alternative view of theory (Carr, 1995). Given that education is a professional field of study focused on the world of practice, many scholars argue that the participatory definition best fits the educational environment. Educators are also concerned with reforming and changing school systems, so the paradigm's orientation toward change is also embraced. The collective orientation and respect for practitioner knowledge is often met with support by professionals in education, who tend to ignore scientific educational research which they feel does not resonate with their experience.

The following table summarizes the differences described in the section above (borrowing from Denzin and Lincoln, 2000).

It is important not to use this table to make generalizations about approaches to theory building. Researchers within the critical or interpretive paradigm might vary slightly in their assumptions about what theory is and how it is best developed. However, using this table as a heuristic device the reader can begin to see some meaningful differences in the way theory is defined to facilitate his or her own judgment on the issues. A

Table 6.2: Differences in Theory Definitions, by Paradigm

	Scientific, Positivist Paradigm	Interpretive Paradigm	Critical Paradigm	Participatory Paradigm
Goals of theory development	To search for regularities and test to predict and control	To describe and explain in order to understand	To describe, critique, and create change	To develop guides for action and change
Theoretical concerns	Relationships, causation, and generalization	Social construction of reality, and interpretation	Social construction of reality, power, domination, and emancipation	Experience, and practical knowledge
Theory building approach	Refinement through causal analysis	Analysis of experience; imagination; abstract thinking	Critical analysis; abstract thinking	Work with communities of practice; involvement in practice
Levels of theory (universal/grand, middle level, and local level)	Universal theory is better	Middle and, particularly, local level is generally seen as better	Universal theory is generally better	All levels of theory are seen as equally important
Role of context within theory, laws and general principles	Theory strives to be context free; based on laws and general principles	Context is important to theory development; theories are context dependent; human behavior does not take the form of laws generally	Theory is often context free, but context is important for various theories; often focuses on general laws	Context is important to theory development; theories are context dependent; human behavior generally does not take the form of laws
Verification of theory	Critical to theory building	Alternative set of standards, but important for theory	Not as important for theory development	Whether change occurs, but not as important for theory development
Values and objectivity	Value-free and objective theory	Value-laden and subjective and relational stance	Value-laden sometimes, subjective and relational stance	Value-laden and subjective and relational stance

common characteristic across many of these alternatives is the “disempowering” of theory. Within the scientific tradition, theory is knowledge that is verified, context and value free, and, for the most part, considered beyond refutation. These various alternatives propose a definition of theory that is more contingent and open to refutation. Some researchers see these alternatives as a much-needed tempering of theory, making it simply one form of knowledge, rather than privileging it over all other forms of knowledge; others see it as the watering down of theory.

One approach to theory development—grounded theory—combines assumptions from several paradigms. It will be presented here to demonstrate how researchers can combine assumptions to develop other unique definitions of theory. In addition, this approach to theory development emerged as a more humanistic version of understanding about human activity. It tries to move away from the imposition of the hard sciences view of theory, and can be instructive to educators. Grounded theory maintains several assumptions from scientific approaches, including the empiricist view of theory, for example, which maintains that developing theory directly from data is a superior method. In addition, grounded theory is similar to scientific definitions of theory in the following ways: (1) it focuses on explanation; (2) it is made up of conceptual categories that tend to be measurable; (3) it refers to generalized relations between categories; (4) it is made up of propositional statements; (5) it focuses on causation; and (6) it is refined through causal analysis.

Yet, grounded theory differs from positivism in some of its assumptions about theory development. For example, local-level theorizing is embraced, context is seen as important to theory development, complex rather than simple theories are encouraged, and the process of conducting research is value laden. Researchers using grounded theory break with the scientific view of theory in claiming that theories are complex and irreducible to a few simple factors (described in the interpretive paradigm). They fear that earlier researchers ignored complexity in the human experience and artificially tried to impose order and simplicity on very complex phenomena. To avoid simplistic rendering of the data, the researcher is encouraged to develop a conceptually dense picture with many linkages among concepts. As Strauss (1987) notes: “It is necessary to do detailed, intensive, microscopic examination of the data in order to bring out the amazing complexity of what lies in, behind, and beyond those data.” (p. 10)

Grounded theory also differs from positivism in its understanding of research as a value-laden process (noted across critical, participatory, and interpretive paradigms). Researchers are encouraged to bring their

personal experience and insights to the research process. Similar to Dewey, who advocated the importance of experience for understanding and learning, Strauss (1987) argues for the value of experiential understanding for the research process and for theory development; he states that

experiential data are essential data, as we shall see, because they not only give added theoretical sensitivity but provide a wealth of provisional suggestions for making comparisons, finding variations, and sampling widely on theoretical grounds. Stet helps the researcher eventually to formulate a conceptually dense and carefully ordered theory. (p. 11)

Insights that researchers have from experience that are not necessarily grounded in the data are not ignored.

Grounded theorists also believe that the process of verification in positivism has limited the creation and generation of new theories that are important for understanding the social world (noted across critical, participatory, and interpretive paradigms). The focus on testing has blocked scientists from new concepts and ideas that might emerge from data. Glaser and Strauss (1967) note that data collected qualitatively can develop theory that is as sound as quantitative research. In the scientific paradigm, qualitative research was usually perceived as a way to develop hypotheses that might then be tested with quantitative methods. However, qualitative research methods for the most part were not considered valid to develop theory on their own since in most cases they do not develop generalizable knowledge on a larger scale (the importance of local-level theory is stressed in the interpretive paradigm).

Grounded theory also differs from positivist views of theory in its characterization of the work of developing theory as creating guidelines, not methodological rules (described earlier under the interpretive paradigm). Grounded theorists feel that the codification of methodology into such rigid approaches has impaired the development of complex theory that explains social life. Grounded theorists instead outline approaches for developing generative questions, coding data, approaches to analysis, and memoing techniques that will help researchers arrive at theory. Glaser and Strauss' two books—*The Discovery of Grounded Theory* (1967) and *Qualitative Analysis for Social Scientists* (1987)—detail an approach for developing theory from data (please see these texts for additional understanding). While many people consider grounded theory a positivist or scientific approach to theory development since it shares many of the assumptions of positivism, readers will also see that it shares several assumptions of interpretive and participatory paradigms.

Grounded theory is an example of the way a set of researchers made careful choices about their assumptions related to theory development and created a systematic approach to research.

THEORY WITHIN HIGHER EDUCATION: VARIOUS PARADIGMS OVER TIME

Having reviewed the various ways that theory has been defined and socially constructed within the academy over time, it might be helpful to examine this same issue specifically within higher education to identify how it has devolved and has been defined within the field.

SCIENTIFIC VIEWS OF THEORY

In higher education, researchers in the 1970s were heavily influenced by scientific views of theory and attempted to identify a core set of theories or a unifying theory to explain various phenomena such as resource allocation, student development, pedagogy, and administration (Buss, 1975; Williams, 1973). For example, one researcher identified six major concepts for which unifying theories should be developed: (1) outcomes or products of higher education institutions; (2) institutions or the structures that perform higher education activity; (3) goals, purposes, and objectives of higher education; (4) people or the individuals and groups involved in higher education; (5) activities or the characteristic, goal-seeking function of institutions of higher education; and (6) environments or the setting wherein institutions of higher education pursue their goals (Williams, 1973). The orientation in theory development is clearly within the positivist paradigm of theory—the focus is on prediction, rational approach, simplification of complex processes, and reduction of the enterprise to a finite set of processes for analysis. As in other fields and disciplines, the scientific definition of theory continues to be used among some researchers and in certain areas of study in higher education.

In the 1980s, Astin developed a theory of involvement that focused on the amount of student engagement in curricular, cocurricular, and extracurricular activities and determined the ways in which this engagement facilitated greater degrees of learning. More recently, in an effort to develop a theory of tuition for the higher education setting, Winston (2003) has suggested some unique economic concepts. He establishes how familiar economic analysis is inadequate for understanding higher education. In general, however, few theories have been derived in higher

education over the last 40 years. Most use of theory involves borrowing rather than development.

In the 1980s and 1990s, there was concern for whether unifying theories could be developed. When universal, unifying theories did not emerge, scholars began to borrow from other fields and disciplines, hoping this would provide legitimate, foundational knowledge for the field. The focus of research was on whether some of the better-established theories from other fields might serve as unifying theories in higher education. An example of this trend is the work of Chickering and Knefelkamp (1980), who borrow theories of adult development from psychology to understand nontraditional students within higher education. Earlier theories of student development could not explain the experience of adult students; Chickering and Knefelkamp saw the promise of examining theory developed from outside higher education. Another example is the adoption of Herzberg's theory of motivation to understand staff performance within the higher education settings, which had eluded earlier scholars (Gawel, 1997). Many of the theories that have been borrowed from other fields have enriched higher education and have given practitioners guides for action.

PARTICIPATORY, CRITICAL, AND INTERPRETIVE PARADIGMS

There has always been a countervailing trend of scholars who believe that higher education should focus more on a participatory definition of theory and not adopt the scientific paradigm. These scholars encourage faculty and administrators to become critical, reflective practitioners who conduct research on their own professional lives and act as agents of change (Duhamel, 1982; Van Lier, 1994; Zuber-Skerritt, 1992).

In addition, these scholars focus on the ways that researchers can partner with practitioners to create theories of practice that are meaningful and bring about change. Bensimon, Polkinghorne, Bauman, and Vallejo's (2004) work on the diversity scorecard is another recent example of the participatory definition of theory. They label their approach *the consumer as producer model*. Under this approach, teams of practitioners working with researchers examine data related to underrepresented students performance. The groups conduct research and develop solutions for improving the institutions capacity to help these students perform; the knowledge that emerges becomes theory that guides action. Over the past 40 years, regular discussions have taken place regarding the lack of congruence between theory and practice. Some argue that this incongruence

is inherent in the process since theory focuses on a reality that is beyond the reach of everyday perception (Birnbaum, 2000); others believe that the divide is a reflection of researcher bias and their lack of understanding of the issues that they are studying (Duhamel, 1982).

Once scholars in higher education became interested in the critical paradigm that applies Marxism and Feminism, they began using these theories to the higher education context. For example, Barrow (1991) uses a Neomarxist framework to examine the history of higher education institutions. His main premise is that the evolution of the system of higher education can best be understood if it is seen as part of the capitalist state. Changes within the state affected the progression of higher education as a system because higher education was dependent on external patronage for its livelihood. Tierney (1991a,b) uses critical theory to examine the importance of transformational leadership to the higher education setting, as well as to explore the way socialization processes in higher education have served to exclude faculty of color, gay and lesbian faculty, and low-income faculty. Lambert (1997) explores how feminist theory can be used to understand the assessment movement in higher education. She identifies an alignment between assessment's focus on making the implicit more explicit and the feminist goal of making male-oriented structures, processes, and cultures within society more explicit. In addition, Love and Love (1995) use constructivist pedagogy and liberation theory to critique the prevailing cognitive notions of learning in higher education that ignore social and emotional processes. The application of grand theories has helped to illuminate a variety of processes within higher education, from learning to assessment, faculty work, leadership, and the history of the enterprise.

Some researchers have also begun to adopt the interpretive paradigm. In the area of organizational theory and leadership, Neumann (1995) and Birnbaum (1992) demonstrate how the perception of followers (which had been ignored in earlier positivist research) is extremely important for understanding the phenomenon of leadership. Perceptions, context, and the interaction of followers and leaders impact views of effectiveness and success in leadership processes. Neumann and Birnbaum also demonstrate that effective leadership varies by institutional context and institutional culture. Their work challenges universal models of leadership (such as transformational leadership) by demonstrating how local-level and middle-level theories appear to more accurately provide guidance for practitioners. Similarly, researchers have begun to apply situated cognition theory to learning, which demonstrates the importance of context in the way people learn math. For example, while people might not understand a particular math principle when it is presented to them in the abstract,

if the information is presented in relation to an activity or problem that they face in their everyday life, such as grocery shopping, than they can execute the math problem.

Throughout the years, various scholars have raised concerns that no general theories of phenomena have emerged for the higher education setting. No universal theory of retention has been developed; instead, there are now over ten different models for different populations and institutional types (Berger and Braxton, 1998; Metz, 2002). In the organizational change literature, there are also over 20 different models or theories of change based on the type of change initiative, institutional context, scope of change, institutional culture, and other such conditions that affect what approach will work best (Cannon and Lonsdale, 1987; Kezar, 2001). As a result, many scholars have begun to examine alternatives to scientific theory for understanding and representing knowledge related to higher education phenomenon. In 1982, Conrad described the promise of grounded theory for higher education. Yet, even with these calls for new approaches, there has been almost no explicit discussion about the role of theory in research. For example, few scholars in higher education have critiqued the ability of scientific theory to explain social phenomena and processes in higher education; rather there have been calls to arms from scholars wondering why a unifying theory has not emerged. I believe greater engagement in the debates related to theory will help build stronger scholarship and will improve the knowledge developed in higher education; whether it appears as theory or in some other form. Given that higher education faces these difficult questions, it might help to review the arguments of scholars who believe that theory is not helpful for inquiry—a question that also must be considered.

ANYTHING GOES: CRITIQUES OF THEORY

Theory systematizes and tidies cognitive leaps; it cannot act as a vehicle for creativity (Thomas, 1997, p. 89)

While it is important to understand some of the alternatives to scientific theory, it is also necessary to review scholars who suggest that theory should not be a goal of the process of inquiry. Although these critiques come from scholars from very different traditions (who often disagree with each other on other issues), they have a common critique that theory constrains rather than enables inquiry. One of the primary critiques of the scientific view of theory was launched by philosophers of science who demonstrated the constraining effect of received knowledge

and who illustrated that theory tended to reinforce existing sets of practices (Mourad, 1997). For example, Kuhn (1962) and Feyerabend (1988) demonstrate (through a review of the history of science) that science does not progress in an orderly fashion, building on prior knowledge. Instead, important advancements come from ideas that exist outside our given understanding. Thus, received knowledge is seen as constraining breakthroughs rather than producing them, as was previously believed. Research advances are characterized as coming from creativity, insight, random interactions, the curious juxtaposition of events, and accidents. Einstein is often used as an example of this scenario. He did not follow established theories or traditions and focused instead on creativity. Similarly, Foucault (1972) demonstrates that theories reinforce prevailing social norms and forms of power, rather than particular “truths” or “knowledge” about the world. Theories operate more like stereotypes and provide traditional lenses for viewing the world, but do not necessarily produce insight.

The privileging of grand or universal theories of knowledge is also of particular concern. Postmodernists argue for the importance of fragmented, local, and specific knowledge. Conflict and contradiction among ideas is advanced, rather than building on existing knowledge and developing consensus. Feyerabend (1988), perhaps the most radical proponent of this perspective, believes that anarchy is the best approach to science and that the abandonment of all received knowledge retains the best possibility for advancing our understanding and for challenging the *status quo* of knowledge. His argument focuses on the fact that hypotheses are generally not developed counterinductively, which prevents certain directions from being explored. The consistency condition, which demands that new hypotheses agree with accepted theories, is unreasonable and works against progress. Also, the uniformity and reductionist emphasis in science prevents new theories and concepts from emerging. Feyerabend also notes that non-Western societies and earlier societies developed important knowledge to guide their social worlds that does not fit the narrow definition of scientific theory but was fully satisfactory for creating technology, navigation, and other innovations. Scientific theory is seen to be one form of knowledge among many, and one that is not necessarily more desirable than others.

Because theory defined under positivism is focused on universal rather than local knowledge, on value-free concepts, and on refinement rather than building revolutionary new ideas, it is perceived as inadequate. Rather than argue for a new or alternative definition of theory, such as those offered through the critical paradigm, postmodernism, and

the philosophy of science, some concerned scholars argue for the abandonment of the notion and use of theory altogether. In a recent article in the *Harvard Education Review*, Thomas (1997) argues that educational research has been severely constrained by the power of theory in the last century and that to profitably move forward we need to abandon theory. He notes

Theories are not simply the playthings of bored academics. Piaget's thinking has been responsible for many of the ideas in discovery learning, and, for instance, the idea that a child has to pass through stage x before proceeding to stage y. Some of these ideas have been helpful, but the power of the theory has meant that others—which, without legitimization and luster of theory, would not have made it to the light of day—have been wholly destructive. (p. 84)

He uses the cases of Piaget, Habermas, and Chomsky to show the danger of theory. In the last century, the notion of children advancing through prescribed stages was challenged in many studies, but because these ideas were outside the established view, this counterevidence was never brought forward (this includes both anomalies in his own research as well as other research studies developed by outside researchers). Thomas characterizes Piaget's work "as arising from a theory first view of the world. The theory is foremost and the experiment is ostensibly designed to support (rather than refute) the theory" (p. 84). He believes that in education theory is particularly problematic as it is creed-like and not open to refutation. Thomas also argues that education and the physical sciences are distinctive areas of inquiry and that theory has not proven to be capable of explaining phenomena in education and should be abandoned within this field of study.

Many of these critiques are most concerned with the practice of theory—the way it has become a totalizing tool that excludes other explanations or tramples the imagination and constrains thought by the sheer legitimacy given to the notion of theory as "verified" knowledge (although they are also troubled by positivists' definition of theory as value free or context free). The work of redefining a term that has not been helpful to the process of inquiry, in the minds of these critics, seems a waste of effort (Thomas, 1997). As Thomas notes, "Theory has come loosely to denote, simply, intellectual endeavor. Many kinds of thinking and heuristics have come to be called theory. But why should they be entitled to this guise?" (p. 76) Given the problematic association with positivism and the misuse in practice (people at times have been reluctant to refute theories), critics feel the only meaningful alternate for inquiry is the abandonment of theory. It should also be noted that many individuals working within an

interpretive, critical, and/or participatory paradigm also adopt principles of the postmodernists and are skeptical of theory development. As I noted, some interpretivists, seeing the dangers and misuse of theory, no longer use the term theory and use the term conceptual framework or alternative forms such as *narrative*. Others do not see dangers and misuse but wonder whether theory is an appropriate representation of knowledge with such social phenomena such as education.

WHY THEORY MAY BE VALUABLE AND WORTH CONSIDERING?

Given all these complex considerations, why would one want to use theory? In other words, does theory help scholars aim their efforts? And does theory serve a valuable role in facilitating the process of inquiry? In this section, I review some of the arguments that have been advanced for why theory might be useful for scholarly work.

RECEIVED WISDOM

The generally accepted belief is that theory provides a tool or mechanism for scholars to identify what we have come to know about certain phenomena based on existing studies. Theory is received wisdom. To conduct all inquiry as if no one had ever developed any worthwhile knowledge seems either arrogant or naïve. Certain theories have been borrowed from other fields and have enriched the field of higher education. Consider, for example, the theory of socialization. Many different areas of inquiry have emerged out of the existing theory of socialization, including studies of how faculty become socialized to a discipline or an institutional culture, how students become socialized to a campus, and how graduate students become socialized to a profession. Without this existing theory, researchers would have had to start from a blank slate to understand the complex processes of how people become part of a community, which is important for faculty and student success. In my own work, I have borrowed theories about organizational change and collaboration from sociology, political science, social work, and business. Although colleges and universities are unique contexts, they operate like other kinds of nonprofit and professional organizations such as hospitals or even like political organizations such as community agencies. Theories derived from nonprofit business, community agencies, and hospitals in sociology, business, and political science have proven helpful for understanding the change and collaboration processes in education.

BUILDING ON EXISTING KNOWLEDGE

Another key role of theory is building on existing thinking (even if one does not believe that science is progressive like positivists). In higher education, Tinto's theory of retention has received a great deal of testing and has served as a mechanism for new theory development. While there have been many contexts and populations for which the theory has not held up, the theory has provided a vehicle for others to examine Latino or commuter student retention and to develop alternative approaches for understanding these populations. Another example is student development theories. Initial theories, developed on all white male samples, outlined the stages through which students proceed as they develop in college. Although Perry's stage theory of development has been challenged, it has resulted in a host of new theories that are sensitive to differences by race and gender that help to explain students' development, for example, the theory of nigrescence (Torres, Howard-Hamilton, and Cooper, 2003). The initial theories provided a helpful springboard for future research, by identifying hypotheses and generating new study ideas, among other directions.

Although scholars such as Feyerabend (1988) point out that Einstein's theory departed from conventional wisdom and would not have been discovered through traditional theory-building techniques, Einstein was familiar with existing views of physics and it was by tinkering with these beliefs and finding fault with them that he was able to refashion our understanding of the physical world. Researchers often develop theory by examining and even critiquing prevailing knowledge. The existing knowledge provides a forum in which one can play mind experiments and generate beliefs. Even grounded theory scholars who focus on data for building theory believe in the importance of grounding the project in existing knowledge. Ethnographic research also emphasizes the importance of orienting the fieldworker to his or her setting. But theory's value can be compromised if it thwarts progress; if no one had felt it possible to challenge Tinto's theory of retention, then the field of higher education would have been impoverished. Luckily this was not the case.

RETHINKING EXISTING KNOWLEDGE

Theory can also be used to rethink or challenge existing thinking. Early behaviorist views of learning were criticized and the challenges resulted in vastly different theories about learning such as collaborative learning theory or Gardner's theory of multiple intelligences (Stage *et al.*,

1998). These new theories depart markedly from the original theories, making a dramatic shift in our understanding of learning as socially constructed, as a group process, and as encompassing a broader view of knowledge itself. Another theory that helped to challenge prevailing notions is social identity development theory. Previously, differences in development by race were attributed to cultural differences. Social identity development theory suggests that oppressed and dominant groups develop differently based on their experience in the social world, moving from no social conscious, to acceptance, to resistance, to redefinition, and to internalization. This particular theory challenged prevailing notions related to culture, but would not have emerged if the researchers had not been finding fault with existing cultural theories or had not felt a need to develop an alternative explanation and to test this theory (Torres, Howard-Hamilton, and Cooper, 2003). In my own work, I challenged traditional theories of leadership as being based on the experiences of white, male, heterosexual, upper-middle-class individuals. Instead, I developed a framework called *pluralistic leadership* that is based on positionality theory. Within this approach, an individual's background and experience, as determined by a set of conditions such as race, gender, or class, shape and inform the way individuals enact and understand leadership. Only by rethinking and challenging existing views of leadership theory was I able to generate a new framework for understanding this phenomenon.

VEHICLE FOR CHANGE

Many scholars strive to create change through their theory; does theory assist in this research goal? As Smith (1999) and Lather (1986) argue, theory is also a guide for action. It is not just a tool for developing new research and insights. Theory can provide an easily accessible tool for the layperson. People often have difficulty seeing a reality that is not in front of them. The goal of theory is to take complex situations and conditions and to reduce them to their key components and to demonstrate how conditions work together, which makes complex social realities more understandable. The flow of experience can be overwhelming; research demonstrates that individuals can take in only about 6% of the stimuli that are occurring at any given moment. Given this reality, people need tools and aids to guide action. In addition, theories can present speculative conceptions of new worlds for people to move toward. These speculative conceptions of the world are difficult for people to see when they are entrenched in the *status quo*.

Yet, for its important uses, theory has also been used in ways that constrain inquiry. Theory seems most useful when it is open to debate and is seen as contestable. Each of the approaches to using theory noted in this section relies on an approach to theory as a contingent set of ideas for building scholarship. The metaphor is theory as a spider web, an intricate and complex scaffolding that serves an important purpose. It can be taken apart fairly easily, but it can also be rebuilt with some ease. Even if theory is useful for inquiry writ large, some scholars argue that it is not relevant in education, which is a professional field, not a discipline, and which has not demonstrated that theory is useful.

IS THEORY VALUABLE AND USEFUL WITHIN EDUCATION RESEARCH?

Educational research has been critiqued for lacking robust theory development and for poor or inappropriate use of theory (Kezar and Eckel, 2000; Lagemann and Shulman, 1999). Many fields and disciplines have an established set of theories that are used to guide inquiry and that serve as a foundation of understanding (Bailey, 1994). This same knowledge is also used to create the curriculum within those disciplines (Bailey, 1994; Lagemann and Shulman, 1999). Education boasts few theories and has no accepted foundational curriculum. This may not be a concern, however, if theory is not an appropriate representation of knowledge because of the nature of educational phenomena. It becomes a problem when theory generation is a major goal of a discipline or field. Within the field of education, theory generation is a priority and there are strong norms reinforcing its value (Kezar and Eckel, 2000; Lagemann and Shulman, 1999). Much of the theory that is used is borrowed from other fields, which causes scholars to worry whether their theory has been appropriately borrowed and applied (Lagemann and Shulman, 1999; Strauss, 1987). Furthermore, in education, theory is rarely accompanied by any discussion of its meaning, and definitions are almost nonexistent (Thomas, 1997). This often leads scholars to identify almost any finding from a study as a theory, which undermines the veracity of the term. Other disciplines and fields might have a stronger definition of theory that better fits the phenomena under study. For example, anthropologists and sociologists use the interpretive paradigm, and physicists and astronomers use the scientific paradigm. But educators do not have a strong alignment with any particular definition of theory, and they also use the term loosely. Lastly, as noted earlier, theory has been used to constrain insights in education (Thomas, 1997). Given these many issues, a clear understanding of what theory is (even if it is defined under many different paradigms) and whether it can be used

profitably in education is needed. I argue that scholars need to become more explicit in their definition of theory and must consider carefully whether theory is a goal in their work.

The lack of precision over the use of the term theory seems a superficial problem that can be clarified by invoking more explicit scholarly norms (reviewed in the next section). However, the issue of whether educational phenomena can be expressed or rendered accurately through theory is a more difficult question to answer and one that individual scholars must address with great care in their work. For example, C.W. Mills argues that social phenomena such as education that are culturally and historically located cannot be easily captured within theory. Let us now consider the important questions and issues that would likely improve theory use within education.

DEFINING THEORY IN SCHOLARLY WORK: AN INDIVIDUAL TASK

As this chapter has demonstrated, theory is a social construction that is based on views of knowledge production, sociohistorical forces, nationality, and discipline. Because there is not just one definition of theory, scholars should define theory and how it will be developed in their work.³ I will now review a set of questions for scholars to consider as they develop their own definitions of theory. Even after considering these questions, a person may decide that theory is of limited or no value. Two overarching issues are important to recognize before moving on to more detailed and specific questions.

The first issue is determining what metatheory (often called paradigm) one is using. A more detailed chapter on choosing a paradigm is Kezar (2004). The response to the question of what paradigm(s) guides one's work will often shape the answers to many of the questions below. Essentially the scholar asks herself or himself, what is the purpose of theory within my metatheory or paradigm? As described earlier, the interpretive, critical, and participatory paradigms all have different perspectives on how theory is defined. One's understanding and notion of theory needs to be placed in and understood within a philosophical framework and

³Others argue that regardless of whether a scholar explicitly attempts to use or develop theory, researchers are always working within a systematic set of assumptions and this systematic set of assumptions should be considered a theory even if it is never stated and even if it is unconscious (Lynham, 2000). These researchers might find a discussion of the use of or value of theory as unnecessary because people automatically engage in this activity. While acknowledging this perspective, I am arguing that being explicit and conscious about theory use can have value in the research process and in the next few sections, I will describe how I think this can improve inquiry.

context. In addition, as demonstrated in the example of grounded theory, a researcher may choose to borrow assumptions from more than one paradigm.

The second overarching issue is the nature of the phenomena under study. Different disciplines and academic fields study phenomena of vastly different nature. The hard sciences, social sciences, and humanities study phenomena that are so different that the use of theory might vary based on the phenomena. Interpretivists have argued that human experience and meaning cannot be studied through scientific views of theory. Yet, not all studies in education focus on human experience. A study of physical plant or capacity might lend itself to a study using scientific theory. A study of financial aid allocation may also lend itself to the scientific view of theory. A study of student transition to college might lend itself better to an interpretive view of theory. Are the phenomena clearly or ill defined? Learning is often considered an ill-defined process. We do not know precisely when it takes place, how it occurs, and under what conditions; whereas, allocation of an annual budget at a university might be clearly defined and bound. Also, can the phenomena be observed (atoms were not initially observable, for example)? Again, learning is hard to observe, as it is an internal process, while retention or graduation rates can be tracked and observed. What type of explanation or description is likely? In the case of some phenomena, like graduation rates, a percentage is the description while in other cases, such as the development of critical thinking, it might be performance on a survey. Habermas' (1971) three-perspective classification of scholarly inquiry is important to consider when thinking about the phenomena of study. I recommend that researchers read his text, *Knowledge and Human Interests*. Habermas suggests that the nature of the world is broken up into three different kinds of knowledge—understanding, practice, and explanation. He describes three modes of inquiry that reflect differences in the type of knowledge, based on the phenomenon of study—analytic, interpretive, and critical sciences.

After thinking through the two overarching questions, another set of questions emerge, which can be addressed in any order. It may help to begin with some of the broader questions on the goal of theory:

1. What is the goal of theory within my research? For example, is theory predictive? Is it merely a technology for channeling and informing perception? A guide for action?
2. Do I believe a theory is universal—grand theory? In what instances? Is it context dependent and contingent?
3. Do I believe a theory includes values?

4. Do theories involve interpretation by people or are they objective reflections of reality?
5. Does subjective knowledge from experience count as theory? At what level of concreteness?
6. Do I believe theories are multiple or adhere and tend to be unifying?
7. Is theory derived inductively or deductively? Both? How and why? Theory comes from empirical work (empiricism), versus theory that is logically derived and tested empirically (rationalism), or both. How and when?
8. What is the relationship of theory to practice?
9. How do I ensure validity or truth-value? Is this important for my definition of theory? Am I striving for trustworthiness, practical adequacy, validity, or plausibility?
10. What is the theory development process? For example, does theorizing involve derivation of hypotheses? Why?

To demonstrate how these questions might be addressed, I will use an example. In my work on leadership, I had to address these questions. I began by deciding that my work would follow a critical and interpretive paradigm, using assumptions from both traditions. I had to consider literature on the commensurability of paradigms since I was borrowing assumptions from both traditions. I examined leadership as a phenomenon and determined that it was a human process that was ill defined, socially constructed, affected by power, and likely to have an amorphous explanation. I did not think that given the nature of the phenomena or the approach I was taking that I was likely to develop a universal theory of leadership. Instead, pluralistic leadership is a framework (not a theory through scientific notions or it fits within interpretive conceptions of theory) that is contingent on the background and social experience of every individual; it is highly contextual.

Given the interpretive and critical framework, prediction was not an important goal, but instead understanding why people had very different beliefs about leadership and determining whether these were important for guiding social action (in some ways this is predictive of behavior) was the focus. I believed that theory was value laden and as a result I felt it necessary to write up my assumptions about, and experience with, leadership and the related issues I was studying, such as race, class, and gender. I believed that people would generally lack awareness about the way that gender, class, or race affected their views of leadership. As the critical paradigm suggests, people tend to be unaware, especially those in

power, of the way that power operates to construct the social world. I did not believe that the theory/framework would emerge from people's subjective experience and knowledge alone, but instead would require the researcher's critique from outside. I conceived that the framework would be derived from people's subjective interpretation; it was critical to understand how people constructed their views of leadership. Simultaneously, I held the belief that their interpretation of their own experience would be incomplete and that the researcher would have to help understand the "objective" ways that power was operating to affect their interpretations. I thought of theory as a guide for reflection, but concede that those who most need to use it are unlikely to seek out this tool of reflection. Rather than ask people to test this same framework, I encouraged other researchers to critique and challenge and to build onto the framework of pluralistic leadership so that more knowledge about this concept will evolve.

Theory/framework development happened both inductively and deductively. I first reviewed the literature (deductive), but then used my experiential knowledge to challenge existing theory (inductive). I conducted a pilot study (inductive) and then returned to the literature (deductive). I believed that both inductive and deductive processes were meaningful for theory development. This movement between inductive and deductive approaches also reflects my belief that theory and practice can be meaningfully merged and are not separate phenomenon or on a continuum at extreme ends. Practice would inform theory and theory informs practice. I believed that theory building, given my phenomenon of study, entailed knowledge of existing theories (positional theory) that challenged traditional leadership theories. I am not sure that this insight would have been obtained inductively as the informants in the study might be unaware of how power was operating. Previous theory was critical within the study and for theory development. I used alternative approaches for verification. I followed up with informants to ensure I understood their comments. I used direct quotes for data analysis, staying as close as possible to the words and meaning of the informants. Lastly, I used reflexive writing to illustrate my own values and role as researcher in the research process.

Before I even began the study, I had a careful and thoughtful understanding of the meaning and role of theory within the study. Yet, from a review of the literature I can see that the word theory is used for a variety of research representations from unsupported models, to metaphors, to perceptions, to conceptual frameworks, to knowledge that has been tested and verified through scientific approaches. The lack of clarity and thought related to what we call theory in the field of higher education leads to confusion, disagreement, and lack of legitimacy for research.

CONSIDERATIONS IN USING, EVALUATING, AND CHOOSING THEORY

Regardless of the way a scholar defines theory, a researcher has a set of choices pertaining to theory use. The first major choice is whether one will use theory and, if so, in what ways.⁴ If theory is not an objective, it is important to articulate what the aim or end product of the research will be; perhaps one's aim is the development of a concept, or a story or narrative. Individuals then need to articulate the value of this representation to elucidate the phenomena studied. Theory may not be the end goal, but it may play a role in the research project. In this instance, it is important to describe how theory is being used—to develop ideas to be examined, to interpret the data, etc. In some circumstances, theory will not be used at all. For example, some researchers specifically note that they are not examining theory in a study so that they will not have “too many” preconceived notions. Answering these questions will help make the work have stronger integrity because it demonstrates why the scholar is choosing to use theory in certain parts of the project or why he or she has decided not to use or develop theory at all.

CHOOSING THEORIES

Another area that researchers struggle with is how to choose among theories or how to choose a specific theory or theories to guide one's work. For most topics of study, there are varying theories that might be used to frame a study. If one is studying learning, should attribution theory or self-efficacy theory be used? In a study of school leadership should one use path-goal theory or contingency theory? These are the choices that scholars typically make for each study. Is the choice subjective and based on one's own personal biases and sense of resonance, or are there objective criteria one can use to choose among theories?

It should be noted that the issue of theory choice has been conceived and articulated mostly within the positivist philosophy and less so within the interpretive and critical paradigms. This is an area in need of thought, consideration, and writing. In many disciplines and fields there are theories that become canonical, that seem to have strong predictive power and have been tested (Achinstein, 1983). Theories that have been

⁴This does not refer to people's implicit mental models, which often guide researcher's decisions. Instead, I am referring to conscious choices that researchers make in using theory. The implicit mental models are often discussed in research on reflexivity in research. See Krieger (1991).

tested repeatedly may or may not have more truth-value (as Kuhn and Feyerabend show, inaccurate theories are often held for many years). However, theories that have been tested represent an important area for scholars to begin their work in choosing theories to work with—they at least deserve consideration.

EVALUATING THEORIES

If there are not canonical theories within the area a researcher is studying, there are likely criteria that can be used. For example, a scholar can compare two theories for their ability to predict a particular outcome. A researcher might also choose to compare the theories' use with particular populations. The criteria for comparing theories should also adhere to the paradigm chosen to guide the study. For example, the predictive power of a theory would not be important in a project within the interpretive paradigm. Instead, theories would be compared for their closeness to the data. In the participatory paradigm they might be compared to practitioners' resonance with a theory. Therefore, theory selection can be guided by the questions (verification standards, achieving the goals set out, and following theory-building approach, for example) the researcher asks himself or herself in defining theory. Some argue that it is better to choose a universal or general theory over a middle-level or local-level theory; this is a privileging of positivist theory choice (Achinstein, 1983). However, it is important to determine the appropriate level of theory to apply or consider within a research project. Researchers need to ask themselves, whether they are studying an issue that is affected by local conditions, by contingencies, or by the context? Commonly used criteria when choosing among theories include: quantity and quality of confirmation, precision of procedures, and a variety of supporting evidence of confirmation by new studies (Achinstein, 1983; Tarascio and Caldwell, 1979). However, many theorists note their disappointment and difficulty in choosing among theories based on empirical or objective grounds.

Other ways of evaluating theories have emerged that are not based on empirical grounds. The first nonempirical criterion is logical consistency, which requires "that no axioms or relationships postulated within a theoretical structure may contradict other relations or axioms in the structure and no mutually incompatible theoretical principles may be deducible from the postulated axioms and relations" (Tarascio and Caldwell, 1979, p. 991). Logical consistency is probably the oldest and most generally accepted of the nonempirical criteria of theory comparison. Another

approach is excellence, which focuses on the beauty and aesthetic appeal of the theoretical structure. Although this criterion exists, I had difficulty finding ways that it has been used that make the criterion clear. The third is extensibility: “a theory is to be preferred if it allows extension through deductions into other areas of investigation” (Tarascio and Caldwell, 1979, p. 992). In other words, theories that explain new areas over time are to be preferred over those that remain narrow in their explanatory shell. The fourth approach maintains that a theory, which incorporates an existing and well-established body of knowledge into a single unified framework, is to be judged superior. The fifth nonempirical criterion involves theoretical support for multiple connectedness. If a new hypothesis fits in with the established theoretical structure, it gains in acceptability. The sixth criterion is concerned with fertility, fruitfulness, and the heuristic value of theories. A theory is preferred if it suggests new areas or methods of investigation or new approaches to a problem. The seventh criterion, simplicity, is another ancient standard; it merely states that the simpler and more economical of two theories is to be preferred (these criteria are all paraphrased from Tarascio and Caldwell, 1979). This list provides the reader with a sense of the various ways that theories can be evaluated, judged, and compared. As readers may observe, almost all of these criteria focus on positivist standards—reduction, simplicity, fitting in with prior knowledge, and generalizability.

Within the interpretive, critical, and interpretive paradigms, there is no well-established list of criteria for evaluating and choosing among theories, as there is within the scientific paradigm. Some of the criteria for evaluating and choosing theories come from the criteria used to verify theories. Within the interpretive tradition, for example, the notion of trustworthiness has emerged with an accompanying set of criteria that can be used to evaluate theories developed within this paradigm: fairness, ontological/educative authenticity, and catalytic/tactical authenticity (Denzin and Lincoln, 2000; Lincoln and Guba, 1985). Fairness focuses on whether the study balances various stakeholders’ views. In a study that is collective and derived from community, the issue of fairness can help to compare studies in terms of quality. Ontological and educative authenticity is concerned with the degree to which the research or theory raises the consciousness of those involved in the study; this is harder to translate to a criteria for evaluating theory. Lincoln and Guba (2001) suggest that this is a moral or ethical commitment to consciousness raising. A theory, therefore, might be more robust if it has the ability to raise consciousness among members of a community. Catalytic authenticity refers to the ability of the study to create change.

In addition to the criteria offered within the framework of trustworthiness, a few other criteria have been presented. Within the interpretive paradigm, since context is so important, theories might be compared to the degree to which the context is explained and made accessible to the reader (Strauss, 1987). Another criterion might be the demonstrated closeness of the researcher to the data or the level of complexity fitting the data (Strauss, 1987). Plausibility of the findings to individuals similar to those in the study might be another way to compare them (Weick, 1989). Within the participatory paradigm, I already mentioned resonance with practitioners (again this is similar to plausibility) (Lather, 1986). For both the critical and participatory paradigms, a criterion would be whether the study results in action by the communities of practice, which is similar to catalytic authenticity (Lather, 1986). Over time, criteria for evaluating and comparing theories within these other paradigms have emerged; hopefully, more definitive criteria will be developed in the future.

What does this process of choosing and evaluating theories actually look like? In evaluating theories used for understanding organizational change in higher education, I attempted to compare various theories and to offer a suggestion for which theories were most useful in higher education. There are six main schools of thought: (1) evolutionary theories; (2) scientific management theories; (3) life cycle theory; (4) political theories; (5) social cognition theories; and (6) cultural theories. In order to compare these various theories, I first examined the context of higher education institutions—the phenomenon of study—to understand if there were certain theories that might better explain the change process, given the nature of the context. Next, I reviewed the empirical results of studies of change to examine which theories were able to explain change in higher education. For example, studies applying theories and concepts from scientific management were rarely able to describe change. Political and cultural theories had a high degree of ability to explain change within the higher education setting. I reviewed each theory, examining the assumptions (did they make sense logically), methodology (was the methodology sound and procedures followed), and results of the studies conducted (were they able to explain, predict, or critique change processes) to provide evidence for the efficacy of each study. Much of what I did was to take an empirical approach to choosing which theories seemed to explain change within higher education. Nonobjective criteria were also used in my decision making, for example, fertility and logical consistency. Theories that appeared to develop new directions (fertility)—life cycle theories—were deemed an important direction, even though few

studies had actually been conducted in this area. Logical consistency was used in examining theories as well. I examined whether the main assumptions that were used to frame the study, the interpretation, and the conclusions had logical consistency. After examining higher education as a context, the political nature of the context was logically consistent with political theories of change. Likewise, the fact that faculty have tenure and employees are long term meant that the change process would likely be affected by the culture of the institution—so the ability of cultural theories to predict change also made logical sense.

Others argue that these rational approaches to choosing among theories represent artificial grounds for evaluation (Weick, 1989). First, some suggest that it is extremely difficult to compare theories, as the conditions in which they were created usually differ. It is unusual for two studies to be identical, which is necessary to make the comparison fair. Second, a number of philosophers of science have claimed that choice is rarely rational and instead reflects the biases of the researcher, couched in terms of rationality. Third, even a perfectly confirmed theory need not be true. For example, as Tarascio and Caldwell (1979) notes, a theory of the business cycle based on a totally specious correlation would have to be chosen over an econometric model's implicit theoretical structure, if the former were better at prediction. Therefore, scholars caution that the use of certain criteria may not ensure adequate theory choice. Similar to the rational, empirical approach, most of the criteria from nonempirical work can only be justified on an intuitive basis. A closer examination of the nonempirical criteria preferences indicates that they are usually based on metaphysical assumptions. The principle of simplicity, for example, has been justified on the grounds that nature is orderly, which clearly presupposes a particular view of the world. Whether or not a theory is elegant is clearly a matter of opinion and is based on the researcher's biases. In addition, post-modernists argue that comparison of theory is not a fruitful task. Theory comparison merely privileges existing norms in science and prevents the use of underutilized or new theories.

Regardless of these problems, some researchers suggest that using these criteria and justifying theory choice is better than making arbitrary choices. Others argue for theory choice based on workability, rather than comparing justification. For example, if a theory is used in a study and it helps to shed light on the issue, then this theory is considered useful for the next study (this would be similar to the criteria noted for the participatory paradigm). Researchers are encouraged to share their experiences using various theories that delineate the pros and cons. More ideas about how to compare theories is needed.

INCOMMENSURABILITY OF DIFFERENT THEORIES

Another issue for scholars to address when examining theory use is related to incommensurability among various theories. Can theories derived within one paradigm be compared with theories derived within another? Also, can a researcher use theories from different paradigms within the same study, and what is the result of using theories from different paradigms within one study? Lastly, can a researcher combine assumptions regarding theory building from more than one paradigm? This has become an important and contested topic in the research literature. When Kuhn (1962) developed the notion of paradigms, he believed that paradigms were incommensurable and that fundamental beliefs and values were so disparate that scientists' work from different paradigms could not be compared or even understood outside the paradigm it was developed. Each paradigm develops a distinctive set of standards and rationality, and theories created within one paradigm can only be judged by the criteria established within that paradigm. This has given some comfort to people who felt this allowed nondominant paradigms to be protected from attacks by the dominant view and also allowed a pluralism of perspectives to flourish. Comparison and reconciliation are viewed with suspicion by many who see them as an assertion of power by the scientific paradigm or any other dominant paradigms that might emerge in the future. Kuhn himself has been troubled over the years by the fact that paradigms and theories are not commensurable and by how this incommensurability would affect the conduct of science, given that so many different paradigms have emerged in recent years. While there may be a benefit to using theories from more than one paradigm to understand an issue, most researchers either by choice or by constraint tend to work with theories in one paradigm.

Kuhn (2000) describes the importance of researchers considering commensurability in their work on important problems. For example, how will we solve the issue of poverty or AIDS with only theories derived from one paradigm?

No other aspect of *Structure* has concerned me so deeply in the 30 years since the book was written (as incommensurability) and I emerge from those years feeling more strongly than ever that incommensurability has to be an essential component of any historical, developmental, or evolutionary view of scientific knowledge. Incommensurability is far from being the threat to rational evaluation of truth claims that it is frequently deemed. Rather it is what is needed

within a developmental perspective to restore some badly needed bite to the whole notion of cognitive evaluation. (p. 1)

Kuhn also goes on to say

... members of one community can acquire the taxonomy employed by members of another, as the historian does in learning to understand older text. But the process, which permits understanding, produces bilinguals not translators and bilingualism has a cost that will be particularly important to what follows. The bilingual must always remember within which community discourse is occurring. The use of one taxonomy to make statements to someone who uses the other places communication at risk. (p. 5)

Some scholars have taken up Kuhn's challenge and suggest that theory building, in general, would benefit from a comparison of different theories developed in multiple paradigms, not for the purposes of determining a truth or unified understanding, but for comprehensiveness, stemming from different worldviews (Gioia and Pitre, 1990; Lee, 1991). Gioia and Pitre (1990) note: "this stance implies that the provincialism that comes with paradigm confinement might instead be turned toward the production of more complex views of phenomena via multiparadigm consideration" (p. 588). The notion of incommensurability is also thought to be problematic because it leads to provincialism and fragmentation, where scholars do not read across bodies of work. They note that many social theories have a foundation in more than one paradigm, for example, action research, Weberian techniques, and solipsism. Multiple paradigms are explored and disparity and interplay are engaged, not reconciled, and an enlarged and enlightened understanding is derived. Gioia and Pitre demonstrate that certain bridging concepts can be introduced to help link theories; for example,

Structuration theories focus on connections between human action and established organizational structures. Proponents of this theory do not treat structuring as separate from structures; they consider social construction processes together with objective characteristics of the social world. Structurationism serves as a means of bridging a gap between subjectivist and objectivist views of related notions. (1990, p. 592)

It is these types of bridging theories that may be useful as scholars try to work across paradigms, work that Kuhn sees as essential in coming years (Lee, 1991).

Others suggest that this is a naïve view and that these scholars only concentrate on combining at the methodological level. They charge that the underlying assumptions of paradigms such as values or goals are not addressed in these efforts and that these issues related to theory building are more problematic to compare and reconcile (Scherer, 1999). Denzin and Lincoln (2000) have suggested that certain paradigms are “more” commensurable and lend themselves more easily to comparison, such as interpretive and participatory paradigms. They note that in relation to the question of commensurability, they offer: a cautious yes. This is especially so if the

paradigms share axiomatic elements that are similar, or that resonate strongly between them . . . Commensurability is an issue only when researchers want to pick and choose among the axioms of positivist and interpretivist paradigms, because the axioms are contradictory and mutually exclusive. (p. 174)

In my own work, I use both critical and interpretive paradigms, combining assumptions from both and comparing theories that I use in my work from both. Negotiating inconsistent assumptions becomes a part of the work of the researcher. For example, in the studies I conducted on pluralistic leadership, I believed that the informants’ interpretation and subjective understanding was critical for exploring how their racial and gendered experiences affected their beliefs regarding leadership. At the same time, I had to reconcile this belief with the assumption in critical theory that people are often unaware of power conditions, and at some level deny their own subjective experience, which may include oppression, domination, or power conditions. Scherer (1999), like Kuhn, believes commensurability remains a critical agenda item for scholars:

in practice, a pluralism of conflicting orientations has to be overcome, as practical actions will finally require unambiguity and a synthesis of contrasting views Science can only offer a pluralism of concepts of rationality, a considerable number of which even completely negate the possibility of rational decisions. If there is no rational treatment of the problem of incommensurability, the pursuit of interests, values, and cultures will become purely an exercise of power. (p. 5)

To this problem, Habermas (2001) and later Lueken (1991) offer a variety of ideas for the ways in which an individual with competing claims can reconcile these perspectives through argumentation and dialogue;

practical engagement and interaction is needed between communities to understand points of commensurability, rather than an abstract discussion of logic.

Defining theory within scholarship is the beginning work; researchers then need to wrestle with how they will use and choose theories and complex issues of commensurability. Commensurability is only one among many issues that scholars must consider. It serves as an example of the difficult questions that we face as academics, which have no clear answers at this time and require further thought and consideration.

CONCLUSION

In this chapter, I have tried to answer a very difficult question that scholars and practitioners have been asking for thousands of years: What is theory? My approach was distinctive from most of the earlier literature in that it does not argue for a particular definition of theory. Scholars are always good at arguing for a particular perspective with which they feel aligned, but they are often not as competent at appreciating the value of various approaches to knowledge production. I believe that some scholars' confusion over the definition of theory is partially an inability to respect a variety of definitions. Though the literature is complex and muddled at times, over the last hundred years a coherent dialogue in the literature emerged to tell the story of how theory has been constructed and reconstructed as views of scholarship have changed, as society has shifted, based on cultural conditions and disciplinary norms. I hope I have shown respect for various views of theory and have provided scholars with some issues to consider as they engage the important task of defining theory in their own work.

The goal of this review was to help develop an understanding of the term theory and to provide scholars with a foundation so they can begin the work of conceptualizing theory in their scholarship. I also hope that I have demonstrated the advantages and disadvantages of theory. Although I have argued for maintaining theory in higher education research, I recognize that theory generation is not a goal in my own research. In the end, I am surprised that this is my argument, but the evidence in favor of maintaining theory as a goal seemed quite compelling as I reviewed the landscape of literature. Like authors from vastly different backgrounds such as Smith, Lather, and Kuhn, I too believe that theory as a concept remains a good one; even if individual people have used it in problematic and even abusive ways, this does not necessarily make the concept itself bad, it just means we need to work on our execution.

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GLOSSARY

Please note that each of these terms has very extensive definitions and that these are only short definitions to guide and ease the reading of this text.

Construct—A concept that is inferred from commonalities among observed phenomenon and that can be used to explain those phenomenon.

Critical paradigm—A paradigm within which knowledge represents the views of people in power. Researchers should examine current understandings to demonstrate how they reinforce a dominant group over an oppressed group. The aim of research is to critique and to make invisible power relationships more visible.

Deductive—Based on abstract reasoning.

Empiricism—The paradigm that knowledge is based on only direct observation and data. This view favors inductive methods and interpretation is minimized as much as possible. The role of the researcher is minimized and the test or experiment is the focus in developing knowledge.

Grand or universal theory—A theory that explains an expansive phenomenon across all contexts and cases.

Grounded theory—An approach to theory development that focuses on working closely with data and with few deductive notions, which allows the researcher to reduce preconceived notions that cloud their view of the data.

Hypothesis—An untested assumption usually derived from concepts or theory.

Incommensurability—The issue where theories that come from different paradigms may not be compared because the logic with which they were created differs so markedly that it does not make sense to compare them.

Inductive—Based on observation or data or empirical evidence.

Interpretive paradigm—A paradigm based on the view that there is not a single knowable reality that we can access since all understanding is filtered through human beings, but that people construct and interpret knowledge and therefore knowledge is relative and specific. Knowledge is developed through interaction with others and is subjective.

Normal science—Working within received knowledge and wisdom from theory.

Objective—A belief in a world unmediated by interpretation; that we can access knowledge of the world, by separating ourselves from preconceived notions and by testing, measuring, or describing a single reality.

Paradigm (or metatheory)—A framework of beliefs and assumptions that guides the work of research.

Participatory paradigm—A paradigm that involves the belief that people create knowledge in groups and through experience. Researchers team with practitioners and communities to examine problems and issues.

Positivism—A paradigm that assumes that knowledge is developed through a combination of deductive reasoning based on theory in combination with direct observation, and that there is a tangible reality that can be captured through experiments and tests. Researchers should focus on foundational knowledge that can be verified for its truth-value.

Postmodernism—A paradigm that suggests that knowledge cannot be verified and that theory is often a representation of the interests of those in power. There is also concern whether social phenomena can be understood through universal laws since context and history affects them.

Postpositivist—A paradigm that believes in a critical realism—reality can only be imperfectly and probabilistically understood, but that until falsified, findings are true. Most of the tenets of positivism in terms of methodology and goals remain similar.

Praxis—A type of knowledge that is grounded in day-to-day activity and, emerges from people's experience.

Rationalism—A paradigm that dictates that knowledge derived from abstract reasoning and logic is the best route for developing knowledge. The world we see is imperfect and an illusion and does not represent true understanding, that can only be apprehended by the mind, separated from the sensate world of illusion.

Subjectivity—A belief that there is not a single unmediated world that people can access to understand experience and develop knowledge. Instead, people interpret and make meaning based on their own experience and background.

Theory—A representation of knowledge based on ordering and relating concepts or constructs into a systemized framework.

Theorizing—Using theory to make decisions within a research project.

Validity or verification—A way to demonstrate whether knowledge is “true” or “valuable.” In the scientific paradigm, validity focuses on tests and evidence. In other paradigms, truth or value is not necessarily tested, but criteria such as creating change or fairness in terms of representing stake holder's views are utilized.

7. CROSSBORDER EDUCATION: AN ANALYTICAL FRAMEWORK FOR PROGRAM AND PROVIDER MOBILITY

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*Globalization is transforming the world and internationalization is
changing the world of higher education*

It is true that academic mobility and education exchange across borders have been a central feature of higher education for centuries. The fact that “universe” is key to the concept of university demonstrates the presence of the international dimension since the founding of universities as institutions of higher education and research. The international mobility of students and scholars are longstanding forms of academic mobility but, it is only during the last two decades that more emphasis has been placed on the movement of education programs, higher education institutions (HEIs), and new commercial providers across national borders.

The knowledge society, ICTs, and the market economy are increasing the demand for higher and continuing education. This is leading to increased crossborder education provision involving new types of education providers, new modes of delivery, new programs and qualifications, new partnerships and network models, and new national and regional regulations.

A fascinating but very complex world of crossborder education is emerging. The last five years have been a hotbed of innovation and new developments. The “Breaking News Service” of the Observatory of Higher Education (OBHE) track and report on many of these new developments, including the following (OBHE, 2002–2004). Phoenix University has become the largest private university in the United States (owned and operated by the Apollo Group Company) and is now present or delivering courses in Puerto Rico, The Netherlands, Mexico, and Canada. Other Apollo Group companies are offering courses in Brazil, India, and China. The Netherlands Business School (Universiteit Nijenrode) has recently

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opened a branch campus in Nigeria, and Harvard is developing two branch campus initiatives in Cyprus and the United Arab Emirates. Furthermore, Jinan University will be the first Chinese university to open a branch campus outside China and will do so in Thailand. Since 2003, three Canadian universities have been formally working with Al-Ahram Organization (a large private conglomerate) to establish the Al-Ahram Canadian University in Egypt. Laureate Education (formerly Sylvan Learning Systems) has purchased whole or part of private HEIs in Chile, Mexico, Panama, and Costa Rica and owns universities in Spain, Switzerland, and France. Dubai has developed a “Knowledge Village” in the Dubai Technology and Media Free Zone and to date the London School of Economics, India’s Manipal Academy of Higher Education, and the University of Wollongong from Australia are offering courses through franchising agreements and branch campuses. The University of Westminster (UK) is the key foreign academic partner in the new private Kingdom University of Bahrain and plays a similar advisory/provision role with new institutions in Nigeria, Uzbekistan, and Kazakhstan. As of June 2003, Hong Kong had 858 degree level programs from 11 different countries operating in SAR and Singapore had 522 degree level programs from 12 foreign countries. Australia as one of the lead exporters of education had in 2002, 97,000 students enrolled in 1,569 crossborder programs.

These are only a few examples of hundreds of new initiatives that have developed in the last five years. They involve higher education providers (including institutions and companies) delivering their courses and programs to students in their home countries. It is convincing evidence that it is no longer just the students who are moving across borders; and, that even though in colonial times there has been significant mobility of institutions, we have now entered a new era of crossborder education.

The purpose of this chapter is to delve into some of the trends, issues, challenges, and implications of these new developments and develop an analytical framework to better understand crossborder education itself. Given the rapid and perhaps tumultuous expansion of international academic mobility, it is important to be clear about the parameters of this discussion. The primary focus is on the movement of education programs and providers across borders, not the mobility of students. The emphasis is on higher education; however, many of the issues and challenges apply to other levels. It is important to recognize that in crossborder education there are different perspectives and issues depending on whether one is a receiving (host) country or a sending (source) country; this chapter aims to address both perspectives. The discussion of issues and challenges is

targeted to system level policies and responsibility, not the individual HEI or provider.

A few words about terminology are necessary as the language of internationalization is changing and differs within and between countries. Even though one of the objectives of this chapter is to make sense of the myriad of new terms that are emerging, it is important to be clear at the outset as to how key concepts are interpreted and used.

Traditional HEIs are no longer the only deliverers of academic courses and programs. International conglomerates, media and IT companies, and new partnerships of private and public bodies are increasingly engaged in the provision of education both domestically and internationally. The term education providers is now becoming a more common and inclusive term as it includes both traditional HEIs and organizations and companies. This chapter uses the term providers to mean all types of entities that are offering education programs and services. There is some criticism directed toward the use of the term “providers” as it seems to be buying into the “marketization and corporatization” agenda. This is a sign of the times and indeed, every attempt is made not to adopt the trade and commercial language of suppliers, consumption abroad, commercial presence, etc. There is great confusion in the sector about the meaning and use of the three terms “transnational, crossborder, and borderless” education. The preferred term for this discussion is crossborder education as it is the presence of national borders which is key to many of the regulatory, quality, academic, and financial issues related to the new mobility of programs and providers.

The outline of this chapter is as follows. The second section addresses the context and challenges facing the international dimension of education. An analysis of the major elements of globalization and their impact on higher education are provided. Most importantly, the relationship of globalization, internationalization, crossborder education, and trade in education services is explored. The rationales driving crossborder education are discussed in the third section and include an analysis of motivations from different actors and stakeholders. New developments in crossborder education around the world are highlighted in the fourth section. In the fifth section, the plethora of new terms, concepts, and issues related to crossborder education is addressed and a conceptual map in the form of typologies is presented to clarify some of the confusion and misunderstanding. The last section concentrates on the identification of issues and implications in terms of the recognition of providers and their qualifications, the quality assurance of the programs being delivered, and the role of national, regional and international regulatory frameworks.

GLOBALIZATION, INTERNATIONALIZATION,
AND CROSSBORDER EDUCATION:
REALITIES AND RELATIONSHIPS

The new globalized environment in which higher education is working presents new opportunities and challenges. It is important to clarify the connections among globalization, internationalization, crossborder education, and trade as these processes are intertwined in a somewhat complicated and confusing way. The following sections attempt to shed some light on the evolution and relationship of these processes.

GLOBALIZATION: CHANGES AND CHALLENGES

There are many changes and new challenges in how the environment is impacting internationalization and how the growing international dimension of higher education is an agent of change itself. Globalization is probably the most pervasive and powerful driver of the changes in today's environment. Globalization is a term and a phenomenon, which is on the minds of policy makers, academics, and professionals/practitioners no matter what the sector or discipline. Education is no exception. The role of education—particularly postsecondary education—as both agent and reactor to globalization is a critical area of debate and study. The discussion, in terms of the nature, causes, elements, consequences, and future implications of globalization on education is prolific, rather controversial and very important (Altbach, 2004; Breton and Lambert, 2003; Marginson, 2001; Scott, 2000). For the purposes of this discussion, a neutral or nonideological definition of globalization is purposely adopted, and secondly, globalization is positioned as a key environmental factor that has multiple effects—both positive and negative—on education.

It is important to note that the discussion does not center on the “globalization of education”—rather, globalization is presented as a phenomenon impacting internationalization. In fact, substantial efforts have been made during this past decade to maintain the focus on the “internationalization of education” and to avoid using the term “globalization of education” (Knight, 1999). This has had mixed results, but some success has been achieved in ensuring that these two terms are not seen as synonymous and are not used interchangeably.

The term globalization, for the purposes of this discussion, is defined as the “the flow of technology, economy, knowledge, people, values, and ideas. . . across borders. Globalization affects each country in a different way due to a nation's individual history, traditions, culture, and priorities.

Globalization increases and reflects the growing connectivity and interdependence among nations” (Knight and de Wit, 1997, p. 6). This definition acknowledges that globalization is a multifaceted process and can impact countries in vastly different ways; but it does not take a position as to whether this impact has positive and/or negative consequences.

There are a number of factors that are seen as fundamental aspects of globalization. These include the knowledge society, information and communication technologies, the market economy, trade liberalization, and changes in governance structures. It can be debated whether these are catalysts for globalization or whether they are consequences of globalization, but for this discussion they are presented as elements or factors of globalization, which have an enormous impact on the education sector.

Table 7.1 describes each of these five elements of globalization and notes some of the key implications for higher education in general and the international dimension in particular. This table presents highlights only, not a complete analysis. Its purpose is to illustrate several of the major environmental changes that are shaping the responses and actions of internationalization to globalization. It is important to note that these implications relate to all aspects of internationalization—the curriculum and teaching process, student and academic mobility, crossborder delivery of education programs, international development projects, study of foreign languages, commercial trade, staff development, and others. The table below includes three columns that are purposely not aligned because the impact of globalization is not linear. The elements of globalization listed in the first column have implications for many different aspects of higher education and in turn the international dimension.

This table positions globalization and internationalization as different but closely linked processes. It reinforces the notion that globalization is a rather generic process which impacts different sectors, of which higher education is just one. Examples of how the international dimension of education is implicated are provided in order to show that internationalization of higher education is seen as both a reaction to, but also, an agent of globalization.

Why is internationalization seen as being both a response to and a catalyst for globalization? The “response to” position is based on the fact that higher education needs to prepare students for living and working in a more connected, interdependent, and globalized world, and secondly, that research and scholarship need to contribute to national and international issues (Knight, 2004). On the other hand, internationalization is seen as an agent of globalization, especially economic globalization or trade, because

Table 7.1: Implications of Globalizations for Internationalization

Element of Globalization	Impact on Higher Education	Implications for the International Dimension of Higher Education
<p>Knowledge society Increasing importance attached to the production and use of knowledge as a wealth creator for nations</p>	<p>Growing emphasis on continuing education, lifelong learning, and continual professional development creating a greater unmet demand for postsecondary education Need to develop new skills and knowledge resulting in new types of programs and qualifications Role of universities in research and knowledge production is changing and becoming more commercialized</p>	<p>New types of private and public providers delivering education and training programs across borders. For example, private media companies, networks of public/private institutions, corporate universities, multinational companies Programs more responsive to market demand. Specialized training programs being developed for niche market and for professional development purposes and distributed on a worldwide basis Increased international mobility of students, academics, education and training programs, research, providers, and projects. Mobility is physical and virtual</p>
<p>ICTS New developments in information and communication technologies and systems</p>	<p>New delivery methods used for domestic and crossborder education, especially online and satellite-based</p>	<p>Innovative international delivery methods such as e-learning, franchises, satellite campuses require more attention given to accreditation of programs/providers and recognition of qualifications</p>

Market economy			
Growth in number and influence of market-based economies around the world	Greater commercialization and commodification of higher education and training at domestic and international levels	New concerns about appropriateness of curriculum and teaching materials in different cultures and countries and the potential for homogenization as well as new opportunities for hybridization	
Trade liberalization			
New international and regional trade agreements developed to decrease barriers to trade	Import and export of educational services and products increased as barriers were removed	Increasing emphasis on commercially oriented export and import of education programs and diminished importance to international development projects	
Governance			
Creation of new international and regional governance structures and systems	The role of national level education actors both government and nongovernment is changing New regulatory and policy frameworks being considered at all levels	New international/regional frameworks under consideration to complement national and regional policies and practices, especially in the areas of quality assurance, accreditation, credit transfer, recognition of qualifications, and mobility of students	
Source: Knight (2004).			

the market approach to higher education is becoming more active in the for-profit side of foreign student recruitment and commercial crossborder delivery of education (Larsen, Morris, and Martin 2001). It is also seen as a vehicle for cultural globalization with supporters highlighting the fusion and hybridization of cultures and critics pointing to the homogenization (usually interpreted as westernization) of cultures.

INTERNATIONALIZATION: EVOLUTION AND EXPANSION

Only in the last two decades has the term internationalization been an important part of higher education lexicon. Prior to this time, international development cooperation, international academic affairs, and foreign students were the key concepts used to describe the kind of international activities that postsecondary institutions engaged in. Beginning in the mid 1980s internationalization of higher education, interpreted in the broadest sense, started to increase in importance, scope, and volume. Evidence of this includes

- the growing numbers of students, professors, and researchers participating in academic mobility schemes,
- the increase in the number of courses, programs, and qualifications, which focus on comparative and international themes,
- growing number of crossborder delivery of academic programs,
- the development of new international networks and consortia,
- increase in campus-based extracurricular activities with an international or multicultural component,
- the impetus given to recruitment of foreign students,
- the rise in number of joint or double degrees,
- the expansion of partnerships, franchises, offshore satellite campuses,
- the establishment of new national organizations focused on international education,
- new regional and national level government policies and programs supporting academic mobility and other internationalization initiatives.

It is interesting to note how the definition of the term has evolved over the last decade. In the late 1980s, internationalization was commonly defined at the institutional level and in terms of a set of activities. The definition proposed by Arum and Van de Water (1992, p. 202) is a good example of this approach. They proposed that internationalization

refers to “the multiple activities, programs, and services that fall within international studies, international educational exchange, and technical cooperation.” By the mid 1990s, a process or an organizational approach was introduced by Knight (1994, p. 7) to illustrate that internationalization was a process which needed to be integrated and sustainable at the institutional level. Internationalization was defined as the “process of integrating an international and intercultural dimension into the teaching, research, and service functions of the institution.” Van der Wende (1997, p. 18) correctly pointed out that an institutional-based definition had limitations and therefore proposed a broader definition, suggesting that internationalization is “any systematic effort aimed at making higher education responsive to the requirements and challenges related to the globalization of societies, economy, and labor markets.” While this definition includes important elements, it only positions the international dimension in terms of the external environment—specifically globalization—and therefore does not context internationalization in terms of the education sector and its goals and functions.

de Wit (2002, p. 114) has concluded that “as the international dimension of higher education gains more attention and recognition, people tend to use it in the way that best suits their purpose. While one can understand this happening, it is not helpful for internationalization to become a catchall phrase for everything and anything international. A more focused definition is necessary if it is to be understood and treated with the importance that it deserves. Even if there is not agreement on a precise definition, internationalization needs to have parameters if it is to be assessed and to advance higher education. This is why the use of a working definition in combination with a conceptual framework for internationalization of higher education is relevant.”

It is important to look at the way in which definitions/meanings of terms evolve to reflect new developments and also to help shape new policies and programs. Given the changes in rationales, providers, stakeholders, and activities of internationalization, it is important to revisit the question of definition and ensure that the meaning reflects the complex realities of today and is able to guide and be relevant to new developments. It is increasingly clear that internationalization needs to be understood both at the national/system level and at the institutional level. Therefore, a new definition is proposed, which acknowledges both levels and the need to address the relationship and coherence between them.

The challenging part of developing a definition is the need for it to be generic enough to apply to many different countries, cultures, and

education systems. While it is not necessarily the intention to develop a universal definition, it is imperative that it be appropriate for use in a broad range of contexts and for comparative purposes across countries/regions of the world. With this in mind, it is important to ensure that a definition does not specify the rationales, benefits, outcomes, actors, activities, and stakeholders of internationalization as they vary enormously across nations and also from institution to institution. What is critical is that the international dimension relates to all aspects of education and the role that it plays in society. The following working definition is proposed: internationalization at the national/sector/institutional levels is defined as “the process of integrating an international, intercultural and/or global dimension into the purpose, functions or delivery of post-secondary education” (Knight 2003a, p. 2).

This is intentionally a neutral definition of internationalization. Many would argue that the process of internationalization should be described in terms of promoting cooperation, and solidarity among nations, improving quality and relevance of higher education or contributing to the advancement of research for international issues. While these are noble intentions and internationalization can contribute to these goals, a definition needs to be objective enough so that it can be used to describe a phenomenon which is in fact, universal, but which has different purposes and outcomes, depending on the actor or stakeholder. Therefore, it is important to explain why specific terms and concepts have been carefully chosen for the proposed working definition of internationalization.

The term “process” is deliberately used to convey that internationalization is a continuing effort. The term process denotes an evolutionary or developmental quality to the concept. The concept of “integration” is specifically used to denote the process of infusing or embedding the international and intercultural dimension into policies and programs in order to ensure that the international dimension remains central—not marginal—and sustainable. The concepts of “purpose, function, and delivery” have been carefully chosen and are meant to be used together. Purpose refers to the overall role and objectives of higher education for a country or mission of an institution. Function refers to the primary elements or tasks that characterize a national postsecondary system or individual institution. Usually these include teaching, research, and service/outreach to society. Delivery is a narrower concept and refers to the offering of education courses and programs either domestically or in other countries. This includes delivery by traditional HEIs but also

by new providers such as multinational companies who are often more interested in the global delivery of their programs and services than the international or intercultural dimension of a campus or research and service functions.

Another interesting development in the internationalization vocabulary is the growing use of two new terms that reflect two related, but different, streams or components of internationalization. The first is “internationalization at home” (Nilsson, 1999) which refers to the international and intercultural dimension of curriculum, the teaching/learning process, research, extracurricular activities, and in fact a host of activities that help students develop international understanding and intercultural skills without ever leaving the campus. The second component is “internationalization abroad” that is crossborder education which involves students, teachers, scholars, programs, courses, curriculum, projects moving between countries and culture, in short, across borders (Knight, 2004).

CROSSBORDER EDUCATION: INNOVATION AND COMPLEXITIES

Crossborder education is a term that refers to the movement of education across national jurisdictional or geographic borders. In the past decade, the interest and growth in international academic mobility has exploded. This increased mobility is reflected in the introduction of new terminology to try to describe or characterize this delivery of education internationally. Crossborder is a term that is often used interchangeably with other terms such as transnational, offshore, and borderless education.

Australia was one of the first countries to use the term “transnational education” as it was necessary to differentiate between the recruitment of international students to Australian campuses and those who were studying for Australian degrees offshore. Hence, the term transnational education became used to simply describe offshore international student enrollments regardless of delivery method.

Europe has also adopted the term transnational education as noted in many of the key reports on the subject (Adams, 2001; ESIB, 2002; Garrett, 2004). The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Council of Europe in their “Code of Practice on Transnational Education” have described transnational education to mean “all types of higher education study where the learners are located in a country different from the one where awarding institution

is based" (UNESCO/Council of Europe, 2001). This term is useful for some crossborder movement of programs but may have limited applications for the growth in provider mobility. For instance, there are private companies that are establishing independent or stand-alone HEIs that are not attached to a "home" university but instead are attached to a "home" company. Would one describe this situation as the learner being located in a different country than the awarding institution? Probably not, and thus this definition may need to be reviewed in light of recent developments in provider mobility.

The term borderless education first appeared in an Australian report by Cunningham *et al.* (2000) and was followed by a similar type of study in the United Kingdom. Basically, the term borderless education refers to "the blurring of conceptual, disciplinary and geographic borders traditionally inherent to higher education" (CVCP, 2000).

It is interesting to juxtapose the concepts of borderless education and crossborder education. The former term acknowledges the disappearance of borders while the latter term actually emphasizes the existence of borders. Both approaches reflect the reality of today. In this period of unprecedented growth in distance and e-learning education, geographic borders seem to be of little consequence. Yet, on the other hand, we can detect a growing importance of borders when the focus turns to regulatory responsibility, especially related to quality assurance, funding, and accreditation.

South Africa has recently developed a code of conduct for crossborder mobility of programs and providers, and they have provisionally called it the Code of Conduct of Crossborder/Transnational Higher Education Programs signaling the similarities between the terms but confusion as to which one to use.

This discussion on the different meanings of transnational education is meant to illustrate how difficult it is to understand how different countries use the term. This has significant implications for how data are collected and how regulatory frameworks are created. In order to avoid the minefield of differing and sometimes contradictory terminology, an analytical framework is needed to provide some clarity and hopefully common understanding about this phenomenon of education moving across borders.

Another reason that a new framework is proposed is to offer an alternative to the trade framework that the General Agreement on Trade in Services (GATS) has introduced into the higher education sector. A few words about the GATS framework are necessary before proceeding

further. The GATS is a worldwide agreement managed by the World Trade Organization (WTO) to further liberalize trade in services. Education is categorized as a service, in the same way that transportation, communication, health, culture sectors are. The GATS has identified four modes of trade or supply of services (WTO, 1999). They are as follows:

Mode 1: Crossborder supply focuses on the service crossing the border, which does not require the consumer to physically move. Examples in higher education include distance education and e-learning.

Mode 2: Consumption abroad refers to the consumer moving to the country of the supplier which in education means students taking all or part of their education in another country.

Mode 3: Commercial presence involves a service provider establishing a commercial facility in another country to provide a service. Examples in higher education include branch campuses or franchising arrangements.

Mode 4: Presence of natural persons means persons traveling to another country on a temporary basis to provide service. In the education sector, this would include professors or researchers.

In short, Mode 1 deals with the service moving, Mode 2 deals with the consumer moving, Mode 3 deals with the provider and investment moving, and Mode 4 deals with human capital moving. There is no criticism implied regarding the central features of the four modes for trade services. On the contrary, it is quite an accomplishment to develop a generic framework to apply to the supply of commercial services for the 12 major service sectors and 160 subsectors included in GATS.

The concern about these four trade modes focuses on the fact that they are now beginning to be seen as the four primary elements and methods of crossborder education and as such, they do not capture or reflect the fullness of crossborder education activity. As more attention is given to the analysis of major actors, stakeholders, rationales, and benefits, and as one examines the implications for quality assurance, credential recognition, accreditation, funding, access, it is important that these matters are addressed for the larger picture of crossborder education. Using a trade framework to categorize crossborder activity is one approach, but, given these new developments and the emerging issues, it is argued that a trade framework is too limited and an education framework is needed. The next section focuses on the process of developing a conceptual framework to address the scope of crossborder higher education.

CROSSBORDER EDUCATION FRAMEWORK

One of the first questions to ask is “what are the defining factors/principles” for a conceptual framework of crossborder education. Many come to mind—what elements of education move, how does the movement occur, why does education move, where is it happening, who is funding it, who is awarding the qualification, who is regulating it? Given the changing nature of the rationales driving crossborder education, the worldwide scope of delivery and the new modes of provision, the “why, how, and where” are eliminated as the defining factors. Emphasis is placed on “what” moves across borders and four different categories are suggested: people, programs, providers, and projects/services (Knight, 2003b). The four categories used to classify “who/what” moves across borders are described below.

PEOPLE

The first category covers the movement of people whether they are students or professors/scholars/experts. Students are mobile in a number of ways. They can take whole degrees in another country, participate in a study abroad exchange program, undertake fieldwork or an internship, register for a semester/year abroad program, etc. The funding for such crossborder education can be through exchange agreements, scholarships from government, public or private sources, and self-funding. Professors/scholars and experts can be involved in teaching and research activities, technical assistance and consulting assignments, sabbaticals, seminars, and other professional activities. These types of initiatives can be self or institution funded, based on exchange agreements, involve contracts and fee for service, or supported by public and private funding.

PROGRAMS

The program, not the student, moves in this category. The delivery of the program is often done through a partnership arrangement between foreign and domestic providers or can be an independent initiative by a foreign provider. The programs can be delivered by distance, face-to-face, or mixed mode. Franchising, twinning, and new forms of articulation and validation arrangements are most common. In some cases, the program and qualification awarded is provided by the source/foreign country institution/provider, but the teaching and support is done in part or totally

by a local institution/provider. In other cases, the foreign provider takes complete responsibility for the delivery of the academic program but may have a local business partner investing in the operation. Distance delivery of a program involves yet another set of circumstances.

PROVIDERS

The key factor in this category is that the institution/provider moves to have physical or virtual presence in the receiving/host country. It is not the student who moves, but the provider moves to serve the student. The movement of a provider can involve a more substantial range of programs and academic/administrative support services moving. A provider can develop a satellite campus or establish a full institution. In other scenarios, the provider moves by purchasing/merging with a local institution. Virtual universities are yet another example of the provider moving across borders through distance delivery of a selection of programs. The providers can include private and public, for-profit or nonprofit, educational institutions, organizations, and companies. Both recognized *bona fide* institutions/providers and nonrecognized rogue providers are included in this category.

PROJECTS/SERVICES

There is a wide range of education-related projects and services that need to be considered when analyzing crossborder education. Such activities could include a diversity of initiatives such as joint curriculum development, research, benchmarking, technical assistance, e-learning platforms, professional development, and other capacity building initiatives especially in the information technology area. The projects and services could be undertaken as part of development aid projects, academic linkages, and commercial contracts.

A second set of key factors relate to the fact that crossborder education occurs under different kinds of arrangements. Therefore, three different sets of conditions for crossborder delivery are proposed: (1) development cooperation/aid education projects, (2) academic exchanges and linkages, and (3) commercial trade initiatives. (In contrast, the GATS framework only covers commercial trade types of activities.)

Table 7.2 presents a framework for crossborder education based on two elements: (1) what moves—people, providers, programs, and projects and (2) under what conditions—development cooperation projects,

Table 7.2: Framework for Crossborder Education

Category	Means (examples)	Conditions of Crossborder Activity					
		Development Cooperation	Exchanges/ Linkages	Commercial/ Profit Oriented			
People	Students Professors/scholars Researchers Experts/consultants						
Programs	Stand alone Twinning Franchised Articulated/validated Joint/double award Online/distance						
Providers	Branch campus Virtual university Merger/acquisition						
Projects	Capacity building Research Curriculum development Educational services						
Source: Knight (2005).							

academic exchange and linkage agreements, and commercial/profit oriented initiatives.

This table can also be used to illustrate significant trends or shifts in crossborder education, and perhaps for internationalization in general. The first trend is the focus of this chapter—the vertical shift downward from student mobility to program and provider mobility. It is important to note that numbers of students seeking education in foreign countries are still increasing. However, there is currently new emphasis being placed on taking foreign academic courses and programs to students in their home country. Thus, the desirability of a foreign education and qualification remains high, but students do not have to leave home to get it.

The second shift is from left to right signifying substantial change in orientation from development cooperation to competitive commerce, or in other words—from aid to trade. However, it would be an oversight

not to recognize the substantial amount of crossborder activity that is happening under the academic exchange and linkage category by HEIs. It is clear that in these three categories, there are different rationales driving the increase in crossborder education.

RATIONALES AND IMPACTS

An examination of the rationales and impacts related to the increase in crossborder education requires a 360-degree view of the issues. This involves giving serious consideration to the diverse and often contradictory perspectives and expectations that different groups of stakeholders may have in both receiving and sending countries. This is not a straightforward or linear task of analysis as the viewpoints differ depending on whether you are a student, a provider, a governmental or nongovernmental body and whether you are in the country that is exporting or importing the programs and services. In short, the analysis of rationales and impacts can be rather complicated.

RATIONALES AT THE NATIONAL/COUNTRY LEVEL

Perhaps the best place to start is to look at the more macro level rationales that are driving internationalization in general and determine which are appropriately applied to crossborder education. Traditionally, the rationales for internationalization have been presented in four groups: social/cultural, political, academic, and economic (Knight and de Wit, 1997). In the past several years, much has been written about the changes in rationales both within and between this classification of rationales (Altbach, 2004; de Wit, 2002; Van Vught, Van der Wende, and Westerheijden, 2002). These generic categories remain a useful way to analyze rationales; however, globalization has contributed to the blurring of the boundaries. It has therefore been necessary and useful to identify cross-cutting meta rationales at both the country level and the institutional/provider level. The rationales for internationalization at the national/system level as identified by Knight (2004) are (1) human resources development, (2) strategic alliances, (3) income generation/commercial trade, (4) nation building/capacity building, and (5) social/cultural development and mutual understanding.

It is important to note that these rationales were identified to reflect both “legs” of internationalization—“at home” and “abroad.” Therefore, it is necessary to focus the rationales more directly on the “abroad” component of internationalization and in particular the crossborder movement

of programs and providers. Another relevant factor to remember is how the rationales relate to both the sending and the receiving countries. A brief discussion for each rationale follows.

HUMAN RESOURCES DEVELOPMENT/BRAIN POWER

The knowledge economy, demographic shifts, mobility of the labor force, and increased trade in services are factors that are driving nations to place more importance on developing and recruiting human capital or brain power through international education initiatives. In general, there is a positive stance toward what is being called brain circulation due to student and professional mobility (OECD, 2004). However, this phenomenon affects small and large, developed and developing countries in different ways. The term “brain chain” may perhaps be more relevant as it is often the larger and more developed countries that benefit most from brain gain and it is the smaller and less developed nations that are at the bottom of the brain chain and experience more brain drain. Therefore, for some countries there is currently an increased risk of brain drain attached to the mobility of students across borders, especially when international student recruitment policies are linked to aggressive immigration policies. Therefore, the smaller countries at the receiving end of crossborder programs and providers see them as effective means to lessen the chances of their tertiary education graduates staying abroad after they have finished their studies.

STRATEGIC ALLIANCES

The international mobility of students, academics, and programs as well as joint degrees and research initiatives are seen as productive ways to develop closer geopolitical ties and economic relationships between countries. Over the past 10 years, there has been a definite shift from alliances for cultural purposes to economic purposes (Van Dalen, 2002). The development of strategic alliances is attractive to both sending and receiving countries and providers.

INCOME GENERATION—COMMERCIAL TRADE

For sending countries, there is a strong motivation to use crossborder education as a means of generating income from fee-based education programs and services (Davis, Olsen, and Bohm, 2000). More emphasis is now being placed on economic and income generating opportunities.

New franchise arrangements, foreign or satellite campuses, online delivery, and increased recruitment of fee-paying students are examples of a more commercial approach to internationalization. The fact that education is now one of the 12 service sectors in the GATS is positive proof that importing and exporting of education programs and services is a potentially lucrative trade area.

NATION BUILDING—CAPACITY BUILDING

While some countries are interested in the export of education for income generation, there are other countries that are interested in the importing of education programs and institutions for nation building purposes. The fact that the increased demand for education cannot always be met by domestic capacity makes the importing of foreign programs and providers an attractive option to help increase access to education and to augment/improve national capacity, especially for work in the knowledge economy (OECD, 2004).

SOCIO/CULTURAL DEVELOPMENT

There are mixed views and sometimes conflicting opinions related to socio/cultural rationales. On the one hand, there is the belief that when students stay in the home country while studying for a foreign qualification, national identity and indigenous customs can be maintained. On the other hand, one can question how relevant and culturally appropriate course content and teaching/learning processes are when imported from other countries. A third opinion emphasizes the advantages to students who live and study in a different country and culture than their own. Such an experience opens their eyes and increases their international understanding and cross-cultural skills while at the same time learning about how their own country relates to the rest of the world. These kinds of experiences and insights are difficult to replicate in a virtual or crossborder provision.

STUDENT AND PROVIDER/INSTITUTION PERSPECTIVES

As already mentioned, it is equally important to examine the rationales and anticipated impacts from the viewpoint of the students enrolled in crossborder courses/programs and the institutions/providers involved in delivering the education. Table 7.3 presents some differing perspectives on several key factors.

Table 7.3: Different Perspectives on Rationales and Impacts of Program and Provider Mobility

Rationales and Impact	Enrolled Students in Home Country	Institution/Provider in Source Country	Institution/Provider in Home Country
Increased access/supply in home country	Ability to gain foreign qualification without leaving home. Can continue to meet family and work commitments	Attracted to unmet need for higher education and training	Competition, collaboration, or coexistence with foreign providers
Cost/income	Less expensive to take foreign program at home as no travel or accommodation costs Tuition fees from quality foreign providers may be too high for majority of students	Strong imperative to generate a profit for crossborder operations. Fees could be high for receiving country	Varied rationales and impacts depending on whether institution/provider is competing or cooperating with foreign providers
Selection of courses/programs	Increased access to courses/programs in high demand by labor market	Tendency to offer high demand courses which require little infrastructure or investment	Need to offer broad selection of courses which may not have high enrollments and/or have major labor equipment requirements
Language/cultural and safety aspects	Can have access to courses in foreign and/or indigenous language. Remain in familiar cultural and linguistic environment. Post 9/11 students have stronger concerns about safety and security	Language of instruction and relevance of curriculum to host country important issues. If foreign language is used additional academic and linguistic support may be needed	

Quality	Can be exposed to higher or lower quality course provision	Depending on delivery mode quality may be at risk. Assurance of relevant and high-quality courses may require significant investment	Presence of foreign providers may be a catalyst for innovation and improvement of quality in courses, management, and governance
Recognition of qualification	Foreign qualification has to be recognized for academic and employment purposes	May be difficult for academic award and for institution to be recognized in foreign country	Recognized home providers have an advantage and are attractive to foreign providers for award-granting powers
Reputation and profile	Due to massive marketing campaigns, international profile is often mistakenly equated with quality of provider/program	Profile and visibility are key factors for high enrollments and strategic alliances	Home (domestic) providers are challenged to distinguish between those providers with high/low profile and high/low quality

It is interesting to review the results of a study by IDP (Davis, Olsen, and Bohm, 2000) which looked at issues and challenges regarding providers, partners, and policy of transnational education. This study focused entirely on traditional public/private universities who were engaged in providing courses and programs in other countries through branch campus, twinning, franchise, and other articulation type activities. Although this study was completed in 2000 and many new developments have occurred since then, the findings are still relevant and seem to be fairly representative of why conventional HEIs are motivated to be active in crossborder delivery of programs. According to the findings of the study (Davis, Olsen, and Bohm, 2000, p. 24), the primary rationales for “Offering Educational Programs Offshore” are

- 41% Generate additional sources of income
- 31% Increased profile and reputation
- 13% Internationalization of the curriculum
- 9% Recruit international students to Australian campuses
- 6% Build capacity of offshore partner

It is interesting to note the rationales that were ranked the lowest in importance, meaning that they had less than 6% response rate. These included providing opportunities for Australian students to undertake courses in offshore campuses and providing staff development and opportunities through the teaching and management of offshore programs. These findings emphasize the importance of income generation and increased profile/reputation as the driving motivation for both national level policy and institution level providers in large exporting countries like Australia. At the same time the potential to build capacity in foreign partners and domestic institutions alike were not seen as important. This is further evidence of the shift from academic collaboration and capacity building to commercialization and income generation.

The study also focused on identifying the challenges facing the movement of programs across borders. The participating institutions described the following issues as the major challenges facing them in the future: maintaining profile, operating within local legal contexts, and comparability of student outcomes. At the national level, the key challenges were seen to be: quality assurance, competition from other countries, nonuniversity players, in-country partners, economic/investment issues, reputation and the development of a national strategy, and avoiding individualism.

These are but a few of the aspects that contribute to the challenges and complexities of delivering courses and programs in other countries. The next section provides a number of concrete examples of this growing phenomenon of crossborder program and provider mobility.

NEW DEVELOPMENTS IN PROGRAM AND PROVIDER MOBILITY AROUND THE WORLD

The Global Student Mobility 2025 Report (2002) prepared by IDP Education Australia predicts that the demand for international education will increase from 1.8 million international students in 2000 to 7.2 million international students in 2025. By all accounts these are staggering figures and present enormous challenges and opportunities. It is not known what proportion of the demand will be met by student mobility, but it is clear that there will be exponential growth in the movement of programs and institutions/providers across national borders. New types of providers, new forms of delivery, and new models of collaboration are being developed in order to take education programs to students in their home countries.

The growth and change in crossborder program and provider mobility are remarkable. This section aims to provide a glimpse of these changes by identifying some of the new and interesting developments in crossborder education provision around the world. It is important to point out that this information reflects the mobility of programs and providers across borders; it does not include any of the innovative activities oriented to increasing student mobility or research/scholarship initiatives. The first part provides highlights of new crossborder activity by region of the world.

INNOVATIVE NEW INITIATIVES

The scope of new developments in program and provider mobility is described in this section. The examples have been taken from the breaking news service of the Observatory on Borderless Education (OBHE, 2002–2004), which tracks and reports on the latest developments and trends in borderless education. Only those initiatives announced or established in the last two years are listed in order to illustrate the most recent developments. There are more examples from conventional HEIs than from commercial company providers or from corporate universities; however, the increase from these “new” types of providers should not be underestimated in terms of volume, innovation, and impact.

MIDDLE EAST

The diversity of new developments in the Middle East makes it a very interesting region to study. For example, Poland has been approved to establish a new private medical institute in Israel where students will study for three years before moving to the Medical University in Gdansk for three more years of clinical study and then return to Israel for an internship (OBHE, 2003, November). Saudi Arabia is in the process of establishing new private universities with the involvement of foreign institutions and investors. For instance, the Prince Sultan Private University is being established in cooperation with the University of Arizona and UNESCO. In addition the Dar-AL-Faisal University is being founded in cooperation with the Stevens Institute of Technology (USA) and with financial investment from Boeing Company and the French Defence firm Thales (OBHE, 2003, June). It is also noteworthy that Harvard is planning to set up a branch campus in the United Arab Emirates (OBHE, 2004, June).

In Bahrain, a new Euro University is being planned in affiliation with the University of Hanover (Germany). Egypt is home to the American University established more than 80 years ago, but in the last three years the German University in Cairo and the LUniversity Francaise dEgypte have been established and a new British University is under development. The types of partnerships between local and foreign partners are slightly different thereby illustrating the creativity and diversity of new forms of collaboration. An interesting example of this is the franchise agreement where the distance M.B.A. program of Heriot-Watt University from the United Kingdom is being offered through the American University in Egypt (OBHE, 2004, March).

ASIA PACIFIC

Vietnam is an emerging hotbed of activity with the development of 100% foreign owner branch campus of RMIT from Australia. The International College of IT and Management, established by Troy State University from the United States is another example of a foreign branch campus. The number of active partnerships is growing. The University of Hue in Vietnam recently developed a franchised/joint degree bachelor's program in tourism with the University of Hawaii, and Hanoi University of Technology is currently offering masters and bachelors degrees with HEIs from Belgium (1), France (8), Germany (1), Singapore (2), and the United States (1). The Vietnamese government recently announced the

development of the “International University in Vietnam” as another initiative to increase national capacity for higher education. It is expected that half the university teaching staff will be Vietnamese and the other half from foreign universities. The involvement of foreign institutions will build on and expand from the current links of Ho Chi Minh City National University (OBHE, 2004, January).

Thailand is another country of increasing importance for crossborder education and is an appealing destination for institutions and providers from Egypt, China, Australia, and the USA. For example, the Egyptian Al-Azhar University and Jinan University from China both plan to open a branch campus in 2005. Swinburne University of Technology (Australia) has been operating a branch campus since 1998, although it is changing its focus to industry training only. Troy State University from the United States has a teaching site in Bangkok for its M.B.A. program and students can transfer to the United States depending on funds and visa requirements. Other institutions operating in Thailand include the Thai-German Graduate School of Engineering as well as 13 Australian and 9 U.K. universities (OBHE, 2004, March).

In Singapore, the University of New South Wales (Australia) will establish the first 100% foreign-owned HEI. They received full approval to do so by the Singaporean Government. It plans to offer undergraduate and graduate level programs and to develop a strong research capacity. Other well-respected foreign institutions offering education programs and training in Singapore through joint ventures, exchanges, and branch campus models include the Chicago University of Graduate School in Business, Shanghai Jiao Tong University, Stanford University, John Hopkins University, the German Technische Universitat Munchen, and Technische Universiteit Eindhoven from The Netherlands (OBHE, 2004, April).

It is also interesting to note the exporting activities of Singapore institutions. For example, the National University of Singapore has developed a joint M.B.A. with Fudan University aimed at both Chinese and Singapore students. It is also embarking on a new graduate school initiative for Chinese students to be located in Suzhou Graduate Town, which is part of the Suzhou Industrial Park (OBHE, 2003, September).

Raffles LaSalle Limited from Singapore is a publicly traded company very active in providing programs in fashion and design in many Asian countries. It has a number of very innovative partnership arrangements and spans many countries. OBHE (2003, December) describes it as “a remarkable instance of international partnership, combining a Singapore firm with branches in Australia, China, Malaysia and Thailand,

accreditation from an Australian state and a Canadian province, degrees from an Australian and a UK university, and a number of in-county university and college partners.”

The speed of change and innovation in India’s higher education sector is unprecedented and includes both the import and the export of programs and services. One of the more interesting initiatives is the partnership between the Caparo Group, a U.K. firm with interests in steel, engineering, and hotels, and Carnegie Mellon University (USA) to set up a new campus in India (OBHE, 2003, July).

AFRICA

The Universiteit Nienrode (The Netherlands Business School), a private institution, has recently established a new branch campus in Nigeria in partnership with the African Leadership Forum (AFL), which is a nonprofit organization founded in 1988. This is one of the first such initiatives outside of South Africa (OBHE, 2004, April). In South Africa, in the last few years, there have only been a handful of foreign institutions with branch campuses including Monash and Bond from Australia, De Montfort (UK), and The Netherlands Business School. As a result of the recent review of all M.B.A. programs offered in South Africa, three of the foreign institutions are leaving because of accreditation related issues. Monash will remain (it does not offer an M.B.A. program) as well as the U.K.-based Henley Management College which is primarily a distance education provider (OBHE, 2004, June). South Africa is an example of a country where there has been a decrease in the number of foreign programs being offered, largely due to government regulations and accreditation processes. Kenya is home to two private nonprofit universities. The Aga Khan University from Pakistan opened a branch university campus in Kenya in 2002, which specializes in nursing education, and Alliant International University from the United States provides education in social sciences and humanities (OBHE, 2004, January).

Mauritius is taking some bold new steps as it tries to establish itself as a “cyber island” by attracting foreign IT firms from the west and from India. A “knowledge center,” described as a world-class integrated education and training complex is a key aspect of its plans. To date, there are already more than 50 foreign universities and professional bodies offering programs locally. These programs tend to be at the diploma or certificate level and in specialized fields (OBHE, 2003, October). The concept of attracting foreign education providers to support the education and training needs of the new “cyber island” may have positive consequences in terms

of stemming brain drain or evening stimulating brain gain, but the impact on local education institutions is not yet known.

EUROPE

Russia is an example of a country undergoing major economic reform with major implications for the higher education sector. Many HEIs, for example, the Moscow International Slavonic Institute and the Moscow State University of Industry are operating programs abroad, such as in Bulgaria. However, Russia is not only a sending country but also a receiving country through joint/double degrees, twinning, and franchise arrangements. For instance, the Higher School of Economics has a double degree program with the London School of Economics. The Stockholm School of Economics is operating in St. Petersburg and the University of Oslo's Centre for Medical Studies is in Moscow. The U.K. Open University is active through 80 business training centers across the country. The University of Southern Queensland is partnering with Far Eastern National University in Vladivostok for program delivery (OBHE, 2003, October). The Pune-based International Institute of Information Technology plans to offer its masters and Ph.D. courses through the newly established Russian-Indian Centre for Advanced Computer Research in Moscow.

In Greece, the University of Indianapolis has been active for more than a decade, first through an articulation program whereby students would start their studies in Athens and then go to the United States for completion of the program. This model has now evolved into a campus in Greece called the University of Indianapolis, Athens (OBHE, 2004, June).

In terms of activities by private companies, Laureate Education owns a part of or all of the Universidad Europa de Madrid in Spain, Les Roches and Glion Hotel School in Switzerland, and the *L'ecole Superieur du Commerce Exterieur de Paris* in France. Apollo International is offering its courses in The Netherlands, and Raffles La Salle from Singapore has recently signed an agreement with Middlesex University to offer their bachelors and masters programs in fashion and design (OBHE, 2003, December).

NORTH AMERICA

To report on the U.S. crossborder activities is a challenge because of the volume, diversity of providers, and types of partnerships. A review of the previous regional sections shows that U.S. HEIs and private

companies are probably the most active and innovative in program and provider mobility around the world. One of the more interesting recent developments is that George Washington University is one of the first HEIs planning to open a branch in South Korea in 2006, now that the government of South Korea has changed its regulatory system to permit foreign providers. There are several examples of U.S. program mobility into Korea through partnerships with local institutions and companies. For instance, Syracuse University, in conjunction with Sejong University in Seoul, offers a specially designed M.B.A. program for Korean students. Duke and Purdue Universities are also offering M.B.A.s in Korea, and Stanford University is delivering online graduate and postgraduate courses and uses alumni as local tutors (OBHE, 2004, August). These types of crossborder activities from U.S. HEIs can be found in many of the Asian countries, for example, China, Vietnam, Thailand, Malaysia, Singapore, The Philippines, and more recently India as well as the Middle East. For instance, the University of Missouri at St. Louis has been involved in the establishment of the first private university in the Kuwait, the Gulf University of Science and Technology, and has similar relationship with the Modern College of Business and Science in Oman (OBHE, 2004, February).

An important feature of the U.S. crossborder activity is the activity by private and publicly traded companies. The Global Education Index (GEI), developed by the OBHE, is a system of classifying many of the largest and more active publicly traded companies who are providing education programs and services. A scan of more than 50 companies (Garett, 2003) shows that the United States is home to the majority of these companies. Some of the better-known ones include Kaplan (owned by the Washington Post), Apollo Group, DeVry, Career Education Corporation, and Laureate Education (formerly Sylvan Learning Systems). Kaplan owns 57 colleges in the United States, but now owns the Dublin Business School—Ireland's largest private undergraduate institution. This is likely to be the first of many future purchases of foreign institutions (OBHE, 2003, December). The Apollo Group owns Phoenix University, which is the largest American private university and is aggressively seeking to broaden its foreign investments and holdings. Since 1995, Apollo has also owned Western International University (WIU), which runs a branch campus called Modi Apollo International Institute in New Delhi through a partnership with the KK Modi Group, an Indian industrial conglomerate. WIU has an agreement with the Canadian Institute of Business and Technology (CIBT) whereby CIBT offers WIU programs through its three business schools in Beijing (OBHE, 2003, October). Other smaller,

but nonetheless interesting initiatives, have been the establishment of Northface University by Northface Learning Inc., which offers degree programs in IT and business and has the backing of IBM and Microsoft. This will be a company to watch in terms of future international expansion (OBHE, 2004, August). The University of Northern Virginia is another small private university offering programs in business and IT and has recently opened a branch campus in the Czech Republic and has delivery partnerships in China and India (OBHE, 2004, August). These are only a few examples of the hundreds of new initiatives and partnerships that U.S. HEIs and companies are undertaking to deliver education courses and programs to other countries of the world.

In early 2004, the Canadian International Management Institute, a private postsecondary institution that represents the recruiting interests of 10 Canadian universities and colleges, signed a memorandum of understanding with the Chinese Scholarship Council to offer a foundation and credit transfer program to students in China wanting to gain Canadian University degrees. It is a five-year program during which students will be based in China for foundation studies, cultural adjustment, and language training for the first three years. If students meet grade requirements, they can continue their studies either in Canada or China for the final two years. The China-based partner for this initiative is the Shougang Institute of Technology, which is a municipal managed higher education institute specializing in manufacturing, business, and services disciplines (OBHE, 2004, June)

The Al-Abram Canadian University in Egypt is Canada's first and to date, the only example of Canadian universities directly supporting the establishment of a new foreign university. The Al-Abram Organization is a large company that owns the Egyptian daily newspaper. It is cooperating with McMaster University, Ecole Polytechnique de Montreal, and the Universite du Quebec in Montreal to establish a new private university that is expected to enroll students as of September 2004. The Association of Canadian Universities and Colleges has played a role linking Al-Abram with Canadian partners and may have a role during the implementation phase (OBHE, 2004, March).

The Serebra Learning Corporation is a publicly traded Canadian company offering generic and bespoke software plus more than 1,800 courses mainly in IT. Serebra is working with the Consortium for Global Education—a group of 45 Baptist HEIs in the United States to provide quality-assured IT training in the developing world. Serebra also played a key role in the creation of the Pakistan Virtual University (OBHE, 2003, November).

In terms of private providers establishing a presence and offering programs in Canada, there are some interesting developments. To date, Phoenix University owned by U.S. Apollo Group has a program operating in British Columbia, DeVry another private U.S. firm has established a degree-granting institution in Alberta, and Lansbridge is delivering distance degree program in New Brunswick. There are other foreign providers operating in Canada or delivering crossborder program at the subdegree level, but systematic information on what types and level of programs, in which provinces, and in what kind of partnerships is just not available.

SOUTH AMERICA

In Mexico, the University of the Incarnate Word (UIW), a private U.S. institution from Texas opened a new campus in 2003. Other U.S. institutions with Mexican campuses include Endicott College and Alliant Intentional University, and Texas A&M which has a “university center” in Mexico City (OBHE, 2003, September). In 2000, Laureate Education purchased the Universidad del Valle de Mexico and is currently planning to open a new Branch in Guadalajara. It also owns Universidad Interamericana, a private university with campuses in Costa Rica and Panama (OBHE, 2003, November), and part of three private universities in Chile (OBHE, 2003, June). Bologna University from Italy is one of the few foreign institutions with a branch campus in Argentina. In terms of exporting, the Technical Institute of Monterrey (ITESM) in Mexico is well known for its online education programs, especially the M.B.A., delivered to many countries in Latin America.

These new initiatives illustrate the diversity of education activities by conventional HEIs and new commercial providers. They demonstrate the range of countries and types of partnerships being formed to promote, exchange, link, and predominantly sell higher education across borders.

COMPARATIVE ANALYSIS OF AUSTRALIA, THE UNITED KINGDOM, AND NEW ZEALAND HEIs CROSSBORDER PROGRAM ACTIVITY

One of the glaring challenges in trying to analyze the implications of crossborder delivery of education programs is the lack of data. While there is more reliable information and informed analysis on the movement of students across borders, the paucity of information on program mobility creates an undesirable environment of speculation, confusion,

and often misinformation. This can have negative consequences in terms of confidence in the quality and dependability of crossborder education provision and impedes the analysis needed to underpin solid policy and regulatory frameworks.

Australia is the leader in terms of having up-to-date and fairly comprehensive data from universities on the volume, types, award level, and discipline of crossborder program delivery. The Australian Vice-Chancellors Association (AVCC, 2003) as well as Department of Education, Science, and Technology (Department of Education, Science and Training [DEST], 2003) collects, analyzes, and publishes these data on an annual basis. In New Zealand, the International Policy and Development Unit of the Ministry of Education (2002) undertook, in 2001, a major survey of crossborder delivery in all tertiary institutions, but this is not an annual data gathering exercise yet. As reported by the Observatory on Borderless Higher Education (Garrett and Verbik, 2004), the U.K. Higher Education Statistics Agency has collected information for the 2002/03 academic year on U.K. education programs offered abroad. This is the first time it has gathered these data and published its findings. This is definitely a step forward, and there is news that OECD is also trying to develop a set of indicators to assist with the collection of program and provider movement in OECD countries in the future.

An examination of the information from Australia, New Zealand, and the United Kingdom reveals differences in approach to data collecting and interpretation. To the extent possible, a comparative analysis was done in order to see if there were noteworthy similarities and differences. In order to manage a degree of comparability, some of the raw quantitative data were converted into percentages. This required some rounding-off of numbers. It is emphasized that the information presented in Table 7.4 is for illustrative purposes only. It is also noted that these three reports provide data on the export of programs and do not provide information on any crossborder education coming into their jurisdiction. However, it is probably fair to say that the number of crossborder programs and providers being imported into these three countries is insignificant as compared to the number of outgoing programs and providers.

It is not surprising that the crossborder activity of these three countries is pretty much concentrated in the Asia Pacific region. This is due to reasons of geographical proximity, historical and linguistic ties, and most importantly the fact that many Asian countries do not have the capacity to meet the increasing local demand for tertiary level education.

Table 7.4: Comparative Data on Programs offered Across Borders

Year data collected	United Kingdom		Australia		New Zealand 2001
	2002/03	1999/2000	2003		
Percent of HEIs delivering crossborder programs		88% of universities		47% of all (38) public HEIs (88% of universities)	
Number of students in crossborder programs	101,645 students	34,905 students	97,751 students	2,200 students (increase from 380 in 1997)	
Number of crossborder programs			1,569 programs	63 programs (increase from 6 in 1997)	
Primary locations	Hong Kong	Hong Kong, Malaysia, Singapore	China, Hong Kong, Singapore, Malaysia represent 70% of crossborder delivery	Malaysia: 23%, China: 9%, Australia: 9%, Hong Kong: 6%, Singapore: 6%	
Level of degrees	Undergrad: 56%, Graduate: 44%			Subdegree: 34%, Undergrad: 39%, Post grad: 27%	
Primary disciplines	Business: 44%, Joint degrees: 21%, Law: 13%, IT: 8.5%		Business, administration, economics	Business/commerce: 15%, Special medicine: 15%, Computer science: 14%, Management: 13%	
Spread of activity among HEIs	10 institutions account for 81% of crossborder enrollments			Three institutions account for 55% of all crossborder program delivery	
Mode of delivery				42% through campus-based teaching; 32% through distance only; 26% used combination	
Source of data	HESA 2002/03; London External 2002/03—as reported by OBHE (July, 2004)	DEST Overseas Student Statistics (2003)	AVCC Offshore Programs of Australian Universities, 2003	New Zealand Ministry of Education (2002)	
Source: Knight (2005).					

Asia is certainly the region to watch for new developments. As this analysis shows, Malaysia, Singapore, China, and to a lesser extent Thailand, India, and Vietnam have been the most popular destination countries during the last 5–10 years. During this period, a maelstrom of new types of partnerships has developed through franchising, twinning, and articulation programs between foreign HEIs and local HEIs and private companies. These receiving countries have learned a great deal from their foreign partners and are currently being more proactive and strategic in exporting their own programs and providers to neighboring countries in Asia and the Middle Eastern countries. This includes a substantial number of private commercial companies such as Raffles LaSalle, Informatics, and Hartford in Singapore, Aptech and the National Institute for Information Technologies in India, and SEG and Stamford College in Malaysia (Garrett, 2003). Given that Asia will represent approximately 70% of the global demand for international education in 2025 (IDP, 2002), this part of the world will be the region to carefully watch for new trends and developments.

TOWARD A TYPOLOGY FOR NEW CROSSBORDER PROVIDERS AND DELIVERY MODES

It is both fascinating and challenging to track the new developments in the movement of programs and providers across borders. The number of new actors involved in the promotion, provision, and now regulation of crossborder education is increasing exponentially. Whether one is supportive or critical of the change, the reality is that the education sector in many countries is becoming a competitive and dynamic market place for both local and foreign providers.

Given the increase in demand for higher education, there are new providers, new delivery methods, and new types of programs. These new providers include media companies such as Pearson (UK), Thomson (Canada), multinational companies such as Apollo (USA), Informatics (Singapore), and Aptech (India), corporate universities such as those run by Motorola and Toyota, and networks of universities, professional associations, and organizations. Generally, these new commercial providers are mainly occupied with teaching/training or providing services and do not focus on research *per se*. They can complement, cooperate, compete, or simply coexist with the traditional public and private HEIs whose mandate is traditionally the trinity of teaching, research, and service. However, as the previous section illustrates, it is not just for-profit companies that are

becoming increasingly interested in commercial crossborder initiatives. Conventional HEIs, both private and public, are also seeking opportunities for commercial delivery of education programs in other countries. The majority of these are *bona fide* institutions that comply with domestic and foreign regulations (where they exist), but there is also an increase in rogue or low quality providers who are not recognized by *bona fide* accreditation/licensing bodies. In addition, there is a worrisome increase in the number of “degree mills” operating around the world. These are often no more than web-based companies that are selling certificates based on “life experiences” and are not delivering education programs at all.

The expansion in numbers and types of entities that are providing education courses and programs across borders is causing some confusion. This also applies to the modes of crossborder program mobility and provider mobility. This general state of flux may well indicate progress and innovation, but it also begs for some kind of classification system or typology in order to make sense of the new “playing field” of crossborder education.

The following sections present three distinct typologies for the different types of providers, the different means of program mobility, and the various ways that providers are moving across borders. A key factor underlying these typologies is that the type of provider is purposely separated from the mode of mobility. To date, much of the discussion about program and provider mobility has consciously or unconsciously linked the type of provider with a certain mode of delivery. This is one of the reasons for the state of confusion and therefore, a generic classification system for crossborder providers is proposed. A second typology on the modes of program mobility is presented. It is important to emphasize that the different forms of program mobility can apply to any or all of the providers. A third typology focuses on the ways that providers move across borders.

TPOLOGY OF PROVIDERS

The term provider is used as a generic term to include all types of HEIs as well as companies and networks involved in crossborder education. It is an attempt to conceptually map the diversity of actors and to separate the type of provider from the form of crossborder delivery. The key factors used to describe each category of provider and to distinguish one category from another are the following:

- Public, private, or religious
- Nonprofit or for-profit
- Recognized by a *bona fide* national licensing/accrediting body
- Part of the national “home” higher education system.

The proposed typology is purposely rather generic and does not provide specific details on the characteristics of each category of provider. The typology is oriented to international academic provision but may have some relevance for domestic delivery as well. There seems to be a continual flow of announcements about new providers and new forms of partnerships between providers. It is an evolving field that needs to be monitored (Table 7.5).

The description and classification of the different types of new cross-border providers is rather challenging. The tendency is to use the factors inherent to traditional HEIs and apply them to new providers. This may change over time.

One of the central issues is who recognizes and gives the provider the power to award the qualifications in the “home or sending country” and/or in the “host or receiving country.” However, as previously pointed out, some of the “new providers” are not part of, or are not recognized by, a “home” national education system. Another challenge in developing a typology is that the terms “public, private, and religious” are interpreted and used in different ways among countries (and sometimes within countries as well). The emergence of new trade regulations applying to education services usually means that all commercial crossborder providers are considered to be private by host/receiving country regardless of their status at home. This adds yet another complicating dimension to the task. Furthermore, the definition of the terms profit and non-profit also varies among countries. It is interesting to follow the changes in national regulatory systems for crossborder education (especially in China, India, Malaysia, Japan, South Africa) in terms of these issues, and especially how profit and nonprofit education entities and services are defined.

TYPOLOGY OF PROGRAM MOBILITY

Crossborder mobility of programs can be described as “the movement of individual education/training courses and programs across national/regional borders through face to face, distance or a combination of these modes.” Credits toward a qualification can be awarded by the sending foreign country provider or by an affiliated domestic partner or

Table 7.5: Typology of Crossborder Providers

Category	Status	Orientation	Notes
Recognized HEIs	Can be public, private, or religious institutions Usually part of home national education system and recognized by national <i>bona fide</i> licensing/accrediting body	Can be nonprofit or profit oriented	Known as traditional type of HEI focusing on teaching, research, and service
Nonrecognized HEIs	Usually private and not formally part of national education system Includes HEIs that provide a course of study but are not recognized by national <i>bona fide</i> licensing/accreditation body If the nonrecognized HEIs are of low quality they are often referred to as “rouge” providers	Usually profit oriented	“Diploma mills” sell degrees but do not provide programs of study and are related to crossborder education but are not a true provider “Rogue providers” are often accredited by agencies that are selling accreditation (accreditation mills) or by self-accrediting groups or companies
Commercial company HEIs	Can be publicly traded company (see Global Education Index of OBHE) or privately owned Includes: 1. Companies that establish HEIs that may or may not be “recognized” by <i>bona fide</i> licensing/accrediting bodies and 2. Companies that focus more on the provision of services Usually not part of “home” national education system	Profit oriented	Known as type of “alternative or new provider” Can include variety of companies (i.e., media, IT, publishing) who provide education programs and support services. Can complement, cooperate, compete, or coexist with more traditional HEIs

Corporate HEIs	Not part of home national education system May be difficult to identify home country Usually part of major international corporation and outside of national education system. Not usually recognized by national <i>bona fide</i> licensing/accreditation body Can be combination of public/public or private/private organizations and HEIs The organizations/networks may or may not be part of home national education system; and they may or may not be recognized by national <i>bona fide</i> licensing/accreditation body. However, some of the individual partners may be. Includes HEIs that are 100% virtual May or may not be part of home national education system and may or may not be recognized by national <i>bona fide</i> licensing/accrediting body	Not relevant	Known as type of “alternative or new provider” Often collaborate with traditional HEIs especially for degree-awarding power
Professional, governmental and nongovernmental organizations and networks		Usually profit oriented in purpose	Known as type of “alternative or new provider”
Virtual HEIs		Usually profit oriented if delivering crossborder	Difficult for receiving national education system to monitor or regulate international virtual HEIs due to distance delivery methods
<p>Note: Home country means country of origin or sending/source country. Host country means receiving country. Source: Knight (2005).</p>			

jointly. Program mobility can involve the delivery of individual courses and programs of a comprehensive HEI; thus, the crossborder profile of an institution/provider may be different from the home profile. On the other hand, program mobility can also involve the only program or course offered by a provider. Franchising, twinning, double/joint, and other articulation models are the more popular methods of crossborder program mobility (Table 7.6).

A key factor in program mobility is “who” awards the course credits or ultimate credential for the program. As the movement of programs proliferates, there will undoubtedly be further changes to national, regional, and even international regulatory frameworks. The question of “who grants the credits/awards” will be augmented by “who recognizes the provider” and whether or not the program has been “accredited or quality assured” by a *bona fide* body. Of critical importance is whether the qualification is recognized for employment or further study in the receiving country and in other countries as well. The perceived legitimacy, recognition, and ultimate mobility of the qualification are fundamental issues yet to be resolved.

Given that several modes for program mobility involve partnerships there are questions about who owns the intellectual property rights to course design and materials. What are the legal and moral roles and responsibilities of the participating partners in terms of academic, staffing, recruitment, evaluation, financial, and administrative matters? While the movement of programs across borders has been taking place for many years, it is clear that the new types of providers, partnerships, awards, and delivery modes are challenging national and international policies and regulatory frameworks and that there are more questions than answers at the present time.

TYPOLGY OF PROVIDER MOBILITY

Crossborder mobility of institution/provider can be described as “the physical or virtual movement of an education provider across a national/regional border to establish a presence to provide education/training programs and/or services to students and other clients.” The difference between program and provider mobility is one of scope and volume in terms of programs/services offered and the local presence (and investment) by the foreign provider. Credits and qualifications are awarded by the foreign provider (through foreign, local, or self-accreditation methods) or by an affiliated domestic partner or jointly. Forms of crossborder provider mobility include branch campuses, mergers with or acquisitions

Table 7.6: Typology of Crossborder Program Mobility Modes

Category	Description	Comments
Franchise	An arrangement whereby a provider in the source Country A authorizes a provider in another Country B to deliver their course/program/service in Country B or other countries. The qualification is awarded by provider in Country A	Arrangements for teaching, management, assessment, profit sharing, awarding of credit/qualification, etc. are customized for each franchise arrangement
Twinning	A situation whereby a provider in source Country A collaborates with a provider located in Country B to develop an articulation system allowing students to take course credits in Country B and/or source Country A. Only one qualification is awarded by provider in source Country A	Arrangements for twinning programs and awarding of degree usually comply with national regulations of the provider in the source Country A
Double/joint degree	An arrangement whereby providers in different countries collaborate to offer a program for which a student receives a qualification from each provider or a joint award from the collaborating providers	Arrangements for program provision and criteria for awarding the qualifications are customized for each collaborative initiative in accordance with national regulations
Articulation	Various types of articulation arrangements between providers in different countries permit students to gain credit for courses/programs offered/delivered by collaborating providers	Allows students to gain credit for work done with a provider other than the provider awarding the qualification
Validation	Validation arrangements between providers in different countries which allow Provider B in receiving country to award the qualification of Provider A in source country	In some cases, the source country provider may not offer these courses or awards themselves
Virtual/distance	Arrangements where providers deliver courses/program to students in different countries through distance and online modes. May include some face-to-face support for students through domestic study or support centers	

Source: Knight (2005).

of domestic providers, independent institutions, study and support centers plus other types of innovative affiliations. A distinguishing feature between program and provider mobility is that with provider mobility the learner is not necessarily located in a different country than the awarding institution (Table 7.7).

The next section of the chapter takes a broader and deeper look at some of the issues and implications involved in this dynamic but rather muddled arena of crossborder education.

ISSUES AND IMPLICATIONS

The typologies of crossborder providers and the different means and arrangements for providing education across national boundaries illustrate the diversity of actors, types of provision, delivery methods, and of course rationales driving the whole enterprise of crossborder education. This section focuses primarily on the issues and challenges that relate to quality assurance and the recognition of providers, programs, and credits/qualifications at national and international levels. This does not diminish the importance of academic and administrative implications for individual providers and especially traditional HEIs. These are noted but not elaborated at the end of this section.

There are five macro issues that are receiving the most attention and which have different dimensions and consequences for the various types of providers. These issues are interrelated and all are influenced by regulations of the sending and receiving country. The first issue is the licensing or registering of institutions/providers who are delivering across borders courses/programs. Are they recognized and part of the home national system and also recognized/licensed in the receiving country? The second issue focuses on the quality of the courses/programs being offered and the quality of the academic experience of the student. The third issue follows on the same theme and focuses on the role of accreditation and the more recent trends of internationalization and commercialization of accreditation for worldwide status and profile, rather than for standards. The fourth issue addresses the recognition of the actual award or qualification being offered for purposes of employment and further study. This point relates directly to the importance of student/employer and public being aware of the quality and validity of the programs and awards provided. The fifth issue focuses on the challenge and need for a review of the policy and regulatory environments in which program and provider mobility are operating.

Table 7.7: Typology of Crossborder Provider Mobility Modes

Category	Description	Examples
Branch campus	Provider in Country A establishes a satellite campus in Country B to deliver courses and programs to students in Country B (may also include Country A students taking a semester/courses abroad). The qualification awarded is from provider in Country A	Monash University from Australia has established branch campuses in Malaysia and South Africa. University of Indianapolis has a branch campus in Athens
Independent institution	Foreign Provider A (a traditional university, a commercial company, or an alliance/network) establishes in Country B a stand-alone HEI to offer courses/programs and awards	The German University in Cairo, Phoenix Universities in Canada and Puerto Rico (Apollo Group)
Acquisition/merger	Foreign Provider A purchases a part of or 100% of local HEI in Country B	Laureate (formerly Sylvan Learning Systems) has merged with and/or purchased local HEIs in Chile, Mexico, and other LA countries
Study Center/teaching Site	Foreign Provider A establishes study centers in Country B to support students taking their courses/programs. Study centers can be independent or in collaboration with local providers in Country B	Texas A&M has “university center” in Mexico City. Troy University (USA) has M.B.A. teaching site in Bangkok
Affiliation/networks	Different types of “public and private,” “traditional and new” providers from various countries collaborate through innovative types of partnerships to establish networks/institutions to deliver courses and programs in local and foreign countries through distance or face-to-face modes	Partnership between the Caparo Group and Carnegie Mellon University to establish campus in India. The Netherlands Business School branch campus in Nigeria in partnership with African Leadership Forum (NGO)
Virtual university	Provider that delivers credit courses and degree programs to students in different countries through distance education modes and that generally does not have face-to-face support services for students	International Virtual University, Hibernia College, Arab Open University

Source: Knight (2005).

REGISTRATION AND LICENSING OF FOREIGN PROVIDERS

A fundamental question is whether the institutions, companies, and networks that are delivering award-based programs are registered, licensed, or recognized by the receiving country. The answer to this question varies. There are many countries that do not have the regulatory systems in place to register out-of-country providers. Several reasons account for this, including lack of capacity or political will. If providers are not registered or recognized it is difficult to monitor their performance. It is usual practice, that if an institution/provider is not registered as part of a national system, then regulatory frameworks for quality assurance or accreditation do not apply. This is the situation in many countries in the world and hence foreign providers (*bona fide* and rogue) do not have to comply with national regulations.

The questions and factors at play in the registration or licensing of foreign providers are many. For instance, are there different criteria or conditions applicable to those providers who are part of and recognized by a national education system in their home country than for those providers who are not? Does it make a difference if the provider is for-profit or nonprofit, private or public, an institution or a company? What conditions apply if in fact the provider is a company that has no home-based presence and only establishes institutions in foreign countries? How does one track all the types of partnerships between local domestic institutions/companies and foreign ones? Is it even possible to register a completely virtual provider? Clearly, there are challenges and difficulties involved in trying to establish appropriate and effective national or regional regulatory systems.

Often there are bilateral cultural/academic agreements in place to facilitate and monitor the foreign presence of education providers. However, the fact that education services are now part of bilateral and multilateral trade agreements introduces new regulations and challenges. The existence of trade agreements that aim to liberalize and promote trade in education services is a relatively recent factor to be considered. Trade agreements can help to provide new opportunities, but also present new dilemmas (Knight, 2002). A key question facing national governments, as well as international organizations, is to what extent will the introduction of new national regulations to license or recognize out-of-country providers be interpreted as barriers for trade and therefore need to be modified to comply with trade rules. The issue of regulating and licensing providers that deliver education across borders needs further attention. Consideration of what national, regional,

and international policies and frameworks are necessary and feasible in light of new trade regulations merits study by the education sector (Van Damme, 2002). This is becoming a complex and more urgent issue to address.

ASSESSING AND ENSURING QUALITY ASSURANCE

It becomes even more complicated when one looks at accreditation and quality assurance of providers and imported/exported education programs. The terms accreditation and quality assurance have different meanings and significance depending on the country, actor, or stakeholder using the term. Terminology related to quality is a real minefield and the cause of much debate and confusion at the international level. For the purposes of this discussion, quality recognition and assurance is used in a general sense and includes quality audit, evaluation, accreditation, and other review processes and elements. This generic approach is not meant to diminish the differences in meaning and approach used by various countries. However, a macro interpretation of quality recognition and assurance of crossborder education is needed to attract the attention that this issue deserves.

Firstly, it must be noted that increased importance has been given to quality assurance at the institutional level and at the national level in the past decade. Quality assurance mechanisms and national organizations have been developed in over 60 countries in the last decade. New regional quality networks have also been established. The primary task of these groups has been to assess and assure quality of domestic higher education provision of public and private HEIs. However, the increase in crossborder education by institutions and commercial companies has introduced a new challenge to the field of quality assurance. Historically, national quality assurance agencies have generally not focused their efforts on assessing the quality of imported and exported programs, with some notable exceptions. Hong Kong, Malaysia, South Africa, and Israel, as receivers of crossborder providers and programs have developed regulatory systems to register and monitor the quality of foreign provision. The United Kingdom and Australia are examples of sending countries that have introduced quality assurance for exported crossborder provision by their recognized HEIs. The question now facing the sector is how does one deal with the increase in crossborder education by public/private institutions, and in particular by the new private commercial companies and providers who are not part of, or recognized by nationally based quality assurance schemes.

It is probable that sectors, in addition to education, will be interested in developing international quality standards and procedures for education. ISO standards or other industry-based mechanisms such as the Baldrige Awards are examples of quality systems that might be applied or modeled for crossborder education. The education sector has mixed views on the appropriateness of quality standards being established for education by those outside the sector, some see merit to this idea and others see problems. At the same time, there are divergent opinions on the desirability and value of any international standards or criteria for quality assurance as this might jeopardize the sovereignty of national level systems or contribute to standardization—not necessarily quality standards. This issue is complex, and there are many different actors and stakeholders involved.

ACCREDITATION—COMMERCIALIZATION AND INTERNATIONALIZATION?

Market forces are making the profile and reputation of an institution/provider and their courses more and more important. Major investments are being made in marketing and branding campaigns in order to get name recognition and to increase enrollments. The possession of some type of accreditation is part of the campaign and assures prospective students that the programs/awards are of high standing. This is introducing an internationalization and even commercialization dimension to accreditation practices. However, it is very important not to confuse commercial *bona fide* accreditation agencies with “accreditation mills.”

It is interesting to note the increase in the number of *bona fide* national and international accreditation agencies who are now working in over 50 countries. For instance, the U.S. national and regional accrediting bodies are providing/selling their services in over 65 countries. The same trend is discernible for accreditation bodies of the professions such as ABET (Engineering) from the United States and EQUIS (Business) from Europe.

At the same time, there are networks of institutions and new organizations that are self-appointed and engage in accreditation of their members. These are positive developments when seen through the lens of trying to improve the quality of the academic offer. However, there is some concern that they are not totally objective in their assessments and may be more interested in contributing to the race for more and more accreditation “stars” than to improving quality. Another related and more worrisome development is the growth in accreditation mills. These organizations are

not recognized or legitimate bodies and they more or less “sell” accreditation status without any independent assessment. They are similar to degree mills that sell certificates and degrees with no or minimal course work. Different education stakeholders, especially the students, employers, and the public need to be aware of these accreditation (and degree) mills which are often no more than a web address and are therefore out of the jurisdiction of national regulatory systems.

RECOGNITION OF QUALIFICATIONS

The need to have mechanisms that recognize academic and professional qualifications gained through domestic or international delivery of education is another important consequence of increased crossborder activity. The key questions are: who awards the qualification, especially in partnerships and network arrangements, is the provider recognized, if so by what kind of accrediting/licensing body, and in which country is that body located? Given the importance of both student mobility and professional labor mobility, within and between countries, the mechanisms for qualification recognition have to be national, regional, and or international in nature and application.

UNESCO has long acknowledged the requirement of an international system to facilitate and ensure recognition of academic and professional qualifications. Regional UNESCO conventions on the Recognition of Qualification were established more than 25 years ago and have been ratified by over 100 Member States in Africa, Asia and the Pacific, the Arab States, Europe, and Latin America. They are unique, legally binding instruments dealing with crossborder mutual recognition of qualifications. There is limited awareness of these instruments except for the European regional convention, which in 1997 was updated jointly by UNESCO and the Council of Europe in the form of the Lisbon Convention. At the present time, there is discussion on how these UNESCO conventions can be used as instruments to assure students, employers, and the public that there are systems in place to recognize academic and professional qualifications (UNESCO, 2002). Given the growth in academic mobility and the increased mobility of the labor force, there is a clear and urgent need that this issue be addressed. Questions are also being raised as to whether these UNESCO conventions can be strengthened or should alternative regional or international agreements be developed.

The credibility of higher education programs and qualifications is extremely important for students, employers, the public at large, and of course for the academic community itself. Additional efforts are needed

at institutional, national, and international levels to keep the different stakeholders cognizant of new opportunities for education and professional mobility but also new risks such as rogue providers, diploma and accreditation mills, and the more subtle issues related to new providers and new qualifications. The larger and perhaps most critical issue is assurance that the education and the qualification awarded are legitimate and will be recognized for employment purposes or for further studies either at home or abroad. This is a major challenge facing the national and international higher education sector and more research is necessary.

NATIONAL, REGIONAL, AND INTERNATIONAL FRAMEWORKS

Of current interest and debate is whether national level accreditation and quality assurance systems (where they exist) are able to attend to the complicating factors of education mobility across countries, cultures, and jurisdictional systems. A fundamental question is whether countries have the capacity to establish and monitor quality systems for both incoming and outgoing education programs given the diversity of providers and delivery methods. Should national quality/accreditation systems be complemented and augmented by regional or international frameworks? Is it advisable and feasible to develop mutual recognition systems between and among countries? Would an International Code of Good Practice be appropriate or strong enough to monitor quality? These are key questions for the education sector to address.

Both UNESCO and OECD have identified the accelerated growth and increasing importance of crossborder education as a priority area for the higher education sector. Together, they are working on two new initiatives. The first is the “UNESCO/OECD Guidelines for Quality Provision in Crossborder Higher Education.” The purpose of the joint guidelines is to ensure that the quality of crossborder provision of higher education is managed appropriately to limit low quality provision and rogue providers and to encourage those forms of crossborder delivery of higher education that provide new opportunities, wide access, and increase the possibilities of improving the skills of individuals students (UNESCO/OECD, 2004a). The Joint Guidelines are based on the principle of mutual trust and respect among countries and recognize the importance of national authority and activity in education policy making. The guidelines make recommendations for six key stakeholder groups. They are national governments, HEIs/providers, student groups, quality assurance and accreditation agencies, credential and qualification

evaluation groups, and professional bodies. As guidelines, they are without any regulatory power, but they are critical to ensuring that crossborder education provision is a priority issue and receives attention and action by key stakeholders. A second joint activity is the development of “An Information Tool on Recognized Higher Education Institutions.” This is an important adjunct to the guidelines and will provide concrete information about HEIs that are recognized by a competent body in participating countries (UNESCO/OECD, 2004b).

As the discussion moves forward, it will be of strategic and substantive importance to recognize the roles and responsibilities of all the players involved in quality assurance including individual institutions/providers, national quality assurance systems, nongovernment and independent accreditation bodies, and regional/international organization. It will be important to work in a collaborative and complementary fashion to build a system that ensures the quality and integrity of crossborder education and maintains the confidence of society in higher education.

IMPLICATIONS FOR HEIs

It would be wrong if one was left with the impression that these issues do not have implications for individual providers and especially HEIs. Quality assurance starts with the provider who is delivering the program—domestically or internationally. Most HEIs have adequate quality assurance processes in place for domestic delivery, but these processes do not cover all the aspects of delivering abroad. The challenges inherent in working cross-culturally in a foreign regulatory environment and potentially with a partner raise new issues. These include academic entry requirements, student examination and assessment procedures, workload, delivery modes, adaptation of the curriculum, quality assurance of teaching, academic and sociocultural support for students, title and level of award, and others. Quality issues must be balanced with the financial investment and return to the source provider. Intellectual property ownership, choice of partners, division of responsibilities, academic and business risk assessments, and internal and external approval processes are only some of the issues the HEIs need to be clear about.

CONCLUDING REMARKS

This chapter started with the phrase “Globalization is transforming the world and internationalization is changing the world of higher education.” To end the chapter, it may be more appropriate to say “Globalization

is transforming the world and crossborder mobility of programs and providers is *challenging* the world of higher education.” The purpose of this chapter has been to explore the scope and practice of delivering education across national borders. There is ample evidence that demand for higher education in the next 20 years will outstrip the capacity of some countries to meet the domestic need. Students moving to other countries to pursue their studies will continue and remain an important part of the international dimension of the higher education landscape. But student mobility will not be able to satisfy the enormous appetite for higher education from densely populated countries wanting to build human capacity to fully participate in the knowledge society. Hence the emergence and growing importance of crossborder education programs and providers.

A review of trends, issues, and new developments in program and provider mobility shows a diversity of new types of education providers, new delivery modes, and innovative forms of public/private and local/foreign partnerships. New courses and programs are being designed and delivered in response to local conditions and global challenges, and new qualifications/awards are being conferred. The growth in the volume, scope, and dimensions of crossborder education has the potential to provide increased access and to promote innovation and responsiveness of higher education, but it also brings new challenges and unexpected consequences. There are the realities that unrecognized and rogue crossborder providers are active; that much of the latest crossborder education provision is being driven by commercial interests and gain; and that mechanisms to recognize qualifications and ensure quality of the academic course/program are still not in place in many countries. These present major challenges to the education sector. It is important to acknowledge the huge potential of crossborder education, but not at the expense of academic quality and integrity.

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8. PREPARING THE PROFESSORiate OF THE FUTURE: GRADUATE STUDENT SOCIALIZATION FOR FACULTY ROLES

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While graduate education produces talented individuals who have the knowledge and abilities to pursue a range of careers, one of its primary functions is to prepare the next generation of college and university faculty members. The socialization that occurs during graduate education contributes to how faculty members understand their work and assume their professional roles. Thus, the nature of graduate student socialization for faculty roles deserves attention among the range of scholarly questions pertaining to the professoriat. Furthermore, over the past decade, research on doctoral education and new faculty experiences has highlighted a wide range of important concerns and issues such as the changing academic job market, the experience of underrepresented demographic groups in the academy, the impact of technology, and the increasing need for interdisciplinary dialogue on teaching and research. These as well as other issues heighten the importance of paying increased attention to the processes and outcomes of graduate socialization for faculty roles.

This chapter addresses graduate student socialization for faculty roles, with particular attention to four key issues: (1) What theoretical perspectives exist in the literature on graduate student socialization to the professoriat that can help scholars and practitioners alike to consider how to prepare the next generation of faculty more effectively? (2) What abilities, knowledge, appreciations, and skills are appropriate outcomes of the graduate school socialization experience for individuals pursuing faculty careers in the United States? (3) What issues and concerns pertaining to the socialization of graduate students to faculty roles have emerged in recent research? (4) Considering the implications of the theoretical work on socialization, the skills and abilities future faculty need, and the concerns

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expressed in recent years about the graduate experience, what practical strategies are currently in place or might be developed to enhance graduate student socialization to the faculty role? This chapter draws on several bodies of literature to answer these questions: the research literature on the experiences of graduate students and early career faculty members; the theoretical literature on organization and role socialization, as well as the theoretical literature specifically on graduate student socialization; the expository and reflective literature offering views on the skills and abilities needed by the next generation of faculty; and the descriptive and empirical literature, some of which comes out of discipline-specific discussions, concerning strategies for strengthening graduate student socialization for faculty roles.

A few points of clarification are needed at the start of this chapter. First, while we acknowledge that some community college faculty positions require only a master's degree, most faculty positions require the doctorate. Thus, we are writing primarily about the doctoral experience as preparation for faculty roles. Second, we note that doctoral education prepares students for a range of roles, only one of which is the academic career. In this chapter, however, we focus specifically and solely on socialization for academic careers. Third, we acknowledge that, since socialization is a process through which someone joins a group, organization, or community (Corcoran and Clark, 1984; Staton and Darling, 1989; Van Maanen, 1976), doctoral students are experiencing several socialization processes simultaneously: socialization to the role of graduate student, socialization to the academic life and the academic profession, and socialization to a specific discipline or field (Austin, 2002a,b; Golde, 1998; Staton and Darling, 1989; Van Maanen, 1976). In this chapter, we concern ourselves specifically with the process through which graduate school functions to socialize those that aspire to be faculty members in academic life and the academic profession. Fourth, we recognize that the context for these socialization processes are the graduate programs in the United States, and that other programmatic, institutional, disciplinary and cultural norms, requirements, and expectations may exist in graduate programs internationally. While such differences deserve examination, that analysis is beyond the scope of this chapter. Finally, we acknowledge that the disciplinary context shapes the process of socialization in significant ways (Austin, 1990, 2002b; Becher, 1984, 1987; Biglan, 1973; Clark, 1987a; Kuh and Whitt, 1988; Tierney, 1990). Disciplines vary in the research questions, methods, and scholarly outcomes that are valued, the relationship between teaching and research, and the patterns of interaction among scholars. For example, while a faculty member in English

typically conducts research alone and produces books and monographs, a colleague in chemistry is likely to work with a research team and submit work to refereed journals. Given these variations, the socialization experienced by graduate students aspiring to the professoriat is significantly affected by the particular disciplinary context. Thus, while we discuss important outcomes and processes of graduate student socialization that are significant across disciplines, we also acknowledge that the particularities of the socialization process and its outcomes relate closely to the disciplinary context.

THEORETICAL PERSPECTIVES ON SOCIALIZATION TO FACULTY ROLES

In this section, we provide an overview of socialization theory as it relates to the socialization of doctoral students to faculty roles. We begin with a discussion of the definitions of socialization from both a traditional sociological perspective and a cultural perspective. We then discuss key elements of socialization theory that illuminate the socialization of graduate students to faculty roles. Specifically, we draw upon the literature on socialization that describes what are considered to be outcomes, stages, core elements, and dimensions related to socialization processes.

Extensive discussion of these terms occurs below, but here we provide brief descriptions. Identification with and commitment to a professional role are the general outcomes of the socialization process, although the formation of professional identity also continues after the period of explicit professional preparation (Thornton and Nardi, 1975). The socialization process involves a serial progression along deepening levels of role commitment in what Thornton and Nardi (1975) called "stages." Additionally, socialization theory (Stein, 1992; Thornton and Nardi, 1975) highlights "core elements" (knowledge acquisition, involvement, and investment) (Weidman, Twale, and Stein, 2001, p. 15) that contribute to the socialization process of identifying with and committing to a professional role. The theoretical literature also identifies six dimensions on which socialization processes vary (collective vs. individual, formal vs. informal, random vs. sequential, fixed vs. variable, serial vs. disjunctive, investiture vs. divestiture) (Van Maanen and Schein, 1979).

In the literature that specifically focuses on the socialization of graduate students, Weidman, Twale, and Stein (2001) have provided the most thorough analysis of socialization theory as it relates to graduate and professional students in higher education. We draw heavily on their framework, which builds on both traditional socialization theory and the more

recent, postmodern, culturally-oriented theories of socialization. We also highlight the work of other authors (Antony, 2002; Nyquist and Sprague, 1992; Staton and Darling, 1989; Staton-Spicer and Darling, 1986; Tierney and Bensimon, 1996) who have contributed to the understanding of the socialization process that prepares graduate students for faculty roles.

DEFINITIONS OF SOCIALIZATION

Merton's work on socialization (Merton, 1957; Merton, Reader, and Kendall, 1957) has served as the foundational definition for much of the writing on the topic. Merton, Reader, and Kendall (1957) defined socialization as "the processes through which [a person] develops [a sense of] professional self, with its characteristic values, attitudes, knowledge, and skills. . . which govern [his or her] behavior in a wide variety of professional (and extraprofessional) situations" (p. 287). Subsequent writers have built on this definition. For example, Brim (1966) defined socialization as ". . . the process by which persons acquire the knowledge, skills, and dispositions that make them more or less effective members of their society" (p. 3). Similarly, Bragg (1976) explained that "the socialization process is the learning process through which the individual acquires the knowledge and skills, the values and attitudes, and the habits and modes of thought of the society to which he belongs" (p. 3). In short, socialization is a process of internalizing the expectations, standards, and norms of a given society. Through this process, a person moves from outsider to insider status (Bullis and Bach, 1989).

In their book on socialization in graduate and professional schools, Weidman, Twale, and Stein (2001) reviewed the previous theoretical literature on socialization. They highlighted three questions that, according to Daresh and Playko (1995), a person should be able to answer at the end of the socialization process: "(1) What do I do with the skills I have learned? (2) What am I supposed to look like and act like in my professional field? and (3) What do I, as a professional, look like to other professionals as I perform my new roles?" (p. 6). These questions illustrate the way in which socialization has been conceptualized as a process through which newcomers learn to fit an expected role and pattern of behavior.

In recent years, several theorists have acknowledged the contributions and thinking of earlier writers, but raised concerns about the way in which this modernist perspective, based on the work of Merton (1957), explains socialization as a rational process. Tierney asserted that the modernist approach assumes the constancy and rationality of culture. Thus, according to this perspective, an organization can teach

newcomers behaviors and criteria for success (Tierney, 1997). A rational viewpoint implies that “people ‘acquire’ knowledge,” that socialization is a one-way process, and that it involves serial progression through a set of specified activities. In other words, socialization is a process of assimilation (Antony, 2002; Tierney, 1997).

Alternatively, a postmodern perspective views socialization as a “cultural process” that is bidirectional, “produc[ing] change in individuals as well as organizations” (Tierney and Rhoads, 1994, p. 2). Since culture is “contestable” and “is constantly being re-created” through human interactions, socialization “is an interpretive process involved in the creation—rather than the transmittal—of meaning” (Tierney, 1997, p. 6). Another way to explain this phenomenon is to note that socialization is a dialectical process, through which newcomers bring perspectives, values, and ideas that interact with the expectations within the organization (Staton, 1990). As newcomers learn about the organization, their presence and interactions with members change the organization as well.

From a postmodern perspective, a single socialization process is not relevant for every person. Socialization should not be a process whose goal is to “homogenize” newcomers and inhibit their individuality (Tierney and Rhoads, 1994, p. 70). Rather, socialization should help “individuals and groups . . . retain their identities and come together in communities of difference” (Tierney and Bensimon, 1996, p. 19). While novices are learning about the organization, their involvement and interactions should also lead to organizational change.

OUTCOMES AND STAGES OF SOCIALIZATION

The literature on socialization identifies four stages (the sequence in the developmental process) through which novices move toward the goals of role acquisition, identity formation, and commitment: anticipatory, formal, informal, and personal (Thornton and Nardi, 1975). Weidman, Twale, and Stein (2001) built on Thornton and Nardi’s work by elaborating on and analyzing these four stages in the graduate socialization process.

Anticipatory

According to Van Maanen (1976, 1983), anticipatory socialization occurs as people gain awareness of the characteristics of the group they wish to join, including appropriate and expected behaviors and attitudes. Merton (1957) noted that anticipatory socialization serves both to help a newcomer become part of a group and to help with adjustment once the

person has become a member. For doctoral students, anticipatory socialization to the faculty role begins with entry into graduate study (although one could make a compelling case that the process actually begins during the undergraduate experience). As students pursue doctoral study, they observe and interact with faculty, advanced students, and peers—learning what is valued, what work is done, how colleagues interact, and what the role of a faculty member involves (Austin, 2002b; Nyquist *et al.*, 1999; Weidman, Twale, and Stein, 2001). For example, as graduate students work with faculty members, they learn about doing research, the responsibility faculty members have for participating in peer review, and the academic freedom associated with their work (Anderson and Louis, 1991).

Theorists who take a cultural perspective, however, are concerned with any suggestion that the impact of socialization flows in a unidirectional path, only from the professor to the student. Staton (1990) expressed this concern, and a similar point was advanced by Anderson and Louis (1991), who noted that graduate students not only observe and imitate faculty, but students also make an impact on their fields when they engage in new research. Adding to these voices, Tierney and Rhoades (1994, p. 23) argued that, in addition to helping a novice become part of an organization, anticipatory socialization also involves the newcomer influencing or “reframing” the group he or she has joined.

Formal Stage

In the formal stage of socialization, those entering an organization become “veteran newcomers,” who have gained some experience with but must learn more about the normative role expectations and standards, as well as the rewards and sanctions of the organization (Weidman, Twale, and Stein, 2001, p. 13). Newcomers at this stage tend to continue to hold somewhat idealized notions of the roles they will play. This stage typically involves formal instruction as well as efforts by novices to seek feedback about their development (Clark and Corcoran, 1986; Staton and Darling, 1989). According to Bucher and Stellings (1977), the success of this stage of socialization depends upon the clarity of expectations and standards, the nature of the activities in which the novices participate, and the amount of time they have for trying out the new roles.

For graduate students, the concerns of this stage include making their way in a new environment and mastering new information and knowledge (Weidman, Twale, and Stein, 2001). Learning about faculty work occurs as doctoral students interact with and observe faculty and more

advanced students, participate in courses, and assess whether they fit the environment of the department and discipline. As they continue their degree programs, students gain responsibilities and privileges, often as they work with faculty members on research projects or assume teaching duties. When students pass their formal exams, they receive some validation of their progress (Staton, 1990).

Informal Stage

In the informal stage of socialization, a person learns about the informal role expectations and the degrees of flexibility associated with the role. As with the formal stage, learning occurs through observations, interactions with faculty, and the influence of the peer culture and support systems provided by other students. In the context of student communities, graduate students share information, discuss their concerns, provide support to each other, and celebrate rites of passage (Austin, 2002b; Staton and Darling, 1989; Weidman, Twale, and Stein, 2001).

Personal Stage

In the fourth stage of socialization, called the personal stage, individuals internalize the new roles, integrating a new professional identity with their existing self-image (Bullis and Bach, 1989; Thornton and Nardi, 1975; Weidman, Twale, and Stein, 2001). According to Staton (1990), teaching assistants (TAs) at this stage are moving toward being scholars and colleagues of established professionals in the field, demonstrating increased maturity and acceptance of professional attitudes and values. The expectations they face from faculty and themselves increase, as does the freedom they are accorded in their teaching and research. They also seek to increase their involvement in professional activities, such as presenting at conferences, publishing, and engaging in professional service (Brown and Krager, 1985). Writing about professional education in various areas for a range of careers, Stark, Lowther, and Hagerty (1986) noted that students moving toward the end of their programs must assess the level of their commitment to further professional development following degree completion.

CORE ELEMENTS OF SOCIALIZATION

The socialization literature indicates three processes or “core elements” (Weidman, Twale, and Stein, 2001, p. 16) involved in the

socialization process: knowledge acquisition, investment, and involvement (Stein, 1992; Thornton and Nardi, 1975). Weidman, Twale, and Stein (2001) integrated these core elements into their model of graduate student socialization.

Knowledge Acquisition

As novices engage in knowledge acquisition, they learn the language, history, problems, and ideology of the profession and begin to develop a sense of professional identity (Weidman, Twale, and Stein, 2001). The novice's knowledge base about the role moves from one that is general to a more complex and specialized framework. As novices act like role incumbents, their personal identity becomes increasingly integrated with their professional identity. Knowledge acquisition is a necessary element of the socialization process since newcomers must gain enough cognitive knowledge and skills to handle the role, as well as sufficient affective knowledge to understand the normative expectations, evaluate their performance in the role, and assess whether others have confidence in whether they can fulfill the role (Weidman, Twale, and Stein, 2001).

Investment

A second core element in the socialization process involves investing time and one's self-esteem in the organization and/or the field, and giving up other options. For example, graduate students in the anticipatory stage begin their investment by choosing one school over another. As they invest increasing amounts of time, energy, and money into their areas of study, their investment becomes greater (Stein, 1992). If they are sponsored by a faculty member who puts time into guiding and advising them or including them in research, they feel a sense of obligation which then deepens their investment in pursuing graduate study and a professional role in the field (Sherlock and Morris, 1967; Weidman, Twale, and Stein, 2001).

Involvement

This is the third core element that leads to role identification and commitment. For example, through their interactions with faculty and more advanced students, as well as their participation in various professional activities such as conducting research and attending professional conferences, graduate students develop an understanding of the issues and

problems of the profession and internalize their identification with and commitment to the professional role (Weidman, Twale, and Stein, 2001)

DIMENSIONS OF SOCIALIZATION PROCESSES

Van Maanen and Schein (1979) identified six polar dimensions that characterize the socialization process. In their work on socialization in higher education, Tierney and Rhoads (1994) asserted that the process of socialization in graduate and professional study also includes these dimensions, as did Weidman, Twale, and Stein (2001). The six dimensions of the socialization experience include: collective versus individual; formal versus informal; random versus sequential; fixed versus variable; serial versus disjunctive; investiture versus divestiture.

Collective versus Individual

This dimension refers to the extent to which newcomers are provided with common experiences. In terms of graduate student socialization, “collective socialization refers to the common set of experiences encountered by all graduate students in an academic program” (Weidman, Twale, and Stein, 2001, p. 27). In contrast, “individual socialization refers to processing new members in an isolated and singular manner” (Tierney and Rhoads, 1994, p. 27). For example, while medical students typically experience considerable collective socialization, students in a doctoral program in English who are working on the dissertation often have a very individual experience (Weidman, Twale, and Stein, 2001).

Formal versus Informal

Formal socialization occurs when novices experience specific activities designed to shape them in specific ways. The formal rites of passage in doctoral education (comprehensive exams, proposal meetings, and dissertation defenses) are examples of formal socialization within doctoral study. With informal socialization, the individual learns through trial and error, and expectations are not necessarily similar for each person (Van Maanen and Schein, 1979). The considerable learning that occurs through the informal peer cultures within departments is an example of informal socialization (Tierney and Rhoads, 1994; Weidman, Twale, and Stein, 2001). One problem in doctoral socialization is that women and people of color may be excluded from some of the informal peer cultures that help

prepare white males for the faculty role (Tierney and Bensimon, 1996; Turner and Thompson, 1993).

Random versus Sequential

When socialization is random, the steps and activities in which newcomers are expected to engage are not clearly specified. In contrast, sequential socialization involves specific and unambiguous steps to achieve the desired goal (Tierney and Rhoads, 1994; Weidman, Twale, and Stein, 2001). Doctoral students aspiring to the professoriat arguably experience both kinds of socialization. The major steps toward degree completion—comprehensive exam, dissertation proposal, and dissertation defense—are usually clearly specified, creating a situation of sequential socialization toward holding a Ph.D. and completing a faculty role. At the same time, the graduate experience varies considerably from person to person, with research and teaching experiences, mentoring, and participation in scholarly conferences occurring at different times and to varying extents for each person. Thus, the socialization of graduate students to the faculty role is random as well as sequential.

Fixed versus Variable

When socialization is fixed, the timetable of moving from one role or stage to another is fixed. For graduate students, however, variable socialization is the norm, since the particular timetable for completing experiences (e.g., passing the comprehensive exams, participating in research activities, preparing a dissertation proposal, and defending the dissertation) varies depending on the circumstances of each student (Tierney and Rhoads, 1994; Weidman, Twale, and Stein, 2001).

Serial versus Disjunctive

When the process through which newcomers learn involves planned experiences with guidance from more senior organization members, the socialization process is serial. A doctoral student whose advisor provides specific advice each step of the way experiences serial socialization. When the novice does not have the guidance of role models who have previously gone through the process, he or she experiences disjunctive socialization. While most graduate students can benefit from the advice of more advanced students, those entering a new graduate program or those who enter a program where students with their characteristics have not

previously participated experience disjunctive socialization (Tierney and Rhoads, 1994; Weidman, Twale, and Stein, 2001).

Investiture versus Divestiture

When newcomers experience investiture, they find the organization welcomes their individual characteristics and what they bring from anticipatory socialization. However, when divestiture characterizes the newcomers' experiences, they find that their personal characteristics are not valued and they are expected to make adjustments in order to fit with the organization or role. (Tierney and Bensimon, 1996; Weidman, Twale, and Stein, 2001). Women and students of color sometimes bring new values to graduate programs, and since dominant values and roles are most typically valued by universities, these students are often urged by advisors to divest themselves of characteristics that differ from the mainstream. (Tierney and Rhoads, 1994).

THEORIES OF GRADUATE STUDENT SOCIALIZATION FOR FACULTY ROLES

In addition to the general theoretical literature on socialization to organizations and roles, a body of literature has developed that focuses specifically on the socialization of graduate students. Some of this literature builds on the traditional work of Merton (1957), which assumes the stability of culture and a rational, linear process through which newcomers learn about the organization. Other theorists take what has been called a postmodern, cultural, or dialectical perspective, which emphasizes that socialization involves more than a one-way flow of information to the novice.

Building on the work of Merton (1957), Clark and Corcoran (1986) offered a stage model to explain the socialization to the professoriat of which doctoral study is one part. They asserted that anticipatory socialization involves the recruitment of an individual who chooses a field of study, followed by a stage called occupational entry and induction in which students participate in formal training (including class attendance, interaction with an advisor, internships, mentoring, examinations and the dissertation, publishing, presenting at conferences, and getting a job). The third stage is role continuance in a faculty role.

Kirk and Todd-Mancillas (1991) also followed a linear approach by identifying "turning points" in academic life that contribute to the

socialization process. More recently, Braxton and Baird (2001) have joined this tradition by offering a stage-based theory of graduate student careers. They suggested that the graduate student career has a “beginning” stage, in which the student becomes familiar with the language and perspectives of the field, learns about the focus of the graduate program, identifies peers with whom to associate, locates a faculty sponsor, and secures financial support. During the “middle period,” between the first year and the completion of courses and exams, the student becomes competent with the language and research approaches of the particular field, specifies his or her intellectual and professional interests, chooses a guidance committee, and gets ready for the comprehensive exams. The dissertation stage is third, during which the student needs guidance, advice, and encouragement.

Other theorists who focus on socialization during the graduate school period draw on traditional, modernist socialization theory, but move toward a more dialectical, culturally based, and nonlinear perspective. This postmodern approach has implications for understanding graduate education as socialization for future faculty. Research studies have shown that women and people of color often have experienced problems in entering and establishing themselves in the academy. They sometimes feel unwelcome, facing negative or ambivalent faculty views, they experience less ease than white males in finding mentor relationships, and they tend to find teaching and service, which they often enjoy, less valued than research (Clark and Corcoran, 1986; Tierney and Bensimon, 1996; Tierney and Rhoads, 1994; Turner and Thompson, 1993). To insist that all newcomers to the academy adapt to the existing cultural norms will perpetuate these concerns. A postmodern view of socialization recognizes the unique contributions brought to the academy by each newcomer and seeks not to absorb novices into the traditional habits, norms, and behaviors of the academy but to honor their contributions in ways that enable their presence to change the academy. This approach recognizes that, while an organization needs to show newcomers what is needed to succeed, the organization can also value difference and use socialization processes as an opportunity to “re-create” rather than replicate the culture (Tierney, 1997, p. 16). This perspective also recognizes that the interactions newcomers have with others in the academy have the potential to both shape the experiences of the newcomers and change the academy.

The work of several researchers and theorists is situated within this postmodern perspective. Staton and Darling, writing specifically about TAs (Staton and Darling, 1989; Staton-Spicer and Darling, 1986, 1987), emphasized that newcomers experience socialization in the context of the

cultures of their disciplines and departments, that they need to interact with others to create their roles, and that socialization occurs through communication; that is, individuals learn through observing, interacting with, and responding to messages or signals in the environment (Staton and Darling, 1989). Specifically, the socialization process for TAs involves the establishment of a social support system with peers that becomes the primary context in which TAs make sense of their experiences, share their concerns, get answers to their questions, and develop a community. Through observation and listening, TAs find information about the expectations they face, the faculty and others with whom they interact, the resources available to them, how they should present themselves, and how others perceive them. The process of socialization also involves learning about rules, seeking feedback and advice, and, through interactions and communication, TAs also offer ideas to others about teaching and research.

Focusing on TAs, Sprague and Nyquist (1989, 1991) made two significant contributions to the work on graduate student socialization to teaching roles. First, they hypothesized three stages through which TAs develop (Sprague and Nyquist, 1989). They suggested that, early in their graduate experience, TAs are “senior learners,” identifying more as students than instructors. These senior learners have not yet developed the confidence to exert authority in their classrooms nor have they amassed a large knowledge base of the subject matter. Sprague and Nyquist suggested that TAs then become “colleagues in training.” At this stage, they have less anxiety about the general role of TA but express concern about developing the appropriate pedagogical techniques needed to teach the material to students. TAs also are often immersed in the jargon of the field, and therefore have a harder time relating the subject matter in clear ways to students and others outside or new to the field. Finally, Sprague and Nyquist labeled the most senior TAs as “junior colleagues.” During this period, the primary focus for the TA is to teach effectively so students achieve the learning objectives of the course. TAs at this stage have developed more security in their professional identities, and communicate in collegial ways without resorting to the jargon of the discipline.

Sprague and Nyquist (1991) also identified four questions that supervising faculty could ask about their TAs to shed light both on their development as teachers as well as the appropriate interventions faculty members might provide: (1) What are TAs concerned about? (2) How do TAs talk about their disciplines? (3) How do TAs relate to authority? (4) How do TAs relate to students? Each of these questions highlights a developmental continuum on which they saw TAs developing. By asking

the first question, a faculty member would be able to get information on the degree to which TAs' concerns were focused on self (survival) issues, pedagogical skills and approaches to master, or concerns about the impact of their teaching on students. Next, by asking TAs to talk about their disciplines, they suggested that supervising faculty can discern the degree to which the student has facility with the content of the field and the extent to which he or she comfortably and clearly discusses concepts in the discipline. The third question concerns the nature of the TA's reliance on teaching supervisors. That is, is the TA (1) highly dependent upon the faculty member for advice and support; (2) counterdependent or independent from teaching supervisors, trying to solve teaching dilemmas on one's own; or (3) interdependent with the faculty member, sharing ideas for pedagogical improvement. Finally, the fourth question concerns ways in which TAs relate to their students (e.g., as peers, in a more detached manner, or in an engaged but professional manner). Overall, Sprague and Nyquist's work (1989, 1991) highlighted complexities in the developmental process experienced by TAs and recognized that graduate student development is not a simple linear process.

The results of longitudinal research on the doctoral experience of aspiring faculty (Austin, 2002b; Nyquist *et al.*, 1999) also concluded that the socialization of prospective teachers in higher education is not a simple linear process; rather, "socialization is an ongoing process, not the result of occasional events" (Austin, 2002b, p. 103). From the start of their graduate experience, prospective faculty are trying to make sense of faculty careers and academic life, as potential paths for their own futures. Like Staton and Darling (1989), this research group concluded that observation, listening to, and interacting with others—faculty members, peers, family, and friends—were important parts of the socialization process (Austin, 2002b; Nyquist *et al.*, 1999).

Antony (2002) has critiqued the classical stage theories and added his voice to those who envision a less linear, more bidirectional theory of socialization that accounts for differences among newcomers (Tierney, 1997). Similar to Tierney and Rhoads (1994) and Tierney and Bensimon (1996), Antony (2002) has been concerned that "... those who argue for socialization theory assert that the degree to which a student assimilates is the degree to which he or she is successfully socialized" (p. 371). Antony has particularly focused on the way in which an approach to socialization that calls for assimilation to the profession's values and standards can be a barrier for women and individuals of color. He has called for "a socialization process that is more unique, individualistic, and reflective

of the nature of more recent incumbents to academic and professional roles” (p. 350). Specifically, Antony (2002) has urged the academy to embrace a variety of approaches to socialization that welcome the unique contributions of diverse scholars. He envisioned

a modified framework for graduate student socialization [that] distinguishes between developing an awareness of, versus developing a personal acceptance of, a field’s content, values, and norms. This type of socialization recognizes that an individual can master content and develop the acumen to work with the traditional norms, values, and standards of a profession without having to internalize, or accept as one’s own, those norms, values, and standards. (pp. 373–374)

Antony and Taylor (Antony and Taylor, 2004; Taylor and Antony, 2001) conducted a study of African American doctoral students whose results illustrate this theoretical point. They found that those students who went on to be successful in their careers as faculty members understood the normative expectations in their work, but did not give up their own particular values. On the other hand, those who adopted more fully the profession’s specific values at the expense of their own tended to be less satisfied or left the faculty career all together.

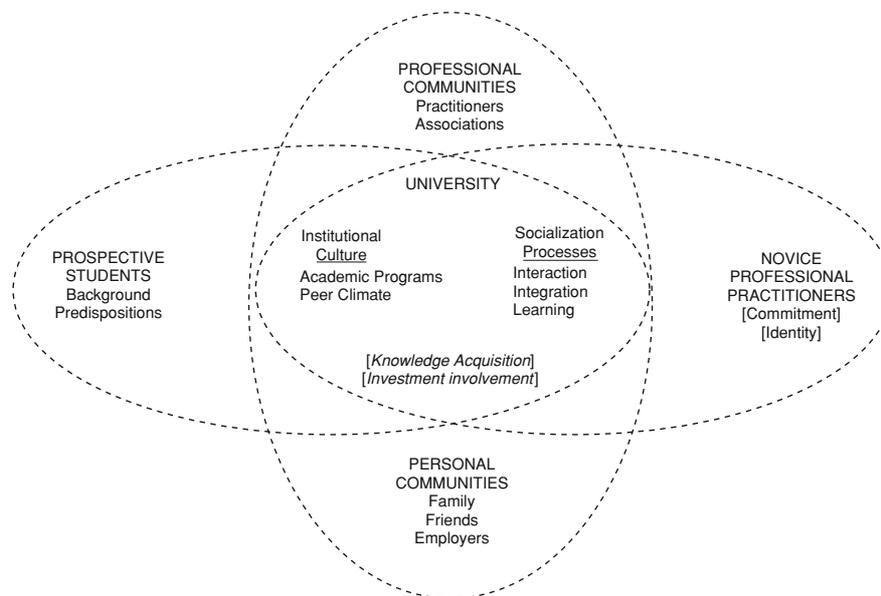
While theorists who take either a traditional modernistic perspective or a postmodern cultural perspective each offer important insights that illuminate the process through which graduate school socializes prospective faculty, the most comprehensive framework for understanding graduate and professional student socialization has been developed by Weidman, Twale, and Stein (2001). The focus of their framework embraced the socialization experiences of all graduate and professional students, not only those who aspire to the professoriat. Their work provided a detailed conceptual lens through which to think about how socialization in graduate school occurs for those intending on pursuing academic careers. Weidman, Twale, and Stein (2001) drew on Stein and Weidman’s (1989) framework for undergraduate socialization in higher education and Stein and Weidman’s (1989, 1990) earlier work on graduate student socialization. However, they also acknowledged the criticisms of their earlier work for not recognizing the bidirectional nature of socialization and failing to be responsive to the diversity of those entering the academy (Tierney, 1997).

In response to such concerns, their recent framework (2001) continued to take a structural-functional perspective, but emphasized that socialization is complex, developmental, and does not have to follow a

linear progression. That is, they saw professional development occurring as newcomers interact with the formal and informal parts of the culture they have entered as well as with various reference groups. Additionally, the framework acknowledged that socialization occurs in a bidirectional way. Institutions expect newcomers to learn and adopt required roles. At the same time, however, individuals can shape their experiences and also can change the normative expectations of the professional community. Thus, Weidman, Twale, and Stein explained: “The outcome of socialization is not the transfer of a social role, but identification with and commitment to a role that has been normatively and individually defined” (p. 36).

As illustrated in Figure 8.1, the Weidman, Twale, and Stein framework recognized the place of institutional culture, socialization processes, and core elements of socialization. They recognized that socialization occurs within a cultural context, which, they noted, includes the culture of the institution and the climate created by peers. Also, in alignment with traditional socialization theory, they emphasized that graduate students are socialized as they learn the knowledge and skills needed in

Figure 8.1: Conceptualizing graduate and professional student socialization. Reprinted with permission from Weidman, Twale, and Stein, *Socialization of Graduate and Professional Students in Higher Education: A Perilous Passage?* (2001). © John Wiley & Sons, Inc.



Interactive Stages of Socialization: Anticipatory, Formal, Informal, Personal

professional practice, interact with faculty and student peers, and integrate themselves into the activities of their fields. The tasks involved in socialization include knowledge acquisition, involvement in peer, program, and disciplinary activities, and investment in the skills and abilities needed for professional practice.

The Weidman, Twale, and Stein (2001) framework is also useful in highlighting four influences on the graduate student socialization process: prospective students themselves, professional communities, personal communities, and novice professional practitioners. Prospective students bring to the graduate experience their backgrounds and predispositions, including their education, race and ethnicity, and gender as well as their values, career aspirations, beliefs, and learning styles. Their personal communities include the family, friends, and employers with whom they interact and whose perspectives or expectations may enhance or detract from the students' graduate experiences. A longitudinal, qualitative interview study with doctoral students (Austin, 2002b; Nyquist *et al.*, 1999) also revealed that family members and friends have a considerable influence on how doctoral students process their experiences in graduate school. The professional communities highlighted in Figure 8.1 include those individuals who are practicing the profession as well as the professional associations that have standards for admission and, in some fields, licensure requirements, and that also provide opportunities for graduate students to interact with both peers and more experienced members of the field. Weidman, Twale, and Stein (2001) also included novice professional practitioners as a fourth community of influence, but this aspect of their model appears less developed and different than the other three in terms of serving as an influence on academic programs and the socialization experience of graduate students.

Finally, reflecting the work of Thornton and Nardi (1975) on stages of socialization, the Weidman, Twale, and Stein (2001) model recognized the anticipatory, formal, informal, and personal stages of the socialization process. However, they emphasized that the stages need not be linear; instead, their framework suggested that the processes of socialization that characterize each of these stages may appear at various points during the graduate student/new practitioner periods. In sum, the Weidman, Twale, and Stein (2001, p. 39) framework is "dynamic" and "interactive" rather than strictly causal. They summarized:

Professional identity and commitment are not achieved at some finite level but continue to evolve. Socialization is dynamic and ongoing, without a definite beginning or end. (p. 40)

IMPLICATIONS OF SOCIALIZATION THEORY FOR GRADUATE
PREPARATION OF FUTURE FACULTY

The theoretical literature suggests several key concepts that are important to keep in mind by those interested in ensuring that graduate education is an effective period of socialization for the faculty career. First, aspiring faculty members need opportunities to acquire knowledge, to invest time and energy in the profession and discipline, and to become involved in the work and life of faculty. Those opportunities need to be explicitly available within the graduate experience if it is to serve as a productive and inviting period of socialization and preparation.

Second, socialization is not linear, but rather complex, occurring through a great range of experiences. Some experiences occur collectively, and some individually; some are formal parts of a graduate program and other happen informally; some happen in random order and others must be sequential. Graduate deans, doctoral advisors, and graduate faculty have the responsibility to examine whether each aspect of the socialization process is occurring in thoughtful and effective ways. Some initiatives can occur at the level of the graduate school, the college, or the department. However, other efforts require the daily or weekly attention of individual faculty members who interact informally and regularly with their graduate students in laboratories, research meetings, classes, and the hallway. Faculty members and advisors may benefit from information or coaching about how to optimize their many interactions with graduate students. In turn, graduate students may need guidance or support in learning how to negotiate both the formal and informal aspects of the process.

Third, the process through which graduate students acquire knowledge and develop a professional identity as future faculty members is influenced by several groups, including student peers, family and friends, faculty members, and professional associations. Efforts to enhance the impact of the graduate experience on the preparation of future faculty should consider ways to address the involvement and contributions of each of these groups.

Fourth, one of the most compelling claims in the recent literature on socialization is that it is a bidirectional process through which newcomers influence the organization and profession even as they learn what is expected of them. The recognition of this concept, along with a concern that some graduate students—most notably women and individuals of color—sometimes feel disjunctive socialization or a sense of divestiture, opens the possibilities for explicit efforts to prepare a more diverse future faculty. When women or people of color feel that the graduate experience

requires them to set aside their values, interests, or commitments, it is not serving well the future of the academy. Colleges and universities, and indeed the broader society, require the knowledge, values, commitments, and expertise of a widely diverse professoriat. Creating graduate experiences that welcome and honor the questions, passions, talents, and career aspirations of many talented, diverse individuals is a contribution to the well-being and betterment of higher education and the society. Graduate education as a socialization experience must simultaneously teach prospective faculty about the expectations they face, the responsibilities they must assume, and the traditions in which they will participate, while also inviting into the academic profession the perspectives, habits, and ideas of a wide diversity of individuals. We turn now to consider what specific outcomes graduate students who aspire to be faculty members should achieve through the socialization processes they experience in graduate school.

PROPOSED OUTCOMES OF GRADUATE STUDENTS' SOCIALIZATION FOR THE PROFESSORIAT

What abilities and skills should prospective faculty members develop while in graduate school? We begin this section by providing a context for this discussion of abilities and skills by noting forces that have changed academic work in recent years. We then highlight four categories of abilities and skills that should be addressed as intended outcomes of the socialization that occurs during graduate school.

FORCES CHANGING THE ACADEMIC WORKPLACE

It is clear that today's graduate students will not have careers identical to their advisors. There are eight factors that deserve mention and that are having a significant effect on the nature of faculty work in the years to come (Austin, 2002a). These changes will require graduate students preparing for faculty careers to develop an expanded set of skills and abilities that goes beyond the knowledge base needed by previous generations of faculty.

First, for the past decade, the public has become more skeptical about how faculty spend their time, the quality of undergraduate education, the skills graduates have in relation to workplace needs, and the overall value of contributions from higher education institutions. Legislatures, parents, and employers raise questions about the dedication of faculty

members and the quality of their work. Second, many public as well as private higher education institutions are experiencing fiscal constraint, just as these universities and colleges are facing heightened demands for their contributions to society. In response, faculty are being asked to engage in more entrepreneurial activity, control costs, and increase their productivity as resources decline. Third, the student body at many higher education institutions has become more diverse over the past decade. In particular, students over age 25 are more numerous and look for educational quality combined with convenience, low cost, and institutional responsiveness (Levine, 2000). Fourth, over the past decade, attention to teaching has shifted to emphasis on learning outcomes and learning processes. The public at large expects to see results from the undergraduate experience, and faculty are expected to be accountable and capable in documenting students' progress.

A fifth factor affecting higher education and the faculty who work within universities and colleges is the increase in new technologies and the emergence of the "information society." Higher education institutions are incorporating technology into face-to-face classes, as well as offering online courses, opening up a myriad of educational opportunities as well as placing demands on faculty to be technologically adept as they engage in their research and teaching. Sixth, knowledge itself is expanding and changing. Faculty members encounter multiple ways of seeking information, diverse ways of knowing and thinking, and new forms of interdisciplinary work. Simply knowing about the traditional approaches in one's discipline is insufficient for engaging in either the teaching or the research responsibilities that faculty members must meet. Seventh, these changes are occurring in a context in which new educational providers are entering the picture. New, private, for-profit institutions are competing with traditional higher education institutions. Universities and colleges are competing with each other by creating online programs, courses, and certificates to attract a steady stream of applicants. Within this changing context, faculty members are facing pressures to engage in more work, often different work, and sometimes with fewer resources.

These demands require innovative, talented, and creative faculty members. Yet, exactly how these factors will affect the academic identity, careers, and work lives of the faculty in the coming decades is not certain. Some observers call for renewed commitment to what Rice (1996) calls the "complete scholar"—the faculty member who is committed to all forms of faculty work and scholarship, including the scholarships of teaching, discovery, application, and integration presented by Boyer (1990). Others wonder whether "differentiated scholars"—individuals who handle some

parts of faculty work but not all responsibilities—will become the norm. Some institutions already engage in “unbundling” or separating aspects of faculty work—for example, assigning teaching to some faculty, while others engage in research, or relying on curriculum design teams to prepare online courses while others handle the actual teaching.

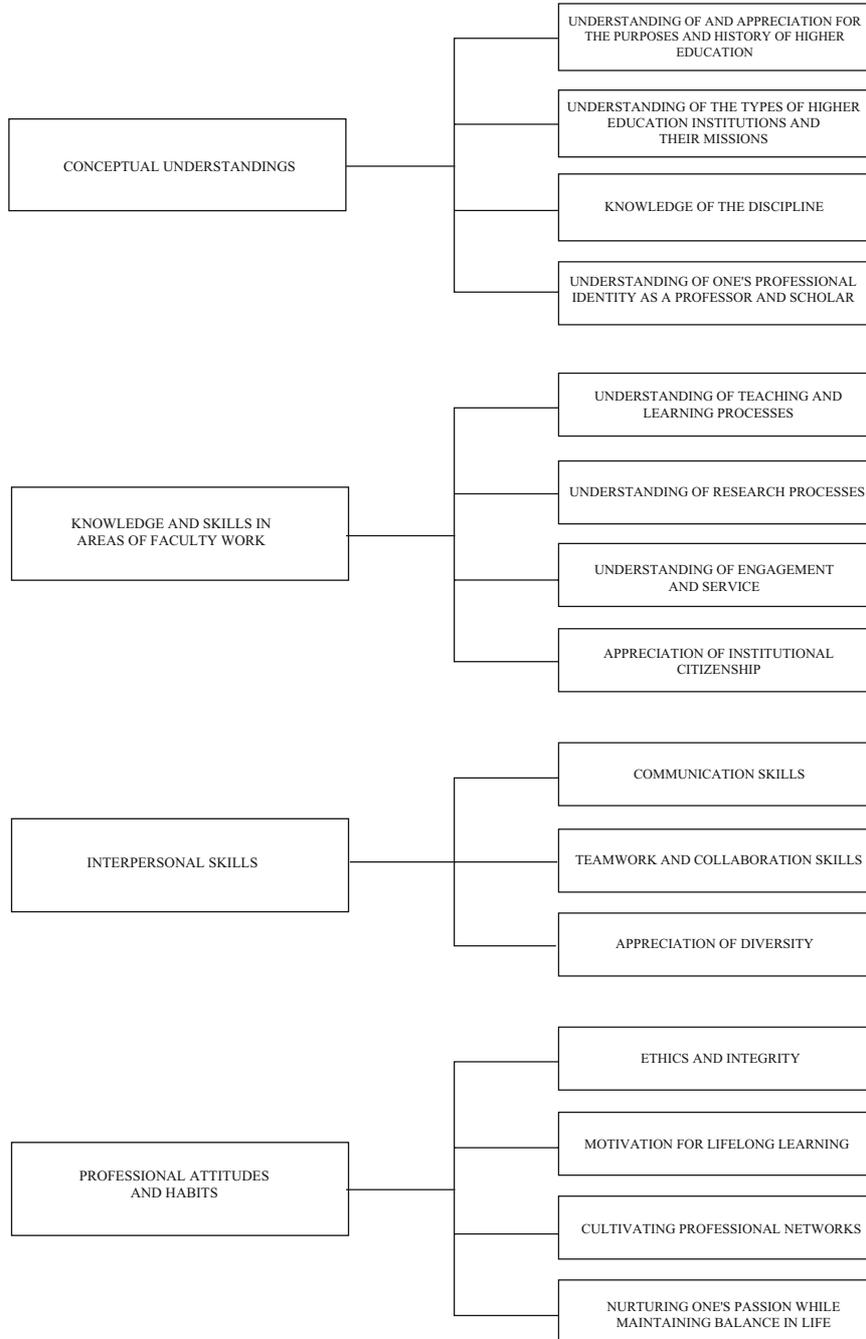
Changes in the nature of academic appointments constitute the eighth factor in the workplace that new faculty will face. In recent years, full-time off-tenure-track appointments have steadily increased, as have the number and proportion of part-time faculty. Specifically, Finkelstein and Schuster have explained that “the majority of all full-time appointments . . . made in the 1990s—new hires in 1993, 1995, and 1997—were off the tenure track” (Finkelstein and Schuster, 2001, p. 5). Often appointments off the tenure-track have differentiated assignments where the faculty member emphasizes either teaching or research.

IMPLICATIONS FOR SOCIALIZATION: IMPORTANT COMPETENCIES FOR FUTURE FACULTY

The picture that emerges after recognizing the forces influencing the academic workplace in the 21st century is of a faculty body that includes multiple appointment types at a range of institutions, with some individuals carrying out “complete scholar” roles and others working in more differentiated roles. While doctoral programs typically are situated within major research universities where faculty members tend to hold traditional tenure-track positions, the graduates of these programs will find themselves in a wide array of circumstances. Thus, the socialization processes that occur during graduate study must prepare students to have mastery of a wide array of important competencies, skills, and abilities (Hood, 2000).

Suggestions of specific competencies that doctoral students should develop as they prepare for the professoriat emerged from the literature written by higher education researchers, observers of graduate education, and disciplinary specialists as well as from our own interviews with faculty and observations of faculty work. We propose that the competencies doctoral students should develop fall into four categories: (1) conceptual understandings; (2) knowledge and skills in key areas of faculty work; (3) interpersonal skills; and (4) professional attitudes and habits. Within each category below, we elaborate specific abilities and skills that should result from the socialization process that occurs in graduate school for students aspiring to faculty careers. Figure 8.2 highlights the four categories as well as specific skills and abilities within each that are important outcomes of the socialization process for the professoriat.

Figure 8.2: Skills and abilities for faculty in the 21st century



Conceptual Understandings

Faculty members work simultaneously within several contexts that set the expectations and norms guiding their work. In particular, prospective faculty must learn about higher education within the country, the various institutional types in which they may work, the discipline that is their intellectual home, and the professional role of academic that they will assume. Each of these contexts has a distinct culture, with norms, values, and expectations that prospective faculty must learn (Austin, 1990).

Understanding of and Appreciation for the Purposes and History of Higher Education. As external forces exert pressure on higher education institutions, faculty members will be well served to have a strong sense of the history of higher education in the country and the roles it has served in society over the years. Levine (2000, p. 17) has suggested that faculty members should have the knowledge to reflect on the “essential purposes and core values” of higher education. An understanding of how colleges and universities have evolved over time, the challenges they have faced, and the traditions of teaching, research, and service that have shaped higher education institutions provides a contextual lens useful to faculty members when they make decisions about their work and participate in institutional decision making. Developing this knowledge base and appreciation should be part of the graduate preparation for future faculty (Austin, 2002a; Austin and Barnes, 2005; Austin and McDaniels, in press).

Because higher education institutions are an important pillar within society, prospective faculty members should learn about the responsibility of institutions of higher education to contribute to the public good—through producing new knowledge and discoveries, preparing citizens and members of the work force, and applying knowledge to practical problems (Austin and Barnes, 2005). Typically graduate experiences within the disciplinary specialization prepare prospective faculty for appreciating their responsibilities to produce new knowledge. However, in terms of the role of higher education role in preparing citizens and workers, Schneider (2004) recommended that graduate students explicitly learn about the purposes of “liberal education” that have been a strong tradition in undergraduate education. She urged that graduate students learn that liberal education gives students “intellectual skills and big-picture understandings” (p. 5), promotes judgment and an appreciation of social responsibility, and helps students learn to integrate ideas and concepts. Other writers call for explicit attention and preparation in graduate education to the responsibility of faculty members to contribute to the

societal good by framing issues in ways that illuminate public debate and by applying expertise to practical societal problems (Austin and Barnes, 2005; Lynton and Elman, 1987).

Understanding of the Types of Higher Education Institutions and Their Missions. Prospective faculty also must learn that the higher education sector comprises a variety of institutional types, each with its own history, mission, and culture (Austin, 1990; Austin and Barnes, 2005; Austin and McDaniels, in press; Becher, 1984, 1987; Tierney, 1990). The several domains of scholarship delineated by Boyer and Rice (Boyer, 1990)—the scholarships of teaching, discovery, application, and synthesis—occur in different patterns of emphasis across institutional types (Austin and McDaniels, in press; Braxton, Luckey, and Helland, 2002). For example, the liberal arts colleges draw on a long history of commitment to teaching undergraduates, while the research universities place heavy emphasis on knowledge discovery, as well as teaching and knowledge application. The culture of the comprehensive institutions often requires faculty to carry significant teaching responsibilities but also to pursue research agendas. The community colleges, with their more recent history, carry a special obligation to address local societal needs, including workforce development. When graduate students assume faculty positions, they need to know and appreciate the particular norms that characterize the institutional type where they will work. This knowledge prepares them to ask, when considering a faculty position, about the expectations they will face and to understand how their work and professional interests may relate well (or not) to institutional history, expectations, and norms.

According to results from Golde and Dore's (2001) quantitative study of the perceptions about graduate education of more than 4,000 doctoral students, 54% had a "strong preference" to work in large research-focused universities, while, in contrast, only 4% indicated an interest in working in community colleges; in comparison to those who wanted to work in research universities, relatively small percentages indicated preference for work in liberal arts or comprehensive institutions. Since the available positions in research universities are fewer than the number of prospective faculty hoping to fill them, doctoral programs need to find ways to ensure that graduates are aware of and prepared for work in a variety of institutional types (Austin, 2002b; Austin and McDaniels, in press). The Preparing Future Faculty (PFF) Program, which has been adopted by a number of universities, is an example of one strategy to address this need by providing doctoral students with opportunities to learn about faculty work in colleges and universities in the vicinity of their universities, thus

increasing graduate students' awareness of the range of institutional types in which they might work (Gaff, Pruitt-Logan, and Wiebl, 2000; Pruitt-Logan and Gaff, 2004).

Knowledge of the Discipline. Deep knowledge of one's discipline is a key outcome of doctoral study (Austin, 2002a). Each discipline has a distinct culture to which prospective faculty members must be socialized (Austin, 1990; Becher, 1984, 1987; Tierney, 1990). The questions that are considered worthy of attention, the methods valued, the criteria of excellence, the typical patterns of work (e.g., alone or with colleagues), the type of products (e.g., books, monographs, articles, technical products), and the pace of scholarly productivity vary across disciplinary cultures. For example, while scholars in English typically place premium value on single-authored books which may require years of research, chemists or physicists often work on large teams and write refereed journal articles.

Prospective faculty members should learn about the norms and expectations of the discipline during the socialization period provided by graduate study. They should understand the history of the field, the paradigms, theories, and philosophical traditions that guide work in the discipline, and major concepts used by disciplinary scholars. They also should explore the cutting edge questions being addressed within the discipline, the contributions as well as limitations of relevant theories, and the major debates or areas of dissension within their fields (Bryant, personal communication, February 14, 2005). Additionally, graduate school provides the opportunity for those entering a discipline to learn the research methods used, the kind of data typically valued, the appropriate modes of scholarly communication, and the arenas in which scholars interact.

Finally, the increase in interdisciplinary work also requires new faculty to appreciate ways in which their own fields connect with other disciplines to address complex questions that exist at disciplinary borders (Austin, 2002a). By learning about how disciplines differ in their approaches to framing questions and using research methodologies, future faculty will be prepared to appreciate as well as critique the work of colleagues and to engage in cross-disciplinary research, curriculum, and teaching endeavors.

Understanding of One's Professional Identity as a Professor and Scholar. In addition to learning about the broad context of higher education, the specific missions and history of the various institutional types, and the culture of the discipline, the socialization process experienced by aspiring faculty should focus on helping them develop professional identities as

professors and scholars. Bess (1978, p. 293) explained that graduate students must “understand fully the symbolic meaning of the activities in which a ‘professor’ engages.” Highlighting professional identity as one important outcome of professional education, Stark, Lowther, and Hagerty (1986) defined it as “the degree to which graduates integrate the profession’s norms, competencies, and values into a conception of role” (p. 53). In short, doctoral students must come to think of themselves as scholars and professors—that is, legitimate members of their professional scholarly communities (Austin and McDaniels, in press).

One part of assuming a professional identity is to recognize one’s responsibility to contribute to the relevant professional community. For prospective faculty, this means participating in the appropriate scholarly and professional associations by presenting papers and reviewing others’ proposals, submitting manuscripts to journals, and becoming acquainted with and interacting with others in one’s field nationally and internationally. Additionally, Stark, Lowther, and Hagerty (1986, p. 65) specifically noted that an outcome of professional preparation should be “scholarly concern for improvement,” that is, commitment to expanding the knowledge base of the professional area.

Part of assuming a professional identity as a scholar and faculty member is to know about the different forms that faculty work can take. Traditionally, being a faculty member meant taking a full-time position that led over a period of years to the award of tenure. Now, new faculty members may take a variety of appointment types, including part-time or term-limited (contract) appointments for three or five years. In fact, the majority of new faculty appointments in recent years is no longer to full-time, tenure-track appointments but rather to part-time or contract positions (Finkelstein and Schuster, 2001). Thus, the socialization experience during graduate school should ensure that prospective faculty members are aware that the positions they assume may not parallel the full-time tenured positions of their advisors. Their preparation should provide them with knowledge about the range of faculty appointments and the issues they should consider when exploring a particular position.

Knowledge and Skills in Areas of Faculty Work

Faculty work involves several specific areas of activity: teaching; research; public service; and institutional citizenship. While the relative emphasis on each of these activities varies depending on the type of institution in which a faculty member works, the socialization of graduate

students to faculty work should include opportunities for future faculty to develop competencies relative to each of these areas.

Understanding of Teaching and Learning Processes. Teaching is expected across all institutional types, but, until recently, many prospective faculty members did not experience any systemic preparation for this role while they were in graduate school. In fact, in qualitative interviews, doctoral students have reported that they typically learn about teaching by watching their own undergraduate and graduate faculty, and identifying those to emulate and those whose examples they wish to avoid (Austin, 2002b; Nyquist *et al.*, 1999). However, several factors make explicit preparation for the role of teacher especially important in the socialization process of the next generation of faculty (Austin, 2002a). Students are becoming more diverse, the effective use of technology in teaching is becoming more the norm, and the emphasis by states, parents, and legislatures on learning outcomes has increased. These and other contextual trends make deep knowledge about teaching and learning an important attribute of a new faculty member (Austin, 2002a; Austin and Barnes 2005; Austin and McDaniels, in press).

Specifically, prospective faculty should understand (1) how learning occurs; (2) how to respond to individual learning differences; and (3) the variety of teaching strategies available to them (Wulff and Austin, 2004). In addition, faculty should have deep content knowledge of their disciplines, but also should develop what Hutchings and Shulman (1999) call “pedagogical content knowledge”. That is, prospective faculty should develop an understanding of how students learn about their specific disciplines, what key problems often frustrate learners, how concepts or other discipline-specific ideas can be best explained, and what pedagogical strategies are most effective within the disciplinary context. Regardless of discipline, the outcomes of graduate education for those preparing for the professoriat should include mastery of the teaching skills to help students frame problems and deal with contested areas within the discipline, and the ability to show students how key questions in the discipline are relevant to societal issues (Schneider, 2004).

All faculty members also should have the skills to encourage and develop students’ critical thinking skills as well as their commitment to functioning as effective citizens. In particular, graduate students preparing to be faculty should learn about the uses of service learning within teaching and how to link academic work to practical societal issues (Austin and Barnes, 2005). The socialization process for graduate students also should include attention to curriculum design processes for courses and academic programs. New faculty who know how to engage in systematic

and conceptually based planning can be efficient in their course preparation and productive collaborators during department or program-based curriculum planning.

Most graduate students today grew up in the age of technology and use many forms of technology very comfortably. Building on general knowledge, prospective faculty should develop specific technology skills relevant to their teaching (as well as their research). With the rapid increase in online teaching, they should have knowledge of teaching methods effective in virtual classrooms, technology-mediated strategies to support advising relationships and long-distance collaborations, and strategies for accessing online databases and other resources useful in their teaching and research. Furthermore, they should master technological presentation skills to assist in teaching or research presentations (Austin, 2002a).

Understanding of Research Processes. Research preparation is at the heart of doctoral study. Consistent with the theoretical literature on socialization, much of the socialization process involves observing faculty members and more advanced peers, participating as an apprentice in research projects, and ultimately assuming responsibility for one's own research study (Austin, 2002b). By the time they complete graduate study, prospective faculty should have extensive knowledge and skills pertaining to research, which can be categorized as follows (Austin and McDaniels, in press):

- (1) *The ability to frame appropriate questions.* With deep knowledge of their disciplines, prospective faculty should understand the history of research in their fields (Maurer, 1999), the key issues and questions that have been addressed by other scholars (McDaniels, 2004), and those questions considered most vexing or at the cutting edge (Austin and McDaniels, in press). They should be skillful at framing questions for study, and should understand the different kinds of questions appropriate in each of the four domains of scholarly work conceptualized by Boyer and Rice—the scholarships of teaching, discovery, application, and integration (Boyer, 1990). The graduate school experience also should prepare prospective faculty to identify questions that play at the borders of their disciplines and are appropriate for interdisciplinary research with colleagues in other fields. They should know what other scholars are working on similar questions and how their work connects with that of others (Bryant, personal communication, February 14, 2005).

- (2) *The ability to design and implement scholarly projects.* Graduate students preparing to be faculty must become very comfortable and skilled in designing research studies (Austin and McDaniels, in press). This work requires them to know the various paradigms that guide work in their disciplines or fields, and to develop a repertoire of research approaches and methods appropriate within the underlying assumptions of each paradigm. Furthermore, they need to understand what counts as acceptable data in their fields, how to access and use available data sources, and the criteria of excellence that will be applied to their methodological choices (Austin and McDaniels, in press). Good preparation for the professoriat involves opportunities for prospective faculty to practice project design under the guidance of experienced scholars, with the dissertation serving as the culminating experience in the doctoral socialization experience. Often overlooked in graduate training is the notion that managerial and administrative skills are crucial to being able to implement a successful research project (Jenkins, 1995). Skills such as fiscal management (Wulff and Austin, 2004), grant-making skills (Pescosolido and Hess, 1996), project organization, and stakeholder (participants, sponsors, funders) management (Jenkins, 1995) are all important for future faculty members to start to develop while in graduate school.
- (3) *The ability to collect and analyze data.* Prospective faculty should be committed to the importance of evidence to support research conclusions. Thus, they must learn in graduate school how to use various analytical methods, including becoming versed in the advantages and limitations of each method. They also should develop an appreciation for maintaining an open perspective about the results that may be suggested by the data that they collect and analyze (Austin and McDaniels, in press; Bryant, personal communication, February 14, 2005).
- (4) *The ability to present results.* Graduate students also must learn how to interpret and present the results of their research (Austin and McDaniels, in press). They should learn a variety of ways to communicate their research to different audiences, including disciplinary colleagues, community members, government leaders, and foundation officers. Prospective faculty should develop competency in communicating in a variety of genres, which, depending on the discipline, might include data-based papers for scholarly meetings and journals, conceptual

or expository essays intended for the general public, and case studies for use in instruction (Austin, 2002a; Austin and Barnes, 2005).

- (5) *The ability to give and receive feedback.* All good scholars and faculty members recognize the value of thoughtful criticism in improving scholarly work (Austin and McDaniels, in press; Eisenberg, 1999). Thus, prospective faculty should learn the criteria used to determine quality and excellence in their fields and in the four domains of scholarship described by Boyer and Rice (Boyer, 1990). The scholarship of discovery, for example, values the dispassionate pursuit of answers to basic research questions, while a key criterion of excellence for the scholarship of application is the extent of impact on real-life problems. Prospective faculty should have opportunities to learn to provide peer review, an important scholarly responsibility. Additionally, graduate students should be guided in learning how to effectively assess their own work as well as receive and incorporate feedback and criticism (Austin and McDaniels, in press; Shulman and Silver, 2003). Graduate programs should provide students with ample opportunity to practice these skills as they carry out coursework and other requirements.

Understanding Engagement and Service. Another component of faculty work is participation in service that draws on one's disciplinary expertise. This work can take many forms, including collaborations between scholars and community members to identify problems, gather and analyze data, and consider the implications of the data for improving practice or solving a problem. However, a qualitative study of graduate students aspiring to faculty positions has shown that prospective faculty are often unfamiliar with the meaning of such terms as "service," "outreach," and "engagement" (Austin, 2002b; Nyquist *et al.*, 1999). Thus, graduate students need to learn how scholars link theory with practice (Lynton and Elman, 1987). Faculty members should encourage graduate students to explore ways in which to relate their work to the public good, including action research with community members, writing analyses and reports for government agencies, writing articles for the popular press, and including service learning in their teaching (Austin and Barnes, 2005).

Appreciation of Institutional Citizenship. Since faculty members have the privilege and responsibility of participating in institutional governance, graduate students planning on faculty careers should learn the history of faculty involvement in governance, the kinds of governance structures

and processes common in many higher education institutions, and the philosophical and practical reasons for participating in the governance processes in the institutions where they work (Austin, 2002a; Austin and Barnes, 2005). Specifically, they should learn how to work effectively with institutional leaders, manage meetings, engage in strategic planning, monitor and facilitate group processes, handle conflict resolution, and manage time well.

Knowledge of the processes and skills used in institutional governance, as well as appreciation of faculty responsibilities in this area, are particularly important outcomes of graduate study for beginning faculty today because of the press of strong external factors. Rhoades (1998) has observed that, as the historic balance between administrative and faculty power and authority shifts away from professors, faculty members are becoming “managed professionals.” Additionally, universities are urging faculty to be more entrepreneurial (Shulman and Silver, 2003) and, in some instances, higher education institutions are forging new relationships with industry pertaining to the funding and uses of research (Blumenstyk, 1998; Duderstadt, 2000).

Prospective faculty also should recognize the opportunity and responsibility faculty have to model effective democratic processes for students through decision-making and mutually respectful interactions among peers (Austin and Barnes, 2005). When faculty participate in institutional decisions, they are not only contributing to the future of their university or college but also helping undergraduate students learn the meaning of being an involved and responsible citizen.

Interpersonal Skills

The competencies discussed in the previous section pertain to the main components of faculty work—research, teaching, service, and institutional citizenship.

Stark, Lowther, and Hagerty (1986) asserted that, in addition to content expertise, various interpersonal skills also are important to address in preparing future professionals. Faculty work also requires this preparation.

Communication Skills. Faculty members must be able to communicate verbally and in writing to a broad audience (Austin, 2002a; Austin and Barnes, 2005). As discussed in regard to research skills, prospective faculty should feel comfortable presenting the results of their work in various forms appropriate for diverse audiences, including government leaders and policy makers (Terenzini, 1996), members of the

community, foundation officers, institutional leaders, and peers in their own fields (Maurer, 1999). In addition, the socialization experience in graduate school should prepare future faculty who are committed to mutually respectful dialogue and careful listening (Austin and Barnes, 2005). This requires mastering the delicate balance between sharing one's expertise and recognizing others' viewpoints.

Teamwork and Collaboration Skills. In order to engage effectively in interdisciplinary work with colleagues who may think about and organize their work in different ways, and in projects with members of communities outside academe, faculty members must be able to appreciate diverse viewpoints, understand how groups form and progress in their work, and be adept at managing conflicts and other challenges of collaboration (Austin, 2002a; Austin and Barnes, 2005; Klomparens and Beck, 2004). The growing diversity of people within the academy is another factor that makes group process, teamwork, and collaboration skills very appropriate outcomes of graduate education. Despite the importance of learning such skills, the Golde and Dore (2001) survey of graduate students revealed that only 27% of the respondents perceived that their departments prepared them for interdisciplinary work, one aspect of this area of competency.

Appreciation of Diversity. Closely related to the mastery of communication and teamwork skills is the development of an appreciation for diversity (Austin, 2002a; Austin and Barnes, 2005). As the academy makes progress toward increasing the diversity within the faculty and student bodies, graduate students aspiring to faculty roles must learn to be comfortable and effectively work with people of different genders, races and ethnicities, sexual orientations, and religious commitments. They also must be comfortable interacting with colleagues from other disciplines, and, as the number of part-time and contract appointments within the faculty increases (Finkelstein and Schuster, 2001), with colleagues who have different career trajectories (Rice, 1996). Learning how to be comfortable, respectful, efficient, and productive when working with others is a necessity for future faculty.

Professional Attitudes and Habits

In addition to specific skills and abilities, outcomes of the socialization that takes place in graduate school should include several attitudes and habits that are important to faculty work.

Ethics and Integrity. Part of the preparation for any professional field is the process of "internalize[ing] the code of ethics agreed upon by the profession" (Stark, Lowther, and Hagerty, 1986, pp. 61–62). Thorough

preparation for understanding and valuing ethical professional practice is a very important outcome of graduate school (Austin and McDaniels, in press; Braxton and Baird, 2001; Pescosolido and Hess, 1996). Future faculty must understand the ethical guidelines for conducting research, the appropriate treatment of human and animal subjects, the role of confidentiality, how to handle conflicts of interest that may arise in the conduct of research, and ethical guidelines for managing collaboration. Knowing what laws and institutional guidelines pertain to intellectual ownership and property rights has become particularly important as faculty produce technology-related products and other inventions and discoveries. When conducting research in communities, scholars must be adept at balancing community interests with the goals and potential of the research. When conducting scholarly work concerning teaching and learning, as well as other research involving human participants, they must understand how to balance the research emphasis on reporting rich, descriptive data with the importance of protecting the privacy of participants.

Braxton and Baird (2001) have called for doctoral programs to help scholars learn to engage in professional self-regulation, in which they are taught deterrence, detection, and sanctioning. They explained that, in order to be able to avoid scientific misconduct, future faculty should be taught deterrence; that is, they should learn research standards, conventions, and ethics, including how to replicate research, the importance of engaging in full disclosure of their research methods, and the important task of retaining and sharing research data. They should develop skills of detection, including learning to recognize problems of misconduct, learning to serve as peer reviewers of manuscripts, and gaining an awareness of how their own biases can inadvertently enter the review process. Additionally, future faculty should learn about sanctions that operate in the research arena. Specifically, they should know what actions to take when faced with improprieties, and the importance of maintaining confidentiality in relation to any concerns about misconduct. Ethical practice and integrity are long-established values of the academy (Austin and McDaniels, in press; Pelikan, 1992) that should feature prominently in the socialization of prospective faculty.

Doctoral programs also should create opportunities for students to learn about ethical issues relating to teaching (e.g., academic dishonesty, teacher-student relationships) as well as institutional service and collaboration (e.g., engaging in appropriate relationships with colleagues, deciding on authorship of joint projects) (Wulff and Austin, 2004).

Motivation for Life-Long Learning. Another important professional attitude that should be an outcome of preparation for the professoriat is, in

the terms of Stark, Lowther, and Hagerty (1986), “interest in [one’s] own professional development and commitment to enhancing and updating their knowledge and skills” (p. 67). In short, future faculty should finish graduate school with a commitment to continue to learn. Taking on the professional identity of a professor and scholar is to commit oneself to ongoing learning and development in order to constantly improve one’s work as a professional. Over time, professional development might involve a variety of activities. Some examples include sabbaticals to deepen one’s knowledge base, attendance at workshops hosted by scholarly associations to prepare scholars to use new research methods, participation in action research teams to study student learning processes in one’s discipline, involvement in institutional faculty development opportunities, and the creation of individualized reading programs pertaining to disciplinary and educational developments. Of course, a prerequisite for participating in such activities is the willingness to take responsibility for advancing one’s own education and career (Schwartz and Tickamyer, 1999).

Cultivating Professional Networks. One of the more important professional habits that faculty members and graduate students considering the professoriat must develop is the ability to nurture professional networks (Eisenhart and DeHaan, 2005; Shulman and Silver, 2003). A vibrant professional network for a faculty member includes junior colleagues, contemporaries, and more advanced peers from both inside and outside an individual’s field. Aspiring faculty should start to develop these networks during graduate school. In addition to cultivating relationships with faculty and peers, graduate students can participate in “noncourse-based” learning venues, including colloquia, professional meetings, reading groups, journal clubs, and speaker series (McDaniels, 2004), where they may find opportunities to interact with, learn from, and provide support to colleagues.

Nurturing One’s Passion While Maintaining Balance in Life. Faculty members who continue to approach their research, teaching, and other responsibilities with enthusiasm over a lifetime exude an ongoing passion and unquenchable interest in their fields. They express a sense of vitality and growth (Baldwin, 1990; Corcoran and Clark, 1984). They continue to ask and pursue the answers to demanding questions and find enjoyment in sharing their enthusiasm with others. During the graduate experience, future faculty members have opportunities to observe and talk with current faculty members in order to learn some of the strategies that fuel such vitality and passion. Thus, one outcome of the socialization process is the awareness by aspiring faculty that good work is not a matter only of

technique, but also of passion, commitment, and enthusiasm, which can be nurtured and fueled over time.

At the same time, future faculty members should have opportunities to explore the kind of lives they want to live in relationship to the balance between professional and personal commitments. Research on aspiring and early career faculty shows that many are concerned with the apparent lack of work/life balance and frenzied daily schedules that they perceive in the lives of many experienced faculty members (Rice, Sorcinelli, and Austin, 2000). Faculty advisors could discuss different models or approaches to a life as a faculty member and support prospective faculty in considering the choices available. Attention during the graduate school period to broad questions about constructing a life may be especially effective in helping women and individuals of color see the faculty career as a viable option (Rice, Sorcinelli, and Austin, 2000).

SUMMARY COMMENTS ABOUT OUTCOMES

Recognizing the changing contextual demands and the various appointment situations and institutional types in which faculty work, we propose that the socialization of graduate students who plan on entering the faculty ranks should help them develop conceptual understandings, skills and abilities in key areas of faculty work, interpersonal skills, and professional attitudes and habits. While further learning occurs during the faculty years, attention to competencies in each of these areas would enhance the transition of graduate students into faculty roles and strengthen the quality of the professoriat.

ISSUES AND CONCERNS ABOUT GRADUATE STUDENT SOCIALIZATION FOR THE FACULTY ROLE

Over the past decade, researchers have produced a body of work focused on doctoral education as preparation for academic and nonacademic careers. This work has identified strengths and advantages of this training, as well as disadvantages, shortcomings, and limitations. A recently edited book highlighted several key studies as well as some nationally recognized projects implemented to enhance the quality of doctoral education (Wulff and Austin, 2004). While using a range of methodologies, including large-scale surveys of current students, regularly scheduled in-depth interviews over several years, exit interviews, and survey data collected ten years after graduation, the recent research studies have been noteworthy with

regard to the cross-cutting themes apparent in their findings. In this section, we discuss the third question posed at the start of the chapter: What issues and concerns pertaining to the socialization of graduate students to faculty roles have emerged in recent research?

LACK OF SYSTEMATIC AND DEVELOPMENTALLY ORGANIZED PREPARATION

The learning process in graduate school tends not to be organized in a systematic or a developmentally focused way (Austin, 2002a,b; Nyquist *et al.*, 1999; Wulff, Austin, Nyquist, and Sprague, 2004). Much of what doctoral students learn about succeeding in graduate school and preparing for faculty roles is through apprenticeship and observation (Lortie, 1975), as they engage with their graduate faculty and reflect upon their observations of their undergraduate professors. Doctoral students develop impressions about academic work as they note how faculty spend time, what they say about their work, what tasks or assignments the faculty relish or avoid, and what faculty value and respect. Graduate students comment that they perceive “mixed messages” about what is valued in faculty work, as, for example, they listen to institutional leaders or read policies that acclaim certain kinds of work, such as serious attention to undergraduate education, but simultaneously note that faculty members recommend avoiding too great an investment of time in undergraduate teaching (Austin, 2002b; Nyquist *et al.*, 1999; Wulff *et al.*, 2004). While graduate students carefully observe faculty members, they typically do not engage in extensive conversations with faculty about scholarly life, higher education issues, or the particular skills and abilities that they should develop in preparation for their careers.

Although systematic guidance from faculty members is not the norm, graduate students do report that they turn to departmental peers, family, and friends outside their departments for guidance and support. Peers help them learn the ropes, acquire the practical information needed to make their way through graduate school, anticipate and handle challenges, and celebrate successes and achievements. Anderson and Swazey reported that “about half of our respondents said that students in their program learn more from each other than from the faculty” (1998, p. 6). While the important role played by peers and other friends and family is consistent with the theoretical literature on socialization processes, this emphasis on peers coupled with students’ reports of the minimal guidance they receive from faculty raises concerns about the information they are getting as they move through graduate school. Research studies suggest that women and

individuals of color may receive even less mentoring and guidance than others (Taylor and Antony, 2001; Turner and Thompson, 1993).

Of course, graduate students do get involved in teaching and research, which helps prepare them for faculty work. However, their research or teaching apprenticeships often do not cover all facets of the faculty role; for example, students in one study reported that they do not feel competent in grant-seeking and proposal writing (Austin, 2002b). While many doctoral students serve as TAs, their assignments tend to be based more upon institutional needs to cover courses than on the specific kinds of teaching with which a particular doctoral student may need experience. Most students are unlikely to have opportunities to move in systematic paths through progressively more demanding and more autonomous teaching assignments with careful and specific developmentally oriented guidance from supervising faculty. Other than teaching and research, aspiring faculty often receive no particular preparation for other facets of faculty work, including advising, engaging in public service and outreach, participating in institutional governance, working on curriculum committees, or assessing ethical questions (Austin, 2002a,b; Lovitts, 2004; Wulff *et al.*, 2004).

In a longitudinal research study that followed a group of graduate students for more than four years (Austin, 2002a; Nyquist *et al.*, 1999; Wulff *et al.*, 2004), researchers asked students aspiring to be teachers to capture the essence of their graduate experience in drawings. The resulting pictures often featured cliffs, mountains, and ravines, and, while they often reflected on their successes, the participants also tended to mention the problems and challenges that thwarted or slowed their process. Some explicitly noted that they would have appreciated more guidance and a more systematic path through graduate school.

LACK OF EXPLICIT EXPECTATIONS AND FEEDBACK

The graduate experience often does not provide aspiring faculty with clear information about what they should do to progress successfully, or feedback about the quality of their work and accomplishments. Data from various studies indicate that doctoral students do not talk regularly with faculty members about the students' professional goals, their areas of focus, and the relationship of their career aspirations with the employment opportunities available. In fact, students often feel they do not get enough basic information about the steps of the graduate process, including expectations, examinations, guidance committees, and dissertations proposals (Austin, 2002a,b; Lovitts, 2004; Nyquist *et al.*, 1999; Wulff *et al.*, 2004).

In 1998, Anderson and Swazey concluded that “only half [of their study participants] agreed—very few strongly—that faculty members were explicit in their expectations” (1998, p. 6). Similarly, in her extensive study of students who decided to drop out of doctoral programs, Lovitts (2004) concluded that doctoral students often do not develop solid cognitive maps of the academic and social communities that they must enter in graduate school. The materials they receive tend to be insufficient and orientations sometimes emphasize departmental prestige to such an extent that students feel inadequate to succeed. Students who later drop out sometimes feel they do not have necessary information about choosing advisors and courses, and understanding standards of quality. Furthermore, as students continue through the graduate experience, they feel they receive “mixed messages” about how to spend their time (e.g., working hard on a teaching assistantship or immersing oneself in research; working on a collaborative team or shining on an individual project; engaging in public service or maintaining focus on publication productivity) and insufficient explicit feedback about the extent to which they are succeeding (Austin, 2002a,b; Nyquist *et al.*, 1999; Wulff *et al.*, 2004).

LIMITED ATTENTION TO ACADEMIC WORK AND CAREER OPTIONS

In the summary of their study of more than 4,000 doctoral students in 11 disciplines in 28 research universities, Golde and Dore (2001) offered a frequently cited conclusion: “the training doctoral students receive is not what they want, nor does it prepare them for the jobs they take” (p. 3). A common theme across the studies on doctoral education in recent years is that graduate students are not being thoroughly prepared for faculty roles (nor for nonacademic roles) (Austin, 2002a,b; Golde and Dore, 2001; Nerad, Aanerud, and Cerny, 2004; Nyquist *et al.*, 1999; Wulff *et al.*, 2004). In regard to faculty work specifically, doctoral students participating in a longitudinal interview study were not able to explain the full range of faculty work, beyond teaching and research; they were less familiar with faculty responsibilities for governance, curriculum development, advising, institutional responsibilities, and grant-seeking. Furthermore, they explained that their faculty advisors seldom initiated conversations about academic careers (nor about career options beyond academe) (Austin, 2002a,b; Wulff *et al.*, 2004).

In a pilot study of 187 doctoral students at six universities, Golde (1998) found that 90% of the respondents felt prepared to conduct research and 63% felt prepared to teach undergraduates, but only 33%

of the respondents felt prepared to teach graduate students, 30% to advise undergraduates, 26% to advise graduate students, 38% to secure research funding, and 19% to participate in governance and service roles. Similarly, Davis and Fiske (2000) reported that 37% of their graduate student respondents reported receiving little guidance about academic careers. Additionally, while a web-based survey sponsored by the National Association of Graduate and Professional Students (NAGPS), to which more than 32,000 students responded, found that 80% indicated they were satisfied with their preparation for academic careers, smaller percentages indicated that their teaching experience was sufficient (only 43% in the life sciences, in contrast to 72% in the humanities) (National Association of Graduate-Professional Students [NAGPS], 2001).

Study results have also shown that graduate students aspiring to the professoriat have only minimal understanding of the different kinds of higher education institutions, their respective missions and cultures, and the implications for the kind of work that faculty do. Their graduate experience also does not typically include discussion of the history of the profession and the responsibility of academics within the broader society (Austin, 2002b). Studying Ph.D. recipients 10 years after degree completion, Nerad, Aanerud, and Cerny (2004) found that graduates would have liked more information about the labor market, employers' expectations, and other job options, as well as more attention to assessment of their own potential.

INSUFFICIENT SENSE OF COMMUNITY

Lovitts' (2004) research on individuals who have chosen to drop out of doctoral programs has emphasized the importance of community for supporting individuals during the graduate experience. She found that those who completed Ph.D.s were three times more likely than noncompleters to have research assistantships and twice as likely as noncompleters to hold teaching assistantships. Those who were awarded fellowships that did not involve assistantship responsibilities were just as likely to stay as to leave. She concluded that graduate school creates a situation of "haves" and "have nots" since resources (including opportunities to make connections as one works on an assistantship) are distributed unevenly. Work assignments and financial aid packages that require students to get to know others contribute to students' ability to integrate into the academic and social community, gain information, and develop cognitive maps about graduate education that enable them to succeed.

Relationships with advisors also were relevant to decisions to drop out or stay. Those who completed degrees were twice as likely as those who departed to be very satisfied with their advisors. Overall, however, respondents indicated that faculty, while cordial, were not particularly welcoming and open. Students perceived that faculty advisors did not wish to develop personal connections with students and that students carried the burden to forge relationships with advisors.

Lovitts' research led to the conclusion that lack of attention to the creation of community among peers and faculty during the graduate experience hinders students' progress and interest in staying in school. She expressed particular concern that women and individuals of color sometimes experience isolation and pressure to conform to expectations, and can feel excluded from a sense of community. Similarly, Antony and Taylor's work (Antony and Taylor, 2001, 2004; Taylor and Antony, 2001) on the impact of stereotype threat also has emphasized that graduate students of color often perceive negative stereotyping, including labeling, marginality, and tokenism. Having to deal with stereotypes of intellectual inferiority, feeling compelled to constantly prove oneself, and sensing that one does not "fit in," can diminish interest in graduate work and an academic career.

Lovitts (2004) suggested that the best way to retain graduate students, including women and individuals of color, is to develop a culture characterized by a sense of community and to adjust departmental culture to the interests and needs of the students, rather than expecting students to make all the adjustments to conform. The work of these researchers illustrates the theoretical points discussed earlier concerning the importance of a conception of socialization that recognizes the bidirectional interaction between graduate students and the culture they are entering.

PERCEPTIONS OF ACADEMIC LIFE

While the socialization that occurs during the graduate experience should help students prepare to be faculty, it apparently also raises concerns among future faculty about their career choice. A number of the studies about graduate education indicate that doctoral students worry whether a faculty career will enable them to live a "balanced" or "integrated" life in which they can pursue both professional and personal responsibilities (Austin, 2002a,b; Golde, 1998; Golde and Dore, 2001; Rice, Sorcinelli, and Austin, 2000; Wulff *et al.*, 2004). Across studies, graduate students repeatedly report their observations that faculty members seem to live very hectic lives, with too much to do in too little time.

Some wonder if they will be able to manage domestic and professional duties, and how dual career relationships will work. These concerns are exacerbated by the lack of opportunity that students find to discuss these concerns with trusted faculty advisors or mentors.

Closely connected to these worries is the observation expressed by graduate student participants in several studies that isolation and competition, rather than community, characterize academic life (Austin, 2002a,b; Nyquist *et al.*, 1999; Rice, Sorcinelli, and Austin, 2000; Wulff *et al.*, 2004). Aspiring faculty members (as well as new faculty) say they want careers that couple hard work with networks and connections—and their observations of faculty lives make them question whether an academic career will measure up. In a poignant quote expressed by a participant in a study called *Heeding New Voices* (Rice, Sorcinelli, and Austin, 2000, p. 16), a student explained: “What I want most in a faculty career is a profession that makes me feel connected to my students, to my colleagues, to the larger community, and to myself.”

Some graduate students preparing for the professoriat indicate that they want to find “meaningful” work that enables them to connect their intellectual passions with the needs of students and society. However, some also wonder whether life as a faculty member will enable them to fulfill these goals (Austin, 2002a,b; Rice, Sorcinelli, and Austin, 2000; Wulff *et al.*, 2004). Based on her research, Lovitts (2004) has expressed concern that women and people of color may be particularly vulnerable to deciding to leave doctoral study if they feel that the culture is “weeding out” those whose interests are not devoted in a traditional and single-minded way to the discipline. Overall, these concerns that graduate students express about the quality of life offered by a faculty appointment raise questions about the nature, impact, and outcomes of the socialization experience in graduate school.

LITTLE OPPORTUNITY FOR GUIDED REFLECTION

Not surprisingly, the graduate school experience presents challenges and significant questions with which students must grapple. For some, the graduate experience leads to a conflict between the values they bring and the products and activities that they find the academy emphasizes. For example, some students expect that teaching will be more heavily valued than they find it to be, or they are surprised to find that faculty struggle to achieve a sense of balance between professional and personal commitments. Other students are surprised at how busy their advisors are, and feel a sense of disappointment or disillusionment that

faculty do not devote more time to students. Some students are uncertain how to find faculty whose interests match their own. Others strive to fit with what they perceive to be academic culture and values, but also want to find ways to remain “true to [their] own values” (Austin, 2002b, p. 111).

While they are grappling with these challenges, students need opportunities for sense making and reflection. Yet, students report that they are typically left on their own to work through their observations and questions, usually without benefit of in-depth discussion with interested and trusted faculty mentors. In fact, when given the opportunity for regular guided reflection as part of a longitudinal research study, many participants reported the interviews to be their only opportunity for thoughtful conversation with an interested listener whose goal was to provide a venue for the student to reflect and explore dimensions of his or her graduate experience (Austin, 2002b; Nyquist *et al.*, 1999; Wulff *et al.*, 2004).

If graduate students had more regularly scheduled opportunities for guided reflection during their graduate experiences, the bidirectional socialization process might work more effectively. Faculty could help students understand more thoroughly the expectations they face during graduate education and in an academic career, and students could find ways to more effectively connect their passions and interests with those of faculty members and with the mission of the higher education institutions which they might subsequently join. Additionally, guided reflection could provide opportunities for students to learn about the particular expectations and experiences unique to the specific disciplinary contexts in which they are pursuing their careers.

SUMMARY COMMENTS ABOUT ISSUES IN THE GRADUATE SCHOOL SOCIALIZATION EXPERIENCE

Since the six issues highlighted above emerged with consistency across several major studies on graduate education, they deserve attention by those interested in improving how graduate education provides socialization for the professoriate. Societal expectations for higher education institutions are increasing just as a wave of retirements is hitting the academy. Those entering the faculty ranks must be highly productive, talented, and motivated (Fairweather, 1996; Massey and Wilger, 1995). Thus, the graduate school period should be used to ensure appropriate and thorough preparation and socialization to the roles that new faculty will assume across disciplinary and institutional contexts and appointment types. Consideration of the issues, concerns, and shortcomings of

graduate education, as suggested by recent research studies, is a useful base for identifying strategies that will enrich and deepen the quality of graduate education as a socialization experience for future faculty.

STRATEGIES FOR ENHANCING GRADUATE SOCIALIZATION FOR FACULTY ROLES

Over the past decade, a number of foundations, government agencies, professional associations, and researchers have created a powerful call for reform in American graduate education. While some of the suggestions have focused on ways to ensure that doctoral education prepares students for the array of career possibilities they may consider, a significant number focus specifically on ways to improve doctoral education as preparation for the professoriat. Here, we draw on and synthesize recommendations from a large number of reports and studies (Association of American Universities, 1990, 1998; Austin, 2002b; Committee on Science, Engineering, and Public Policy, 1995; Gaff, Pruitt-Logan, and Weibl, 2000; Golde and Dore, 2001; Hartle and Galloway, 1996; Kennedy, 1997; LaPidus, 1997a,b; Lovitts, 2001, 2004; Malcolm *et al.*, 1998; Nerad, Aanerud, and Cerny, 2004; Nyquist *et al.*, 2001; Nyquist, Woodford, and Rogers, 2004). The organization of the suggestions presented here draws heavily on a recent synthesis of recommendations provided by Wulff and Austin (2004) in an edited book that highlighted six major studies on graduate education and six nationally recognized initiatives to improve doctoral education. The recommendations we offer also are informed by the theoretical literature on socialization, the kinds of graduate school outcomes appropriate for future faculty, and the research findings that highlight specific concerns and problems often found in doctoral education today.

Following our discussion of major recommendations for improving the graduate student socialization experience, we consider key stakeholders who have a role to play in improving the preparation of the next generation of faculty, and the nature of the contributions appropriate for each. We also provide examples of strategies and programs already underway.

RECOMMENDATION 1: ADDRESS STUDENTS' INTERESTS AND GOALS, AS WELL AS PROGRAM EXPECTATIONS, EARLY ON IN THE SOCIALIZATION EXPERIENCE

The graduate socialization experience should begin with clearly stated program expectations coupled with opportunities for students to

articulate their own goals and interests. The literature on socialization indicates that newcomers are eager to learn about the norms and expectations of the culture they are entering. Similarly, research studies show that graduate students need to develop what Lovitts calls “cognitive maps” (2004) of the requirements that they must fulfill. However, faculty members often do not provide clear information for new graduate students about the requirements, informal norms, expectations that determine success, and the steps or stages of the graduate education process. Absent clear guidance from faculty members, doctoral students typically derive much information, as well as support, from each other and more advanced student colleagues. They also try to make sense out of what they observe as they watch faculty members and other students. While they learn much in this way, contradictory messages as well as gaps in the information they gather makes the process of socialization less efficient and more stressful than necessary.

At the same time they are seeking information about the environments they are entering and the careers they may wish to pursue, students also are assessing their own values and talents and the extent to which their interests and goals match with what they observe of their graduate programs. Creating a diverse faculty will require newcomers of all backgrounds to feel welcome from the start and to see that their contributions, values, and passions are respected and have a place within the academy (Antony, 2002; Antony and Taylor, 2001, 2004; Taylor and Antony, 2001; Tierney and Rhoads, 1994). Several strategies can enrich the early socialization period in graduate education:

Provide a Thorough and Welcoming Orientation

A carefully planned orientation can provide a clear and explicit message that all new students are welcome and that the program they enter looks forward to the specific contributions, ideas, and experiences that they bring into the graduate experience. Additionally, a useful orientation should ensure that new students have a comprehensive understanding of what is expected, the norms and values of the community, and the resources that provide support and guidance. Specific information should include formal requirements, benchmark experiences, evaluation markers and relevant criteria of success, timelines, expected activities in which students will be engaged, and norms of behavior and interactions among faculty and students.

Involve Students in Goal-setting Conversations

Incoming doctoral students should participate in individual or group conversations where they articulate their goals, interests, and expectations. In these meetings, students should explore with faculty how their goals relate to the program's purposes and strengths, where any discrepancies lie, what is realistic or possibly unrealistic in their plans, and how individual needs fit with program emphases. Such conversations provide a starting point for achieving a balance between respecting the individual interests of students and recognizing the particular focuses and strengths of a program and its faculty. Such conversations open the way for programmatic efforts to honor the diversity among graduate students.

RECOMMENDATION 2: PROVIDE REGULAR ADVISING AND MENTORING THAT PROVIDE CLEAR EXPECTATIONS AND EXPLICIT FEEDBACK

Across the studies on the doctoral experience, students express concern about lack of regular advising and mentoring, lack of clarity about expectations, and uncertainty about the quality of their performance. The socialization literature makes clear that novices need to assume the roles to which they aspire and try out the activities that they are learning—and then make adjustments based upon feedback. Thus, the faculty who work with those preparing for the professoriat need to take seriously their responsibilities as advisors. Several specific actions would improve this aspect of the socialization experience for future faculty:

Establish Clear Institutional Standards for Advising

Rather than leaving all aspects of the advising relationship to individual faculty members, universities and departments can assume part of this responsibility. Written guidelines can address the goals of the advising relationship, the availability of advisors and the expected regularity of advising sessions, the importance of formal annual assessments of student progress, and the process through which students can change advisors. While some faculty may prefer leaving such issues to individual preference, formal guidelines both signify the seriousness with which the institution takes advising responsibilities and provide guidance to faculty and students to help them forge effective relationships.

Encourage Faculty to Take Advising Seriously

While formal guidelines are important, the heart of the advising relationship takes place in the interactions between the student and faculty member. Faculty members should think about the kind of relationships that they wish to create with their advisees, considering their own disciplines and personal styles. Advisors contribute in significant ways to an effective socialization experience for their students when they speak explicitly about expectations they have for their students, invite students to reflect on their personal goals and expectations, discuss their own career paths and choices, reflect on ethical issues in faculty work, and open conversations about the many facets of a scholarly career. Michigan State University's Graduate School offers a program called "Setting Expectations and Resolving Conflicts," originally supported by the Fund for the Improvement of Postsecondary Education, which helps graduate students and their advisors develop more productive and satisfying advising relationships (Klomprens and Beck, 2004).

Encourage Doctoral Students to be Proactive in Seeking Input and Feedback from Faculty Members

Graduate students also have a responsibility for developing effective advising relationships. Students can benefit from creating solid professional relationships with more than one faculty member so that they can gain multiple perspectives as they make sense of their experiences. Students seeking academic careers should also ask for opportunities to talk with faculty members about their goals and their observations and questions about academic life, and should actively seek critique and feedback about their work and progress. Students have as much responsibility as faculty members for creating a successful and productive socialization experience.

RECOMMENDATION 3: ENCOURAGE STUDENTS TO FEEL INTEGRATED AND CONNECTED IN THEIR FIELDS OF STUDY

Graduate students benefit from feeling that they are welcome and belong in the department, institution, and field they have selected. The literature on socialization indicates that people entering an organization or profession engage in assessment of whether they see themselves fitting in and succeeding in the field. The research on the graduate experience

shows that successful students are more likely than those who drop out to experience a sense of connection with others—what Lovitts (2004) termed “social integration.” Feeling welcome in the department, developing a peer support network, getting to know faculty, and interacting regularly with other students and faculty through a research or teaching assistantship are all components of feeling welcome and connected (Antony and Taylor, 2004; Austin, 2002b; Lovitts, 2001, 2004; Nyquist *et al.*, 2001; Wulff *et al.*, 2004). Of particular importance, Antony and Taylor’s work (2001, 2004) has emphasized that feeling welcome is especially significant for the success of underrepresented students, who often feel that others are viewing them through the lenses of stereotypes that undermine their sense of belonging and self-confidence. Finding ways to help students experience a sense of belonging, integration, and connection will enrich the graduate socialization experience and help ensure the kind of diverse professoriat that universities and colleges need.

Ensure that Recruitment Efforts Are Aimed at Attracting a Diverse Group of Graduate Students

Higher education institutions need to ensure that the faculty is diverse in gender, race and ethnicity, religious commitment, sexual orientation, and academic expertise. An essential ingredient in creating a diverse faculty is to recruit, retain, and graduate a diverse group of doctoral students.

Cultivate in Each Student a Sense of Being Welcome and of Belonging

Recent literature on socialization emphasizes that the socialization process should be conceptualized as bidirectional, with newcomers bringing their perspectives and commitments into the organization even as they learn about widely held norms and expectations. As graduate programs prepare the next generation of faculty, faculty members should appreciate that newcomers sometimes bring new questions and approaches to scholarly issues. In addition to a general climate of openness, flexibility, and adaptability to the contributions of newcomers, faculty members can help students feel that they belong by helping them find assistantships that promote scholarly interactions, travel support to participate in professional meetings, and opportunities to serve on departmental committees that provide interactions with faculty and indicate confidence in students’ professional judgment.

Promote Opportunities for Students to Engage in Informal Interactions with Faculty and Fellow Students

When faculty members make themselves available for informal interactions with students, they cultivate departmental cultures that encourage and welcome graduate students. The literature on socialization emphasizes the importance of learning that occurs through newcomers' experiences and observations as well as informal interactions with faculty. While the research on the graduate experience confirms that prospective faculty members learn a great deal from regular observation of faculty, it also indicates that students find informal conversations with faculty about academic life are infrequent. Faculty members could strive to incorporate more casual conversations about such topics as faculty life, ethics in academic work, choice making about personal and professional commitments, and changes in the role of higher education in society into their interactions with graduate students. Additionally, since graduate students already benefit from informal interactions with peers, department leaders might arrange for structured peer conversations in which more advanced students help newcomers learn about expectations, the departmental culture, and strategies for nurturing a successful graduate experience.

RECOMMENDATION 4: PREPARE STUDENTS IN MORE EXPLICIT AND THOROUGH WAYS FOR THE RANGE OF RESPONSIBILITIES AND CIRCUMSTANCES THEY MAY FACE AS FACULTY MEMBERS

A consistent finding across the studies that examine the graduate experience is that prospective faculty are not prepared thoroughly for the various aspects of faculty work nor the range of institutions in which they may find employment. As we have discussed, the demands on higher education institutions and the faculty who work within them require knowledge, skills, and abilities that exceed what was needed by faculty in the past. Several strategies would be useful to implement:

Ensure that the Graduate School Socialization Period Includes Experiences that Help Students Develop as Researchers, Teachers, Service Providers, and Institutional Citizens

Prospective faculty need opportunities to learn about all aspects of research, including proposal development and grant seeking, data collection and analysis, communicating research results to diverse audiences, and collaboration and team work experience. In terms of teaching, prospective

faculty need experience in the various teaching settings they will likely encounter in their fields, including classes of different sizes and the use of various teaching strategies. They also need experience in curriculum design and assessment of student learning. Ideally, their graduate experience involves teaching in progressively more independent settings coupled with opportunities to discuss their experiences with interested faculty members. The graduate experience also should provide students with opportunities to connect their research expertise to societal issues, to learn about institutional citizenship responsibilities that faculty members must assume, and to engage in explicit consideration of the ethical challenges associated with work in their field as well as in faculty work in general.

Help Students Explore Interdisciplinary Work

As the boundaries of disciplines blur, scholars often find themselves working on problems with colleagues from different disciplines. Even faculty who do not engage in interdisciplinary research sometimes must critique the work of colleagues in other fields. Thus, the graduate experience should include opportunities for students to gain some familiarity with research approaches in other fields and to have some exposure to interdisciplinary research. Strategies include occasions to attend scholarly seminars with colleagues in other departments, courses taught from interdisciplinary perspectives, and opportunities to participate in interdisciplinary research teams.

Provide Opportunities for Prospective Faculty to Learn About the Changing Higher Education Context, the Range of Institutional Types in Which They Might Work, and the Various Choices that They Might Consider in Creating Faculty Careers

Some institutions are developing graduate courses and workshops that specifically address various aspects of faculty work. For example, a course might address the academic career, covering such topics as the nature of students entering higher education, the variety of faculty appointment types (including term or contract, part-time and full-time, tenure-track and nontenure-track), and the range of institutional types and their missions. Other courses and workshops might focus on college teaching, engaging in the scholarship of teaching and learning (e.g., conducting research about one's teaching), or communicating scholarly work to diverse audiences.

Structure Discussions and Guided Self-Reflection to Help Prospective Faculty Consider Choices Regarding Faculty Work

In order to help individuals preparing for faculty careers make effective choices, the socialization experience should include opportunities to talk with experienced faculty about such important issues as their choices about balancing personal and professional responsibilities, and how they think about the relationship between individual intellectual passions and collective institutional needs. Small group discussions as well as advising sessions organized to promote occasions for graduate students to engage in self-reflection are strategies that enrich the socialization experience and help students address the important question of whether they see themselves pursuing an academic career. The issue of nonacademic career alternatives would also be an appropriate topic within such discussions.

Provide Data on Completion Rates, Placement Information, and Job Search Strategies

Graduate schools have a responsibility to provide students with information about the experiences of recent graduates and guidance in how to handle the practical aspects of job applications and interviews. Some graduate schools provide workshops in which students practice interviewing as well as panel discussions with recent graduates about their experiences in the academic workplace.

INVOLVING KEY STAKEHOLDERS IN IMPROVING THE PREPARATION OF FUTURE FACULTY

The recommendations to improve the preparation of doctoral students for faculty roles require commitment and initiative from various stakeholders. Efforts are needed—and are already underway—by individual faculty members, and by leaders in departments and university graduate schools, foundations, and scholarly associations. This collage of initiatives is strengthening the socialization of the next generation of faculty for the expectations that they will face. Here, we discuss the kind of contributions that are being made by each key stakeholder.

Faculty members play a key role in socializing aspiring faculty through their advising responsibilities, their frequent formal and informal interactions with graduate students, and the modeling they provide. Faculty members may be concerned that following the recommendations offered for improving the socialization process could prove too time-consuming for them and their graduate students. However, faculty can

improve the socialization process merely by taking note of the messages they provide through their examples and conversation, using their advising time in purposeful ways, recognizing moments when they can provide explicit feedback and guidance about teaching, research, and other competencies that aspiring faculty must develop, and providing occasions for frank and reflective conversations with students about faculty life and its responsibilities and possibilities.

Department chairs and graduate school deans can facilitate efforts to develop programmatic opportunities designed explicitly for purposes of socializing graduate students to faculty roles. For example, some departments or graduate schools offer graduate courses on college teaching strategies, courses that focus on strategies for conducting research on teaching and learning, or courses on linking research and public service. In addition to courses, departments and graduate schools also provide workshops (e.g., concerning the higher education context or strategies for finding a position in the academic labor market). The Preparing Future Faculty (PFF) Program has helped many universities establish internship programs in which graduate students explore faculty life in liberal arts colleges, community colleges, and comprehensive institutions (Gaff, Pruitt-Logan, and Weibl, 2000; Pruitt-Logan and Gaff, 2004). Certificate programs, through which doctoral students participate in a variety of professional development opportunities, often including courses, workshops, internships, and the development of a professional portfolio, are another strategy used at some universities.

Foundations are also taking a leadership role in improving the socialization of graduate students for faculty roles. The Carnegie Initiative on the Doctorate, sponsored by the Carnegie Foundation for the Advancement of Teaching, is a five-year program (2001–06) involving departments in six fields that are committed to studying, improving, and then assessing reforms in their graduate programs. The Initiative emphasizes that doctoral programs are preparing “stewards of the discipline” who should be able to: (a) “generate new knowledge by conducting research and scholarship;” (b) “critically conserve history and foundational ideas of a discipline;” and (c) “effectively transform existing knowledge and its benefits to others through application, teaching, and writing” (Walker, 2004, p. 38). The Woodrow Wilson Foundation has developed a program called The Responsive PhD, which emphasizes new partnerships, new paradigms, new practices, and new people (Weisbuch, 2004). More specifically, the program encourages partnerships between people internal and external to academe for the purpose of improving graduate education, and seeks to include a broad range of people

in graduate study. It also encourages graduate students to develop skills in interdisciplinary work and to use their scholarly expertise beyond the university.

Another set of stakeholders interested in the quality of graduate education are the disciplinary communities. Interesting and innovative efforts are emerging within these communities to improve the socialization of graduate students for faculty work. The National Science Foundation, for example, has initiated and funded several programs to improve graduate education. One is the Center for the Integration of Research, Teaching, and Learning (CIRTL), a five-year project involving collaboration between the University of Wisconsin Madison, Michigan State University, and The Pennsylvania State University. CIRTL is developing a network of ten research universities that are committed to developing and implementing strategies (including courses, workshops, and internships) that prepare graduate students in STEM fields (science, technology, engineering, and mathematics) for successful careers that integrate excellence in research and in teaching (<http://www.wcer.edu/cirtl/>).

Within individual disciplines, leaders are also giving considerable attention to improving doctoral education. For example, the American Chemical Association, the American Chemical Society, and the Chemical Sciences Roundtable (established by the National Research Council) have held conferences and workshops to examine graduate education and have produced publications on the topic (American Chemical Society, 2002; Caserio *et al.*, 2004; Casey, 2004; Commission on Physical Sciences, Mathematics, and Applications, 2000). The Modern Languages Association, which has been giving considerable attention to the socialization of doctoral students for academic careers in the context of a severe shortage of tenure-track positions, held a Conference on the Future of Doctoral Education in 1999 (Hohendahl, 2000). The discipline of sociology has a long record of attention to the socialization of its graduate students for future faculty roles. The journals *Teaching Sociology* and *The American Sociologist* have produced special issues on the socialization of graduate students, and the American Sociological Association has supported the PFF Program and published reports on professional socialization (Loscocco *et al.*, 1996; Pescosolido and Hess, 1996). In the field of education, interest in the preparation of doctoral students for research careers has intensified in the last several years, partly in response to federal mandates that have called for “scientifically based” research in education” (Eisenhart and DeHaan, 2005, p. 3). A number of articles in *Educational Researcher*, a journal associated with the largest scholarly association for researchers in education, have

focused on the skills and abilities that graduate schools should emphasize in preparing future scholars (Metz, 2001; Page, 2001; Pallas, 2001; Young, 2001).

Reform in graduate education is not easy. Tradition, financial constraints, and the many demands that faculty members already face are challenges that make changing, adapting, or improving strategies for socializing prospective faculty somewhat difficult. However, the combined efforts of faculty members, department chairs and graduate deans, foundation leaders, and disciplinary communities already are bringing considerable attention to graduate education and resulting in innovations in the socialization of future faculty.

CONCLUDING THOUGHTS

To fulfill their missions, universities and colleges require the talents, commitment, and intellectual abilities of their faculty members. As higher education institutions address a growing number of societal expectations and needs, the work of the faculty is more important than ever—and the range of competencies they need grows as well. If faculty members are to research, teach, address societal problems, and carry out institutional responsibilities at high levels of excellence, then their socialization in graduate school should prepare them with the competencies they need to fulfill all aspects of their work. And if universities and colleges are to have the kind of faculty requisite for meeting the needs of a complex society—people who are diverse in gender, race, and ethnicity, and intellectual interests and abilities—then the socialization process that occurs in graduate school must welcome and support a wide array of people. The graduate school experience must include opportunities for aspiring faculty to develop appropriate conceptual understandings, to master the skills and abilities associated with each aspect of faculty work, to develop keen interpersonal skills appropriate for working with diverse people across a range of disciplines and fields, and to internalize attitudes and habits that will motivate and fuel their work. Ensuring that graduate school provides such thorough and thoughtful socialization will require the commitment and good ideas of faculty members, department chairs and graduate school leaders, foundations, and disciplinary communities. Additionally, aspiring faculty members need to commit themselves to finding and participating in the array of opportunities offered during the graduate school experience and learning all they can about what faculty work involves, even as they bring into the academy their own ideas about the kind of academic lives they will live.

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9. USING DATA MINING TO ANALYZE LARGE DATA SETS IN HIGHER EDUCATION RESEARCH: AN EXAMPLE OF PREDICTION WITH NSOPF: 99

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INTRODUCTION

The recent advancement in computing technology, availability of low-cost storage devices, and popularity of Internet have empowered data acquisition that is substantially different from the traditional approach (Hand, Mannila, and Smyth, 2001; Wegman, 1995). This trend has influenced higher education in many aspects, one of which is the increasing number of large data sets as secondary data sources for academic research. It has become common for journals in higher education to present studies (e.g., Rosser, 2004; Toutkoushian and Conley, 2005) that were based on a data set of over several thousands of records from sources such as the National Center for Educational Statistics (NCES) and the American Association of Community Colleges.

As compared to the small, low-dimensional, and homogeneous data collected in traditional research activities, these large-scale data sets are mostly collected without any preconceived research questions and present a huge number of observations in a high-dimensional variable structure. Although such a wealth of information is beneficial to the academic community for gaining a better understanding of the higher education system and the people involved, in order to take advantage of these data resources, researchers cannot shun the fact that traditional statistical techniques have weaknesses when used to extract valid and useful information from a large volume of data (Fayyad, 1997; Hand, Mannila, and Smyth, 2001). As pointed out by Wegman (1995), using traditional statistical methods to analyze very large data sets is most likely to fail because “homogeneity is almost surely gone; any parametric model will almost surely be rejected by

any hypothesis-testing procedure; fashionable techniques such as bootstrapping are computationally too complex to be seriously considered for many of these data sets; random subsampling and dimensional reduction techniques are very likely to hide the very substructure that may be pertinent to the correct analysis of the data” (p. 292).

The statistical challenges associated with high-dimensional, large-scale data sets have drawn attention from statisticians since electronic data collections became common in scientific research and business management, years before the same trend began in education and behavioral sciences. In order to analyze large-scale data sets efficiently and effectively, many new procedures and techniques have been proposed and explored, one of which that has stayed prominent in business and scientific communities for over a decade is a data analytical approach called “data mining and knowledge discovery in database” (data mining). Data mining uses computer-intensive methods to extract previously unknown and potentially useful information from a massive amount of data (Frawley, Piatetsky-Shapiro, and Matheu, 1991; Press, 2004). Many statisticians (e.g., Elder and Pregibon, 1996; Friedman, 1997; Hand, 1998, 1999; Hand, Mannila, and Smyth, 2001; Wegman, 1995) voiced their support for data mining as an efficient and intelligent tool for analyzing sheer volumes of data because of its minimal dependence on statistical tests and high efficiency in automated probing for valuable knowledge.

However, data mining is still a novel term to researchers in education and the social sciences. Throughout the review of the literature, few studies were found that officially claimed having used a data mining approach for the analysis. Therefore, the purpose of this chapter is to introduce data mining to researchers in higher education by presenting an example in which prediction models of faculty salary were constructed using a specific data mining technique and, as a comparison, a traditional multiple regression procedure. With the two approaches side by side analyzing the same data set and answering the same research question, the readers are led to compare and contrast data mining and traditional statistics and to make informed evaluation of the strengths, weaknesses, and applicability of both the approaches.

DATA MINING

Data mining as a fairly new discipline arose at the confluence of machine learning, statistics, artificial intelligence, database management, and visualization techniques with a goal to discover useful information efficiently and present knowledge in a form that is easily comprehensible

(Frawley, Piatetsky-Shapiro, and Matheu, 1991; Hand, 1998; Hand, Manila, and Smyth, 2001; Press, 2004; Zhou, 2003). Offering an array of analytical techniques, data mining draws upon many statistical methods, such as classification, cluster analysis, multidimensional analysis, regression, stochastic models, time series analysis, nonlinear estimation techniques, just to name a few (Michalski, Bratko, and Kubat, 1998; Press, 2004). However, data mining is much more than a rework of statistics; it embeds statistical and other analytical procedures in a machine learning system to induce high-level concepts and/or concise models through intelligent modeling of the input data (i.e., examples) in a way analogous to human knowledge induction. This automated process is especially useful for tackling problems that lack algorithmic solutions or have poorly defined or informally stated solutions (Michalski, Bratko, and Kubat, 1998).

Different from the mathematical models produced by traditional statistics, data mining usually generates descriptive rules as output models through algorithms such as artificial neural networks, Bayesian networks, decision trees, and generic algorithms that do not rely on parametric assumptions (Press, 2004). Automated analysis processes in data mining largely eliminate the need for human interventions, but the data-driven approach causes some scholars in social and behavioral sciences to dismiss data mining as “fishing” or “data snooping.” Nonetheless, the exploratory nature of data mining and its independence of hypothesis testing are indisputable advantages when dealing with massive data sets.

As a toolbox of quantitative analysis, data mining shares a few common concerns with traditional statistics, such as estimation under uncertainty, construction of models in a defined problem scope, and prediction (Glymour *et al.*, 1997). To limit the scope of discussion, prediction functions are the focus of this chapter. Specifically, the goal is to explore the potential of data mining, in comparison to multiple regression, in offering unique outlooks when used to make predictions based on a large-scale data set.

BAYESIAN BELIEF NETWORK

With advanced computing power and efficient algorithms, Bayesian probability theory has been applied in many forms and in many academic fields, ranging from computer science (Williamson and Corfield, 2001) to sociological studies (e.g., Raftery, 1995). Despite the different ways of implementing Bayesian probabilities, the basic version of Bayes' Theorem was first discovered by Thomas Bayes in the 18th century and later

modified by Laplace. In its simplest form, Bayesian probability can be given as

$$P(H|E) = \frac{P(H) \times P(E|H)}{P(E)}. \quad (1)$$

which provides the probability of hypothesis H happening given that evidence E is true, calculated in terms of the known probabilities of H , E , and the *likelihood* of E given H is true (the degree to which the happening of H predicts the existence of E). Starting with the basic version and with the probability product rule, more probabilities can be chained together by Bayes' Theorem (Heckerman, 1997). For instance, the probability of H happening given that evidence E is true in a known context C can be written as

$$P(H|EC) = \frac{P(H|C) \times P(E|HC)}{P(E|C)}. \quad (2)$$

To continue, the probability of H given that E_1 , E_2 , and C have happened can be found as the chained Bayes' Theorem:

$$P(H|E_1E_2C) = \frac{P(H|C) \times P(E_1E_2|HC)}{P(E_1E_2|C)}. \quad (3)$$

With the power to always take into account new evidence in predicting the probability of hypothesis H , Bayesian probability can be implemented to form a tree-like network. However, too many variables can make the network very complicated. To prune the network structure and make it easier to introduce new evidence, the chained Bayes' Theorem is often made simpler with the assumption of conditional independence, stating that each variable is independent of its nondescendants in the network, given the state of its immediate parents (Friedman, Geiger, and Goldszmidt, 1997). For example, given that C is true and E_1 being true does not affect the probability of E_2 being true, then a simpler version of the chained Bayes' Theorem in equation (3) is possible:

$$P(H|E_1E_2C) = \frac{[P(H|C) \times P(E_1|HC)] \times P(E_2|HC)}{P(E_1|C) \times P(E_2|C)}. \quad (4)$$

A primary terminology in Bayesian probability is the *prior probability* $P(H)$, the probability of the hypothesis H regardless of the evidence, or "the degree of *belief*." The notion of prior probability is being viewed either positively or negatively by different schools of Bayesianists. Some believe it is part of the strength of Bayesian probability because, by giving a value to $P(H)$ based on subjective evaluation, the prior probability allows the

inclusion of input from domain experts for predicting future probability. Others take it as a negative feature because subjectivity in expert inputs is something often frowned upon. Relatively, $P(H|EC)$, $P(H|E_1E_2C)$ and such others are called *posterior probability*, the modified probability of hypothesis H based on new evidence.

After a humble existence as an inoperable theorem for almost two centuries, the rules of Bayesian probability are now considered as very generic and even praised as the interface between probabilistic networks and ordinary logic. The applications of Bayesian probability were found in recent developments in statistics, computer sciences, decision theories, artificial intelligence, and other computationally intensive fields. One type of the applications is called *Bayesian Belief Network* (BBN), algorithms written to build tree-like network structures used for predictions and classifications.

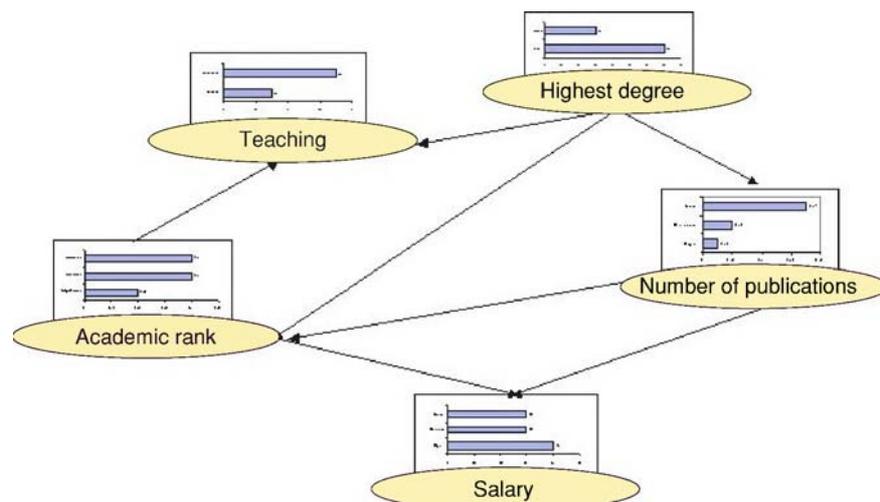
In data mining, BBN is often employed as a prediction model in which variables are connected by their mutual relationships measured as conditional probability (Friedman, Geiger, and Goldszmidt, 1997). To identify an optimal BBN model from a high-dimensional data set, all variables have to be defined so that each of them has a finite number of values; the dependencies among the variables (or the lack of them) and the conditional probabilities (CPs) involved in those dependencies need to be calculated from the data (objective input) or determined by domain experts (subjective input). The initial probabilistic distribution of the predicted variable (also called the outcome variable) is the prior distribution $P(H)$, which is being updated during the model learning process by chaining additional variables into the network as new evidence, and the probabilities are calculated by various possible paths, being the actual path leading to a particular value of the outcome variable.

Although the resulting network performs its function in a linear time, the amount of computation can be enormous in learning a previously unknown BBN because, first, the calculation of the probability of any path requires all paths of the network to be recalculated (Niedermayer, 1998) and second, every variable added at a later stage of the learning process results in back-tracking and modifying the CPs that have been established at an earlier point (Yu and Johnson, 2002). When a large number of variables are involved, the extensive iteration on which the network relies to update its structure and prediction probabilities (belief values) becomes nearly infeasible because of the exponentially increasing calculation task and the intimidating complexity of the full joint probability distribution over the *product state space* (defined as the complete combinations of distinct values of all variables).

It is not a coincidence that the renaissance of the Bayesian probability theory happened around the same time when high-speed computers with staggering computational power became available. Even now, with software tools that could interpret the network structure and perform the complex iteration and propagation, it is still computationally impossible to find the BBN of best prediction accuracy through *exhaustive* search in the *entire* model space, if a relatively large number of variables are involved along with a demanding product state space. To overcome this difficulty, the algorithms of BBN learning in data mining are often embedded with functions that perform stochastic variable subset selection and guide the search for the best prediction model. In other words, a random sample of models are selected from the entire model space and some utility functions are adopted as evaluation criteria to track the prediction accuracy (measured by classification error rate) of every attempted model in order to find the optimal subset of variables connected in the most efficient network structure (Friedman, Geiger, and Goldszmidt, 1997).

Apparently, the sound mathematical basis is one of the important features of BBN. In addition, BBN is a type of graph-based multivariable models that take advantage of an intuitive visual presentation (Heckerman, 1997; Press, 2004). A final BBN model can be expressed as a directed acyclic graph (see the example in Figure 9.1) that consists of three major classes of elements. The circular nodes represent the random variables in

Figure 9.1: An example of a BBN model. This graph illustrates the three major classes of elements in a Bayesian network; all variables, edges, and conditional probability tables are for demonstration only and by no means reflect the data and results of the current study.



the model, the directed arcs (lines) that connected variables indicate the causal/relevance relationships, and finally, each variable Y has an attached CP table $P(Y|X_1, X_2, \dots, X_n)$ describing the posterior probability (the updated strength of belief), given that the prior probabilities with parent nodes X_1, X_2, \dots, X_n are true.

The root of BBN in the Bayesian theorem also determines the algorithmic preference to nominal or ordinal variables in order to define a finite product state space for calculating the CPs and learning the network. Thus, interval and ratio variables need to be discretized into a number of bins (intervals). Such binning causes information loss, but in the meanwhile it makes BBN a flexible technique for handling different types of variables. Most importantly, the binning of continuous variables becomes advantageous for BBN when analyzing large-scale data sets. First, treating all variables as nominal frees the measure of variable relationships/associations from parametric requirements such as linearity and normality. Second, by adjusting the width of intervals so that an equal number of observations fall in each bin, binning minimizes the negative consequences of outliers and other types of irregularities inherent in secondary data sources. Third, binning reduces sophisticated probabilistic distributions to simple frequencies and so makes the amount of computation independent of the sample sizes. Finally, the oversensitivity to minor differences in significance tests when sample size is too large becomes an irrelevant concern because of the nonparametric nature of the algorithms.

In the next section, an example of the BBN model for salary prediction was learned from a large postsecondary faculty data set and a comparison was made between the BBN model and a traditional multiple regression model.

METHOD AND ANALYSIS

In order to demonstrate the different data analysis approaches, a postsecondary faculty survey data, the National Survey of Postsecondary Faculty 1999 (NSOPF:99), was chosen as a laboratory setting for trying the statistical and data mining analyses. It is understood that evaluating variable importance in salary determination, not simple predictions, is the primary concern of faculty compensation studies. However, the purpose of this chapter is to introduce a new data analysis technique rather than advancing the domain knowledge in faculty compensation. Therefore, both the data mining and the regression models were built through a data-driven approach.

DATA SET

The NSOPF:99 was a national survey of postsecondary faculty conducted by the NCES (NCES, 2002). The initial sample included 960 degree-granting postsecondary institutions stratified by Carnegie institution types and 27,044 full- and part-time faculty members employed at these institutions stratified by sex and ethnic background. The weighted response rates were 93% at the institutional level and 83% at the individual faculty level.

For the purpose of this study, only faculty data of 18,043 records were used. Due to obvious differences between the compensation structures of full-time and part-time faculty, only full-time faculty were considered for the analysis. After excluding respondents who were postdocs, assigned by religious orders, had affiliated or adjunct titles, or reported invalid salary measures (<\$5,000 for the academic year 1998–99), the total number of records that remained in the study was 9,963, a sample size workable with both traditional multiple regression and data mining BBN. Two thirds of these observations, referred to as *the training data set* thereafter, were randomly selected for building prediction models; the rest were kept as *testing data* for cross-validating the proposed models.

The faculty data set had 439 original and derived measures that covered faculty information including demographic background, workloads in terms of teaching, research, committee responsibilities, salary, benefits, and so on. A review of the general compensation guidelines in postsecondary institutions and the compensation literature in higher education served as the theoretical basis for selecting 91 variables as the most salient measures of professional characteristics and the most relevant information to faculty salary and compensation. Among them, there were multiple measures on teaching, productivity, and some other constructs; although overlapping, they quantified different aspects of the same underlying constructs. The redundant information among those variables offered an opportunity to test the differentiation power of variable selection procedures. All the 91 variables and their definitions are available in Table 9.1.

A BBN SALARY PREDICTION MODEL

First, a BBN data mining model was constructed for salary prediction. To start, all 91 variables (including academic-year salary, the predicted variable) were fed into a software tool called the *Belief Network (BN) PowerSoft*, authored by Cheng and Greiner (1999) and available on the World Wide Web as shareware. The Bayesian algorithms used in this

Table 9.1: Name, Definition, and Measurement Scale of the 91 Variables Selected from NSOPF:99

Variable Name	Variable Definition	Scale
Q1	Instructional duties	Categorical
Q10AREC	Years achieved tenure	Interval
Q10REC	Tenure status	Ordinal
Q12A	Appointments: Acting	Categorical
Q12E	Appointments: Clinical	Categorical
Q12F	Appointments: Research	Categorical
Q13	Chair of a department	Categorical
Q16A1REC	Highest degree type	Ordinal
Q16A2REC	Second highest degree type	Ordinal
Q16B2REC	Years since second highest degree	Interval
Q19	Current position in the primary employment	Categorical
Q20	Outside consulting	Categorical
Q21	Other employment, fall 1998, nonconsulting	Categorical
Q23	Positions in higher education during career	Interval
Q24A1REC	Years since first job in higher education	Interval
Q24A3	Employment status for first job in higher education	Categorical
Q24A5REC	Rank at hire for first job in higher education	Ordinal
Q25	Years teaching in higher education institution	Interval
Q26	Positions outside higher education during career	Interval
Q29A1	Career creative works, juried media	Interval
Q29A2	Career creative works, nonjuried media	Interval
Q29A3	Career reviews of books, creative works	Interval
Q29A4	Career books, textbooks, reports	Interval
Q29A5	Career exhibitions, performances	Interval
Q29B1	Recent sole creative works, juried media	Interval
Q29B2	Recent sole creative works, nonjuried media	Interval
Q29B3	Recent sole reviews of books, works	Interval
Q29B4	Recent sole books, textbooks, reports	Interval
Q29B5	Recent sole presentations, performances	Interval
Q29C1	Recent joint creative works, juried media	Interval
Q29C2	Recent joint creative works, nonjuried media	Interval
Q29C3	Recent joint reviews of books, creative works	Interval
Q29C4	Recent joint books, reports	Interval
Q29C5	Recent joint presentations, performances	Interval
Q2REC	Teaching credit or noncredit courses	Ordinal
Q30B	Hours/week unpaid activities at the institution	Interval
Q30C	Hours/week paid activities not at the institution	Interval
Q30D	Hours/week unpaid activities not at the institution	Interval
Q31A1	Time actually spent teaching undergrads (percentage)	Ratio
Q31A2	Time actually spent teaching graduates (percentage)	Ratio
Q31A3	Time actually spent at research (percentage)	Ratio
Q31A4	Time actually spent on professional growth (percentage)	Ratio

(cont.)

Table 9.1: (Continued)

Variable Name	Variable Definition	Scale
Q31A5	Time actually spent at administration (percentage)	Ratio
Q31A6	Time actually spent on service activity (percentage)	Ratio
Q31A7	Time actually spent on consulting (percentage)	Ratio
Q32A1	Number of undergraduate committees served on	Interval
Q32A2	Number of graduate committees served on	Interval
Q32B1	Number of undergraduate committees chaired	Interval
Q32B2	Number of graduate committees chaired	Interval
Q33	Total classes taught	Interval
Q40	Total credit classes taught	Interval
Q50	Total contact hours/week with students	Interval
Q51	Total office hours/week	Interval
Q52	Any creative work/writing/research	Categorical
Q54_55RE	PI/Co-PI on grants or contracts	Ordinal
Q58	Total number of grants or contracts	Interval
Q59A	Total funds from all sources	Ratio
Q61SREC	Work support availability	Ordinal
Q64	Union status	Categorical
Q76G	Consulting/freelance income	Ratio
Q7REC	Years on current job	Interval
Q80	Number of dependents	Interval
Q81	Gender	Categorical
Q85	Disability	Categorical
Q87	Marital status	Categorical
Q90	Citizenship status	Categorical
Q9REC	Years on achieved rank	Interval
X01_3	Principal activity	Categorical
X01_60	Overall quality of research index	Ordinal
X01_66	Job satisfaction: Other aspects of job	Ordinal
X01_82	Age	Interval
X01_8REC	Academic rank	Ordinal
X01_91RE	Highest educational level of parents	Ordinal
DISCIPLINE	Principal field of teaching/researching	Categorical
X02_49	Individual instruction with grad and first professional students	Interval
X03_49	Number of students receiving individual instructions	Interval
X04_0	Carnegie classification of institutions	Categorical
X04_41	Total classroom credit hours	Interval
X04_84	Ethnicity in single category	Categorical
X08_0D	Doctoral, 4-year or 2-year institution	Ordinal
X08_0P	Private or public institution	Categorical
X09_0RE	Degree of urbanization of location city	Ordinal
X09_76	Total income not from the institution	Ratio
X10_0	Ratio: Full-Time Equivalent enrollment/ Full-Time Equivalent faculty	Ratio
X15_16	Years since highest degree	Interval

Table 9.1: (Continued)

Variable Name	Variable Definition	Scale
X21_0	Institution size: Full Time Equivalent (FTE) graduate enrollment	Interval
X25_0	Institution size: Total Full Time Equivalent (FTE) enrollment	Interval
X37_0	Bureau of Economic Analysis (BEA) regional codes	Categorical
X46_41	Undergraduate classroom credit hours	Interval
X47_41	Graduate and first professional classroom credit hours	Interval
SALARY	Basic academic-year salary	Ratio
Note: All data were based on respondents' reported status during the 1998–99 academic year.		

BN PowerSoft had the best prediction accuracy among 114 worldly submissions and won the Task One of the Data Mining Competition of the Knowledge Discovery and Data Mining Cup in 2001.

As described previously, algorithms for learning a BBN require all input variables to have discrete values in order to have an unambiguous definition of a finite product state space; therefore, all interval- and ratio-scale variables were binned into category-like intervals. For instance, academic-year salary as the outcome variable was binned into 24 intervals because a finite number of output classes were required in BBN. In this study, the rule of binning was to keep the same number of cases in each bin, therefore the width of bins may vary. Other binning methods are available, but by approximating the prior probability to a uniform distribution in which chances are equal for respondents to fall in each bin, the equal-probability schema helps to simplify the computation by avoiding complex variable distributions while keeping the model prediction as accurate as possible. It is also worth noting that any monotonic transformation of salary and other variables is unnecessary because BBN is a robust nonmetric procedure independent of parametric assumptions.

Once the data are fed into the software, the learning of the BBN model consists of automated trials conditioned by some adjustable parameters. According to Cheng and Greiner (1999), the learning process has two major tasks: identifying strong variable associations/causal relationships to outline the graphical structure of the network, and determining the direction and the strength (CP tables) of the identified relationships. Between the two tasks, identifying and outlining the network structure is the most computationally demanding. The BN PowerSoft starts modeling the network structure by measuring the association (i.e., closeness, measured

by *mutual information tests*) between every pair of variables, and an arc is used to connect the pair of variables if the measured association is stronger than a specified threshold value. Later, conditional independence tests are employed to revalidate the structure and to decide the direction of the arcs.

The threshold value, used to separate significant relationships from nonsignificant ones, can be either specified by the users or determined by the system. Relationships below this threshold are omitted from subsequent network learning to simplify the model structure and to reduce the amount of calculation (Cheng and Greiner, 1999). Choosing an appropriate threshold value is important for building a BBN model of good fit. If the threshold value was low, the relatively weak dependencies would be kept in the learning process and the final model would consist of a relatively large number of predictor variables and too many arcs (dependency relationships) in a complex structure (Cheng *et al.*, 2001). With an excessive number of variables and their conditional dependencies kept in the network, the model could be overfit, meaning that it only works well with the training data set but would have poor prediction accuracies on new data sets. Adjusting to a higher threshold value can alleviate overfit by constructing a model with a smaller number of predictor variables connected by relatively strong relationships. However, when a threshold is too high, the resulting missing arcs and often very simple structure of the model illustrate a phenomenon called underfit.

During the modeling process, an algorithm for variable selection was run automatically to find the subset of variables with the optimal prediction accuracy. By the end, out of the 90 predictor variables, only the subset that was evaluated as having the best prediction accuracy stayed in the final network. To search for this optimal model, a few BBN learning trials were completed, each using a different threshold value. When threshold was set to eight times the system default value (SDV, determined by the algorithms), the learned network had 8 variables connected by 21 arcs. The network had a classification accuracy of 46.84% for the training data set but only 10.57% for the testing data set, a sign of overfit. As shown in Table 9.2, the classification accuracy for the training data set decreased when the threshold value increased, but the prediction accuracy for the testing data set reached its peak at a threshold value of 12.5 SDV. Noticeably, the two BBN models with the threshold values 10 and 12.5 SDV selected the same group of six variables, indicating model stability; but the former had three more CP arcs (13 vs. 10), which helped the classification rate for the training data but slightly harmed the prediction with the testing data. When the threshold increased to 15 SDV, the classification

Table 9.2: Four BBN Models with Different Threshold Values Specified

Threshold (SDV)	No. of Variables	Conditional Probability	Prediction Accuracy			
			Training Data (Total = 6,652)		Testing Data (Total = 3,311)	
			No. of Correct Classifications	Percent (Std.)	No. of Classifications	Percent (Std.)
8	8	21	3,116	46.84 (0.60)	350	10.57 (0.53)
10	6	13	2,066	31.06 (0.55)	372	11.24 (0.54)
12.5	6	10	1,707	25.66 (0.53)	383	11.57 (0.55)
15	4	7	1,297	19.50 (0.48)	340	10.27 (0.57)

Note: The number of variables does not include the predicted variable (SALARY). Numbers in “threshold” column are times of the system default value (SDV).

accuracy with both the training and the testing data sets was the lowest among the five models, a clear indication of being an underfit structure.

For prediction models, generalizability to new data sets is an important index of model utility; the comparison of model parameters suggested that the model with the threshold value of 12.5 SDV would be the best BBN model that had been identified: 6 variables connected by 10 CP arcs, as shown in Figure 9.2. The six variables of the final prediction model are career creative works in juried media (Q29A1), self-reported percentage

Figure 9.2: The BBN model of salary prediction. Some of the directional relationships may be counterintuitive (e.g., Q31A1 → X04_0) as a result of data-driven learning. The conditional probability tables are not included to avoid complexity. The definitions of the seven variables are as follows: (a) SALARY: basic salary of the academic year; (b) Q29A1: career creative works, juried media; (c) Q31A1: percentage of time actually spent teaching undergrads; (d) X15_16: years since highest degree; (e) X01_8REC: academic rank; (f) X04_0: Carnegie classification of institutions; (g) Q10AREC: years since achieved tenure

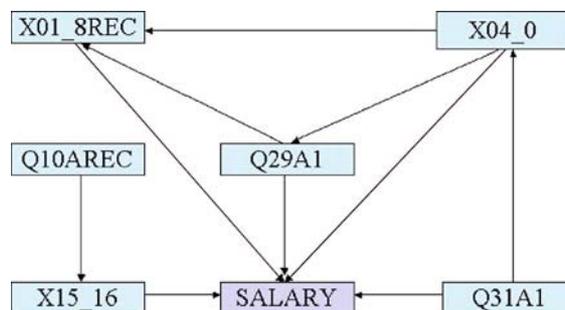


Table 9.3: An Example of the BBN Conditional Probability Tables

Bin	Salary range	P
1	<29,600	.0114
2	29,600–32,615	.0012
3	32,615–35,015	.0487
4	35,015–37,455	.0655
5	37,455–39,025	.0254
6	39,025–40,015	.0263
7	40,015–42,010	.0460
8	42,010–44,150	.0950
9	44,150–46,025	.0894
10	46,025–48,325	.0552
11	48,325–50,035	.1590
12	50,035–53,040	.0728
13	53,040–55,080	.0081
14	55,080–58,525	.0672
15	58,525–60,010	.0985
16	60,010–64,040	.0140
17	64,040–68,010	.0321
18	68,010–72,050	.0142
19	72,050–78,250	.0228
20	78,250–85,030	.0098
21	85,030–97,320	.0005
22	97,320–116,600	.0170
23	116,600–175,090	.0190
24	> 175,090	.0005

Note: Salary was binned into 24 intervals. For this particular case, the product state is that an assistant professor ($X_{01.8REC} = 5$) in a public research institution ($STRATA = 12$ and all other binary variables were 0), who obtained the highest degree 3 years ago ($X_{15.16} = 3$), had three publications in juried media ($Q_{29A1} = 3$) and spent 20% of the time teaching undergraduate classes ($Q_{31A1} = 0.20$).

of time actually spent teaching undergrads (Q_{31A1}), years since highest degree ($X_{15.16}$), academic rank ($X_{01.8REC}$), years since achieved tenure (Q_{10AREC}), and Carnegie classification of institutions ($X_{04.0}$).

An important component of the BBN model output is the CP tables that describe the posterior possibilities. An example of such tables is shown in Table 9.3: if a faculty member in a public research university ($STRATA_{12} = 1$ and other $STRATA$ binary variables were 0) received

the highest degree 3 years ago ($X15.16 = 3$), serving as a nontenured ($Q10AREC = 0$) assistant professor ($X01.8REC = 4$), reported 20% of the work time spent teaching undergraduate classes ($Q31A1 = 20$) and published three articles in juried media ($Q29A1 = 3$), the salary predicted by the BBN model would be between \$48,325 and \$50,035 because this interval offered the highest probability ($p = .159$) in the posterior distribution for this particular combination of variable values. A posterior distribution like this is available for every unique combination of variable values (instances in the variable product state space).

The prediction accuracy of this BBN model was only 25.66% and 11.57% with the training and testing data, respectively, measured as the ratio of the number of correct classifications to the total number of predictions. Several possible reasons were identified for this relatively low prediction accuracy. First, all but two of the six predictors were on an interval or a ratio scale; loss of information was inevitable when they were binned into categorical measures. Second, a utility (scoring) function was used to track model accuracy during the process of learning an optimal BBN. When nonspecialized scoring function was used to guide the learning of a BBN from many variables without any prior knowledge, the resulting network could have poor prediction accuracy (Friedman, Geiger, and Goldszmidt, 1997). The current situation proved to follow this exact outcome. Finally, the classification of an individual case was the only option with highest probability among all possible outcomes. This highest probability might not be strong at all (in the above example case, $p = .159$) when the outcome variable, salary, was divided into quite a few bins (24, to be exact), most with a narrow width. The narrow bin widths meant weakened differences among the possible outcomes, and the weakened differences in turn led to an increased chance of misclassification.

Another problem with the identified BBN model was the counterintuitive relation between the self-reported percentage of time spent teaching undergrads ($Q31A1$) and the Carnegie classification of institutions ($X04.0$). It is expected to have the arc pointing from $X04.0$ to $Q31A1$ because the institutional type should determine the time spent teaching undergraduates, not the other way around. With a data-driven process, this type of misspecification of causal relationships is not unexpected. As a matter of fact, the BN PowerSoft allows prespecified knowledge and domain expert inputs, such as the order of variables in some dependence relationships and some forbidden or known causal relations among variables, to be included in model structure along with objective information extracted from the data. In this example, the BBN model learning relied strictly on the input data to keep the findings of the data mining

comparable with a data-driven multiple regression model, which was presented in the following section.

A MULTIPLE REGRESSION MODEL FOR SALARY PREDICTION

To build a multiple regression model for salary prediction, data reduction must be performed because 90 predictor variables are too many with which to start, even without considering the recoding of categorical variables. The goal of variable reduction is, while keeping as much as possible the original information, to reduce the 90 variables to a smaller group that can be effectively manipulated by a linear regression procedure, and with this group of selected variables, an optimal regression model would be identified that had a strong prediction power and a simple structure. Academic-year salary as the dependent variable was log transformed to improve its linear relationship with the candidate-independent variables as suggested by the compensation literature and the properties of the current data set. Unless specified otherwise, $\alpha = .01$ was used in all significance tests.

Given the fact that among the 90 variables there were nominal, ordinal, interval, and ratio measures, the variable reduction was completed in two phases. During the first phase, for the 82 variables that were on dichotomous, ordinal, interval, or ratio scales, exploratory factor analysis (EFA) and K-means cluster (KMC) analysis were employed to study the dimensional structure of the variable space, and information generated from the analyses led to the grouping of the 82 variables into a number of major dimensions. Two different techniques were used because EFA measures variable relevance by linear correlations and KMC by geometric distances (e.g., Euclidian distance); for a better understanding of the underlying variable structure, the consensus of their results can alleviate the biases associated with either of the individual approaches.

In EFA, the principal component analysis was the primary factor extraction approach followed by both VARIMAX and OBLIMIN rotations of the extracted factors. Based on the factor-loading matrices, variables were considered being in the same group if they had a loading of no less than 0.35 on the same factor. In KMC, the number of clusters generated to house all the 82 variables needs to be specified beforehand. In this study, the result of the EFA procedure was used to estimate a range of the possible number of clusters because the exact number of final clusters was unknown. Thus, the KMC analysis was repeated several times, each specifying a different number of clusters within the estimated range. The multiple runs of KMC also helped to reduce the chance of getting

a solution of local optimum. Finally, by balancing between the clear interpretation of individual clusters and the simple structure of the overall dimension, the KMC analysis separated variables into mutually exclusive clusters, the identity of which were interpreted based on variables close to the cluster seed (the centroid).

The outputs of the EFA and KMC analyses were compared to seek for a schema of variable space simplification and their consensus suggested that 70 of the 82 variables were clustered into 17 groups. Ten of the groups were major clusters with clear boundaries: academic rank, administrative responsibility, beginning work status, education level, institutional parameters, other employments, professional experience, research, teaching, and work environment index. Another seven groups were also identified, but they appeared to be subdimensions of some major constructs: teaching—graduate, individual instruction, undergraduate committees; publications—books, presentations and performances, and reviews; and miscellaneous institution parameters.

This dimensional structure made it possible to reduce the number of variables through variable extraction. Next, in the second phase of data reduction, one variable was selected from each cluster by regressing the log-transformed salary to all variables within the same cluster. It is obvious that the overlay of EFA and KMC analyses meant that variables clustered in the same group might not share strong linear relationships; nevertheless, given that the final prediction model was to be a linear multiple regression, it became desirable to extract variables that accounted for more variance in the predicted variable. Thus, one variable was chosen from each group that accounted for the greatest partial R^2 change in salary. A list of 17 variables were the results of linear regressions within the 17 clusters.

Meanwhile, the 12 variables that did not show any strong relationships with any of the 17 clusters, along with 8 multilevel nominal variables that could not be classified through EFA and KMC, were carried into the initial linear modeling as independent variables and tested for significance. To summarize, all 37 variables (17 extracted variables and 20 variables that could not be clustered) are listed in Table 9.4 as the candidate-independent variables for a multiple regression model for salary prediction.

For the regression analysis, K -level ($K > 2$) nominal variables were recoded into $K - 1$ binary variables. As suggested by the literature, some possible interaction effects among the predictor variables (e.g., between gender and academic ranks) were examined and included in the model if found significant. To search for the optimal model, both forced entry and stepwise selection were used to select variables from the initial pool of 37;

Table 9.4: Candidate-Independent Variables of the Multiple Regression Model

Variable Name	Variable Definition	<i>df</i>
Variables from the data reductions		
Q29A1	Career creative works, juried media	1
X15_16	Years since highest degree	1
Q31A1	Time actually spent teaching undergraduates (percentage)	1
Q31A2	Time actually spent at teaching graduates (percentage)	1
X02_49	Individual instruction with grad and first professional students	1
Q32B1	Number of undergraduate committees chaired	1
Q31A5	Time actually spent at administration (percentage)	1
Q16A1REC	Highest degree type	1
Q24A5REC	Rank at hire for first job in higher education	1
Q29A3	Career reviews of books, creative works	1
Q29A5	Career presentations, performances	1
X08_0D	Doctoral, 4-year or 2-year institution	1
Q29A4	Career books, textbooks, reports	1
X10_0	Ratio: FTE enrollment/FTE faculty	1
Q76G	Consulting/freelance income	1
X01_66	Job satisfaction: Other aspects of job	1
X01_8REC	Academic rank	1
Variables cannot be clustered		
DISCIPLINE	Principal field of teaching/research	10
Q12A	Appointments: Acting	1
Q12E	Appointments: Clinical	1
Q12F	Appointments: Research	1
Q19	Current position in the primary employment	1
Q26	Positions outside higher education during career	1
Q30B	Hours/week unpaid activities at the institution	1
Q31A4	Time actually spent on professional growth (percentage)	1
Q31A6	Time actually spent on service activity (percentage)	1
Q64	Union status	3
Q80	Number of dependents	1
Q81	Gender	1
Q85	Disability	1
Q87	Marital status	3
Q90	Citizenship status	3
X01_3	Principal activity	1
X01_91RE	Highest educational level of parents	1
X04_0	Carnegie classification of institutions	14
X04_84	Ethnicity in single category	3
X37_0	Bureau of Economic Analysis (BEA) region code	8

if the two selection approaches did not agree on the significance of any of the variables, a separate test of that variable was followed in order to decide whether to include it in the model. Moreover, *All-Possible-Subsets* regression techniques including Max R and Mallows's C_p were tried to evaluate the model fit in terms of R^2 , adjusted R^2 , and the C_p value. The thorough model construction and evaluation process yielded a final regression model with 16 predictor variables ($df = 47$ because of the binary-coded nominal variables). The parameter estimates are available in Table 9.5 and model summary information in Table 9.6. The model R^2 was .5036 and adjusted R^2 .5001.

The final model was presented in a regression equation:

$$\begin{aligned}
 \text{Log(SALARY)} = & 10.0399 + 0.0019 \times \text{Q29A1} + 0.0077 \times \text{X15_16} \\
 & - 0.0011 \times \text{Q31A1} + 0.0017 \times \text{Q31A5} \\
 & + 0.0841 \times \text{Q16A1REC} + 0.0018 \times \text{Q29A3} \\
 & + 0.0037 \times 10^{-3} \times \text{Q76G} + 0.0519 \times \text{X01_66} \\
 & + 0.0510 \times \text{X01_8REC} - 0.0023 \times \text{Q31A4} \\
 & + 0.0013 \times \text{Q31A6} - 0.0667 \times \text{Q81} \\
 & - 0.0608 \times \text{BEA1} + 0.0082 \times \text{BEA2} \\
 & - 0.0545 \times \text{BEA3} - 0.0868 \times \text{BEA4} \\
 & - 0.0921 \times \text{BEA5} - 0.0972 \times \text{BEA6} \\
 & - 0.1056 \times \text{BEA7} + 0.1480 \times \text{BEA8} \\
 & - 0.0279 \times \text{DSCPL1} + 0.1103 \times \text{DSCPL2} \\
 & - 0.0643 \times \text{DSCPL3} + 0.0695 \times \text{DSCPL4} \\
 & - 0.0449 \times \text{DSCPL5} + 0.0933 \times \text{DSCPL6} \\
 & - 0.0641 \times \text{DSCPL7} - 0.0276 \times \text{DSCPL8} \\
 & - 0.0249 \times \text{DSCPL9} + 0.0130 \times \text{DSCPL10} \\
 & - 0.0541 \times \text{PRIMACT1} - 0.0133 \times \text{PRIMACT2} \\
 & + 0.0469 \times \text{PRIMACT3} + 0.0053 \times \text{STRATA1} \\
 & - 0.0377 \times \text{STRATA2} - 0.0041 \times \text{STRATA3} \\
 & - 0.0917 \times \text{STRATA4} + 0.2630 \times \text{STRATA5} \\
 & + 0.2588 \times \text{STRATA6} - 0.1557 \times \text{STRATA7} \\
 & + 0.0386 \times \text{STRATA8} - 0.0061 \times \text{STRATA9} \\
 & - 0.0207 \times \text{STRATA10} - 0.0879 \times \text{STRATA11} \\
 & + 0.0792 \times \text{STRATA12} + 0.1428 \times \text{STRATA13} \\
 & + 0.0005 \times \text{STRATA14} + \text{error}. \tag{5}
 \end{aligned}$$

Table 9.5: Parameter Estimates of the Multiple Regression Model

Variable	Label	Parameter Estimate	Std. Error	t value	P > t
Intercept	Intercept	10.0399	0.0485	207.10	<.0001
Q29A1	Career creative works, juried media	0.0019	0.0002	11.87	<.0001
X15.16	Years since highest degree	0.0077	0.0004	17.82	<.0001
Q31A1	Time actually spent teaching undergrads (%)	-0.0011	0.0002	-6.04	<.0001
Q31A5	Time actually spent at administration (%)	0.0017	0.0003	5.95	<.0001
Q16A1REC	Highest degree type	0.0841	0.0050	16.68	<.0001
Q29A3	Career reviews of books, creative works	0.0018	0.0004	4.22	<.0001
Q76G	Consulting/freelance income	3.7×10^{-6}	0.0000	5.75	<.0001
X01.66	Other aspects of job	0.0519	0.0058	8.89	<.0001
X01.8REC	Academic rank	0.0510	0.0031	16.27	<.0001
Q31A4	Time actually spent on prof. growth (%)	-0.0023	0.0006	-3.86	.0001
Q31A6	Time actually spent on service activity (%)	0.0013	0.0003	3.80	.0001
Q81	Gender	-0.0667	0.0084	-7.97	<.0001
Bureau of Economic Analysis (BEA) region codes (Baseline: Far West)					
BEA1	New England	-0.0608	0.0058	8.89	.0021
BEA2	Mid East	0.0082	0.0031	16.27	.5788
BEA3	Great Lakes	-0.0545	0.0006	-3.86	.0001
BEA4	Plains	-0.0868	0.0003	3.80	<.0001
BEA5	Southeast	-0.0921	0.0084	-7.97	<.0001
BEA6	Southwest	-0.0972	0.0198	-3.07	<.0001
BEA7	Rocky Mountain	-0.1056	0.0148	0.56	<.0001
BEA8	U.S. service schools	0.1480	0.0142	-3.82	.2879
Principal field of teaching/research (Baseline: Legitimate skip)					
DSCPL1	Agriculture and home economics	-0.0279	0.0306	-0.91	.3624
DSCPL2	Business	0.1103	0.0228	4.84	<.0001
DSCPL3	Education	-0.0643	0.0216	-2.98	.0029
DSCPL4	Engineering	0.0695	0.0246	2.82	.0048
DSCPL5	Fine arts	-0.0449	0.0241	-1.86	.0627
DSCPL6	Health sciences	0.0933	0.0182	5.12	<.0001
DSCPL7	Humanities	-0.0641	0.0195	-3.29	.001
DSCPL8	Natural sciences	-0.0276	0.0190	-1.45	.148
DSCPL9	Social sciences	-0.0249	0.0202	-1.23	.2173
DSCPL10	All other programs	0.0130	0.0194	0.67	.502

Table 9.5: (Continued)

Variable	Label	Parameter Estimate	Std. Error	t value	P > t
Primary activity (Baseline: Others)					
PRIMACT1	Primary activity: Teaching	-0.0541	0.0169	-3.21	<.0013
PRIMACT2	Primary activity: Research	-0.0133	0.0199	-0.67	<.5039
PRIMACT3	Primary activity: Administration	0.0469	0.0203	2.31	<.0211
Carnegie classification (Baseline: Private other Ph.D.)					
STRATA1	Public comprehensive	0.0053	0.0236	0.22	<.8221
STRATA2	Private comprehensive	-0.0377	0.0263	-1.43	<.1525
STRATA3	Public liberal arts	-0.0041	0.0341	-0.12	<.9039
STRATA4	Private liberal arts	-0.0917	0.0260	-3.52	<.0004
STRATA5	Public medical	0.2630	0.0326	8.07	<.0001
STRATA6	Private medical	0.2588	0.0444	5.82	<.0001
STRATA7	Private religious	-0.1557	0.0523	-2.98	<.0029
STRATA8	Public 2-year	0.0386	0.0247	1.56	<.1185
STRATA9	Private 2-year	-0.0061	0.0574	-0.11	<.9155
STRATA10	Public other	-0.0207	0.0563	-0.37	<.7127
STRATA11	Private other	-0.0879	0.0428	-2.06	<.0399
STRATA12	Public research	0.0792	0.0228	3.47	<.0005
STRATA13	Private research	0.1428	0.0259	5.51	<.0001
STRATA14	Public other Ph.D.	0.0005	0.0254	0.02	.984
Note: The dependent variable was log-transformed SALARY.					

If the values of the example case in BBN—a nontenured (Q10AREC = 0) assistant professor (X01_8REC = 4) in a public research university (STRATA12 = 1 and other STRATA binary variables were 0) who had received the highest degree 3 years ago (X15_16 = 3), had three publications

Table 9.6: Summary Information of Multiple Regression Model and the Combination Model

Source	df	Sum of Squares	Mean Square	F	Pr > F
Multiple regression model					
Model	47	621.4482	13.2223	142.46	<.0001
Error	6,599	612.4897	0.0928		
Corrected total	6,646	1233.9379			
Note: For the statistical regression model, $R^2 = .5036$, adjusted $R^2 = .5001$, and the standard error of estimate is 0.305.					

Table 9.7: The Example Case of the Multiple Regression Model

Variable Name	Example Case		Parameter Estimate
	Value	Note	
Intercept	1	Regression model intercept	10.0399
Q29A1	3	Career creative works, juried media	0.0019
X15.16	3	Years since highest degree	0.0077
Q31A1	20	Time actually spent teaching undergrads (%)	-0.0011
Q31A5	5	Time actually spent at administration (%)	0.0017
Q16A1REC	6	Highest degree type: Doctorate	0.0841
Q29A3	1	Career reviews of books, creative works	0.0018
Q76G	0	Consulting/freelance income	3.7×10^{-6}
X01.66	2	Job satisfaction: Other aspects of job	0.0519
X01.8REC	4	Academic rank: Assistant professor	0.051
Q31A4	0	Time actually spent on professional growth (%)	-0.0023
Q31A6	25	Time actually spent on service activity (%)	0.0013
Q81	1	Gender: Male	-0.0667
BEA1	1	New England	-0.0608
DSCPL7	1	Academic discipline: Humanities	-0.0641
PRIMACT1	1	Primary activity: Teaching	-0.0541
STRATA12	1	Institution type: Public research	0.0792

Note: The predicted log-transformed salary of this example case was 10.74 (about \$45,954) according to equation (5).

in juried media (Q29A1 = 3), and reported 20% of work time spent teaching undergraduate classes (Q31A1 = 20)—were substituted into this equation, so were the values of the remaining 11 variables (listed in Table 9.7), the predicted value of this individual’s log-transformed salary should be 10.74 (about \$45,954), with an estimated standard error indicating prediction uncertainty.

MODEL COMPARISON

The two prediction models were comparable in several ways. First, both models were the results of data-driven procedures; the preexisting data, rather than the underlying theory, directed the model discovery.

Second, both approaches relied on some variable selection procedures to reduce the data complexity in the original pool of 90 predictors. And finally, they shared the same group of major predictor variables even though the multiple regression model had a much larger group. With the common ground they share, the differences between the two models provided a good insight into the strengths and weaknesses of the traditional statistical methods and the data mining techniques when analyzing large-scale data.

VARIABLE TRANSFORMATION

The data mining BBN model started with all 90 predictor variables. In order to calculate the posterior probabilities, all continuous variables were binned so that a finite product state space could be defined. The loss of information that happened during the variable downgrade is a threat to model quality and prediction accuracy, but converting all variables to a nominal scale helps to relax model assumptions and, as a result, BBN does not require normal distributions and linear variable relationships. The nonmetric nature of BBN also makes the procedure robust against outliers and other types of noises common in large secondary data sets.

In contrast, multiple linear regression explicitly or implicitly recodes categorical data to meet parametric model assumptions (e.g., linearity and normality); recoding K -level ($K > 2$) nominal variables into $K - 1$ binary variables causes loss in the model degrees of freedom, but the consequence is trivial given a large sample size. Continuous variables are preferred in linear regression because of the underlying model assumptions and the richness of information, although sometimes transformation is necessary to improve the linearity. That was why the dependent variable, academic-year salary (SALARY), was log transformed in this study.

DIMENSIONAL SIMPLIFICATION OF THE VARIABLE SPACE

Variable selection is inevitable when a large number of measures exist in a high-dimensional structure. With many variables involved, the learning of a BBN becomes intractable if an exhaustive search for the optimal model in the entire model space is expected because of the complex network structure and the amount of iterations and propagations. To reduce the computational task, two steps were taken. First, a threshold

value was specified and the pairwise variable relevance was measured with some statistical tests (e.g., χ^2 test or mutual information test); variables were dropped from future computations if the strength of its associations with other variables failed to exceed the threshold. Second, to avoid an exhaustive search in the entire model space, an automated procedure was embedded in the network learning algorithms so that every attempted model started with a random selection of variables from the complete list, and all the attempted models together formed a random sample from the entire model space. Among this random sample of models, the one with the best accuracy became the final network. In sum, the variable selection in BBN was automated; a local optimum might result when all the randomly attempted models failed to enlist the one with best prediction accuracy in the model space. In spite of its efficiency, the automated variable selection in the black-box BBN learning deprived researchers of any detailed knowledge of the variable relationships except for what was presented in the final model.

With the statistical multiple regression approach, the simplification of variable dimension started with separating variables based on their measurement scales. Eight multilevel categorical variables were recoded into binaries; only 82 dichotomous, ordinal, interval, and ratio variables were included in the reduction due to the parametric assumptions of the procedures. The outputs were carefully studied and compared, and 17 clusters of the variables were manually determined. Extra steps were taken to extract a small group of representative variables. Finally, a group of 16 variables were selected from the 37 candidate predictors. The intensive human intervention demanded time and resources and created room for human errors, but the underlying structure of the predictor variables was clearly revealed and detailed information was available about variables relevance and distances.

As for the effectiveness of the two variable selection approaches, both were able to identify the most important variables. As shown in Figure 9.2, the BBN model selected only 6 variables from the pool of 90, and 5 of them (i.e., career creative works in juried media [Q29A1], percentage of time actually spent teaching undergrads [Q31A1], years since highest degree [X15_16], academic rank [X01_8REC], and Carnegie classification of institutions [X04_0]) were among the top 6 variables in the stepwise selection of the multiple regression model. Even so, the high-level automation in data mining is only desirable when the underlying variable relationships are not of concern or when the number of variables is so large that human handling becomes impossible.

VARIABLE RELATIONSHIPS AND MODEL SELECTION

With only nominal variables allowed in learning a Bayesian network, the relationships between variables were measured as nonmetric associations in order to establish the CP statistics among variables. Statistical tests (e.g., χ^2 test or mutual information test) were used to quantify the frequencies of different values of two variables that were associated and the number was compared with how likely those values would happen to be together by random chance (Cheng *et al.*, 2001). All possible associations are considered within the model space, defined by all variables, their values, and their measured associations. Theoretically, each different combination of predictor variables is a potential model, which means the model space consists of candidate models of substantially different structures. In the automated search for the BBN with optimal performance, numerous candidate models were tried and compared; the attempted model can always be updated by adding new information (additional variables). Eventually, in a black-box approach, the model with the best prediction accuracy is “discovered” and presented.

In the multiple regression analysis, variable relationships were measured as linear correlations. Strong relationships between the dependent variable and the independent variables are wanted, but strong relationships among the independent variables themselves may cause multicollinearity and lead to unstable model structures. Although every unique combination of the independent variables theoretically makes a candidate model, the modeling procedures produce models, the structure of which are mostly nested. Different approaches are available to select the best predictors, each emphasizing some different measures of model quality. Human input is always necessary to compare candidate models and to select the final one that usually has a higher R^2 with a simple and stable structure.

MODEL PRESENTATION

The outputs of the data mining BBN model and the linear regression model are totally different as a result of different structures of the input data, different measures of the variable relationships, and different algorithms of the analyzing data. Like many other statistical procedures, the final model of a multiple regression is a mathematical equation as shown in equation (5) (see p. 475). When the independent variables are substituted with real values, a predicted value can be calculated. With the

assumption of normality, the predicated value is only a point estimate (the conditional mean); the prediction uncertainty is implicitly expressed as the standard error of estimate (SEE) around the predicted value.

In contrast, the BBN model presents its final outcome as a graphical network in which all predictor variables are connected directly or indirectly to the output variable (as shown in Figure 9.2). CP tables, available for every variable in the network, indicate the strength of beliefs (as shown in Table 9.3). When the values of the predictors are known, the posterior distribution can be determined through CP tables for that particular combination of values and the predicted value is the distributional mode of that posterior probability. The BBN explicitly expresses the prediction uncertainty by presenting the posterior probability as a random variable. Prediction based on the mode of a probabilistic distribution enhances the robustness of BBN because mode, unlike the arithmetic mean, has strong resistance against outliers and skewed distributions.

LARGE DATA VOLUME

The nature of inductive learning shared by most data mining techniques enjoys large sample sizes because abundant information residing in the data can help improve the accuracy of the model summarized from the input. Also, more data are needed to validate the models and to avoid optimistic biases (overfit). Large sample sizes pose no threats to data mining because the algorithms rarely use significance tests; therefore the worry about oversensitivity to minor differences is no longer necessary.

Like many other traditional statistical techniques designed for small-sample analyses, multiple regression has some difficulties when used to analyze large data sets. First, the large number of observations can make graphical outputs problematic. For instance, in regression, scatter plots are necessary for checking variable relationships, but they are of no use when the sample size goes extremely large and turns the plots into indiscernible black clouds. Second, the large sample size minimizes the standard error and renders the statistical significance tests oversensitive to minor differences. One of the examples in this multiple regression analysis was the variable *union status*. With a sample size of 6,652, the partial $R^2 = .0009$ of this variable was found significant at $P = .0073$ in the stepwise selection. Actually, a simulation study has found that the estimated regression model becomes very stable and little improvement can be made after the sample size goes beyond 1,000 (Hill, Malone, and Trocine, 2004). Indeed, large sample sizes bring challenges to traditional statistics.

PREDICTION ACCURACY

Similar to classification trees and other data mining techniques that have qualitative output variables, the prediction accuracy of a BBN model is the ratio of the number of cases that are correctly classified to the total number of predictions. In this study, the final network made correct predictions for 25.66% and 11.57% of the training and testing data, respectively. In multiple regression, the prediction accuracy for individual cases can be quantified by the distance between the predicted values and the observed values (i.e., residuals or studentized residuals). An overall measure of the model accuracy is the SEE, which is the standard deviation of prediction errors in a normal distribution. The model R^2 conveys information on how well the selected model fits the data. In the final regression model, 16 variables had a R^2 of .5036 ($df = 47$, adjusted $R^2 = .5001$, and $SEE = 0.305$).

As previously argued, one of the reasons for the low prediction accuracy of the BBN model was the downgrade of the continuous variables and that four out of the six predictor variables in the final BBN model were continuous. How well would the prediction be if the six variables selected by the Bayesian network were used in a multiple regression model that allowed them to keep the original scales? To answer this question, another prediction model, named as the combination model, was produced in which the six predictor variables identified by the data mining BBN were combined into a multiple regression model. However, among the six variables, the number of years since achieved tenure (Q10AREC) was only connected to the dependent variable (SALARY) through another predictor variable (i.e., years since the highest degree [X15_16]) and had a strong linear correlation with both X15_16 ($r = .64$) and academic rank ($r = .43$) in the model. Thus, Q10AREC was excluded from the combination model to avoid multicollinearity after a test confirmed that it was not a suppressor variable.

The construction of the combination model started with the remaining five independent variables. Variable recoding took place to logarithmically transform salary, the dependent variable, and change the only categorical measure, Carnegie classification of institutions ($K = 15$), into 14 binary variables. The final combination model was easily defined because all five independent variables were found significant at $P < .0001$ and had a model $R^2 = .4214$, adjusted $R^2 = .4199$, and $SEE = 0.328$ (summary information are given in Tables 9.8 and 9.9). Although the statistical multiple regression model had a greater R^2 than the combination model, it used more degrees of freedom (47 vs. 18). Specifically, the R^2

Table 9.8: Parameter Estimates of the Combination Model

Variable	Label	Parameter Estimate	Std. Error	t value	P > t
Intercept	Intercept	10.5410	0.0272	387.28	<.0001
Q29A1	Career creative works, juried media	0.0024	0.0002	15.34	<.0001
Q31A1	Time actually spent teaching undergrads (%)	-0.0030	0.0002	-20.06	<.0001
X01_8REC	Academic rank	0.0664	0.0032	21.01	<.0001
X15_16	Years since highest degree	0.0088	0.0004	19.97	<.0001
Carnegie classification (Baseline: Private other Ph.D.)					
STRATA1	Public comprehensive	-0.0385	0.0250	-1.54	.1236
STRATA2	Private comprehensive	-0.0645	0.0281	-2.29	.0218
STRATA3	Public liberal arts	-0.0315	0.0363	-0.87	.3853
STRATA4	Private liberal arts	-0.1221	0.0276	-4.42	<.0001
STRATA5	Public medical	0.2933	0.0339	8.66	<.0001
STRATA6	Private medical	0.2915	0.0471	6.20	<.0001
STRATA7	Private religious	-0.2095	0.0551	-3.80	.0001
STRATA8	Public 2-year	-0.0403	0.0258	-1.56	.1179
STRATA9	Private 2-year	-0.0371	0.0611	-0.61	.544
STRATA10	Public other	-0.0245	0.0594	-0.41	.6802
STRATA11	Private other	-0.0871	0.0456	-1.91	.0563
STRATA12	Public research	0.0479	0.0242	1.98	.0472
STRATA13	Private research	0.1543	0.0276	5.60	<.0001
STRATA14	Public other Ph.D.	-0.0496	0.0268	-1.85	.0648

Note: The dependent variable was log-transformed salary.

Table 9.9: Summary Information of Multiple Regression Model and the Combination Model

Source	df	Sum of Squares	Mean Square	F	Pr > F
Combination model: Multiple regression with variables selected through BBN					
Model	18	520.2949	28.90527	268.4	<.0001
Error	6,632	714.3279	0.10769		
Corrected total	6,651	1234.6228			

Note: For the combination model, $R^2 = .4214$, adjusted $R^2 = .4199$, and the standard error of estimate is 0.328.

of the statistical regression model was .0822 higher than that of the combination model at the expense of 29 degrees of freedom; each additional variable in the statistical model only increased the model R^2 by .0028 on average. Too many independent variables are undesirable in multiple regression because they complicate the model structure and may cause multicollinearity if strong correlations exist among the predictors.

Another way to compare the statistical regression model and the combination model was their generalizability to new data because regression equations produced with the ordinary least square method are optimized for the training data, whereas generalizability is always an important index of quality prediction models. Thus, the two models were cross-validated with the holdout testing data set. When the 3,311 records in the testing data were put through the statistical regression model and the combination model, their model R^2 s were found to be .5055 and .4489, respectively, a slight increase for both models compared to their original R^2 s of .5036 and .4214 for the training data set.

Because both the statistical model and the combination model used multiple regression for prediction, their contrasts shed more light on how well traditional statistics and data mining techniques functioned in terms of the data simplification and variable selection. They shared predictors that were strongly related to the predicted variable, an indication that both analytical approaches were able to identify the critical measures for making accurate prediction and can serve the purpose of dimensional simplification. The simplicity and high model R^2 of the combination model also provided evidence that data mining can be used together with traditional statistical techniques when the situation is appropriate.

CONCLUSION

Large-scale data sets have become very common in the field of higher education with the increasing use of electronic data acquisition. Almost every institution has databases of student performance and faculty progress. National surveys are conducted in a larger scale and at a higher frequency to gather information of postsecondary institutions, college students, university faculty, and much more. Although most of the data are collected without predefined research questions, they are definitely invaluable resources of information for researchers to pursue a better understanding of the system and the people involved. Many studies have been carried out using these data sets, but still, we have not been able to take full advantage of those large-scale data sources, partly because most of the traditional statistical procedures were developed for understanding

relatively sparse data and are inadequate to process sheer volumes of data (Hill, Malone, and Trocine, 2004). Indeed, there is a desperate need for more effective and unbiased analytical techniques that can turn massive data sets into useful information and valid knowledge for researchers in the “soft sciences.”

In this study, data mining was introduced as a potentially useful approach for studying large-scale data sets in higher education research. Through concrete examples, it was made clear how one of the data mining techniques, BBN, approached the prediction problems differently than the traditional multiple regression analysis. The traditional approach of statistical analysis of the data set with more than 90 variables and 6,500 training cases revealed the cumbersome process from data reduction, variable selection, to model construction and identification. Loss in degrees of freedom was no longer a concern with the large sample size, but traditional statistical procedures trusted valid data modeling to correct understanding of variable relationships; unfortunately, the large number of variables made it almost impossible to have a thorough examination of variable dimensions and to check interactions among variables.

For data miners, “more is better” (Hill, Malone, and Trocine, 2004, p. 241). Being exploratory in nature, the emphasis of the BBN modeling was to identify the associations between variables. High variable dimensionality may demand a trade-off between efficiency and accuracy, but large sample sizes serve the inductive learning well. Also, the underlying BBN algorithm discovers the model with the best prediction accuracy by using Bayesian probabilities; it reduces all variables to a nominal scale, dismisses probabilistic assumptions, and rarely uses significance tests. The automated process of model learning is completely different from the multiple regression. However, data mining activities have drawbacks as well. First, the BBN model, as most data mining models, is adaptive to categorical variables. Continuous measures need to be binned and the downgrade of the measurement scale definitely costs information accuracy. Second, the automated algorithms limited human intervention; such a black-box approach blinds researchers from a detailed picture of variable relationships. Finally, the pure data-driven analysis can lead to models with counterintuitive structures.

Another problem with large-scale data sets is that redundant measures on the same constructs are common; they emphasize different aspects of the construct, but the information overlap makes it difficult to identify the most salient measure from the highly correlated group. As shown in this study, BBN is able to perform such a function because it

identified one variable from each of the five groups of redundant measures on teaching, publication, experience, academic seniority, and institution parameters, and the selected variables happened to be among those chosen by the statistical regression model for those having the greatest partial R^2 among all alternative measures of the same constructs.

In summary, the statistical challenges associated with large data sets have been well acknowledged. Innovations are directed to two general directions: developing and improving algorithms to handle large data sets effectively or using data reduction techniques to reduce the complexity of the data sets (Hill, Malone, and Trocine, 2004). Data mining is one of the new data analysis approaches specifically designed to handle sheer volumes of data; as an academic discipline with applied importance, it continues to grow by taking advantage of new developments in computer science, machine learning, and statistics (Fayyad, 1997; Zhou, 2003). With its success in business management and scientific research, data mining is being introduced to researchers in higher education in this study and has been found to have some unique features that can contribute to studying very large data sets. First, combining statistical and machine learning techniques in automated computer algorithms, data mining can be used to explore large volumes of data with robustness against poor data quality, such as nonnormality and outliers, and inductively summarize data structure without relying on statistical tests; second, data mining has advantages in handling nominal variables and is efficient for the purpose of variable selection; and finally, when appropriate, using data mining in combination with some statistical procedure may help achieve both efficiency and accuracy.

Given the diverse structures of large data sets, no specific techniques can address all analytical needs and constantly outperform others (Hill, Malone, and Trocine, 2004). The intention of this chapter is to introduce an alternative approach in a comparative manner to those who need to work with large data sets; it is neither possible nor necessary to attempt a clear-cut answer regarding the absolute advantages of the data mining approach. Information was provided so that researchers can make their own assessment about how and when data mining techniques can offer unique insight into the structure of and to extract valuable information from large volumes of data. The proper implementation of any analytical techniques always depends on researchers' ability to tailor their choices of analytical procedures to the structure of the data, the specifics of research questions, and the theoretical considerations and the ultimate goal of the studies. Whenever possible, researchers are also expected to follow-up

their findings generated by data mining with confirmatory analyses. With continuous effort, the rich collection of information will be turned into a reservoir of knowledge to serve public interests.

A final note is to offer caution regarding any attempts to generalize the variable relationships identified in this study as verified compensation structure because the models presented were data driven and could be misleading without further validation. Moreover, the survey data were from a stratified sample, the disproportionate selection and unequal clusters require the consideration of sampling weight in order to correct the unequal representation of each observation in the sample for unbiased conclusions regarding faculty salary. Even though disproportional samples have little impact on the accuracy of model-based predictions given a sample of substantial size, risks do exist that models in this study had misleading structure, and findings about the variable relationships were biased.

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10. TOWARD STRATEGIC AMBIGUITY: ANTIDOTE TO MANAGERIALISM IN GOVERNANCE*

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Specifically, I would suggest that the effective organization is garrulous, clumsy, superstitious, hypocritical, monstrous, octopoid, wandering, and grouchy.

—Karl Weick

This chapter addresses the continuing trend in colleges and universities toward loss of control by faculty over the conduct of academic and institutional affairs and the further deterioration of the ideology of shared governance. The chapter argues for the reinstitutionalization of a fast-disappearing traditional quality of higher education organizations—an ambiguity of institutional goals, culture, organizational structures, authority, and individual responsibilities. This proposed anomalous new strategy/policy would seem to violate long-standing bureaucratic maxims that organizations should be guided by clarity of purpose and rationality in practices and procedures. In this chapter, however, an argument is made for the installation of a more ambiguous institutional academic culture and structure as an important means of preserving and enhancing shared and democratic decision making—the hallmark of academic self-governance and a critical venue for creativity and innovation. The chapter considers how ambiguity and democracy are inextricably linked and why in higher education, ambiguity is needed to support academia's indispensable democratic modes of governance.

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Because ambiguity is proposed in this chapter as a functional desideratum of colleges and universities, it is important to understand its many meanings, especially as those meanings are culturally dependent (Batteau, 2001; Feldman, 1991; Huxham and Vangen, 2000; Kelemen, 2000; Martin, 1992; Martin and Meyerson, 1988; Meyerson, 1991a,b; Sharkansky and Friedberg, 1997; Weick, 1985). This chapter is concerned in part, therefore, with the nature of ambiguity as a cultural and sociological artifact itself, and its connection to the modes by which “authority” is played out in organizations—especially colleges and universities. Allowing for technological requirements and constraints, the ability of a social system to tolerate high levels of ambiguity is partly determined by values and norms of “trust” both in the “system” and in the participants in the system (Creed and Miles, 1996; Fukuyama, 1995; Luhmann, 1979; Malhotra and Murnighan, 2002; Tschannen-Moran and Hoy, 2000). Trust modulates the potential and intentional ambiguities across structural decision-making units in institutions of higher education. This relationship is explored at length later in the chapter and in Figure 10.3.

The chapter is divided into two related parts. The first considers the pressures from the general public and their spokespersons within institutions (e.g., trustees) for more accountability, describes the misdirected focus of proposed remedies, and discusses the emerging “managerialism” that has resulted. The second part of the chapter moves to a consideration of the organizational cultures of colleges and universities and the benefits of ambiguity.

The chapter begins with a general and somewhat abstract, theoretical discussion of the ways that organizations, particularly colleges and universities, are designed—i.e., formally composed into interacting units in structured relationships. The argument is made that colleges and universities are in fact poorly designed to perform their primary functions, and that reform efforts flowing from external pressures virtually ignore design issues and focus instead on evaluation of individual and unit productivity. Following this discussion is a consideration of the typical modes of decision making and of the causes and impact of increasing bureaucratization. The next section deals with the values and structure of democracy, particularly participative democracy. The various meanings of the terms “ambiguity” and of the ways that it is and can be embedded in different types of organizations are then discussed. The chapter goes on to address the question of ambiguity, particularly ambiguity in organizations, and of the relationship of ambiguity to democratic versus bureaucratic decision making. The role of trust is then explored. Additional portions of the chapter explore the relationships of ambiguity to decision-making

efficiency, culture, innovation, and learning. Postmodernist perspectives are also examined as an alternative way of understanding ambiguity in organizations. The chapter concludes with a discussion of the practical problems of introducing and sustaining ambiguity both culturally and structurally in colleges and universities.

ORGANIZATIONAL AUTONOMY VERSUS INTERDEPENDENCE

As will be seen, a prime source of the omnipresent pressures on governance structures and processes to be effective in most institutions of higher education lies in part in the examined and unexamined strategies of leaders for dealing with current opportunities, demands, and threats from the external environment (Lynn, 2005). The complexity and dynamism of these environments demand varied responses from many subunits inside the institution. In some cases, particularly with respect to the research function, a decentralized, independent response from each unit fits a resource dependence argument for greater efficiency (Froosman, 1999; Pfeffer and Salancik, 1978). On the other hand, with regard to teaching undergraduates, a coherent, consistent, and efficient response from the organization *as a whole* requires some manner of interdependence among the many separated producing units as well as those supporting them. As Committee T of the AAUP (1995) noted some years ago,

The variety and complexity of the tasks performed by institutions of higher education produce an inescapable interdependence among governing board, administration, faculty, students, and others. The relationship calls for adequate communication among these components, and full opportunity for appropriate joint planning and effort. (p. 180)

This interdependence has been operationalized in practice over time through organizational strategies developed both by trial and error and by intention. Functionally differentiated units out of necessity learn to work with one another. They recognize organizational designs that account for needs for cross-unit interaction and collaboration. The problem of organizational design—and ultimately governance—is how to “structure” the interaction and collaboration and to assess continually their effectiveness without undue hierarchical control (Bachmann, 2003).

It should be noted that interdependence among individual faculty members *qua* functioning *organizational* units (i.e., rather than their departments) is not a highly salient problem for those concerned with

academic strategy. Quotidian academic operations in teaching and research are assumed not to require continuous interaction among faculty, especially linkages that demand particularistic oversight. Rather, faculty action can be conducted with great autonomy and scanty regular oversight and evaluation (though there is considerable variance across fields).

This pattern seems to be changing insidiously as well as obviously. Forces external to higher education institutions today increasingly pressure institutions for solutions to alleged inefficiencies in operations that increase annual costs. The solutions offered, however, do not address organizational problems of product design, technology, and unit interdependence. Instead of attacking the root causes of inefficiencies in the domain of organizational design or “architecture” (Hannan, Polos, and Carroll, 2003), they question individual human resource utilization and management and seek to impose evaluation techniques to maintain or advance high productivity by individual faculty members and other workers. In point of fact, current external forces have led to internal pressures on administrations for the formation of a “managerial culture” (Farrell and Morris, 2003; Ritzer, 2000; Trow, 1997; Welch, 1998) and a devaluation of faculty (Scott, 2002). As will be discussed below, these are likely to be inimical to the achievement of the educational goals of most institutions. This new culture increasingly reflects a conservative strain toward strategic and tactical operational clarity set in an internal system of mechanistic, bureaucratic controls that leave little room for doubt, dissent, misunderstanding, or misinterpretation, let alone the creative deviance available through traditional faculty autonomy. As Hackman and Oldham (1980) note

Control systems help organizations minimize redundancies and inefficiencies in carrying out work, allow for careful monitoring of important aspects of organizational performance (productivity, financial expenditures, or staffing levels), and provide a concrete basis for taking corrective action when system-provided data do not conform to standards.

However, control systems also tend to limit the complexity and challenge of jobs (Clegg and Fitter, 1978). Because it is important to pinpoint accountability, control systems often specify in considerable detail exactly who is to do what specific tasks, thereby restricting the autonomy in employees’ jobs. Also, control systems often rigidify and standardize the work, so that performance indices can be developed and applied to all employees and work activities within the system. (p. 125)

In the schema of Scott (2001, pp. 51–52; see also Etzioni, 1961), most academic institutions are moving from normative and cultural-cognitive conditions to regulative ones. In Tonnies' (2001) terms, the shift is from *Gemeinschaft* to *Gesellschaft* structures, norms, and human relationships, and in the Weberian (1958, 1978) framework from *vertrational* to *zweck-rational* orientations and actions.

Sometimes these conceptual organizational dichotomies are characterized as “organic” versus “mechanistic” (Burns and Stalker, 1961; cf. Durkheim, 1933). Individual action in the former depends importantly on affective interpersonal orientations, while in the latter, actions are more cognitive and calculative. Weber (1947, pp. 115–117) explains these latter as a “rational orientation to a system of discrete individual ends . . . making use of . . . expectations as “conditions” or “means” for the successful attainment of the actor’s own rationally chosen ends.” Mechanistic systems tend to work best when separated working units need to be tightly linked (coupled) functionally—as for example, when they are sequentially or reciprocally interdependent (MacKenzie, 1986; Thompson, 1967; Victor and Blackburn, 1987) in an assembly line operation.

Organic systems fare better when units do not need continuous, coordinated interaction, and the productivity of the whole depends on the pooling of the independent contributions of each unit. A research team is often structured in this mode, at least in its operational stage, when different researchers perform their roles rather autonomously, leaving the required integration of their efforts to periodic or concluding exchanges. Organic systems tend to value individual input into decision making and to recognize the long-run benefits of participative management via democracy for their effectiveness.

THE LOCUS OF ACCOUNTABILITY

Managerialism specifically in higher education makes an important assumption that efficient and effective organizational conduct requires mechanistic connections, accountability for failed connections, and negative sanctions for less-than-satisfactory individual outcomes (Burke and Associates, 2005). Thus, accountability has both structural and individual components that are related to one another in a “levels of analysis” mode (Dansereau, Yammarino, and Kohles, 1999; Griffin, Mathieu, and Jacobs, 2001). It is important to distinguish between the two. Those who argue for the structural solution alone propose that work units be organized so that they interact more efficiently. The solution that focuses on the individual level suggests that greater efficiency can be achieved through

more careful control of individual (not necessarily unit) work. This solution suggests that it is necessary to find ways to hold individuals more accountable for their work behavior. Again, current external demands for accountability tend not to address issues of structural reform, despite assumptions that colleges and universities can be made more efficient by treating them *more* like business enterprises. The reform focus instead is, somewhat illogically, on *individual* accountability. This is especially true in the light of the Enron and other scandals that have resulted in federal and state laws—e.g., Sarbanes-Oxley (Dreier, 2005)—that require strict personal responsibility for all actions.

In actuality (and perhaps contrary to common belief), the flow of work and communication in institutions of higher education for the most part is already modeled structurally on mechanistic, “assembly line operations.” Students are “processed” through the system by exposure to sequential transformation operations (i.e., separate courses) in the curriculum. The structure of the assembly line for processing either students—or basic ideas in research—historically has not depended on carefully designed linkages across different processing units. Academic components (from the individual faculty member to the department and college/school) are relatively independent, with contributions “pooled” to accomplish institutional aims. Faculty members add parts to the “assembly” of the student or research product without questioning whether their contributions mesh well with prior or adjacent value-added segments. That is, despite philosophical, ideological, or pedagogical goals to the contrary, structurally, the assumption is that there is no essential need for closely-knit, continuous, carefully orchestrated, interdependence across units (faculty members and/or courses). The belief is that if each faculty member does his or her part, students will reach the goals that their institution hopes for them. Similarly, research output will be at optimum institutional levels without extensive structural connections among units.

In reality, such loose coupling is accepted (or at least not challenged) in the academic community as a system-wide normative rationalization for the failures of faculty collaboration, especially across departments, but even within them. Loose coupling it is alleged helps preserve academic freedom, institutional comity, and faculty autonomy. The cost, however, is sloppy inattention to the true organizational and time requirements for effectiveness (Birnbaum, 1988, p. 40). With respect to students, faculty leave the integration of knowledge across disciplines to the students themselves—rarely helping them make the connections. It is a form of labor exploitation. Students are an informal and unpaid but critical part of the labor force of the institution. They are asked to do the integrating work

of faculty. Unfortunately (or perhaps, “naturally”), they, the students, are ill equipped to perform the knowledge-integrating function. The test of their achievement of the status of a “whole” person is difficult to devise, but it seems clear that most students graduate with a fragmented picture of the state of the world, especially of the knowledge that might help them understand how the separate parts might be connected.

MISDIRECTED REFORM EFFORTS

As noted earlier, it appears that the need for a redesign of academic organizations to provide better integration of the differentiated knowledge disciplines is now not perceived as critical. Such “structural” solutions today have relatively low priority. Instead, the improvement of individual and unit efficiency has become paramount. Budget crises are forcing new looks at expenditures and at the return on those investments. The focus is on alleged low individual faculty productivity, not organizational effectiveness. Without due consideration of organizational design factors in the planning and executing of improvements, however, the proposed “cure” for individual lack of productivity is likely to be futile or deleterious (Gamson, Hollander, and Kiang, 1998). Indeed, as will be detailed below, it can utterly destroy the character of the institution and, in the long run, its effectiveness. Goals are displaced (Gouldner, 1954), and the means become the ends. What individual faculty do or not do, rather than how the institution organizes itself becomes salient. The unit analysis for evaluation purposes remains at the lowest level rather than on the collectivity responsible for overall output, thus supporting a competitive rather than a collaborative culture.

The focus on calculations of personal productivity, in turn, engenders a significant organizational liability arising out of the mode of evaluation of individual behavior. One of the classic dangers of taking the logical step both toward greater integration of differentiated units and toward closer scrutiny of individual performance is that both are usually accompanied by superordinate oversight and control—by “managerialism.” (In the ideal, professional organizations manage such merged relationships through interpersonal relations [Mintzberg, 1983a].)

It is important to recognize, moreover, that efforts at reorganization through an extreme rational dissection of organizational problems focusing on individual accountability may (probably will) result in mechanistic systems that ill suit the needs of an institution of higher education and its members over the long run. In this chapter, consequently, we argue that a modicum of “ambiguity” in administration in colleges and universities is

necessary to save the system from the extremes of excessive rationalism and to preserve the system from destruction of its essence—and, not incidentally, of its effectiveness. In particular, the argument is that mechanistic systems and democratic systems are antithetical. Further, democracy in academia is *sine qua non* of the institution's social function and identity, notwithstanding the “support” functions of administrations. Not only are the structural features of democracy critical to effective institutional functioning but also democracy's cultural underpinnings form the basis of a humanistic lifestyle that has been a theoretical, normative model for many social organizations.

In sum, the present system is already partially mechanistic structurally at the system level (e.g., the assembly line model for students). By virtue of external pressures, it is becoming mechanistic at the individual level through increasing managerial oversight. The results are both a less-than-efficient organization and a faculty with declining participation in decision making and a diminution in morale.

A solution through radical structural redesign seems unlikely at least in the short run. Past efforts have required sustained and imaginative leadership, cultural commitment at the institutional level, and massive investments in energy and effort by faculty (Bell, 1966; Harvard University, 1945; Rosovsky, 1990). At issue, therefore, is how to stop the system from further deterioration into more bureaucracy and antidemocratic decision-making modes. Below, we will attempt to demonstrate that it is necessary to preserve or even enhance the organizational ambiguity that supports organizational democracy which, in turn, better fits both the organizational and the individual objectives of a college or university.

Before exploring the issues of the connection of democracy to academic structure and functioning, however, it is necessary to take a closer look at the phenomenon of managerialism as a means of organizational control.

MANAGERIALISM AS A FORM OF ORGANIZATIONAL CONTROL

The trend toward managerialism that seems to be endemic in virtually all colleges and universities today has been extensively considered and documented (Deem, 1998; Flynn, 1999; Lamal, 2001; Martin, 1998; Pollitt, 1990; Ritzer, 2000; Waugh, 1998, 2000, 2003), though there are some who see other, countertrends (Hoggett, 1991). Managerialism in higher education has its roots in corporate management techniques embodied in neo-Taylorism and post-Fordism. It mirrors a similar historical

movement in American society when industry shifted from small-scale craft operations to larger enterprises, beginning especially in the late 19th century. In higher education, the impetus for managerialism is the change in the composition of governing boards and trustees and the backgrounds of institutional chief executive officers (Tierney, 2005). With the increase in members of the institutional leadership bodies who have business and industry backgrounds, it is not surprising that their managerial ideas about running colleges and universities reflect the leaders' personal experiences.

As noted above, managerialism is founded on a number of principles that violate the essence of collegial democracy. Enteman (1993), for example, comments

Managerialism asserts that society is made up of numerous subunits. They may be variously labeled groups, organizations, corporations, or associations. The different labels carry different connotations, and the designation should be inclusive. Managerialism specifically denies that the fundamental nature of society is an aggregation of individuals. It also denies that society has an overarching essence. (p. 190)

Managerialism, especially "hard managerialism" (Trow, 1993) employs—or tries to employ—most of the theories of control developed in the late 1980s in response to the attention paid to allegedly more efficient Japanese management techniques (even though those techniques were manifestations of a far different mode of control—Bess, 1995).

Managerialism's most important feature in higher education is the "standardization of tasks and the proliferation of control, audit, monitoring, and reporting functions that carry out the tasks previously undertaken by academics themselves" (Parker and Jary, 1995). It stresses the importance of attempting to make unit performance standards comparable so that differential performance of individuals and groups across units can be accurately and validly "measured." In a confirmation of systems theory predictions of entropy, one consequence is the reduction of qualitative distinctiveness and the propagation of sameness.

Managerialism is also an exercise in deviance dampening—suppressing the desire and willingness to engage in nonroutine, nontraditional activities. The prevailing organizational motivational model is one of "satisficing" (Simon, 1947)—accepting the first available solution to problems, rather than the optimum one. Such dispositions can lead to mediocrity (Birnbaum, 1983). Satisficing strategies are "heuristics"—"cognitive shortcuts, or rules of thumb that simplify the sorting and

analysis that decision making requires” (Halpern and Stern, 1998, p. 7) but they can lead to mistakes (Tversky and Kahneman, 1974).

When managerialism is the predominant mode of decision making, decisions tend to be made more by those in formal administrative authority or power (or both), than by other members of an organization, as in a more collegial form of governance. But more is at risk from increasing managerialism than a change in “style” of governance (Marginson and Considine, 2000, pp. 9–10). The insidious intrusion or even open manifestation of power threatens to paralyze higher education through its deindividualization (Wolin, 1988; Gerber, 1997). The latter is certainly not a “new” issue, as is revealed in the classic publications of Selznick (1948, 1957) and Parsons (1969), which attach considerable importance to the nonrational, sociocultural, and psychological elements in organizations. Further, it has been shown that in the presence of uncertainty, particularistic criteria for decision making are more likely than universalistic criteria to be used (Pfeffer, Salancik, and Leblebici, 1976). In other words, as a system moves toward more certain mechanistic criteria, there will be less room for individual judgments based on evolved social relationships. In systems where uncertainty in decision making is regularly encountered—as in colleges and universities—the tendency will be to resort to the known and impersonal. Indeed, the focus of the decisions is likely to shift to debates about criteria and away from alternative decision possibilities themselves.

In addition to deindividualization, managerialism breeds a close guarding of potentially useful information and a secrecy about how information will or can be used. Both department heads and faculty exchange only innocuous information or information that is likely to advance the cause of the sender. Ambiguous or potentially damaging information is withheld. There is less of a tendency to view colleagues and hierarchically superior officers as beneficent possible helpers and more as evaluators and even as captious critics aiming at improving efficiency despite any latent or even manifest effects on workers.

DECISION-MAKING ORGANIZATIONAL DESIGNS IN UNIVERSITIES

There is a wide variety of organizational structures and associated processes and procedures in colleges and universities, including departments and schools with varied curriculums, and methods of teaching and research (Bess, 2002). Readers will be familiar with these structures,

but it is useful to adumbrate them in order to understand better their relationship both to democracy and to ambiguity.

The structures are separately arranged as formal hierarchies or as representative democracies, or as both. The structures usually involve (1) both a partially centralized and a partially decentralized administrative structure ("the administration") to manage most of the "adaptation" functions (Parsons, 1951) of the institution (e.g., seeking external resources and allocating them efficiently within the institution), (2) a decentralized democratic or semidemocratic structure or structures (e.g., schools and departments) to attend to the goal setting and immediate personnel functions, and (3) a system of adjudicating claims for decision-making authority over a variety of institutional matters. The latter includes a formal system of checks and balances, which allows administrative authorities to oversee and override decisions made by the faculty (and on rare occasions, the opposite).

Modes of authority and control, of course, are accompanied by supportive patterns of organizational structure and culture. In colleges and universities, in the period preceding the present loss of faculty involvement in decision making, the decision-making apparatus was more cumbersome, ill defined, duplicative, and frequently inefficient. Sometimes, it was even boring because of its redundancy and *pro forma* attention to participation; but at other times it was dynamic and provocative, especially when latent ambiguities and suppressed disagreements emerged in policy disputes.

Though this quondam pattern was virtually universal (at least in universities), most faculty were politically inactive, were out of touch with governance issues, and often were unaware of the problems at hand and the history of attempts at solutions. To be fair, they were attending to their teaching and research roles. They and their representatives often stumbled incrementally through their problem-solving routines (Lindblom, 1954; Quinn, 1980). They frequently were ignorant of the formal, intraorganizational legal codes (e.g., governance manuals of jurisdiction) that authorized decision making in different spheres of policy formation. Nor did they appreciate the scope of their own discretion in making decisions. This ignorance of their governance roles outside of their departments had a number of latent functions for the institution, however, that outweighed the disadvantages of conflict, indecision, and delay and that permitted institutions to survive and even prosper. More on this follows below.

Although some would suggest a more inclusive list (de Boer and Denters, 1999), there are essentially four main "structures" in academic

organizations, bridging the realms of technical, managerial, and institutional levels of organization (AAUP, 1966; Mintzberg, 1983b; Parsons, 1960). In addition to the “administration,” three other decision-making structures exist in a typical university. All have slightly different authority structures. Importantly, ambiguity exists uniquely both within and among all of these internal structures. Indeed, there is ambiguity across structures about the very nature of the ambiguity in adjacent systems.

The administrative structure in higher education tends to be hierarchical, with the number of levels in the hierarchy varying by institutional goal and size (Blau, 1994). The faculty comprise the second decision-making suborganization. This structure is most often a representative democracy (at least titularly) in which members of the faculty turn over proxies for their votes to selected surrogates, mostly elected in the department. A third structure provides avenues for student decision making. It is also a representative democracy. Fourth, there is a university-wide structure, usually a “senate,” that encompasses all constituencies. The structure of this organization is a representative democracy as well. Members are elected by faculty, students, sometimes librarians, and others. Members of the administration, usually extant formal office holders, are appointed by the administration.

Each of these four structures is assigned formal responsibility for different kinds of decisions, but some of the jurisdictions overlap. Sometimes, they overlap intentionally—i.e., joint decision making or “shared governance” is necessary and expected (Lunsford, 1970; Mortimer and McConnell, 1978). Sometimes, they overlap informally by custom and tradition. And sometimes they overlap unintentionally, because ambiguity and power insinuate themselves into the decision making (Schuster *et al.*, 1994). Their roles, power, and influence vary widely depending on particular institutional characteristics (Kezar and Eckel, 2004; Minor, 2004). In all of these separate and overlapping systems, despite codification in formal documents, there is ambiguity of different kinds and strengths concerning the scope and “legality” of the authority of each body to make decisions. In point of fact, the ultimate *legal* authority lies with the administration, which has override prerogatives over the faculty and other constituent interests and votes. Hence, “sharing” becomes operative in practice only if the nonlegal norms and values of the culture strongly support joint decision making. Since much of the culture is usually *sub rosa* (Schein, 1972, 1992), the extent of sharing must be inferred from the practical actions on decisions. The effect of managerialism, however, is to render effete a culture of sharing.

Yet another ambiguity concerns the institution-environment interactions of colleges and universities. The boundaries surrounding institutions of higher education are becoming increasingly porous. This phenomenon was brought to public attention most famously by Clark Kerr's (1963) observation of the "multiversity." University faculty are simultaneously members of the organization and intimately connected with colleagues in other institutions, professional associations, and profit-making businesses outside. This ambiguity of organizational identification has benefits and detriments to both the individual and the organization. The benefit is the better flow of information inside and outside of the institution (Weick, 1978, 2003). Faculty are more quickly apprised of developments in their theoretical fields and practical applications if they have a foot in each camp. The downside of this multifaceted identification is that intrainstitutional collaboration (formal and informal) yields more independent, individual, idiosyncratic effort—which may be either irrelevant to organizational aims or even be at odds with them.

While above, we noted that a core characteristic of academic institutions is unit independence, excessive external connections by members of an institution result in a chaotic vacuum of the meaning and purpose that bind workers to the institution and its goals (Corley and Gioia, 2004). Both the organization and the individual suffer from an absence of shared achievement (Martin, 1992) and from the consequences of alienation at the individual level and anomie at the organizational level. Interestingly, the fragmentation of the institution can be overcome by more bureaucracy, which puts higher priority on institutional and group identity—a coalescing of attitudes toward organizational, rather than individual goals. But the cure may be worse than the disease. The reason, as noted earlier, is that integration through bureaucratic means carries with it superordinate controls and an emphasis on individual accountability. As will be discussed later, there are other ways of achieving integration without vitiating the norms and values of academia.

BUREAUCRACY

Bureaucracies in the Weberian sense are exquisite manifestations of the application of rational decision making, though they suffer, as Weber observes, from the submerging of human sensibilities that serve to coalesce organizational members. In the "administration" in colleges and universities, classic patterns of bureaucratic form exist—e.g., division of labor into specialized tasks, procedural specification (routinization,

standardization, operations, and activities governed by written rules, impersonality), rational and universalistic application of rules, selection and promotion based on objective criteria and technical competence within constraints of seniority, hierarchy of authority, fixed salaries and pensions, assured and visible career track, technical training of officials, and merit appointments.

In academic systems, however, rationality takes different forms and has different meanings in faculty and administrative circles. “Pure” rationality *qua* logic (in the Kantian [1949] sense) has always been central to the “line” systems that produce teaching and research outputs (Parsons and Platt, 1973). In these academic contexts, rationality has been a necessary underpinning among faculty for sharing understanding of specialized realms of knowledge. In the context of administrative systems, on the other hand, by ignoring contextual considerations (Halpern and Stern, 1998), excessive attention to rationality can become a cultural and practical deterrent to efficient action.

As noted above, colleges and universities are organizational systems comprising many overlapping subsystems. In total, the overall system tends to strain to reach maximum levels of “rationality,” since both irrationality and ambiguity are usually psychologically difficult for interacting human beings to manage and are perceived to lead to ineffective behavior. Some of the subsystems in a college or university are systems designed to be maximally rational—i.e., ideal forms of bureaucracy. That is, they represent attempts to provide clearly visible rational relationships among workers in the system. As Weber noted, rationalization is

the organization of life through a division and coordination of activities on the basis of exact study of men’s relations with each other, with their tools and their environment, for the purpose of achieving greater efficiency and productivity.”

(cited in Freund, 1968, p. 18)

For some kinds of activities in a higher education system, such efforts at rational planning and rational organization can be readily accomplished (Chaffee, 1983). These activities are ones that over time can be understood as being repetitive and predictable, hence capable of being diagnosed in routine ways—e.g., by referring to procedural manuals that describe the array of typical problems and prescribe solutions that have been shown in the past to be successful. As Peter Berger (1973) notes, technology and bureaucracy are manifested in structures that are “precise, highly quantifiable, universally applicable and . . . capable of spanning past, present and future within the same categories.” (p. 149) Needless to say, however, as

critics of rational decision-making theory assert, all decisions are taken in some social context and hence are affected idiosyncratic interpretations of what is “rational” in any particular setting (Barley, 1991; Halpern and Stern, 1998).

Interestingly, with bureaucratization comes an expansion of the administrative apparatus needed to make it effective (Blau, 1974, 1994). Thus, paradoxically, the managerialization of academia that is claimed to make it more efficient requires a growth in the numbers of administrators that tends to render the system less so¹ (Solomon and Solomon, 1993). In other words, while “muddling through” (Lindblom, 1954) in an ambiguous setting may seem to be inefficient, in point of fact, it may be more efficient at a macro-organizational level in the long run. The inevitable absence of an exhaustive system of bureaucratic procedures that cover all contingencies in a rapidly changing environment can be “efficiently” compensated for by the elaboration of informal networks (Homans, 1950) that address the decision-making interstices in the formal system. Such informal systems, however, can be overwhelmed by ambiguity in the absence of norms that encourage openness and communication.

DEMOCRACY

Alternative conceptualizations of the political organization of society abound. The idea of democracy has many of its origins in ancient Greece. Plato (1945) believed democracies were undesirable because political power migrates into the hands of unscrupulous people. Aristotle also worried that inherent selfishness of people invites shortsightedness and reckless pursuit of personal agendas (Ball and Dagger, 1999). In essence, democracy is not simply a description of a political form of social control. It is a “web” of relationships (MacIver, 1965), a “civic culture” (Almond, 1980). MacPherson (1973) concludes that in a democracy, members must be more than mere consumers. They must be “doers”—acting on their inalienable right to “become” what they wish. This self-fulfillment characterization of democracy, it should be noted, is more than a conceptualization of democracy as “rights” of participation in matters of personal concern. It suggests that individuals who want the benefits of democracy must be agents in the preservation of the structure of that democracy as well as in the occasional participation in issues that affect them personally (Arendt, 1963).

¹ Whether this is so turns on the definition of efficiency. While the number of administrators expands significantly with increasing size, the number of workers they oversee or are responsible for grows at a faster rate.

THE LANGUAGES OF DEMOCRACY

What is to be cherished about democracy in general and ambiguity as a critical support for it is found in what Frohock (1999) calls the “elasticity of languages.” Frohock maintains that this elasticity allows

the wide scope of debate over issues and problems, the ways in which discussions continue without obvious points of closure, and the compelling needs to reach provisional agreements about practices that represent the moral and political principles of a political society. (p. 15)

Further,

Public reasoning in its judicial mode is expected to produce impartial conclusions and to achieve the political reconciliations needed for consensual governing in liberal democracies by relying on values that everyone would reasonably endorse. (p. 40)

Because academic governance in higher education is intendedly egalitarian, the language used by various constituents to exchange ideas and positions is not (or at least should not be) biased by alleged omniscience about goals and quality as promulgated by top management. Indeed, as in all organizations in the face of imperious and dictatorial management, workers tend to find ways to contravene management directives (Kerfoot and Knights, 1995; Knights and Vurdubakis, 1994). With the increase in managerialism, the language of power-oriented management (Foucault, 1977) intrudes itself into interactions between administration and faculty. As Kelemen (2000) notes, “the language of TQM, as designed by the various gurus, has been appropriated by a large proportion of managers and transformed into a technique aimed at producing, ordering and disciplining organizational practices for the purpose of increased efficiency.” (p. 485) Administrators come to believe they know what is best for the institution and no longer feel the need to seek validation of their positions. Kelemen observes that managerial language employs both semantic and poetic nuances—the first designed to connote concreteness and rationality in service of goal achievement, the second to suggest the possibility of multiple interpretations by employees. Again, Kelemen notes, “In other words, the semantic attempts to reduce ambiguity while the poetic draws on and legitimizes ambiguity.”

As has been maintained throughout this chapter, ambiguity has many positive functions. In the interstices of meanings, it creates opportunities for creativity and initiative. It also forces individuals isolated by

organizational designs that divide labor to come together for both operational and social reasons.

THE ALLOCATION OF AUTHORITY

Democracy is not only a formal system of representative government but also a philosophic rationale for allocating authority for decisions made for the collectivity. It sets the conditions for acquiring authority and simultaneously establishes the constraints on that authority. In higher education, democracy includes not only the election of representatives on the faculty side, but also the sharing of power and authority among administration, faculty, and students (and, increasingly, outside agencies such as the government and commercial interests). The question of the utility of ambiguity in college and university governance revolves around how, on the one hand, formal administrative authority becomes both empowered and constrained by the principles of democracy and, on the other hand, how faculty and other campus bodies are more strongly enfranchised by linkages with administration. As will become clear later in this chapter, a key to successful implementation of these processes is partially structural—the development of mechanisms for communication among cultures with values about goals and decision making that may differ (e.g., among faculty and administration). There are, however, some inherent limitations on the possibility of shared culture between these two entities. As Marceau (1995) notes

Managerialism stresses the need for transparent budgeting and getting value for money. While the first is unexceptional, the second raises major issues of value, timing and the interests of the beneficiaries of the policies concerned. It tends to lead to over-rapid evaluation and policy termination because the real rate of social change that is possible through most policy decisions is much slower than is imagined by observers tending to rational expectations. (p. 116)

In other words, as Carol Weiss (1977) observes, behind specific policies in any social system are value assumptions about appropriate economic and social behavior. Marceau goes on to note that adoption of a managerial vocabulary severely reduces the possibilities for alternative, equally legitimate modes of collective action. In short, to accommodate disparate values and associated values underlying administration and faculty, integrating mechanisms—both structural and cultural—must be imaginatively designed to “unfreeze” (Lewin, 1951) the value constraints hidden by language.

PARTICIPATIVE DEMOCRACY

Many social scientists have observed the trend in the United States toward severely reduced citizen participation in civic affairs. Putnam (2000), for example, reports that between 1985 and 1994, “active involvement in community organizations in this country fell by 45%. By this measure, at least, nearly half of America’s civic infrastructure was obliterated in barely a decade.” (p. 60)

In higher education, the trend is similar (Mortimer and McConnell, 1978; Tierney and Minor, 2003). The reluctance of most academics to become involved in institutional planning and decision making has amplified and ramified the influence of external managerial forces by shifting the locus for many decisions to the hierarchical administrative framework. In this current system, power and authority, increasingly now lodged at the top, create an institutional monolith that *allegedly* can absorb better the pressures for efficient operation stemming from outside. In the absence of a democratic counterforce, an expanded bureaucratic structure helps create an apparatus for decision making that “appears” to be highly rational.

Stepping into this vacuum of voluntary participation have come both new social and institutional structures and some few individuals who are able (or believe they are able) and willing to make decisions on behalf of the institution as a whole. The diverse and diffuse masses of followers both feel and believe that they are incapable of making important decisions, especially in the area of broad institutional policy (reminiscent, perhaps, of historic instances of the delegation of authority by citizens in some national systems to charismatic leaders). Many academic “citizens” look increasingly, therefore (if sometimes reluctantly), to extant formal leaders to make executive decisions on behalf of the collectivity, even temporarily yielding their mandated constitutional rights. Moreover, those who would seize the opportunity for responsibility and power tend to view the proletariat as less qualified to participate in the making of informed policy decisions. Such a position is not too different from the Platonic recommendation for system hierarchy and for “guardians” as the best kinds of governors. To be sure, there is a fine line between realistic yielding of power and authority through democratic electoral processes to those who know more and the abandonment of responsibility for participation because it requires less time and effort. According to Almond and Verba (1963), the civic culture that best nurtures democracy comprises a mix of citizens with varying degrees of desire for and actual involvement in governance.

What is the cause of the feeling of powerlessness or/and incapacity among academic citizens? It lies in the ambiguity of the means of control over their representatives. Importantly, in higher education, there is virtually no accountability for elected representatives. Representatives in essence become “stewards” who, according to Wolff (1970), are “merely pledged to serve the unspecified interests of [their] constituents in unspecified ways.” As O’Connell (1999) observes

Another reality and limitation is that the broader civil society is not really accountable to anybody. Even the courts, though they have some influence, cannot ensure that civil society will function as a democratic society needs it to. Who, if anyone, should be accountable? If no one, who defends civil society from everyone? Civil society, as a related issue, does not really have a constituency, or at least one that accepts the burden of stewardship and mission. Everyone is a participant, but no one is trustee.” (p. 78)

Constituents in the society at large have little sense of the personal effectiveness of the representatives in pursuing interests of concern to the constituents. Further, as Hardin (2000) notes, the incentives for holding officials accountable include reliable knowledge of what is expected of them—things that are “big enough or overt enough to make it into public awareness.” (p. 112)

In higher education, matters of public accountability are rarely salient at the department or school levels. Moreover, since there is little competition for elected positions at the institutional level, most representatives remain in office for many terms. Such long terms of office “involves dangers for democracy.” (Michels, 1962, p. 120; see also Ortega y Gasset, 1985) Michels notes

Democracy leads to oligarchy, and necessarily contains an oligarchical nucleus When democracies have gained a certain stage of development, they undergo a gradual transformation, adopting the aristocratic spirit, and in many cases also the aristocratic forms, against which at the outset they struggled so fiercely . . . Oligarchy . . . issues from democracy . . . The formation of oligarchies within the various forms of democracy is the outcome of organic necessity.

(Cited in May, 1965)

Contrary to Pareto’s belief that those who reach the higher echelons in a democracy are the best of the elite, in higher education, mediocrity among governance participants is often allowed to persist.

It should be noted that an argument can be made for the effectiveness of low-level citizenship participation (Dahl, 1956) or “functional apathy”

among constituents. As Berelson (1970) notes, “the apathetic segment of America probably has helped to hold the system together and cushioned the shock of disagreement, adjustment, and change.” “But,” he goes on to observe, “that is not to say that we can stand apathy without limit.” (p. 76) Indeed, “democracy has proved to be unworkable where the majority of the people are politically inert, uneducated, unconscious of their unity or of any binding common interest.” (MacIver, 1965, p. 143) The reason that apathy is not functional for democracies is that an apathetic culture is characterized by a static, compliant acceptance of ambiguity. For ambiguity to be functional in democracies, it must energetically embrace the idea and practice of recognized diversity of perspectives, values, and opinions, however dimly conceived.

To be sure, when there is a critical and prominent controversial issue on a campus, elected governance representatives become more visible and voluble. In point of fact, however, their influence declines during these times, as local faculty plenary assemblies take up the issues and make it clear what positions their representatives should take at the central level.² The distributed wisdom of democracy comes alive and becomes powerful at these junctures.

Above, we have characterized policy making in higher education as a resultant of joint decision making by administrators and faculty, with each having primary jurisdiction over certain operational domains of institutional relevance. It should be noted, however, that in addition to formal policy makers, there is an “underground” of *de facto* policy makers—the lower level administrators and faculty who carry out policy. Comparable to loyal and competent “civil servants” in government agencies, these workers fill in the gaps in the incomplete or ambiguous policies issued by formal decision-making bodies. As Lipsky observes, often “the latitude of those charged with carrying out policy is so substantial that . . . policy is effectively ‘made’ by the people who implement it.” (Lipsky, 1978, cited in Lindblom and Woodhouse, 1993, p. 59)

Colleges and universities employ two different but linked management systems. The reason for this duality is that institutions of higher learning are uniquely governed by both formal political mandates and organizational authority structures. Behavior in the formal organization (as in almost every organization), moreover, is informally political. That is, in some respects both leaders and participants “behave” as though the former were democratically elected, while in other situations, elected

² There are differences in political involvement of faculty across institutions of higher education with different levels of prestige.

leaders act as though they are officials hired from outside and appointed, not elected, positions in the hierarchy.

Decisions are made either in the organizational framework or in the political framework, and sometimes in both. Some decisions are made exclusively through the governance structure that is composed at least in part of “representatives” from different constituencies on a campus. Other decisions are made by managers in an organizational hierarchy. Still other decisions are made jointly. Woven throughout the structure are the norms and patterns of decision making of professions—e.g., institutions conduct themselves as partners in a law firm. Needless to say, the bases of authority in these three types of organizations are quite different (Parsons, 1954). Indeed, the bases are often ambiguous in different types of institutions. For example, the balance in community colleges is quite different from that in prestigious universities. The organizational challenge for colleges and universities is to find ways to engender collaborative/cooperative modes of interaction. Inevitably, this requires the development of a “culture of cooperation” in which conflicts between or among the authority systems are settled amicably. When such cultures are in place, the system tends to be “collegial.” When they fail to materialize, the system becomes “differentiated” (Martin, 1992) and often politicized.

The problems of meshing the three systems stem in part from the inevitable division of labor in organizations, in which each system generates unique vocabularies and grammar, despite the appearance and utility of commonality (Bourdieu, 1977, p. 79). Further, through the strategic use of persuasive language, changes favoring those more skilled are enabled. As Suddaby and Greenwood (2005) note

This emerging perspective offers a distinctly political view of institutional change in which entrepreneurs skillfully interpret and exploit contradictions embedded in dominant institutional logics to further their self-interests . . .

Further,

Drawing from Burke’s (1969) notion of language as symbolic action, contemporary rhetorical analysis has adopted a socio-cognitive perspective on discourse, which assumes that opposing actors in a context of social change adopt genres of speech and writing that subconsciously reflect and deliberately manipulate the values and ideology of a particular discourse community . . . Social change is thus facilitated by manipulating and reconceptualizing genres . . .

Whenever systems are differentiated into more specialized subsystems, some degree of “suboptimization” occurs. That is, the divided units compete and tend to try to maximize the achievement of their more local goals at the expense of those of the institution as a whole. To some extent, the culture of cooperation can be brought about through overlapping organizational structures and by enlightened leadership from the differentiated sectors that can adjudicate fractures in an evenhanded way. Indeed, a form of “knowledge brokering” (Hargadon, 2002) is needed. We will have more to say on this below.

In addition to the organizational challenges of differentiation brought about by the division of labor, institutions of higher education, like other organizations, must find ways of enhancing and sustaining the motivation of its workers. With Etzioni (1961), we will argue here that modes of effecting worker compliance with organizational expectations must be appropriate to the nature of the organization. It would be unreasonable, for example, to expect prisoners to comply with prison regulations expressed through hortatory exclamations of guards. Rather, in such a coercive organization, force or threat of force must be used to exact obedience. Ambiguity in that setting is almost always dysfunctional. (One might imagine a growth-oriented prison where different norms operate, but such institutions are rare.)

In utilitarian organizations, workers have more freedom to negotiate their work conditions and rewards. Etzioni (1961) describes the control and involvement in such organizations as follows:

remuneration is the major means of control over lower participants and calculative involvement (i.e., mild alienation to mild commitment) characterizes the orientation of the large majority of lower participants. (p. 31)

When ambiguity finds its way into such settings, it has mixed benefits and detriments. In these organizations, the level of trust itself is ambiguous, leaving workers more self-protective and self-serving.

Colleges and universities have traditionally been predominantly “normative organizations,” according to Etzioni. In such organizations, workers, at least the “professional” workers, identify with the larger organization’s objectives and processes, which they have internalized as legitimate (though operationally, they are committed to their subunit goals). Institutions of higher learning, of course, have mixed modes of engendering compliance with organizational objectives and procedures (Lunsford, 1970; Shinn, 2004). Further, there are significant variations in these institutions depending on Carnegie classification (and still other

variations cross-nationally) (Amaral, Jones, and Karseth, 2002). According to Etzioni, compliance in normative organizations is effected through “leadership, rituals, manipulation of social and prestige symbols, and re-socialization.” (Etzioni, 1961, p. 40)

For optimum efficiency and effectiveness in Etzioni’s schema, there must be a “match” between the type of organization and the modes of gaining compliance utilized. Where there is a mismatch, commitment and compliance of the workers is reduced. As will be seen, mismatches in higher education appear to be increasingly common as institutions come to be considered less and less normative and more calculative or even coercive. The result (sooner or later) is or will be less commitment and more alienation on the part of workers (Currie and Vidovich, 1998).

Colleges and universities with their mixed governance systems—bureaucracies and democracies—create a dilemma for participants of both sectors when they come together to work on policy issues. Again using Etzioni’s terminology, on one side, administrators for the most part will come to negotiations from their “pure involvement” backgrounds and with “calculative” orientations—anticipating zero sum trade-offs between what they want and what they expect to receive. Theirs is a positivist perspective, believing in the epistemological possibility and wisdom of discerning a “reality” beyond their imaginations that is shared by others. Because of their calculative bent, however, the presentation of that reality for public discussion is often manipulated or distorted by administrators for the self-serving gains of the administration.

Faculty, on the other side, with their “social moral involvements,” in their relationships with others generally expect nonzero sum outcomes that might satisfy both parties. Or, at least they are partially constrained not be calculative by extant professional and local norms. For the most part, faculty have more of a postmodernist epistemological perspective (though not necessarily fully realized consciously), accepting the idea that no one perception of “reality” is necessarily “true.” After vigorous argument in a “rational” dialogue, they are more willing to accede to others the legitimacy of alternative realities (budget realities to the contrary, notwithstanding). Again, there are variations across disciplines, and for members of each side, there is likely to be ambivalence (Merton, 1976).

Clearly, faculty would seem to be more psychologically disposed to work in democratic settings and under democratic decision-making rules (Lazarsfeld and Thielens, 1958). In colleges and universities, the strong positivist traditions of cognition and conflict resolution through reasonable discussion imbue the system with a strong norm of attention to reflective action aimed ultimately at consensual paradigm development.

Normatively academics, over time, typically strive to come to agreement about what is “true”—by which they mean what can be defended rationally (Schön, 1983). Or, as Kenneth Gergen (1992) suggests

Thus, the typical manager will draw from the repository of wise, perspicacious or “true” sayings within the particular subculture of the firm to generate intelligibility. Or to put it another way, he or she manages the available language conventions to achieve a sense of rationality as defined within the organization. (p. 219)

Faculty are attracted to the profession at least in part by its intellectual richness and diversity. Most develop a temperament that can accept professional challenges to their own perspectives without retreating into stubborn intransigence. Academics live and thrive in a culture of dissent. Moreover, the academic timetable is less stringent and exacting than in the profit-making sector—in the sense that deadlines tend to be more long range. In sum, academics live in somewhat “messy” environments where toleration of ambiguity is a necessary condition of work. Abrahamson (2002) defines “mess” as being disorderly, accumulative, and comprising varied entities. Such environments are also those where democracy also prospers. Messy environments tend to spawn original ideas by virtue of the chance proximity of ideas.

Importantly, “threat perceptions—both dispositional and environmental—play a central role in determining whether a set of citizens will internalize and apply the democratic principles of restraint and tolerance, or whether they will set them aside in particularly difficult situations . . .” (Sullivan and Transue, 1999, p. 633)

To be sure, in practice, neither side—administration or faculty—is homogeneous in value and belief system. Again using the Etzioni typology, some administrators are morally involved, and some faculty are calculative. Further, in negotiations, both sides learn the other’s prevailing mores and try to accommodate their styles accordingly. Etzioni argues that to improve efficiency, organizations should move toward a “congruence” of power use types and modes of involvement. Thus, morally involved workers should be treated with normative power, and calculatively biased workers should encounter remunerative power. Given the significantly different orientations of the participants in joint decision making in colleges and universities (basically, the administration and faculty), however, there is no one “congruent” pattern that will work for both sides. As Weber (1947) notes, relationships among parties in a social setting consist “entirely and exclusively in the existence of a *probability* that there will be, in some meaningfully understandable sense, a course of social action.”

As has been maintained throughout this chapter, however, absent this probability and congruence, the cost is a loss of democracy and its concomitant benefits. The seemingly ineluctable advance of managerialism may, of course, permit a more consistent application of congruent power use through personnel selection and pruning, but this homogeneity of value, attitude, and disposition is likely to result in more “group think” and less diversity and energy.

These arguments in favor of democracy in higher education will be seen as controversial. There has been considerable literature revealing the daunting difficulties of implementing and sustaining democracy in organizations in general (Collins, 1997; Forrester, 2000; Randolph, 2000). As Kerr (2004) notes

Close analysis suggests that political democracy provides little guidance for organizational democracy because its essential characteristics—accountability to the governed, right of participation, free exchange of information, and right of representation—are rarely, if ever, supported in organizations. Furthermore, the basic function of political democracy—legitimization of authority—has no counterpart in organizations. (p. 81)

The theme of this chapter, however, is that colleges and universities are uniquely suited to a form of democratic governance that is essential to their effective operation. That institutions of higher education are now looking to managerialism as a model would seem to be counterintuitive and counterproductive.

CONFLICT

Communication patterns differ in the administration and in faculty networks both in substance and direction. Communication can be instrumental and/or expressive. Instrumental communication carries information and knowledge, while expressive communication addresses attitudes, norms, and values. In “administrations,” like those in a college or university, the flow of communication is primarily vertical because of the need for centralized coordination, planning, and policy directives and for reports of behavior and outcomes at lower levels in the hierarchy. Most workers in administrations have calculative orientations. Hence, the substance of communication tends to be informational and directive, with less emphasis on expressive communication. Among the faculty, where peer relationships are more common and differential reward possibilities are more restricted, more “expressive” communication up and down

as well as across the flatter hierarchies is necessary to insure normative compliance.

Thus, communication in joint decision-making bodies in colleges and universities tends to be distorted at both the sending and the receiving ends by participants with different backgrounds and expectations. This ambiguity of orientation in negotiations both interferes with the possibilities for cooperation and facilitates the ultimate resolution of disputes. When the latent value positions—the Etzioni dualism—are made manifest, parties in disagreement tend to “dig in,” making progress difficult.

A further source of conflict arises out of differences in understandings of the nature and use of authority. Questions of authority are critical in all organizations, including colleges and universities. In almost all professional organizations, there are conflicts between the needs of the professionals who perform the line operations (e.g., surgeons in a hospital) and those whose roles are supportive of the line operations—those who must arrange the organizational conditions to accommodate the professional needs (e.g., the hospital administrators). The limits of budget and the changing environments in which the professionals serve are seen as necessary constraints on professional activities that otherwise might exceed the capacity of the organization’s resources.

The structure of institutions of higher education is based on conflicting philosophical premises that promise continual conflict—as well as ambiguity. The assumption (largely subliminal) of members of the administration is that their authority in the administration stems from the primacy of the administration as part of a larger social entity—a political “state.” The assumption stems from an historical social and cultural tradition of faith of members of the state in the wisdom of the rightful “ruler” (the higher authority), and from their willingness to subject themselves to the beneficence of the ruler (Laski, 1935). In this view, the proletariat “exist” for the good of the state and are accountable to it and to its figureheads/leaders. A contrary view is that the authority of the citizens borrows from the democratic principle that the state is accountable to the people, not the reverse. The state (i.e., the institution, its administrative apparatus, and its leaders) exists for the good of its populace.

Translating these conflicting premises to the university setting, on the one hand, the citizens (e.g., the faculty) owe allegiance and obedience to the presumed beneficent rulership of the administration. From the other perspective, the administration “serves” the faculty. From these two opposing premises flow policies and practices that are inherently ambiguous or openly in conflict. In a system of asymmetrical power, those in lower positions are likely to resent and resist decisions made on their

behalf—even if when first hired, they accept the contract of subordinated status.

THE CONCEPT OF AMBIGUITY

A full discussion of the idea of ambiguity comes late in this chapter in order that some of its many nuanced understandings could be limned earlier. In this section, we will consider both the multiple meanings of ambiguity as well as its sources.

The concept of ambiguity must be understood in its manifestations at three levels and both positivistically and phenomenologically. At the system or organizational level, the practical necessities of work involve exchanges of information among participants that may themselves be objectively ambiguous in their meaning, owing to grammar and other complexities of language. The communication itself, in other words, is objectively poorly presented.

On the other hand, the communication may be objectively clear, but not understood by the recipient. As Martin (1992) notes, ambiguity is subjectively perceived, judged so “because it seems to be unclear, highly complex, or paradoxical.” (p. 134) She defines ambiguity as a perception of “lack of clarity, high complexity, or a paradox.” In her words

A lack of clarity occurs because something seems obscure or indistinct, and therefore hard to decipher. Silences and absences can also create a lack of clarity. Something is highly complex because a plethora of elements and relationships makes it difficult to comprehend in any simple way. Both a lack of clarity and high complexity can sometimes be resolved with more information or a fresh insight, making the ambiguity disappear. Paradoxes are not so easily resolved. A paradox is an argument that apparently derives contradictory conclusions by valid deduction from acceptable premises. (p. 134)

How do organizational phenomena, for example, in colleges and universities, become “unclear,” “highly complex,” or “paradoxical” or appear to be so to participants? What, in other words, are the sources of subjective or perceptual ambiguity?

One answer lies in the unusual number of organizational phenomena in higher education that are intentionally or unintentionally “uncertain, vague, indefinite, indistinct, indeterminate, unclassifiable, anomalous, obscure, abstruse, incomprehensible, puzzling, mystifying, enigmatic, enigmatical, perplexing, problematic, problematical, cryptic, oracular, Delphic.” (Rodale, 1978, p. 45) Colleges and universities are “inherently”

ambiguous, some would say, because these kinds of institutions are professional and educational organizations with long histories of patterns of behavior and underlying values that have never been made explicit. For example, as is well known, colleges and universities typically have amorphous institutional goals, mixed authority systems, multiple and sometimes *sub rosa* power holders and power strength, overlapping responsibility for actions (i.e., complex structural jurisdictions), a reliance on the predominance of experience over theory as a guide to the future, and obscure symbols of success (see Cohen and March, 1974). Importantly, however, the characteristics can be real or imagined.

Each of these features of ambiguity has its sources in one of four fundamental organizational realities—the nature of the organization, its relationship to the external environment, the interface between the organization and the individual or internal operating unit, and the limitations of the worker, himself or herself (Milliken, 1987, 1990). These sources or “causes” create dilemmas of choice for decision makers (Weick, 1979).

In addition to structural and processual ambiguities in higher education, there are practical and “softer” variables embedded in the problem-solving interactions of the participants. McCaskey (1982; see also Weick, 1985), for example, conceptualizes ambiguity generally (not necessarily uniquely to higher education) as having 12 sources. They include the nature of the problem, information reliability, multiple conflicting interpretations, different value orientations, unclear goals, resource limitations, contradictions and paradoxes, vague roles, missing success measures, unclear cause-effect relationships, use of symbols and metaphors, and fluid participation. Still another source of ambiguity is “identity ambiguity.” (Clark, 1972; Corley and Geola, 2004) In most institutions of higher education, the uniqueness of the institution’s character *vis-à-vis* comparable sister institutions is rarely made manifest. This “saga” is ambiguous in most cases and is frequently fragile, though as Clark notes, “when the saga is firmly developed, it is embodied in many components of the organization, affecting the definition and performance of the organization and finding protection in the webbing of the institutional parts.” The impact of the saga is different for faculty and administrators. For the former, the power of the saga or belief system for the institution as a whole is desegregated and subordinated to the smaller, subunits where more frequent interactions among members can reinforce the more immediate ideological system. The strength of the institutional saga for faculty is also compromised by external professional attachments and identities (Gouldner, 1957). The result is an ambiguity of “appropriate” strength and locus of identification. It should be noted that this diffuseness serves

and inhibits both faculty and institution by adding a richness to organizational life, while making it difficult to garner concerted action at both centralized and decentralized levels.

For the administration, on the other hand, there is less variance in perception of the identity of the institution. Administrator identification tends to be more unified around the concept of the campus, except for individuals at the highest levels. Administration *per se* is by definition addressed to the forwarding of overall institutional aims. Individual efforts are focused on collective, not personal achievements—though, to be sure, advancement is based on individual success, and there is a degree of internecine conflict among administrative departments. Total institutional identity and pride in institutional reputation are, in other words, part of the administrative culture (Goffman, 1957).

Needless to say, the divergent orientations of faculty and administrators render collaborative efforts somewhat difficult. The objectives of the collaboration for the faculty are to gain advantages for individual faculty to perform better, while the objectives for administrators are to facilitate the advancement of the institution as a whole by controlling the means to individual achievement. Importantly, the ambiguity of these orientations affects the quality and outcomes of the interactions.

Let us return to Martin's focus on the "use of symbols and metaphors" a cultural explanation of ambiguity. Martin describes three alternative organizational cultures, one of which is usually the occasion for ambiguity. The first is an "integrative perspective," in which organizational participants pursue their business under the guise of presumed normative consensus and place high value on concern for the individual, egalitarian participation in decision making, and emphasis on innovation. The second is a "differentiation perspective" that occurs when the system is intentionally decentralized in structure and ideology, but inconsistencies are rampant, harmony exposed as a myth, and conflict abounds. The third condition is called the "fragmentation" viewpoint. Martin reports that this perspective focuses on ambiguity as the fundamental nature of culture.

Essentially, in this last view, organizations are "anomic," and there will be confusion about the beliefs of the members, as norms and values are not widely known or are not widely shared. As Levine (1985, p. 167) notes, "Conflicts of value and related alternative choices representing different axes of rationalization permeate bureaucratic organizations." (p. 167) Clearly in different institutions of higher education, any of the three perspectives may obtain. However, the bifurcated structure of administration and faculty in higher education generates different and often

competing cultures that correspond most trenchantly to a differentiation or fragmented perspective.

In anomic situations, as noted earlier, ambiguity may result from the lack of clarity of or biases in communications—communications on subjects ranging from goals to technology to participation. Further, ambiguities result from receiver inadequacies—in particular, from the personal, self-serving biases of the receiver that may distort even an unambiguous communication.

Another kind of ambiguity results from the generalized uncertainty that organizational officers feel—the “equivocality of meaning” in organizational life (Cole, 1999). Since at the levels of academic middle and upper management, administrators usually have had faculty experience and usually continue to have faculty rank (and sometimes teach), they have ambivalent feelings about the roles they are and should be playing. Indeed, the department chair role is said to be one of the most difficult in academia because the chair must simultaneously represent the administration—“above”—and the faculty—both as peers and subordinates.

With the advent of the managerialized university, however, the ambivalence will be lessened as the managerial career becomes divorced from the faculty. As Robert Rosenzweig (1998) notes, the professionalization of the administrative career (e.g., dean, provost, president) has resulted in a cultural separation of administrators from faculty. “Distance from the faculty life is a *de facto* requirement for becoming a president.” (p. 133)

The above discussion of various kinds of ambiguity attributes most of the cause of ambiguity to organizational conditions. Dequech (2001), however, addresses the question of the meaning of ambiguity by relating it to bounded rationality and *individual* uncertainty. Citing Camerer and Weber (1992, p. 330), he quotes these authors’ views with respect to *strong* uncertainty: “Ambiguity is uncertainty about probability, created by missing information that is relevant and could be known.” Workers may not know with accuracy, the exact probability of each future event in question, but they do know all or most of the likely events to take place. On the other hand, under conditions of what he calls “fundamental uncertainty,” workers cannot anticipate the full breadth of future events that “might” occur, hence cannot attach a probabilistic estimate. Einhorn and Hogarth (1986) say this “uncertainty about uncertainties” is the essential meaning of ambiguity.

In the mainstream subjectivist conception, uncertainty is characterized by the presence of a unique, additive and fully reliable probability distribution. Defined in opposition to this, strong uncertainty is

essentially characterized by the absence of such a distribution, due to the paucity of evidence.

(Dequech, 2000, p. 44)

And

Ambiguity usually refers to a situation in which there is uncertainty about probabilities and this uncertainty is due to lack of information . . . A situation in which a person does not know which event will happen but unambiguously assigns a definite probability to each and every event involves risk but not ambiguity.

(Dequech, 2000, p. 45)

In other words, ambiguity in organizations allows for the possibility that with additional information, decision makers can assign probabilities. On the other hand, more fundamental uncertainty will inevitably prevent those decision makers from achieving sufficient clarity to make intelligent decisions.

The definitional issue is exacerbated by the admixture of different kinds of authority—hierarchical, professional, and political—in “mixt systems.” (Lunsford, 1970) In such a system, all decisions, even long-standing bureaucratic ones, can be challenged on “political” grounds. In a polity, the community is permitted, even expected, to participate. This potential for conflict results not only in ambivalence on the part of a formal authority but also ultimately in ambiguity on the part of those who encounter him or her in organizational matters. In the case of a chairperson, since he/she will sometimes side (calculatedly or under pressure) with the administration and sometimes with the faculty, his or her behavior is not predictable, hence ambiguous.

Oftentimes, ambiguity is intentionally or unintentionally disguised as agreement. For example, in order to avoid open conflict, disputants come to agree not to make their positions publicly known. So, the organization comes to have a “latent” or underlying set of unresolved problems (Cyert and March, 1963). The latter may be real but little understood. Or, they may be real but understood differently by disparate constituents. A third possibility is that the problems are not real, but seem to be so because of ambiguities about them. One potential benefit of an illusion of organizational comity is the somewhat more peaceful collaboration that follows from it. The cost is the perpetuation of inefficient modes of production that are allowed to persist because open conflict is perceived to be worse than sustained ambiguity. In place of both the illusion of organizational peace and the manifestation of dysfunctional conflict, the

possibility of the organization and administration of a carefully designed culture of ambiguity exists.

The problem is that there is no known “standard” degree of functional ambiguity. It differs for different kinds of organizations, especially with different histories. The issue is related to Barnard’s (1938) “zone of indifference,” though that concept deals with acceptance of authority. The level of acceptable tolerance among organizational participants for too little or too much ambiguity is part of the ambiguity problem itself. That is, organizational norms may support participants’ willingness to leave a particular situation undefined, but the norms do not clearly delineate the tolerable deviation from the norm because ambiguity itself has no concrete behavioral referents. It can be said, however, that most organizational members will have an intuitive sense of when the magnitude of ambiguity is getting out of hand; but they will not be able to identify the qualitative nature of the excess deviance.

Ambiguity can have two diametrically different effects on workers. On the one hand, unresolved “unnecessary ambiguity” (e.g., ambiguity fostered by poor communications or badly written operating procedures) can result in frustration and desultory commitment to organizational tasks. On the other hand, “functional ambiguity”—e.g., uncertainties about future states (Dequech’s “fundamental ambiguity”), or genuine diversity in values, or differences in operating procedures—can lead to substantive arguments about purposes and methods that help redefine institutional purpose and enhance individual commitment. It is toward this latter area that the thesis of this chapter is directed—namely, the need to introduce more of this kind of ambiguity into governance.

Again, from one perspective, ambiguity can foment political internecine infighting. From another perspective, ambiguity can support multiple positions without an organizational deterioration into captious cavils. Which direction the organization goes is a function of leadership and culture. Ambiguity, that is, can be a valuable cultural artifact that must be consciously observed and preserved by institutional leaders else its benefits will be lost. For example, as noted above, alleged anxiety-reducing replacements for an ambiguous culture and structure include the imposition of a controlling structure and institutional ideology dominated at the top. Elimination of ambiguity through the use of bureaucratic rules has both manifest and latent negative impacts on workers’ psyches (Selznick, 1980; Weber, 1978; many others). Even when bureaucracy’s unfortunate dehumanizing effects are not the direct result of leaders, the desire to “escape from freedom” (Dewey, 1960; Fromm, 1941) is seductive,

and workers frequently seek succor in bureaucracy's predictability and the security of its rule-oriented impersonality.

Before pursuing a strategy of implementing ambiguity, however, it is necessary more fully to understand the unique confluence of organizational forms that comprise governance in higher education. For it is in the interstices of their integration that ambiguity can be most useful.

Ambiguity in organizations must be addressed at both the structural and cultural levels. Structural ambiguity refers to a formal lack of clarity about responsibilities for work processes and authority for decisions. Cultural ambiguity reflects a lack of exactness about attitudes and values of workers in formal and informal organizational settings with respect to work procedures and outcomes. These latter include both programmed activities and nonprogrammed, "emergent" activities that workers must create to do the work, as well as tacit activities that are needed to maintain patterns and reduce tensions (Homans, 1950; Parsons, 1951). Since it is impossible to specify all required worker behaviors and attitudes and values (Homans, 1950; Simon, 1957), a host of interstitial sets emerges to fill in the blanks. There is an important distinction between a "polity" and an organization or overall social system. As Kerr defines it

A polity is defined by the fact that its members participate in and are governed by a formal political process. It is different from the idea of society, however. Societies are social groups that may or may not have a formal political process. "Polity" emphasizes the political and legal aspects of a group, while "society" emphasizes the social and cultural. (p. 94)

Cultures and social systems are quite different. Batteau (2001) considers organizational cultures as organizationally dispersed "stories, myths, symbols, rituals, and stylized actions and interpretations the group uses to make sense of what they are doing, what they have done, and what they should do."

Trust is an "attitude" of an individual toward others. It is set in a context that comprises shared norms, knowledge, and expectations. The success of any formal organizational system is based in part on "trust" (Fukuyama, 1995; Kramer and Tyler, 1996). In an untrustful system, individuals and suborganizations tend to suboptimize and are reluctant to share information. Increasing size and bureaucratization tend to result in less trust, requiring still more bureaucracy to assure compliance to organizational expectations.

There is a variety of interpretations of the meaning of trust. Trust can be "calculative," "norm-based," or "expectations-centered." (de Boer,

2002, p. 48) Calculative or instrumental trust generates behavior that is based on the relative certainty of the deterrent consequences of violations of the trust (Lewicki and Bunker, 1996). It is

an ongoing, market-oriented, economic calculation whose value is derived by determining the outcomes resulting from creating and sustaining the relationships relative to the costs of maintaining or severing it. Compliance with calculus-based trust is often ensured both by the rewards of being trusting (and trustworthy) and by the “threat” that if trust is violated, one’s reputation can be hurt through the person’s network of friends and associates. (p. 120)

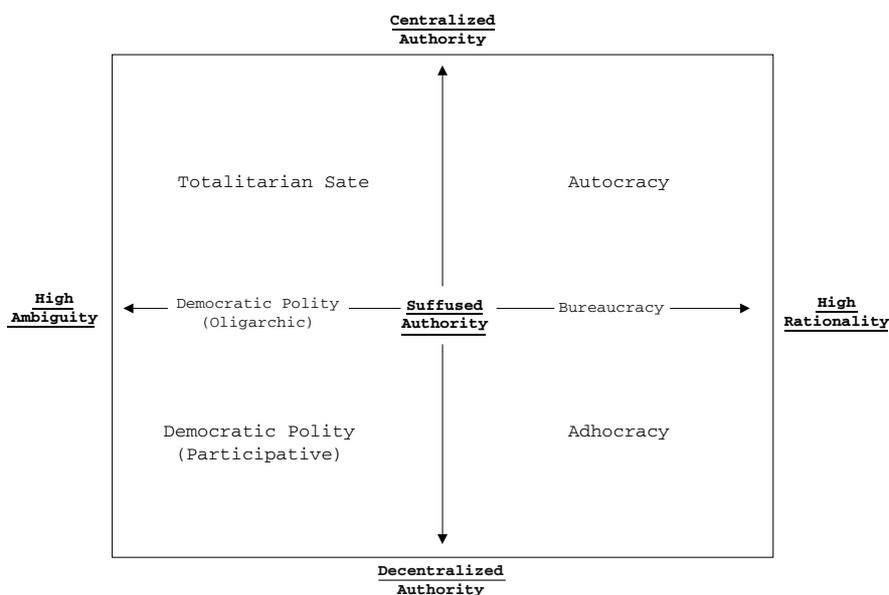
“Norm-based” trust is another kind based on collectively held values and norms, particularly in less certain environments. Knowing that others hold the same values gives assurance that one’s own actions will be understood. Related to this is “knowledge-based trust,” which is “grounded in the other’s predictability—knowing the other sufficiently well so that the other’s behavior is anticipatable.” Rather than being based on deterrence, it is the resultant of a history of trustworthy interactions.

A large debate continues in the literature over whether “deep” trust is necessary for democracy to be effective (Sullivan and Transue, 1999). Functionalists maintain that citizens must achieve consensus on essential values—e.g., a trust in other people. Others, however, suggest that societies that have such consensus do not “need” the political apparatus of democracy. It serves no purpose, as disputes can be handled amicably by recourse to basic values. This position asserts that when “liberal values” support democracy, agreement is necessary only on the rules of contestation—the modes by which democratic decision making must take place (Rustow, 1970, p. 362).

BALANCE IN ORGANIZATIONAL FUNCTIONING

While democracy and bureaucracy are fundamentally different decision-making systems, the ambiguity and authority that exist in each are not polar opposites. Figure 10.1 below illustrates the relationships among ambiguity and authority that are hypothetically manifested in six different organizational structures for decision making—totalitarian state, autocracy, oligarchy, bureaucracy, representative democracy, and adhocracy—each of which can be found in colleges and universities either at the total institutional level or below. By identifying its predominant structure, institutions can understand the distribution of both ambiguity and authority.

Figure 10.1: The structure of academic authority



Systems can be highly ambiguous, yet highly authoritarian (see northwest quadrant). In a totalitarian state (for example, in the Communist Soviet Union), citizens could be terrorized by the uncertainty of when and where authorities would act. On the other hand, in a piecework factory where individuals independently produce completely scripted tasks, an autocratic system can be highly rational.

Between centralized and decentralized authority is a system in which authority is “suffused” throughout the system (see Helsabeck, 1973). System-wide authority *per se* is somewhat decentralized, but at the local level, it may be centralized. For example, department chairs may be given great discretionary power by the central administration, but exercise it in an authoritarian way in their own departments.

When authority is suffused, an oligarchy will emerge in a system with high ambiguity, but a bureaucracy will arise if the system tends toward high rationality. As authority becomes more centralized, highly controlling structures obtain, while with high decentralization, the system moves toward either participative democracies or adhocracies. In sum, to understand how authority is structured in a system like a college or university, it is important to account for both the degree of decentralization and the relative emphasis on rationality.

Recent history reveals a conflicting shift in patterns of authority in higher education. While the trend toward centralization of authority yields more control to the administrative sector—the “managerialism” noted earlier—the market forces leading toward decentralization of authority for academic decision making constitute a countervailing trend. This flattening of organization is, in fact, a trend in organizations in general (Ostroff, 1999). In a postmodern world of academic capitalism (Slaughter and Leslie, 1997), departments are both encouraged and constrained to define their realities and to act on them. Hoggett (cited in Reed, 2002, p. 170) calls these strategies “centralised decentralisation” or “regulated autonomy.” In higher education, however, attempts by a central administration to control the manner and extent of regulation in the alleged interests of efficiency result in information deprivation at all levels.

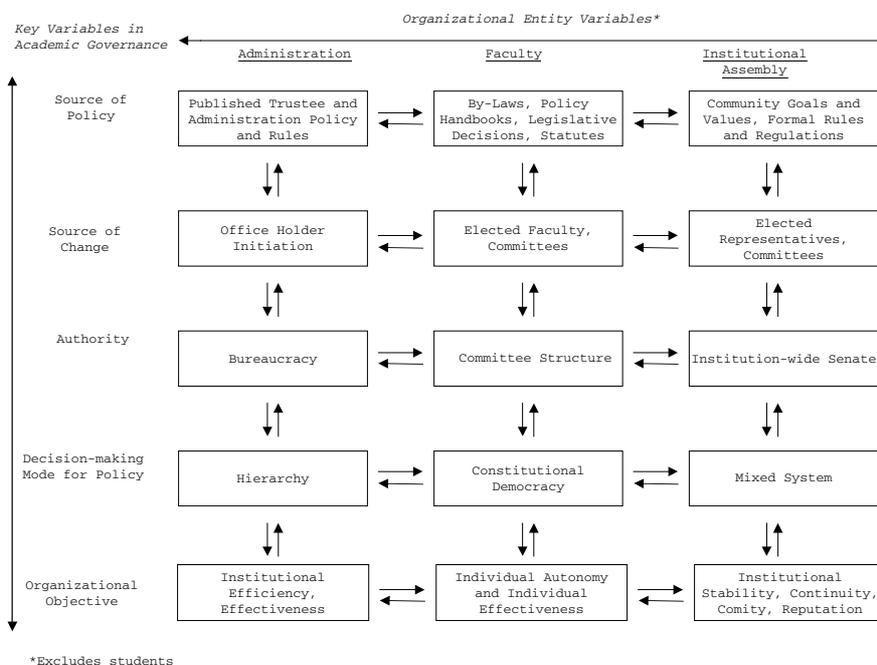
“Appropriate” levels of ambiguity and authority may also be keyed in part to contemporary contingency theories that suggest a matching of internal structural and cultural conditions to the levels and quality of external environmental uncertainty (Donaldson, 2001; Duncan, 1972; Nadler and Tushman, 1977). Central to the argument also is the notion that complex organizations comprise many overlapping systems of coordination and control (Mintzberg, 1983a, pp. 19–23), each of which satisfies different functional needs of the organization. Attempts to simplify and unify—to reduce their ambiguity—therefore, run the risk of vitiating the benefits of the disparate systems.

IMPLEMENTING AMBIGUITY IN COLLEGES AND UNIVERSITIES

From this discussion of bureaucracy and democracy, it should be clear that their underlying assumptions and modes of operation are antithetical in many dimensions. Yet, since colleges and universities apparently must and presently do operate with a dual system, some reconciliation must be necessary. The true problem is to prevent bureaucracy from creeping into the democratic ethos of academia and to enable academics to appreciate the needs and demands of bureaucracy. More ambiguity is needed on one side; more rationality on the other.

In Figure 10.2 below, the three primary decision-making bodies in a college or university are displayed. Ambiguities exist both within and between these sectors, and organizational actions that flow through each sector are often either assumed to be clear or known to be ambiguous and allowed to remain so. Oftentimes, their ambiguity will become apparent when implementation authority or directives appear to be in conflict. As

Figure 10.2: Potential and intentional ambiguities in governance

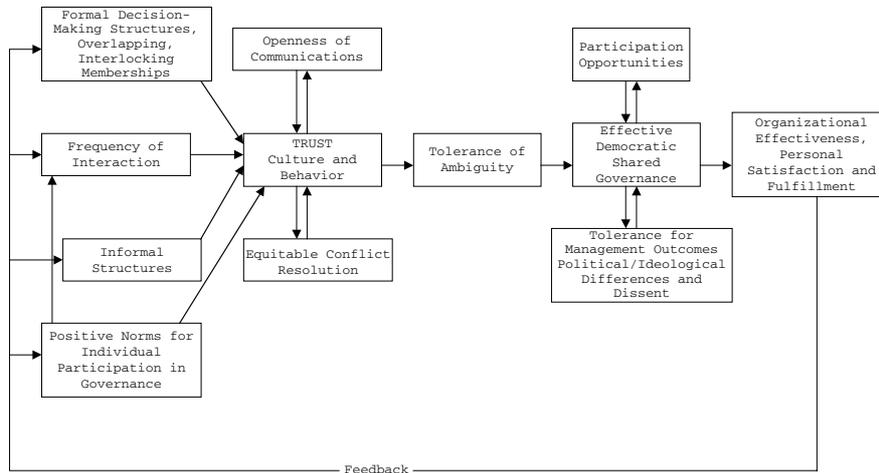


noted earlier, the danger of managerialism is that in attempts to integrate the perspectives of the different sectors and their policies, administrative prerogatives will prevail. In part this is because a dispersed faculty whose responsibility for governance is a part-time occupation cannot marshal support for its position quickly and effectively enough. Moreover, representative democracies are notoriously slow to act.

To preserve the ambiguity needed to advance the effectiveness of colleges and universities, a culture of trust is essential. In Figure 10.3 below, we have displayed the central role that trust plays in supporting ambiguity and ultimately effective democratic governance.

Note that the primary influences on the generation of trust are formal and informal interaction formats. Despite differences in ideology and personalities between administrations and faculty, there is much literature to support the notion that the more frequent the interactions, the more individuals come to care for and appreciate their coworkers (Hare, Borgatta, and Bales, 1965). Hence, these formats must be institutionalized and supported. George Keller (1989) emphasizes the need for new and/or nonformal groups that integrate disparate parts of the organization. Keller

Figure 10.3: Implementation of optimum levels of ambiguity



stresses that such integration replaces self-serving politics with collaborative modes of action. Relatedly, Andrew Hargadon (2002) suggests that such “knowledge brokers” are the key to successful innovation processes.

Knowledge brokering organizations serve as windows into the relationship between learning and innovation because they routinely transform their past knowledge into new and innovative products, processes, and services. These organizations move between multiple domains rather than pursue centrality with any one, and this article grounds the model of knowledge brokering in examples from case studies of eight such firms (p. 46)

Such brokers in higher education would act as mediators, translators, and interpreters of the cultural worlds that are occupied by faculty and administrators. Their roles would not be to advance one side or the other, but to make known the premises and biases of each side to the other.

Note that in Figure 10.3, trust is hypothesized to generate and benefit from an openness of communication and a cultural value of equitability of conflict management outcomes. Note also that trust breeds a tolerance of ambiguity, which, in turn, produces effective democratic shared governance. The latter has the effect of increasing participation opportunities, positive norms for individual participation, and more tolerance for political/ideological differences and dissent.

Mutual understanding, however, requires more than simple trust. As Gadamer (1975) and Habermas (1984, 1987) have observed, there must

be continuous interaction efforts at consensus making on the substance of differences, rather than on compromise. Democracy requires “paying attention” (Bellah *et al.*, 1991). As Deetz (1992) notes

From a participation perspective, communication difficulties arise from communication practices that preclude value debate and conflict, that substitute images and imaginary relations for self-presentation and truth claims, that arbitrarily limit access to communication channels and forums, and that then lead to decisions based on arbitrary authority relations. (p. 161)

The dependent variables at the far right of the figure—organizational effectiveness, personal satisfaction, and fulfillment—follow from such governance structures and behaviors. While it could be argued that a more managerial, bureaucratic mode of governance might produce higher value levels in these dependent variables, much of the literature on contingency theory suggests otherwise. In a rapidly changing environment where institutions must adapt quickly and in organizations where professional autonomy is both necessary and cherished, bureaucratic controls are simply not appropriate. They prevent recognition and response to opportunities outside of the organization, they impede functional deviation, and they demotivate workers (Weick, 1978, 2003).

CONCLUSIONS

“The creation of a genuinely democratic public is a daunting enterprise . . .” say Bellah *et al.* (1991, p. 142). It is especially so in colleges and universities, where decades of internecine strife over power, policies, and practice have subtly and incrementally poisoned the culture. The cultivation of a culture and structure of ambiguity in American higher education, however, is a prerequisite for the renewal or/and enhancement of academic democracy. And, participation in academic decision making is an essential condition for preserving and enhancing the vitality and creativity that, despite structural and cultural impediments, has made colleges and universities in this country so successful. Yet, as Dahl (1990) observes, democracy has not sufficiently been embraced in these institutions. He notes

In these institutions democratization has not gone nearly as far as in the state. Even in institutions where the ostensible claim to legitimacy by those who wield authority is that leaders are democratically chosen, as in the political party and the trade union, everyone knows that internal democracy is mainly a fake. (pp. 2–3)

It would be foolish to argue that institutions of higher education, the citadels of rationality, should abandon careful thinking and planning of missions and strategies. Certainly, practical concerns dictate clear attention and informed debate. Rather, the argument for more ambiguity is directed at recognizing the critical importance of ambiguity as a guarantor of the very viability of reasoned discourse as well as creative deviance. This proposal is for the preservation and enhancement of ambiguity as a *cultural* value within which *ad hoc* rational, situationally contingent decisions can be made within broad general policy and value guidelines (McLoughlin, Badham, and Palmer, 2005).

Clearly, the success of such an approach is dependent at least in part on the question of whether democracy can exist in the absence of a unifying community. Alain Touraine (1998) suggests that “Democracy is based on the disappearance of the One” (p. 147), by which he means that democracy requires the dismissal of the claim that “society can be homogenized or totally controlled.” It cannot and should not be overrationalized. With respect to higher education, Readings (1996) points out that the bureaucratization of colleges and universities is partially an attempt to make them efficient by rationalizing the idea of community—or, more properly, rationalizing the assumption that community is possible. In the postmodernist conception, moreover, colleges and universities are fragmented, often unconnected aggregations of entities striving to maximize their often separate and uniquely defined aims. As such, they are also resistant to attempts to homogenize their cultures.

Democracy is of necessity filled with tension and uncertainty because it is always in the process of “becoming.” Connolly (2000, p. 305), paraphrasing Nietzsche, says that democratic life “is most vibrant when critical tension is maintained between, on the one hand, being, the herd, language as equalization, and the weight of tradition, and, on the other, becoming, genius, the unequal, and creativity.” Nietzsche, however, despaired of the possibilities of such vitality. Connolly argues for the pursuit of “a deep plurality of democratic life.” In Arendt’s (1963) thesis, political life requires active involvement.

The problem, then, for institutions of higher education is how to sustain some level of integration and cooperation, especially between faculty and administration, while living with the cultural and structural fragmentation that ferments innovation and change. In the terms of this chapter, the issue is how to institutionalize ambiguity so that it is acceptable as a viable organizing premise and so that it does, indeed, allow work to proceed with at least a modicum of efficiency. This can only be accomplished

through both structural and normative change. It requires a willingness on the part of administrators to interact meaningfully with faculty in formal committees and informal settings. It demands also a refinement of the “discourse” of the rhetoric that is employed to link differentiated parts of the institution. As noted earlier, the epistemological assumptions of different parties in the discourse about goals and means are themselves different. Hence, the language used is inevitably ambiguous. If that linguistic ambiguity leads to a disinclination to cooperate or, worse, to a selfish, self-serving orientation, no progress will be made. What needs to happen is “discourse about discourse.” That is, parties in governance must take time to consider and discuss their modes of communication—not so much to clarify meaning in order to persuade, but to assure counterparts of their sincerity and of the validity of their perspectives. Under these conditions, and with the assistance of the brokers noted earlier, ambiguity will thrive—as will democratic institutions.

The argument in this chapter is certainly not that colleges and universities should become either chaotic or anomic. As Merton (1938) warned, in anomic social systems, “predictability disappears and what may properly be called cultural chaos or anomie intervenes.” (p. 682) On the other hand, total rationality is also disastrous. As Blauner (1964; see also Ellul, 1964; Perrow, 1967) observed, one of the dangers of routine technology is that workers rapidly become alienated from their work and institutions. They are impelled to act like machines themselves—efficient, automatons, without heart or soul (Marx, 1975). They are increasingly condemned and confined to the “iron cage” that Weber (1947) so famously described.

It should be noted that conflict and ambiguity are words that are natural parts of the political science argot. Some (e.g., Reed, 2002) would argue that accepting conflict and ambiguity as inevitable is an abandonment of both the long-standing “human relations” positions (Argyris, 1964; Bennis, 1969, 1973; Fulton, 2003) and the legitimacy of the norms and values of “collegiality (Bess, 1988).” The substitution of a “new” kind of managerialism presupposes that through cultural reengineering, attitudes and values that reinforce self-serving behavior can be replaced with high trust and transformational leadership. Indeed, Reed suggests that within the new corporate culture is the notion of a “revitalized paternalism and collectivism [that] promotes unitary notions of ‘family’ and ‘team’ rather than the fragmentary and often conflictual identities associated with occupationally and functionally-based professionalism” (p. 169)

In point of fact, colleges and universities as professional bureaucracies must live with both the structural conflict engendered by democratic decision making and the functional ambiguities of mixed democratic and bureaucratic systems. It is naïve to believe that managerial ideology that is grounded in bureaucratic authority and power can and will be mediated in a “new” managerial culture. Institutions of higher education are not only educational systems; they are economic institutions. As such, market forces demand accountability and efficiency, especially in the short run (Ouchi, 1980). There is thus an inevitable conflict with professional values that embody long-term objectives, tolerate errors, and embrace collective achievements in which individual effort is sometimes difficult to measure.

“Saving” higher education through the institutionalization of ambiguity will be difficult and will require adept and knowledgeable change agents. It will also require a commitment of time by administrators and faculty. It will demand recognition of differences and tolerance of those differences. Finally, it will necessitate faith in the ultimate positive outcomes, despite the inevitable anxiety of ambiguity. Organizational citizenship behaviors (Bateman and Organ, 1983; Bolino, 1999) are discretionary, hence depend on social exchanges that have positive outcomes, which perpetuate motivations to collaborate.

Ambiguity thrives in a culture of limited communication, especially across borders of groups with different, even opposed informal political groups. Even in the presence of weak ties, however, faculty and administrators can be effective collaborators if the information that is exchanged is modulated by belief in each other’s competence and trustworthiness (Granovetter, 1973; Levin and Cross, 2004). Under conditions of weak ties, more “nonredundant” information, especially tacit knowledge, has been found to be more readily exchanged. In other words, when the requirements for organizational functioning are left more open, workers will feel freer to fill in the blanks.

Lastly, recall that at the outset of this chapter, we suggested that ambiguity was a cultural artifact whose strength as a value is now relatively weak—and growing weaker. To change this tendency and reinstitutionalize ambiguity as a cherished value will require, as any cultural change requires, strong, persistent, and probably charismatic leadership. It is difficult to provide individual rewards and incentives in “messy” systems (Abrahamson, 2002), especially when the goals, means, and rewards for achievement are ambiguous. This is not to suggest that in an ambiguous system, the “medium is the message.” At least, it is not the only message.

To be sure, ambiguous systems are “cool” in McLuhan’s (1965) conceptualization, thus demanding involvement and interpretation. Perhaps more pointedly, they require “participation”—indeed, a visceral not *pro forma* participation. All evidence seems to point to the positive effects of such shared governance and to the greater benefits for both the individuals and the institution as a whole.

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11. THE POLITICAL ECONOMY OF INTERNATIONAL STUDENT FLOWS: PATTERNS, IDEAS, AND PROPOSITIONS

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The flow of international students into U.S. higher education has received substantial attention following policy and enrollment shifts in the aftermath of 9/11. Considerable political debate has surrounded the Bush administration and Congress' promotion and implementation of various policies and practices related to national security that target international students and enlist higher education institutions as collaborators in foregrounding security concerns over those of privacy, civil rights, and unfettered academic exchange. Some presidents of prominent research universities, such as MIT, have been publicly critical of many of the measures, partly because international graduate students are so central to the U.S. higher education economy. Many others in the academy have also voiced concerns, in the context of a higher education environment in which entrepreneurial colleges, universities, and professionals are actively recruiting international students, for cultural as well as economic reasons. In this chapter, we trace such political and economic forces that shape the global flow of international students.

In 2004, U.S. higher education experienced the first absolute decline in international student enrollments since 1971 (Institute of International Education [IIE], 2004). Observers anticipate that there will be a further downward trend in international student enrollment in the United States. Many factors have been identified as likely contributing to such a contingency. In the global marketplace for international students, there is heightened competition. Examples include the aggressive marketing for international students (i.e., Australia) as well as changing policies in competitor countries that extend visa stays for international students, making them more attractive sites for study (i.e., Canada). There is also a steady stream of U.S.-based corporations and universities setting up or partnering

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with universities in other, particularly developing, countries (i.e., Sylvan Learning Systems in Mexico and Harvard University in India). Of course, the economic pull factors of studying in the United States, a land of immense wealth and employment opportunities, remain very strong. But there are also other economic factors and some geopolitical factors that may make the United States a less attractive destination for international students, and that are pushing these students in other geographic directions. For example, the high financial costs of studying and living in the United States, and rising employment opportunities (particularly in the science and technical fields) in less developed countries are important economic deterrents to studying in the United States. Moreover, mechanisms established by the United States to limit and monitor “foreign” students, related to costly visa procedures and the Patriot Act, also reduce the attractiveness of the United States for study. Related, there remain perceptions of discrimination in the United States against international students, particularly against students from the Middle East. Further, strong international sentiments opposed to the Iraq war and occupation may also detract from the attractiveness of the United States for international students. We believe that the patterns of student flows can best be understood in the context of such political and economic forces.

There is much commentary about the decline in international student numbers in the United States. There is also much policy discourse. Yet, there is much less empirical work on the subject in the field of Higher Education. There is also relatively little available by way of distinctive conceptual grounding to guide the design of research on flows of international students.

Migration most generally encapsulates student mobility and flows. According to the United Nations (2004), 175 million people were living outside of their country of birth in 2000, thereby making 1 in every 35 an international migrant (United Nations, 2004, p. 25). This represents a significant number although there are some indications that the number will not keep this incremental rhythm. Although the total number of migrants has jumped considerably from 75 million in 1965 to 175 million in 2000, this represents a small increase to the total percentage of the world’s population, from 2.3% to 2.9% (te Velde, 2005, p. 15). Nevertheless, these numbers reflect part of the global context where student mobility is taking place.

At the same time, migration seems to be of more critical concern to some countries than others. Traditional host countries are looking for ways to regulate, control but also benefit from immigration; traditional sender countries have also received benefits from migration, but they

also experienced a range of negative economic, social, and cultural consequences. As economic examples, India, Mexico, Philippines, Morocco, Egypt, and Turkey are the top six recipients of remittances in the developing world, in terms of the amount of dollars received.¹ Actually, in 2002, “remittances are estimated to have reached \$130 billion . . . \$79 billion of which went to developing countries” (United Nations, 2004, p. xi). But there are other effects, both short and long term that can appear even catastrophic. Almost half-a-million Mexicans illegally migrate to the United States per year, resulting in losses of 40,000 Mexican individuals leaving the country per month, one Mexican leaving the country per minute (Bartra, 2005, p. 1). This is just one example on how the demographic consequences for a sender country may be dramatic.

Brain migration is another facet of global migration. Especially given the importance of knowledge—its transfer, production, and importance, in present times. Although there is a lack of accurate counts on the number of individuals studying outside their home countries and the number that decides not to return to their countries, Altbach (2003) suggests that “some 1.8 million students now study outside their own countries—with by far the largest number traveling from developing and middle-income countries to a small number of industrialized nations” (p. 1). These 1.8 million students abroad, in relation to the total worldwide migration, mean that approximately 1.05% of the total international migration involves college students. Regarding the migration phenomena, the percentage of students abroad may not seem as impressive as the number itself. However, the estimation is that the number of international students traveling abroad will continue to increase; some studies anticipate that this number will rise to 8 million by 2025 (Altbach and Bassett, 2004, p. 30).

While migration explains the particular phenomenon of studying abroad, internationalization explains the primary educational intention. Among the efforts defining internationalization, there is more overlap and complementary additions than contradictions (De Wit, 2002; Van der Wende, 1997). Some of the latest definitions basically incorporate elements to polish the characterization of internationalization. For the purposes of our discussion we agree that internationalization can be concisely understood as “the process of integrating an international,

¹ India receives approximately \$10 billion and Mexico is very close to this amount; the Philippines receives approximately \$6 billion while Morocco receives \$3 billion, just a little less than Egypt. The other five countries are Turkey, Lebanon, Bangladesh, Jordan, and Dominican Republic (close to \$2 billion). In terms of the percentages in relationship to their Gross Domestic Product, the countries with the highest percentages are: Tonga, Lesotho, Jordan, Albania, Nicaragua, Yemen, Moldova, Lebanon, El Salvador, and Cape Verde in this order (BBC News, 2004).

intercultural or global dimension into the purpose, functions or delivery of post-secondary education” (Knight, 2004, p. 11). International student mobility, is also, is actually one of the most observable expressions of internationalization worldwide (Altbach, 1998a). However as we will explain, new realities, differing contexts, and activities have complicated its definition.

Historically, student mobility is hardly a new phenomenon. The early European universities, considered the model for present-day universities, were international. These early universities used an international language, Latin, and served students from different countries (Altbach, 1998b). Actually, there is some evidence about the mobility of students in European medieval universities as early as the 12th century. In Bologna during 1230, students from outside Bologna were granted the same rights as those possessed by Bolognese citizens and were under oath that they would not leave the “*Studium*” (Eco, n.d., p. 18). Scott (2000) affirms that “internationalism has always been part of the life-world of the university. From the very start the University was defined as an international institution” (Scott, 2000, p. 5). Yet despite the long history of international student mobility, there remains limited research on the topic.

In this chapter, then, we seek not as much to review the literature on the flows of international students as to offer first a structured set of observations, and some of our own data about what the patterns of flows are, and then a set of propositions to guide future research on international student mobility. Analytically, we structure our observations around three levels of activity. We focus first on the choices of international students about where to pursue their studies. After considering existing literature on the choice processes of domestic students, we note the limitations of this work for addressing factors that our work suggests are important in the case of international students. We then offer some propositions about these choices, propositions that may be useful in understanding the choices of domestic students.

A second level of activity that we address is that of the strategies and activities of higher education institutions and professions. Again, we look to the considerable literature on entrepreneurial colleges and universities, but find that it is limited in informing our understanding of the global activities of locally situated colleges and universities. We develop some propositions that may not only yield insight into the strategies and activities oriented to international students, and to changing national policies with regard to those students; they may also lead us to enhance and extend our understanding of entrepreneurial higher education organizations and professionals.

The third level of activity that we address is the ideologies and power relationships that are found in international organizations and define country situations. It is important to incorporate the role of international organizations because of their direct role in affecting public policies in developing countries especially. In looking at nation-specific as well as regional trends in the flow of international students (especially to and within developing countries), we can rethink how countries are typically categorized (i.e., sending vs. receiving country, central vs. peripheral country). The propositions that we develop speak to the ways in which researchers can reconceptualize the roles and positions of countries when it comes to student mobility. There are important geopolitical and economic factors, including aspects related to historic colonialism and other new situations reflected in neoliberal policies that channel student flows in the imperfect marketplace and the ideologically charged geopolitical arena in which we find ourselves.

INTERNATIONAL STUDENT CHOICES ABOUT WHERE TO GO

Much of what is already known about student flows is as an educational pipeline from high school to college and sometimes to graduate school. This linear model has been used extensively to shape domestic policies about affording equal opportunities for access to college. While past research has contributed toward our understanding of the inequities and diverse pathways involved in college access, this stream of research has yet to expand conceptions of college access beyond the domestic front. Not only has research on college access neglected to address waves of international students coming into the United States but has also disregarded the geopolitical and global economic context in which decisions about college are being made. Thus, this section reviews research on college access among U.S. students and then extends this research to international students. Given the relatively limited research on the latter population, we present some empirical data on international student flows. We conclude this section with some propositions for future scholarship.

COLLEGE ACCESS WITHIN THE UNITED STATES

The process of college choice from the students' perspective has received considerable attention in higher education research. Some of the earliest models about college access began with the economic (Kotler and Fox, 1985) and status-attainment (Sewell, Haller, and Portes, 1969;

Sewell and Shah, 1978) factors and cost-benefit processes to explain how students make decisions about attending college. Such models suggest a utilitarian process by which students rationally weigh the costs and benefits of a college degree. Economic and status-attainment models have received criticism for assuming that students have equal access to information and for not adequately accounting for ways that personal and family circumstances interact with social and high school environments (Hossler, Schmit, and Vesper, 1999). More recently, combined models that incorporated these and other procedures, such as information gathering and information processing based on students' social and cultural capital, have been introduced (Chapman, 1984; Hossler and Gallagher, 1987; Hossler, Schmit, and Vesper, 1999). These latter models have informed researchers to the complexities of college choice as being largely influenced by students' unique backgrounds and characteristics. Theories about cultural capital (Bourdieu, 1977; McDonough, 1997) and social capital (González, Stoner, and Jovel, 2003) more fully explain how students' internalized expectations and beliefs as well as socializing agents affect students' access to information, interpretations about college, and eventually decisions about whether and/or where to attend. In other words, contemporary models recognize that information about higher education is unequally distributed and that decisions about college are not perfectly rational or made by a simple analysis of costs and benefits.

The latest research on college choice has investigated the diverse pathways based on students' personal backgrounds. Considerable research has demonstrated the unique experiences by race, particularly among Native Americans (Fann, 2002), African-Americans (Freeman, 1997, 1999; Noeth and Wimberly, 2002), Latinos (González, Stoner, and Jovel, 2003; Noeth and Wimberly, 2002; Post, 1990), and Asian-Americans (Teranishi *et al.*, in press). Such research further describes the diverse experiences *within* racial groups in the United States, as well as the interaction effects of social class that further differentiates the outlooks and opportunities of aspiring college students of color.

Other studies have investigated the role of differing contexts, especially the familial and school environments as well as the interaction between families and schools (Lareau and Horvat, 1999). Of course, having college-educated parents highly ensures future college-educated children. But even the extent of K-12 parental education affects college students' perceptions about college (Lee *et al.*, 2004). Highly related to parental education levels is the degree of family engagement in students' academic success (Jun and Colyar, 2002; Tierney and Auerbach, 2004). The high school context also determines the structure of opportunities for diverse

students (Noguera, 2001). High school counselors, for example, can also play a pivotal role in the likelihood of their students considering college, especially among students whose parents did not attend college (McDonough, 1997). Students' social class backgrounds often determine the extent of high school guidance, not only depending on whether they attend a school with adequate college counselors (McDonough, 1997), but also depending on whether they can afford to hire private college counselors (McDonough, Korn, and Yamasaki, 1997).

In a broader context, college access research has investigated the role of state and federal policies in the United States. Research has indicated that state policies related to appropriations to higher education institutions, tuition, financial aid, and K-12 education, are related to the enrollment patterns of high school graduates (Perna and Titus, 2004). Scholarly attention has especially revolved around federal issues including affirmative action and financial aid. Affirmative action has been the subject of considerable debate on whether race, in particular, should be factored in college admissions. Despite the U.S. Supreme Court's ruling that diversity serves as a "compelling interest" and numerous studies indicating the benefits of diversity on a range of student outcomes (Chang, 2005; Chang, Astin, and Kim, 2004; Gurin, Dey, and Hurtado, 2002), States continue to ban the consideration of race in their admissions decisions. As tuition continues to rise and as financial aid is provided in the form of loans over grants, "minority" and low income access to college declines (Heller, 1999; Orfield, 1988). Even when it comes to college choice, research has shown that the receipt of financial aid grants positively affects students attending their first-choice institution, whereas the receipt of loans has no significant impact on the particular college students attend (Kim, 2004).

While such research has informed our understanding of college access in the United States, considerably more research and new theoretical frameworks are needed to understand college access on the global scale. Despite the wealth of information on college access theories about domestic students in the United States, there is very limited research on international students and how they choose to study in the United States and elsewhere. Certainly, the decision and level of commitment for an international student to study abroad is very unlike the decision for a U.S. student to study within the United States. Enrolling in an institution outside one's home country, often being removed from family and other support networks, and learning a new culture, all based on limited information in making this decision can pose unanticipated obstacles upon enrollment and, in some cases, decisions to remain in the home country.

INTERNATIONAL STUDENTS IN THE UNITED STATES AND IN MEXICO

The recent drop of international student enrollment in the United States has received much attention. In some regions of the world, the decreases were especially notable. From the Middle East, for instance, enrollment significantly dropped by 9% and from Saudi Arabia alone by 16% (IIE, 2004). There are also observable shifts by field of study. Between 2002–03 and 2003–04 academic years, there has been a 5% drop in Business and Management, 6% drop in Mathematics and Computer Science, and 15% drop in Intensive English Language. Meanwhile, political and academic leaders demand increased support for international education in the United States (Harrison, 2002; National Association of Foreign Student Advisers [NAFSA], 2003; Peterson *et al.*, 1999). Yet despite the economic and educational benefits that international students bring to the United States, little is being done to increase international student enrollment. As such, the decline in international students in the United States is anticipated to worsen.

While there is much attention on the declining rates of international student enrollment, there remains limited research that speaks on the decrease of international students in the United States. Research on international students tends to focus on the difficult experiences of studying in the host country. The literature is sparse but offers explanation as to why students may be reluctant to study abroad. Kher, Juneau, and Molstad (2003), for example, describe how many support services, including admission, registration, residence life, and dining do not cater to the unique needs of international students, despite the greater needs that they have as compared to native students. Even outside the United States, there are numerous reports about bad housing accommodations, lack of social support, confusing enrollment procedures, and inadequate support services, as some of the problems faced by international students (Lloyd, 2003). Cultural, including language, differences can hinder social relationship with local students. International students in the United Kingdom, for example, encounter major hurdles forging friendships with native students (Pritchard and Skinner, 2002). Similar difficulties and misunderstandings between native students and international students were noted in Australia (Grey, 2002). Relatedly, international students suffer from communication issues with staff and faculty, and many areas of needed support may be left unmet. While most of these studies have problematized such difficulties as international students' "coping" or "adjustment" issues, recent research has further uncovered how

universities may even serve as an unwelcoming and hostile climate for international students (Lee and Rice, 2005). Rather than simply placing the burden on international students to cope, such research questions how institutions may marginalize international students. In sum, such obstacles upon enrollment are noteworthy because such accounts likely lead to negative reports to prospective international students in the home country.

These studies also suggest that the considerations to study in another country extend beyond the typical indicators presented in college access research in the United States (gender, race, social class, parents, high school contexts, etc.). While such factors as social class and cultural capital, for example, affect international student mobility, other factors such as perceptions of the host environment, language, and cultural differences come into play. Even the extent of parental education becomes less relevant when a student considers studying in a different country than where her parents studied. On a more global scale, concerns regarding international relations between countries, different economies and costs of living, and the long-term economic benefits of studying abroad are especially heightened. There remains very limited research that explores the reasons that students choose to study in another country and in most cases, the political economy is rarely taken into account.

One recent case study investigated the ways by which international students choose to study in a U.S. institution (Lee, 2005). Our analyses indicated that the reasons that international students selected our university, for example, were most often related to the institution's national ranking and prestige. The prestige associated with degrees obtained from research universities in the United States can typically open up more professional opportunities than degrees obtained from institutions in many sending countries. In some cases, international graduates from U.S. institutions are able to secure jobs within the United States. While the reputation of institutions lure domestic and international students alike, status and prestige become even greater incentives when committing to study outside one's home country. In this case, the prestige of studying in our U.S. institution can serve as an economic pull for many international students.

This "halo effect" that comes with studying in nationally (and internationally) ranked universities can be particularly worrisome for international students, especially when such institutions do not cater to the specific needs of students from outside the United States. Based on our interviews, many international students' initial expectations about studying abroad, such as the quality of training and its application to

the home country, have been unmet. Misinformation is more likely to be passed around when students choose to study outside their home country in comparison to studying within the home country, especially when the information is based on advertisements and information conveyed by recruiters. Our findings revealed that students from East Asia, in particular, heavily relied on institutional rankings (i.e., U.S. News and World Report) in choosing where to study, even though they had very limited information about the campus setting, student culture, and institutional resources. Very few of the interviewed international students, in fact, had ever visited our institution in the past. Most had visited large urban cities in the United States, such as New York or Los Angeles, as tourists, but were unfamiliar with the Southwest region prior to enrolling. One national study of institutions in the United States demonstrates that there is little relationship between institutional rankings based on cross-sectional data (i.e., U.S. News and World Report) and student outcomes (Astin and Lee, 2003). The majority of variation among institutions is attributable to entering freshman characteristics rather than to any institutional policies or practices. The extent of outcomes for international students are especially unknown. Limited programs and resources for international students at most U.S. institutions cast some doubt on the quality of their experiences.

We also found that advertisements (followed by family members, friends, and then counselors) were the most commonly utilized information sources among the survey participants. There were some differences based on students' region of origin and parental education levels. For example, students from highly educated backgrounds utilized more information sources than students from less educated backgrounds. Also, students from East Asia relied most heavily on advertisements while students from South Asia relied most heavily on family members and friends. Such findings further suggest different pathways depending on the region of origin and related socioeconomic status (SES).

The geopolitical context plays a key role in whether international students study in the United States. In a recent national study of 480 institutions, jointly conducted by the NAFSA (Association of International Educators formerly the National Association for Foreign Student Affairs), the Association of American Universities (AAU), the National Association of State Universities and Land-Grant Colleges (NASULGC), the IIE, and the Council of Graduate Schools (CGS) institutional administrators that experienced a decline of international student enrollment were asked to indicate the primary reason for the decrease. In regards to the decline in

international undergraduate enrollment, approximately 40% noted visa troubles (i.e., delays in issuance and denials) and 20% noted a decrease in the number of applications. In reference to the decrease in graduate student enrollment, 47% indicated a decrease in the number of applications while 29% noted visa troubles (CGS, 2004). In sum, the enrollment decline is largely attributable to less interest in studying in the United States and perceived barriers about the visa process. The geopolitical context, in this case, might then dissuade international students from studying in the United States.

Another study indicated that international students hold some resentment related to visa and student and exchange visitor information system (SEVIS) procedures, which led to some doubt about making the right decision of studying in the United States (Lee and Becskehazy, 2005). Students reported of SEVIS as “useless” and “complicated.” Others reported the U.S. visa procedures as being “debilitating,” sometimes even preventing students from visiting their home country during the summer or winter breaks. Fear for their own safety (only for the Middle East) and an unwillingness to subject themselves to what they perceive as humiliating and unnecessary responses to 9/11 (SEVIS and lengthy visa procedures) have pushed many of their friends and family members to seek postsecondary experiences in Australia, New Zealand, and Europe. Many also reported of friends and family back home, who were accepted to study in the United States but were not granted visas to enter the United States.

Mexico offers a contrasting example as to how student mobility might be shaped by the country's level of economic development. Despite Mexico being a developing country, Mexico is the leading destination among developing countries for U.S. students. Furthermore, Mexico is the seventh leading country of destination among all countries for U.S. students studying abroad (IIE, 2004). We recently surveyed over 300 international students in Mexico. Reasons for studying in Mexico and information sources were widely different when comparing their responses to the international students at our institution in the United States. Preliminary results indicated that the reasons international students studied in Mexico were most often because of the cost of studying at the particular institution in Mexico, followed by reasons related to securing better jobs in the sending country. The most common information sources were preexisting contracts between institutions in other countries, followed by counselors, friends, family, and advertisements. In the case of Mexico, the costs of studying in Mexico combined with future job opportunities suggest that economics plays a major role in studying in this country.

DIRECTIONS FOR FUTURE RESEARCH

The process by which an international student decides to study outside her/his home country is complex and under investigation. Practitioners and scholars have identified a range of factors involved in this decision, from a lack of adequate resources in the home country to more abundant opportunities and specialized training in the host country. The “push” and “pull” framework has often been utilized to generally describe the forces within the home country that “push” (i.e., lack of specialized fields, political repression, etc.) and the forces within the host country that “pull” (i.e., greater education opportunities, higher quality of education, better quality of life, etc.) a student to study abroad (Altbach, 2004). While this model has helped to identify some of the larger social, political, and economic factors that contribute to the global imbalance of student flows, the way these forces interact within the individual process is highly speculative. In other words, despite its appeal, the framework does not fully account for the individual’s background, information sources, and multiple reasons in choosing a particular institution. As such, more empirically based research is needed to better understand and address shifting international enrollment rates in the United States and elsewhere.

Thus, future research should consider the political economy that shapes students’ access to higher education, not only domestically, but also globally. Studies of college access within the United States ought to explore the diverse pathways of international students as they are ignored in most college student research. Future research on college access within the United States should especially keep in mind the economic factors beyond tuition, financial aid, and students’ socioeconomic backgrounds. Less measurable economic factors in college choice include the perceived economic value of degrees from more selective versus less selective institutions. For example, what kinds of jobs and social networks do some institutions offer more than others? Despite research that has demonstrated that more selective institutions do not necessarily produce better outcomes than less selective institutions, the more selective institutions may have particular reputations that open up more opportunities upon graduation, especially abroad. As with international students, some domestic students, particularly first-generation students or students of low SES, may make decisions about college based on limited information. Certainly more research is needed on international student flows. Beyond the experiences of these students, much is unknown regarding how their choices are made, not only whether they study abroad but also where they study. Access to college should extend beyond whether they pursue higher

education or the type of institution they enroll in and on to the crossing of national boundaries and cultures. Furthermore, how do geopolitical and global economic issues factor into students' decisions about where to study? The United States, for example, educates many future leaders of other nations. How do current political relationships between the United States and other countries affect the decisions of whether to study in the United States or elsewhere? Perceptions of terrorism, issues of safety, and discrimination against particular cultures can also surface in the decision-making process. These are just some of the multiple issues that should be further considered in studying college access and student mobility.

ORGANIZATIONAL AND PROFESSIONAL STRATEGIES AND ACTIVITIES

A dominant metaphor about the system of U.S. higher education is that it is a competitive marketplace. Much significance is attributed to students' choices in this marketplace. Indeed, the idea underlying federal student aid policy is that these consumers' choices of institutions will enhance the overall system in part by leading colleges and universities to improve in order to attract students (Leslie and Johnson, 1974). Moreover, much significance is attributed to institutions' strategic activities to better position themselves in the higher education marketplace. Indeed, the idea underlying much scholarship on colleges and universities is that these organizations' entrepreneurial efforts will enhance the overall system in part by leading institutions to become more responsive to the demands and needs of consumers and constituents (Tierney, 1998).

Yet there is little work that directly connects, on the one hand, the choices of student consumers, and on the other hand, the strategic activities of colleges and universities. And for all the discourse about globalization, there is even less work that connects the strategies and activities of higher education organizations (and professions) to the flows of international students to particular countries and institutions. We have very little understanding of the global scope and character of college and universities' strategies and activities with regard to international students, and of the ways in which these are influenced by the higher education economy, nationally and internationally, and by the belief systems and commitments of professions involved in recruiting and serving international students. Thus, this section of our chapter briefly reviews research on the relationship between students and types of institutions, as well as on the strategic activities of colleges and universities. Given the relatively limited research on the topic, we then present some empirical data on the

strategies and activities of higher education institutions and professions with regard to international students. Finally, we offer some propositions to guide future work in this area.

Many factors underlie and shape higher education institutions' strategies and activities with regard to international students. One is the long-standing centrality of international students to the U.S. higher education economy, particularly in graduate education. A second is the more recent fiscal pressure on and entrepreneurial initiative within colleges and universities to generate new revenues. A third is an even more recent movement to "internationalize" campuses in the context of an increasingly globalized world. Particularly with regard to the latter two patterns, there are emergent and growing professions in the academy and on the margins of the academy, managerial professions and intermediating associations (Metcalf, 2004) that are committed to these functions. These professions and associations themselves become drivers that push colleges and universities to more aggressively recruit international students.

With the above points in mind, we concentrate here on issues related to the recruitment and flow of undergraduates. That is where the organizational and emergent professional action is, principally (by contrast, in the case of graduate students the action is more at the level of academic departments). That is also the level of analysis to which most of the literature on strategic, entrepreneurial activity is directed.

Our principal substantive focus is on colleges and universities in the United States, which are prominent players in the international higher education marketplace. Our principal analytical focus is on what Slaughter and Rhoades (2004) have called "academic capitalism and the new economy," a knowledge/learning/consumption regime of policies and practices that involve the academy actively interpreting and incorporating its work in terms of revenue generation and in the context of the knowledge-based economy. From such a frame, higher education organizations can be seen to be pursuing international students as a new circuit of knowledge that promises to generate increased organizational revenues. They can also be seen to be developing the internal managerial capacity to undertake and coordinate the pursuit and service of international students, in the form of an infrastructure of personnel and offices designed to work with such students. These professionals build and expand organizational capacity in the realm of international activities, and become another internal driver to pursue international students.

Of course, U.S. colleges and universities are not the only higher education institutions in the marketplace for international students. Australian and British universities have also been very active (Rhoades

and Smart, 1996). In the late 1980s, the Australian government began to emphasize an “export culture” (Marginson, 1993). Within a short time, the foreign student policy of the country had shifted from a metaphor of “aid to developing countries” (many foreign students had historically come from lower income Asian families—see Chandler, 1989) to one of “trade with foreign countries,” and full cost fees for foreign students began to be charged. Australian universities responded by aggressively recruiting foreign students (Smart and Ang, 1993). More recently, Canadian universities have entered into this competition. All of this has likely contributed to the decline in U.S. universities’ share of international students.

Despite the Anglo-American model that defines similar policies in Australia, Britain, and Canada, the strategies and activities of colleges and universities with regard to international students vary by national setting. For example, although some continental European universities are becoming increasingly entrepreneurial (Clark, 1998), they are characterized by a very different stance toward international students than what is found in the American context. Programs such as ERASMUS are designed to enhance cultural exchange and understanding among European countries; host institutions do not charge higher fees to students to generate additional revenues. Indeed, many European universities continue to charge reduced fees or no additional fees to students from developing countries as well as from Eastern Europe. Thus, sociocultural goals, and a social democratic sense of collective responsibility guide the strategies and activities of continental European universities in the realm of international students. And that might lead to a different mix of international students in these institutions.

SOCIAL STRATIFICATION AND INSTITUTIONAL STRATIFICATION: THE LITERATURE

Turning now to the literature, research on U.S. students and their college destinations is extensive and definitive. There is a strong correlation between the socioeconomic backgrounds of students and the selectivity/prestige of the colleges and universities they attend. In short, social stratification in the broader society maps onto institutional stratification in U.S. higher education.

Over a decade ago, Hearn (1991) conducted an analysis of a national, longitudinal data set of students, and found that nonacademic factors of students, such as SES, were significantly correlated with the type of institution they attended. In the 1990s, Karen (2002) replicated Hearn’s study on a data set that tracked students into the 1990s and came up

with similar findings. Student destination in higher education is related to student SES. More recently, Astin and Oseguera (2004) found that the entering classes of the most selective colleges and universities in their national sample have become increasingly stratified by their social class background. That is, “American higher education . . . is more socioeconomically stratified today than at any time during the past three decades” (Astin and Oseguera, 2004, p. 338).

Some scholars take us beyond the overall patterns to understanding some aspects of the decision-making process that affects college destination. Again, they find these processes to be shaped by students’ SES, as well as by their race, ethnicity, and gender. For example, Hurtado *et al.* (1997) detail differences in patterns of college applications (the number of colleges students apply to) and college destination among racial/ethnic groups. Paulsen and St. John (2002) focus on another factor shaping students’ decision making—college cost and the availability of financial aid. They develop a “financial nexus model” to capture the sequence of students’ choices. As with the other authors cited above, they find that SES is a major factor.

There is a great deal of work in this realm, then. The findings are consistent, and overwhelming. Social class background matters in not just whether high school graduates go to college, but in where they go to college.

Yet for all the work in this area, and despite the longstanding presence of large numbers of international students in U.S. colleges and universities, we have little understanding of the extent to which there is a connection between the SES of international students and their college destinations in the United States. Nor do we understand, as noted in the previous section of our chapter, the particular choices of international students. It is one thing (and an important one) to map a basic connection between the two sets of variables, about students’ social background and college destination. It is quite another to understand the choice process that takes students to particular institutions.

STRATEGIES AND ACTIVITIES OF COLLEGES AND UNIVERSITIES: THE LITERATURE

If we move to the other side of the equation, to the strategies and activities of colleges and universities, we find a somewhat different sort of problem. There is a good deal of research on the strategic activities of colleges and universities. Yet most of this work addresses process more than content. It speaks to the mechanisms of strategic planning and decision

making more than it does to the substance of the decisions themselves. To the extent that some scholars have spoken to the direction that colleges and universities are moving, they have postulated large-scale trends that shape higher education institutions generally, rather than identifying specific factors that lead colleges and universities in particular entrepreneurial directions.

Two decades ago, Keller (1983) provided a defining study of a management revolution, focusing attention on academic strategy. Subsequent work has picked up the thematic focus on the challenge of stimulating strategic change in higher education institutions. Scholars studied how universities could make “wise moves in hard times” (Leslie and Fretwell, 1996) and “make big decisions better” (Schuster *et al.*, 1994). There was much focus on making universities more responsive to external society and constituents (Tierney, 1998, 1999), and on processes of academic restructuring (Gumpert, 2000). And some presidents wrote of necessary transformations in leadership and decision-making processes (Duderstadt and Womack, 2003).

In virtually all of this work there were presumptions that change in colleges and universities is slow and difficult, and that any progress was dependent on the initiative of central managers (Rhoades, 2000). In addition, and perhaps as a result, concentration on the processes of how to effect change took precedence over careful consideration and analysis of what changes to pursue. In short, there has been much more talk about how tough the choices to be made are, and how best to make them, than there has been deliberation and analysis about what those choices, and their consequences, might be.

Some specificity of direction is provided by scholars who have researched the entrepreneurial initiatives of colleges and universities. Comparative analyses of entrepreneurial universities (Clark, 1998; Slaughter and Leslie, 1997) tracked, among other patterns, the shifts in the sources of revenues (becoming more diverse and less dependent on governmental support) and in the areas of expenditures (more in research and less in instruction). Yet more attention is directed to the types of entrepreneurial activity than to the substantive focus of these efforts. As Rhoades (2000, p. 58) has written with regard to the strategic planning processes and entrepreneurial initiatives, “the lion’s share of campus deliberations involved debating and developing the means, not the ends.”

Interestingly, this work on entrepreneurial universities has also largely overlooked the global scope of college and universities’ activities. For example, although Slaughter and Leslie (1997) situate their discussion of entrepreneurial universities in the context of a global economy that

increasingly commodifies students, their empirical focus is nation-specific, in four countries. They do not feature the international dimensions of entrepreneurial initiative. Neither does Clark (1998), even though he notes a few examples of universities' entrepreneurial activities that are international in nature.

Two recent books have directed attention to some specific ends, particularly to college and universities' increased competition for high-end students who can afford to pay higher and higher tuition. In *Knowledge and Money*, Geiger (2004) refers to the competition among research universities for the "best" students as "the selectivity sweepstakes." Although there is much competition among these institutions for international students, particularly at the graduate level, Geiger does not address them, partly because he is focused more, as we are, on undergraduates.

In *Academic Capitalism and the New Economy*, Slaughter and Rhoades (2004) devote a chapter to the ways colleges and universities market themselves to students in the institutions' interests, and how they move to serve more privileged segments of the student market. In one portion of that chapter, they speak to international students who are being aggressively recruited by some community colleges. A key factor in this process is the fact that these low-tuition higher education institutions can charge international students far higher tuition than local students—sometimes up to 10 times as much. That helps us understand why colleges and universities might move to the international student market, and even to a particular kind of international student market. This newly prioritized "circuit of knowledge" offers the promise of tuition revenue windfalls, as they can be charged and are willing to pay more, and as they receive less financial aid. A win-win situation, economically for the institutions. In addition, as internal managerial capacity to foster this revenue stream is expanded, in the form of emergent, managerial professions that develop to recruit and provide services to this student population, these professions become essentially an internal interest group developing rationales (such as the need for the "internationalization" of college campuses) to justify increased recruitment efforts and increased international student numbers.

In the mid-1990s, Rhoades and Smart (1996, p. 149) indicated that, "With some exceptions, there is little evidence that institutions invest much in infrastructure or inducements to realize the educational or entrepreneurial possibilities of increasing the number of foreign [graduate] students, although this may be changing at some universities." That view was corroborated by a survey a decade earlier, conducted by the IIE, which revealed a low level of interest for an investment in foreign students on the part of university officials (McCann, 1986).

In our view, the increased significance of the academic capitalism knowledge/learning regime in the new economy can help us to understand the increasing aggressiveness of some institutions in pursuing international students. The reason for pursuing such students is at least in part much like the rationale underlying enrollment management practices, which are designed to increase net tuition revenue (Hossler and Bean, 1990; Rowley *et al.*, 1997). The idea is to get students who pay more and cost less. Yet in contrast to enrollment management, which has dramatically increased in popularity in the last decade (as more public institutions engage in the practice and hire consultants to assist in that strategic shift), the target population in the academic capitalist knowledge/learning regime may lie outside the borders of the United States.

LESS SELECTIVE INSTITUTIONS AND INTERNATIONAL STUDENTS

Most research on recruitment, admissions, and enrollment management concentrates on four-year institutions, particularly selective colleges and universities. However, the realm of international students points to the significance of addressing the organizational strategies and activities of community colleges. By virtue of their very name, at least some of their revenue base, and certainly their historical orientation, these institutions are focused on local communities. Yet, in recent years, community colleges have become increasingly aggressive and successful in recruiting and enrolling international students. From 1993/94 to 2002/03, the number of international students at community colleges in the United States increased by 57.9% (to 96,785). That is the largest increase of any sector of American higher education, and it is nearly double the overall increase (30.4%) in international students in U.S. higher education during that time period (IIE, 2003; Koh, 2005). (Interestingly, community colleges have subsequently experienced the same decline in international student enrollment as that found in the system as a whole; just from 2002/03 to 2003–04 there was a decline of 7.7% in enrollment—see IIE, 2004.)

The growth of international student numbers in community colleges is no accident. Many of these institutions have undertaken quite extensive efforts to recruit internationally. For example, Chase (2005) refers to the efforts of Spokane Community College to expand its international student enrollments.

Spokane Community College in Washington . . . has established an active recruiting program . . . [and] has committed financial resources to market its institution in international recruiting magazines, attend

student fairs and send faculty abroad to help infuse the curriculum with a global perspective. . . . [a]lthough it is relatively easy for them to attract students from Asian countries, they are striving to bring additional diversity to the campus by attending foreign student fairs in Brazil, Argentina and Chile.

And Spokane is not even among the top 40 associate institutions nationally in terms of international student enrollments.

De Anza and Foothill College, as well as Glendale Community College, all in California, are on the list of top 40 associate institutions (numbers 4, 8, and 36, respectively). They contract with Linden Educational Services, a consulting group that: “assists regionally accredited U.S. universities in their efforts to recruit, enroll, and serve international students” (Linden Educational Services, 2005). Among the institutions it works with are several community colleges that pay \$1,000 to participate in fairs in various parts of the world. Institutions can also pay to participate in a range of other activities during their tours of foreign countries.

As reported in the Wall Street Journal, some colleges pay recruiters what is essentially a bounty for international students (Golden, 2002). Such a practice has been “explicitly forbidden” by the National Association of College Admission Counselors (National Association of College Admission Counseling [NACAC], 1998). However, if it does not qualify as a “best practice,” such recruitment activities do represent a common practice.

The extent of community college activity in this realm is evidenced on the web site of the American Association of Community Colleges (AACC). Under “Hot Issues,” and as a link on the main web page of the AACC, under “International News” is an article about U.S. State Department Policy regarding student visas for international students applying to two-year colleges (Burcham, 2005). The article reports the comments of Janice Jacobs, the State Department’s deputy assistant secretary for visa services, who gave a talk at the 57th Annual Conference of the NAFSA.

In response to concerns expressed by officials from two-year higher education institutions about a perception that visas are frequently denied to students seeking admissions to two-year colleges, Jacobs said the State Department has reminded consular officers that different institutions meet the needs of different students. She said consular officers have been told to review every single case on its own merits, keeping the broad array of U.S. educational opportunities in mind.

A second story under “International News,” also printed in *Community College Times*, is on an AACC sponsored online fair, held in Peru.

Prospective students in Lima and five provincial towns were introduced to the workings of the U.S. Community College system, which has no parallel in Peru, virtually: "The event, sponsored by the American Association of Community Colleges, gave Peruvian students at seven binational English-language centers in six cities, country-wide, a chance to link with forty Community Colleges in sixteen states across the United States" (Quintanilla, 2005). In fact, the AACC has a web site (www.cc-usa.org/) for promoting two-year colleges to international students, with a select list of colleges.

One of the AACC's publications, the *Community College Times*, also regularly features international activities by way of recruitment. One of the most consistent contributions relates to recruitment trips and fairs for international students. For example, in 2005 there is a report on how "community colleges continue to make inroads into Asia" (Bloom-Wilson, 2005).

Another indicator of the prominence of community college activities with regard to international students is the web site of the IIE. It features community colleges, both as an important sector to be considered in regard to international students, and as the recipient of important association awards. For example, there is a special section of the site that is devoted to articles and papers on community colleges. In a section of "marketing," which includes three articles on graduate education, one article features a community college, Orange Coast College, and its "strategies for dynamic growth." According to the article, the underlying rationales for Orange Coast pursuing international student recruitment included financial gain as well as a transformation of the campus. "The philosophical foundation of the program stemmed from a college-wide realization that beyond financial gain, this program provided a unique opportunity to address the cultural realities of a world in which communication and cross-cultural exchange are the pre-eminent features." (Mohammed, 1997). Internationalization became part of the institution's strategic plan. More than that, the recruitment of international students became a target for investing institutional resources. "Orange Coast College deliberately opted for high-impact, low-cost methods of recruiting international students. Prominent among these was the establishment of an International Center Programs web site and the computerization of Form I-20. The college invested in appropriate technology that allowed us to respond to students within 24 hours of an inquiry." (Mohammed, 1997)

Yet another indicator of the prominence of internationally oriented activities in community colleges is the IIE awards for internationalization that have been received by colleges in recent years. In 2005, two

community colleges received honorable mention for their projects in internationalizing their campus. (Interestingly, there is no award for recruiting international students.)

As evidenced in the preceding paragraphs, then, the strategies and activities of community colleges with regard to international students are a function not solely of the choices of individual colleges, but also of the commitments and initiatives of associations of the institutions and the professional practitioners in international education. In some regards, those commitments and initiatives can be understood in terms of a drive to internationalize higher education. Such a drive might make particular sense in the context of large metropolitan areas with large numbers of immigrants. Indeed, the top five associate institutions are the Houston Community College system, Santa Monica College (in the Los Angeles metropolitan area), Northern Virginia Community College (in the Washington, DC area), De Anza College (in the Silicon Valley), and Miami-Dade Community College (in a metropolitan area with a very large immigrant population). At these and other similarly situated colleges, one mechanism for recruiting international students may be to tap into the local immigrant population, which likely has ties to other populations abroad.

However, it is not colleges in major metropolitan areas that are recruiting international students, it is not just international students from contiguous areas that are being recruited, and it is not just for reasons of internationalization that these students are being pursued. For example, Eastern Arizona College, located in Thatcher, Arizona, with a population of about 14,000, has a section of its web site devoted to international admissions. This is not unusual for similarly rural colleges in Arizona.

As for where international students are being recruited from, for associate institutions nationally, the two top sending countries are Japan (14.5% of all international students in these institutions) and South Korea (9.1%). By contrast, Mexico accounts for only 4% of enrollments, and Canada for only 2.4% (IIE, 2004). Consider similar data for a particular institution, in this case, Los Angeles City College. Of the 4,788 international students there in 2003, 30.6% came from the former USSR, and 11.6% came from South Korea. No other country accounted for more than 9% of the international students. Mexico accounted for 4.3% of the students.

Finally, consider the following data on tuition. At Mesa Community College, in Arizona, the tuition and fees for Arizona residents is \$60 per credit hour. For international students, the cost is \$248 per credit

hour, over four times as much. That represents a significant incentive for recruiting and enrolling such students.

It is not just community colleges that are increasingly recruiting international students. The second largest host institutional type is masters granting universities. In the list of the top 100 institutions nationally that have more than 1,000 international students, the following regional institutions, some of which are Masters I and others of which are Doctoral Granting universities, and their rankings are listed: University of Texas, Arlington (#28), San Francisco State University (#38), University of Texas, El Paso (#45), University of North Texas (#50), University of South Florida (#53), Northeastern University (#55), University of Texas, Dallas (#61), California State University Long Beach (#61), Western Michigan University (#72), California State University Northridge (#84), California State University Fullerton (#85), San Jose State University (#90), University of Central Oklahoma (#95), San Diego State University (#97), and California State University, Hayward (#99). For these institutions, as with community colleges, their recruitment of international students arguably extends them well beyond the scope of their mission, and certainly beyond their intended local catchment and recruitment area. As with community colleges, however, there is an economic incentive to pursue international students. And it is apparent from the flows of such students, that regional universities are pursuing them.

PROPOSITIONS

After reviewing the above literature, posing our analytical framework of academic capitalism and the new economy, and examining some empirical evidence about the role of less selective colleges and universities in regard to international students, we close this section by offering some propositions to pursue in future research.

In our view, the current political economy of higher education, which is expressed in institutions' pursuit of students who can afford to pay more, also likely plays out along similar lines with respect to international students. As was described in the case of Australian higher education, there may be a change in the sort of international students that are recruited to U.S. higher education. This is our "pursuing the most privileged international students" proposition.

Over time the entering classes of international students will be more and more privileged in terms of parental educational, income, and occupational levels.

Two corollaries to this proposition have to do with students' sources of support, and nations of origin. That is, over time, we would expect that the entering classes of international students will be more and more likely to be government sponsored, and we would expect that increasing proportions of students will be recruited and enrolled from more developed regions (e.g., from the Tiger Economies of Southeast Asia as compared to from Africa and Latin America), and from more developed countries within particular regions (e.g., from South Africa vs. other African countries).

As with institutions' pursuit of more monied domestic students, we believe there is also likely to be an opportunity cost of focusing on international students, particularly at less selective institutions. This is our "sacrificing the local" proposition.

Over time, institutions aggressively recruiting internationally will experience a decline in the enrollment of in-state students and students from the local community.

In other words, institutions will not substitute larger numbers of international students for out-of-state students; rather, they will move away from serving students in their immediate locale. An important corollary here has to do with the implications for the sorts of managerial professionals that colleges and universities invest in. We would expect that as institutions move more resources toward international recruitment and services to international students, they will move resources away from managerial professionals working in the area of local outreach and service to students who are commuting daily from local locations.

A third proposition relates to the managerial professions responsible for recruiting and working with international students. As we suggested earlier, such personnel can become an interest group within the organization that can work to move the organization to increasingly emphasize international students. Essentially, the professional group is involved in growing its professional portfolio of responsibilities. Our "professional interests" proposition is that:

There is a positive relationship between the numbers of international managerial professionals in the organization and the numbers of international students.

It may be, as Tolbert (1985) has demonstrated in the case of various administrative offices, that the strength of the relationship varies over time depending on how "institutionalized" or common the offices and personnel of international student affairs become. The more common they are,

the weaker the connection to student numbers. There is good reason to expect the growth of managerial professionals in this realm. A recent survey of student affairs preparation programs across the United States revealed that almost all of these preparation programs (56 out of 63 surveyed) offered some international component (i.e., international-related courses, internships, etc.) (Lee *et al.*, 2005). Moreover, a vast majority of these programs (54 out of 63) anticipated a trend toward greater internationalization in student affairs. It would appear to be a growing professional field.

A fourth proposition is our “resource dependency” proposition. In the United States, the most tuition driven institutions tend to be the least selective and least prestigious colleges and universities. Such institutions are often overlooked in higher education literature. In the context of our chapter, we believe they are overlooked as sites of study for international students as sites at which strategic enrollment management is being put into practice.

The more tuition driven and dependent colleges will be the ones that most aggressively pursue undergraduate international students.

Our formulation is consistent with research on less selective liberal arts colleges, which have been found to drift from their historical and publicly expressed liberal arts missions in pursuit of students and tuition revenues (Kraatz and Zajac, 1996). As a corollary to this proposition, we would expect that less selective institutions are increasingly purchasers of enrollment management services from various private companies.

A fifth proposition relates to a competing hypothesis as to why community colleges and regionally oriented institutions are recruiting larger numbers of international students. In our increasingly global world it is increasingly likely that locally oriented institutions will be serving immigrant populations, as they have done historically, most dramatically in the case of the City University of New York. A new twist to this may be that such institutions may be beginning to focus less on local immigrants and more to international students who can be charged higher tuition. On the other hand, it may be that in serving local immigrants, who have social networks in their nations of origin demand from international students increases. This is our “immigrant” proposition.

There is a positive correlation between international students and immigrant students, in absolute numbers and in country of origin.

The latter part of the proposition speaks to possible social networks between local immigrants and potential international students in their nations of origin.

In sum, our propositions speak to the political economy of higher education, which we see as influencing the strategies and activities of higher education institutions, in ways that likely have a significant impact on the flow of international students and on what mix of students are being served by the system, as is the case with domestic students. We also see the political and professional economies of higher education as influencing the strategies and activities of professionals in the academy, again in ways that play out in terms of who is being served. Finally, we see the flow of international students as being connected to larger political and economic patterns of migration that affect regionally and locally oriented institutions in significant ways.

NEOCOLONIALISM AND BRAIN DRAIN

An understanding of student mobility and flows should recognize geopolitical issues regarding colonialism, hegemony, and imperialist relationships between developed and developing countries. At the same time, the international organizations have further shaped the geopolitical landscape by offering economic incentives and sometimes serving as third-party brokers in the exchange, or transferring, of international students. With these broader matters in mind, we offer some statistical data to demonstrate how international mobility to and within developing countries redefines traditional conceptions of “brain drain,” followed by a discussion about the intermediary role of international organizations. We end this section with propositions for future scholarship.

Among the consequences that colonialism has had historically on higher education, the impact on student mobility is a major one. Colonizing countries not only exported their own university models but also attracted students from their original home countries in a way that appeared almost natural. This pattern continued in emerging colonies or former colonies even after colonies obtained their independence. What was once known as empires is now represented by powerful, industrialized nations and among them the United States, still represents the most influential country in the world. It is not by accident that the United States has been the major host country in the world, although the tendency could shift as was reported earlier in this chapter. It is also not a random coincidence that the United States controls some of the most important international organizations such as the World Bank and the International Monetary Fund. The United States continues to serve as a dominant force, both geopolitically and economically, in the international mobility of students.

INTERNATIONAL STUDENT FLOWS IN NUMBERS

Despite a recent dip in international student enrollment, the United States still enrolls the highest number of international students worldwide. The United States hosts approximately 57,000 international students, over twice as many as the second highest receiving country, the United Kingdom (IIE, 2004). While there is a wealth of data on the enrollment of international students within the United States and U.S. students studying abroad, there is less precise data on international student exchange between other countries, especially developing countries. Such information is vital in better understanding the global context for international student flows, as much student exchange occurs outside the United States.

Scholars such as Altbach (1991, 1998a), Altbach and Lulat (1985), Barber *et al.* (1985), Chen and Barnett (1995), Cummings (1991), Jenkins (1984), Knight (2001), Knight and de Witt (1999), and Weiler (1984) have more generally described student mobility around the world. Most of their observations have paid attention to the flows from developing countries to developed countries. There have been other efforts to study the topic more regionally. For instance, Maiworm and Teichler (1996, 1997), Rosselle and Lentiez (1999), Teichler (1996, 2001), Van der Wende (2000), and Wächter (2004) have studied student mobility in Europe, particularly following the implementation of the ERASMUS program.

Other comparative studies have been conducted contrasting U.S. student mobility and higher education internationalization with other European, Asian, and other developed nations (Altbach and Umakoshi, 1997; De Wit, 1995, 2002). There is an additional research that generally describes internationalization processes in developing nations, where student exchange or student mobility is the central focus. Some examples in Asia is Knight and de Wit (1997) and in Mexico, Kent (2003).

There is extensive literature about the European Union because of their efforts to harmonize their higher education systems and establish several cooperative academic programs among its members. After the introduction of ERASMUS in 1987,² this program has become the largest and most ambitious student exchange program in the world. The program reports that from 1987 to 2003–04: 1,226,146 students from about 32 countries had participated in their exchange in different stages (European Commission. Education and Training, 2005). The European

²ERASMUS has experienced different modifications, beginning with its incorporation into the Socrates program which covers education from school to university to lifelong learning in the European Union after important events in the region such as the Bologna Declaration, in 1999 and the follow-up meetings (Prague, 2001; Berlin, 2003).

Table 11.1: Top Five Host Countries Receiving Developing Countries in 2001 and Enrollment Numbers by Leading Sending Countries (in Parentheses)

African Countries	Asian Countries	South America	African/Asian/South American Countries
France (75,465)	United States (294,230)	United States (28,142)	United States (352,049)
United States (29,677)	Australia (77,849)	Spain (6,604)	France (99,546)
Germany (19,394)	United Kingdom (74,400)	Germany (4,265)	United Kingdom (95,460)
United Kingdom (18,134)	Germany (67,658)	France (4,253)	Germany (91,317)
Belgium (10,976)	Japan (58,170)	United Kingdom (2,926)	Australia (82,606)

Note: Table elaborated from “Education database” by OECD (2005). Retrieved from: http://www1.oecd.org/scripts/cde/viewdb.asp?dbname=edu_uoe&dbicon=%2ficons%2foecd%2egif.

Union effort has constituted a rather unique approach in student exchange, whereas programs in other countries strategies are more concerned with revenue generation.

Based on data derived from the Organisation for Economic Co-operation and Development (OECD), we offer some numbers to shed more light on the role of developing nations on international student mobility. Table 11.1 presents the top five developed countries receiving developing country students from three regions in 2001.

We contrast these numbers with those provided by the Institute for International Education (IIE, 2005). Tables 11.2 and 11.3 show some contradictions with respect to the OECD countries, in part because the information is more recent but also because there are variations in defining each activity. The information about the flows in the five countries with the largest concentration of African, Asian, and South American students is also presented as a way to follow-up on the cases of the United States, France, the United Kingdom, Germany, and Australia.

Table 11.3 shows the way “centers” (developed countries) and “peripheries” (developing countries) can be defined differently depending on the context. It is difficult to think of even one example in which a country is solely identified as a host or sender. This is even true in the case of the United States, since it is the third highest sending country to China and the ninth highest sending country to India. Indeed, the United States has

Table 11.2: Top Ten Sending Countries in Five Developed Countries and Enrollment Percentages (in Parentheses)

Most recent total for international student enrollment	United States	United Kingdom	Germany	Australia	France
	572,509 (2003/04)	270,090 (2002/03)	227,026 (2003)	188,406 (2003)	180,418 (2002/03)
	India (13.9%)	China (12%)	China (12%)	China (19%)	Morocco (16%)
	China (10.8%)	Greece (9%)	Poland (6%)	Hong Kong (8%)	Algeria (10%)
	South Korea (9.2%)	United States (5%)	Bulgaria (6%)	South Korea (7%)	China (5%)
	Japan (7.1%)	Germany (5%)	Russia (5%)	Indonesia (7%)	Tunisia (4.6%)
	Canada (4.7%)	France (5%)	Morocco (4%)	Malaysia (7%)	Senegal (4%)
	Taiwan (4.6%)	Ireland (5%)	Turkey (4%)	Japan (6%)	Germany (3%)
	Mexico (2.3%)	India (4%)	France (3%)	Thailand (6%)	Italy (2%)
	Turkey (2%)	Malaysia (4%)	Ukraine (3%)	India (5%)	Cameroon (2%)
	Thailand (1.6%)	Hong Kong (4%)	Cameroon (3%)	United States (4%)	Libya (2%)
	Indonesia (1.6%)	Spain (3%)	Austria (3%)	Singapore (4%)	TIE: Ivory Coast (2%), Spain (2%)

Note: Table elaborated from "Atlas of student mobility" by Institute for International Education (2005). Retrieved from: <http://atlas.iienetwork.org/>.

been the most important host country, since 1960 (United Nations, 2004, p. 30); however, it has also been playing a major role as sending country, especially most recently.

Again, it is important to note that global flows, hardly, occur not only in one direction but in several direction. Student flows do not follow a single trajectory but should be observed as encompassing more complex paths.

Regarding the relative classification of a country as host or sender—center or periphery, there are some cases that show these contrasts. For instance, France appears in the OECD data as a major host country for developing countries, especially among African countries. However,

Table 11.3: Four “Peripheries” Playing as Regional Centers and Enrollment Percentages (in Parentheses)

Most recent total for international student enrollment	China	South Africa	Turkey	India
	77,715 (2003)	46,687 (2002/03)	18,427 (2001/02)	7,738 (2002/03)
	South Korea (45.5%)	Zimbabwe (19.49%)	Cyprus (16%)	Nepal (10.35%)
	Japan (16.4%)	Botswana (12.93%)	Azerbaijan (10%)	Malaysia (10.18%)
	United States (4.8%)	Namibia (11.54%)	Turkmenistan (10%)	Kenya (6.73%)
	Vietnam (4.5%)	Lesotho (7.25%)	Greece (8%)	Sri Lanka (5.05%)
	Indonesia (3.3%)	Zambia (5.24%)	Kazakhstan (6%)	Bangladesh (4.81%)
	Thailand (2%)	Mauritius (3.48%)	Russian Federation (6%)	Mauritius (4.73%)
	Germany (1.6%)	Swaziland (3.47%)	Kyrgyzstan (5%)	Iran (4.34%)
	Russia (1.5%)	Angola (1.45%)	Bulgaria (4%)	Thailand (3.79%)
	Nepal (1.5%)	Mozambique (1.24%)	Albania (4%)	United States (3.15%)
	Mongolia (1.4%)	Malawi (0.76%)	Islamic Republic of Iran (3%)	Yemen (3.13%)

France loses its importance as a host country worldwide, when data on developed countries is also included. Explanations are related to colonization issues as well as to what students in developing countries are looking for when they decide where to study. Elements such as language commonalities will explain the large amount of Francophone African students who go to France, but there are other as important aspects, such as social security and educational and cultural similarities. Geopolitical reasons will also require more attention in future research, particularly for the United States following the September 11 and more recently following the effects of the Hurricane Katrina disaster regarding changing perceptions about the United States from outside its borders.

We also observed that middle-income developing countries are the main hosts for poorer, developing countries. China, Mexico, Morocco, and Greece are some examples of middle-income developing countries. Students from low-income countries tend to study in these middle-income

Table 11.4: Same Four Countries as “Country of Origin” in 2000

	China	South Africa	Turkey	India
Percent tertiary students abroad	1.47% (2000)	0.8% (2000)	4.34% (2000)	1.2% (2000)
Note: Tables elaborated from “Atlas of student mobility” by Institute for International Education (2005). Retrieved from: http://atlas.iienetwork.org/ .				

countries rather than study in developed nations, largely because of their financial affordability.

For the most part, student flows to or within developing countries are not typically studied and should be further investigated in order to better understand the full global context of student mobility. The latest Human Development Report contrasts the cases of Vietnam and Mexico in an interesting way. The United Nations Development Program (UNDP, 2005) points out that “deeper participation in trade has sustained rapid advances in Vietnam [whereas] Mexico[s] export ‘success’ has gone hand in hand with limited progress in human development” (p. 32). From 1990 to 2003, Vietnam has increased its exports on goods and services from 36.0% to 59.7%. On the other hand, Mexico’s exports increased from 18.6 to 28.4%. However, Vietnam reduced its national extreme poverty line, the same period from 30.0 to 15.0%, which contrasts with Mexico’s percentage drop, from 22.5 to only 20.3%. Just paying attention to the student flows of these two countries and given Vietnam’s economic circumstances, it seems the Vietnamese strategy has been to send students to China, where Vietnamese students represent about 4% of China’s international student enrollment (see Table 11.3). On the other hand, Mexico, given its geographical location, has concentrated its efforts in sending students to the United States. Whether these strategies have affected general national development initiatives and more concretely in the poverty reduction is a pending question to be studied. Nonetheless, it seems possible at least to consider that these strategies are related to a direct economic impact on the host country in one way or another.

BRAIN DRAIN

Brain drain is of particular concern among developing countries. Brain drain is traditionally defined as the “emigration of skilled and

professional personnel from developing countries to advanced industrialized nations” (Miyagiwa, 1991, p. 743). We accept that there are different approaches of the so-called phenomenon “brain drain” and many more discussions about the use of the concept (Carrington and Detragiache, 1998; Solimano and Pollack, 2004). However, we considered that even when terms such as “brain exchange” more practically describes situations such as the highly skilled personnel mobility within Europe, “brain drain” is especially pertinent to describe the unequal situations between developed and developing countries and what some of these developing nations may be losing. While such mobility is expected to keep pace (and in some cases increase), Docquier and Marfouk (2004) report that “North-North brain drain did decrease over the last 10 years (except in a few countries where the changes were very small)” (p. 23).

Some studies have attempted to quantify the impact of brain drain: “the wealth generated by Indian IT experts in the Silicon Valley is estimated at \$250 billion, around half of India’s gross domestic product. Despite this, the total amount of investments by Indian expatriates over 1991–2001 was only \$2.6 billion. This is low compared to around 50% of 40 billion or so of the FDI [Foreign Direct Investment] received by China during the late eighties and the nineties (Balasabramanyam, 2003)” (cited in te Velde, 2005).

Indeed brain drain issues have provoked different impacts. Yet this is also the case of Indian Diaspora and Indian graduates who have returned home and have contributed tremendously to the economic development of certain areas. Clearly, the involvement, association, and connection with Diaspora have been considered as one of the most important strategies as a way to reap benefits from brain drain in developing countries (Meyer and Brown, 1999; Quaked, 2002).

INTERNATIONAL COOPERATION, ORGANIZATIONS, AND STUDENT MOBILITY

International organizations represent one of the clearest examples of how international entities are disputing national sovereignty and imposing policies in developing countries. The scope of international organizations varies by the types of institutions (i.e., banks, think tanks, foundations, and United Nations institutions) and its range of influences (i.e., regional, worldwide, or bilateral). Among the existing international organizations affecting education, the World Bank is among the most

influential. In several ways the World Bank not only finances diverse educational projects around the world but also sets the policy agenda in developing countries (Bennell, 1996; Ilon, 1996; Klees, 2002; Maldonado-Maldonado, 2000, 2003; Samoff, 1999).

The increased international interest in promoting student mobility has also influenced the field of international cooperation. Indeed, bilateral agencies have been especially active in supporting these activities than the role taken on by international organizations with a worldwide scope (Maldonado-Maldonado, in press). Examples of international cooperation include activities of assistance, philanthropic, nonprofit, development aid, and subsidies, as among some of the most common activities (Levy, 2003). In the definition of cooperation, the specifications about the characteristics of the donors, recipients, actors involved, conditions, activities supported, circumstances, and context are also very relevant.

Some examples about the type of activities within higher education are: development projects, foreign student's supports, research and teaching projects, extension activities and business and consultancy of projects public service (McAllister, 1996). Nevertheless, student exchange remains one of the most popular activities of cooperation, and sometimes with special interest in cases where institutions generate revenues from such coordination. For some international agencies, student exchange activities can be understood as part of the diversification of finance sources, which is a central recommendation by some organizations such as the World Bank or the OECD.

International cooperation has been traditionally coordinated by national and local governments, higher education institutions and international organizations. However, as part of the presence of new actors, consortia, networks, alliances, business, associations have emerged as important players in interorganizational and international agreements (Beerrens, 2002, p. 297).

Some of the main antecedents in cooperation among universities worldwide are related to student mobility. The University of Berlin (Germany) and Columbia University (United States) signed an agreement in 1906 to develop academic activities between them. This agreement was signed by William Fulbright and the Physics Nobel Prize Werner Heisenberg (Martins Romeo, 2003, p. 42). Other examples are the activities conducted by some of the most important foundations such as the Ford, Rockefeller, and the Carnegie Corporation, who especially developed programs promoting science in developing countries after the 1950s. They also gave a high priority in their financing to developing

countries which later increased thorough the 1970s. This was a clear example of how education became the “fourth dimension” of the exterior policy and fit in the objectives of industrialized nations in the West (Selvaratnam, 1985, p. 310). Currently, these foundations have an important role supporting activities related to student mobility; especially financing students from developing countries to get their degrees in developed countries. For instance, the Ford Foundation has decided to invest \$330 million in 10 years, establishing the largest fund in the history of the Foundation. The largest amount of its money, \$280 million is spent on international scholarships. This allows 3,500 students to study for about three years on master’s or Ph.D. degree courses at universities around the world (Maldonado-Maldonado, in press). Since 1950, the Foundation has spent approximately \$365 million on graduate education for about 30,000 students in 70 countries (Bollag, 2000, p. 1).

International cooperation activities have always been polemic, where the cooperation associated to education is not an exception. On the one hand, it has been related to a genuine recognition that education is a basic element in national development and self-sustainable growth. On the other hand, cooperation has been seen as a main component in Neo-colonial relationships, in the expansion of market and trade mechanisms, in technology transfer and in the benefit of geopolitical interests from industrialized nations (Morales Gómez, 1992). Levy (2003) affirms that even less radical academics consider that assistance reflects mainly the interests and goals of the donors not the receptors.

There is a classic dichotomy between modernization and dependency among developing nations. This debate affects the approaches and assumptions related to national development and international aid.³ There are many tensions and issues about the conditions imposed by international organizations. Since every international organization has its own agenda; it is not possible to consider international cooperation as neutral, especially when some of the most important international agencies are dominated by the United States. For instance, one of the principal points in the agenda of some of these international organizations and regimes, such as the World Bank, is promoting privatization and market mechanisms at the higher education public sector in developing countries. This is also the case of the WTO agenda and the sponsorship for including education and professional services as part of General agreement on trade in services (García Guadilla, 2003; Maldonado-Maldonado, 2003).

³ These are issues that have been discussed by Dependency Theory, Modernization approaches, or as part of the debates related to Neoliberalism, Neocolonialism, and Globalization.

FUTURE TRENDS IN RESEARCH

While our discussion has focused on issues of student mobility, student exchange and related revenue generation, the activities of international providers, the new private consortia establishments, and online international services should also be considered as part of the debate regarding students and international issues in a near future. We see these aspects as future elements that will affect student flows and mobility in both the short and long term.

There are still many other areas of study concerning student flows such as the different aspects that attract students from developing (low and middle income) and developed countries to select some countries over others. Another important level to be studied is about the different mechanisms used by countries to attract international students and the types of students that they have been attracting.

In general, data on student mobility and student flows is still not very accurate. There is need for more data; for instance, polishing the contradictory numbers among IIE information, OECD, and others. Data is needed to have a better comprehension of the flows, their directions, and concentrations.

Other important aspect that requires more research is in regard to educating elites from developing countries; particularly where Neocolonial aspects are involved. There is already a long tradition among developing countries that elites be educated in developed countries. Elites who later become presidents or first ministers, revolutionaries, dictators, and national heroes, have been educated in developed countries. These can be considered as other ways industrialized nations expand their influence throughout the building of networks in developing countries.

The role of international agencies is necessary in the future research trends since some approaches have been privileged over others. Considering student mobility as a way to generate revenue could be considered as an indirect result of the reduction of public financing in higher education institutions in developing countries promoted in different ways by agencies such as the World Bank. In this sense, the responsibility of an organization such as the UNESCO should have been to push a different vision about student mobility, privileging its role in the cultural and social exchange. Unfortunately, this has not happened yet or at least other voices have not been heard as much as it is needed.

Finally, future literature on international students should include many neglected, but highly related topics, such as migration, economic effects, scientific and technology transfer, among others. There is also

a need to further understanding of the role of trade regulations affecting the way we see student mobility and student flows in general, what Slaughter and Rhoades have defined as the context of “academic capitalism regime” (Slaughter and Rhoades, 2004). The current disputes on brain trade around the world, not only in attracting international students as source of revenue but especially in more sophisticated ways, such as the role of knowledge production, copyright issues, and knowledge transfer have acquired considerable importance in the current economy.

In sum, we suggest that it is important to see the history of student mobility within the context of a migration phenomenon. However, what have sometimes been excluded in its study are the implications and problems that worldwide migration carries: inequalities, discrimination, and power disputes. Until we include these topics in the research on student flows, its comprehension will remain incomplete.

CONCLUSION

There are geopolitical and economic forces shaping the global flow of international students. In this chapter, we began by examining how the choices of international students are influenced by such forces. We then considered how the strategies and activities of higher education institutions and professions are animated by geopolitical and economic influences. Finally, we addressed how national and international ideologies and policies are shaped by and express such forces. The geopolitical and economic forces become in themselves a political economic structure affecting the global flow of international students. Geopolitical and economic forces are not neutral, as they also reflect ongoing problems related to existing or further promoting global inequalities.

In reviewing the literatures on these topics, we have noted throughout that the empirical literature is relatively limited. We have also indicated that existing literatures are similarly limited in providing conceptual frames for analytically focusing research on the global flows of international students. Of course, it is true that much work has been done to model students’ predispositions and choices in deciding whether and where to go to college; indeed, this is one of the most empirically developed literatures in the field of Higher Education. So, too, there is much research on the strategic and entrepreneurial activities of colleges and universities. Further, there is much scholarship on patterns in national higher education policy. Yet each of these considerable

literatures is surprisingly limited substantively, failing to really address the flow of international students. In addition, these literatures are surprisingly limited conceptually in helping us to address patterns of student movement across national borders. As a result, we have sought to provide some direction for future research in these realms in two ways. First, we provided some new empirical work on these topics that we hope will stimulate similar and related work on the topics at hand. Second, we offered some propositions to explore and build upon in future research.

We believe that the direction and insights we offer are relevant for reconceptualizing scholarship on domestic topics, in ways that incorporate the political economic dimensions we have explored in this chapter. In the case of student choice, there is still much that we do not know about the process by which students choose which particular colleges and universities to apply to and enroll in. And there are many variables that we have overlooked. In the institutional level, more research on the net economic benefits (or costs) brought in by international students is needed. While we do know that international education is the fifth largest export in the United States and the gross contribution that international students bring to the local and federal economies, we know far less about the extent to which different types of institutions (i.e., public, private, community colleges, etc.) are reaping the economic benefits from international students in different ways. And globally, there is very limited data and patterns of flows to and within developing countries. A focus on mobility to or within developed countries narrowly assumes that developing countries solely serve as “senders,” which based on some data, demonstrates that developing countries play a significant role as “receivers” as well.

Perhaps most importantly, though, we believe that our field should more systematically pursue research on international students, and expand the scope of topics and conceptual considerations integrated into and informing our scholarly agenda. Future work should pay special attention to student movement, not only across national boundaries, but also across cultural boundaries as well. With the increase of educational partnerships between institutions in different countries, students can even be taught as international students in their own home town. While corporations and institutions from developed countries are setting up campuses in less developed countries, we question the extent to which these new or satellite institutions are truly a partnership between two countries or simply one country setting up shop on (i.e., colonizing) another. Given the

increase of globalization and interest of noneducational organizations in international education, we anticipate that current conceptions of student mobility may not keep pace with the ever-changing global marketplace. Thus, we offer these observations, propositions, and suggestions for future research, as a way to better understand the global political economy in which we now live.

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12. SOCIAL CAPITAL AND THE RACIAL STRATIFICATION OF COLLEGE OPPORTUNITY

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On the fiftieth anniversary of *Brown v. Board of Education*, many scholars took an opportunity to reflect on the state of access to quality education for minority students. On the one hand, it was an occasion to celebrate the dramatic and significant gains in educational achievement and attainment by minority students and for women. The high school graduation rate for Blacks, for example, soared up to 78.5% in 2000, from only 33.7% in 1970. Black students achieved similar gains in college attendance (30.3% of high school graduates going to college, compared with 15.5% in 2000 and 1970, respectively).

On the other hand, the anniversary of *Brown* was also a time to contemplate the many remaining barriers to educational access and equity. In 2000, only 59.6% of Latino youth graduated from high school and only 21.7% of those went on to college (U.S. Census Bureau, 2005). In 1999, incoming freshman SAT I Verbal scores for Black students lagged behind the average scores for White students by 93 points, and by 106 points in Math (Jenks and Phillips, 1998). New reports about the resegregation of public schools and urban communities remind us of how persistent racial inequality continues to be in American society (Frankenberg, Lee, and Orfield, 2003; Orfield, 1996).

For many reasons, much of the discourse of educational stratification has brought socioeconomic class to the forefront of scholarly and public discussion as an explanation for racial differences in access and attainment (Kahlenberg, 1996, 2000; Sander, 1997). The assertion that racism is a problem of a bygone era and that we are left only to deal with its vestiges has convinced some that a long period of civil rights legislation, affirmative action, and political correctness has brought us closer

to a “colorblind” society—so much so that some states have moved to “colorblind” legislation in college admissions (Brown *et al.*, 2003).

And yet the record shows that we are far from a race-neutral society. At elite institutions, in particular, racial tension related to college admissions and recent attacks on affirmative action policies has further exacerbated the enrollment gaps for minority students (Teranishi and Briscoe, 2004). Wide gaps in academic preparation between racial minority and White college applicants still persist. Issues pertaining to racial segregation within and between schools, disparate access to resources, a greater emphasis on testing, and grade inflation remain unresolved.

In this chapter, we assert that issues of race and racism are central to the fabric of our society and are far from disappearing from our national consciousness or from our institutional policies and everyday interactions. The educational pipeline—particularly the transition from high school to college—is no exception. The racial divide is still very much evident, both in educational outcomes, as well as in the stories and lived experiences of racial minorities in high schools and colleges across the country.

This chapter contributes a new approach to thinking about the ways in which race and racism continue to stratify access to higher education. We examine the pursuit of higher education by students of color and place the process by which students pursue college within a larger racialized social context. Specifically, we place inequitable access to college resources, information, and knowledge in a social capital framework and discuss how access to social capital is stratified and mediated by race and racism as a larger social construct.

RACE AND EDUCATIONAL OPPORTUNITY

The study of higher education has been long involved in the debate about the role of race in educational opportunity and success. While studies overwhelmingly support the notion that race plays a large role in determining who gets educated and at what levels, *how* and *why* this trend persists is the subject of much discussion (Bowen and Bok, 1998; Herrnstein and Murray, 1994; Jenks and Phillips, 1998; Thernstrom and Thernstrom, 2003). A belief in the innate intellectual inferiority and limited capability of some racial groups, while standard fare a century ago, have largely (though not entirely) given way to a more nuanced and complex debate about the various social, economic, cultural, geographic, legal, and legislative contexts that give rise to educational success for some and poor educational opportunities for others.

While an abundance has been said about how these factors interact to promote educational opportunities for some and not for all, our focus in this chapter is to understand one small piece of the educational pipeline—the process by which students move from high school to college. More specifically we examine the role of the network of people, places, ideas, and institutions that a student taps into when making decisions about colleges. No surprisingly, we find evidence that race plays a role in how these networks develop. It can determine which networks students have access to and which they do not, how those networks shape a unique reality about the college world for students, and how students are perceived by the actors who move them along this small, but vital, piece of the educational pipeline.

The study of social network theory, which in the higher education literature focuses primarily on the lack of access to influential and important resources for college access and degree attainment for racial and ethnic minority students, can help to understand the ways race influences how students perceive and interact with various agents within their networks. This is compelling because the focus of previous research has been largely about simply gaining access to networks without attention to the role of race and racism.

Several factors complicate a simple understanding of how race is influential in social network theory. First, students are both “racialized” and “performers” of race. Racialization is the process by which skin color, or any other physical attribute, becomes imbued, over time, with social, cultural, psychological, socioeconomic, and/or political significance (Martinot, 2003; Omi and Winant, 1986). Ability tracking in K-12 schools serves as a prime example of how educational ability has been racialized (Hallinan and Oakes, 1994; Lucas and Berends, 2002; Oakes, 1985).

On the other hand, students can be seen as performers of race when they themselves infuse meaning in their racial identity and act consciously in ways that either confirm or contradict those meanings. One of the more well-known examples of race performance in education comes from the work of Fordham and Ogbu (1986), studying Black high school students who designate good educational performance as “acting white” and, consequently, poor educational performance as “acting black.” While this study is the subject of much scrutiny, it underscores the way in which students can and do bring their own social and cultural definitions to what skin color means.

A more subtle example exists in Steele and Aronson’s (1995) psychology research on stereotype threat in which they find that Black students underperform on standardized tests when the students were informed

that the tests were measuring cognitive ability, or when the students were asked to give their racial identity at the outset of the test. In this instance, even the *suggestion* of race is enough to prompt different “performance” by Black and White students.

This last example demonstrates the way in which these processes—racialization and the performance of race—are often intertwined and mutually reinforcing. Part of the performance of race—the underperformance on a test, for example—can be a reaction to being racialized. In this line of research, the mere existence of a negative stereotype is the mediating factor. The example further highlights another confounding wrinkle—neither process has to be conscious. Racialization and race performance can be both unintentional and misperceived.

A second reason that the study of race in social networks needs more focus is related to research paradigms; that is, assumptions about the college-choice process for different racial minority populations can be traced to the research paradigms that are often applied to the study of race in higher education. The most common approach to study the college-choice process for students of color is often driven by a normative racial framework. In essence, most higher education research assumes a “natural” division among five racial groups (Blacks, Whites, Asians, Latinos, and Native Americans) without interrogating the complex differences that exist within and across each group.

For example, scholars have paid only minimal attention to the differences between race and ethnicity. As a result, the actual educational experiences and processes of students from different racial groups as a whole, and as distinct parts, are often concealed. In many cases, studies are not designed to acknowledge or appreciate the heterogeneity that exists within a racial group. Research is underway to identify the vast and important differences in the educational experiences of Asian Americans and Latinos by examining the ways in which ethnic groups within the larger racial category hail from a variety of vastly different countries and vary by cultural and social practices (Teranishi, 2005). It should not be assumed that there is enough consistency in the homogeneity across racial groups that they are equally comparable and the instruments used to measure differences across groups are universally applicable.

Other researchers have taken to prioritizing either race or ethnicity, assuming that ethnicity is simply another kind of racial boundary, demarcated by language, culture, or national origin rather than by skin color. New evidence, however, is demonstrating that these factors are not mutually exclusive, and that scholars need to pay attention to how ethnic identity is complicated by race and vice versa (Taylor, 2004; Teranishi,

2005). Students must contend with the norms, values, and social constructions of their primary ethnic identity, as well as with the ways that their ethnicity is racialized in the context of U.S. politics and policy making.

We argue that racial groups are neither equally nor consistently comparable and the approaches to study different student populations are not universally applicable, especially when one considers the ways in which race and racism affect people in different ways. For the purposes of this chapter, race and ethnicity will serve as distinct variables in an increasingly complex discussion about the role of national origin and ethnic identity in a highly racialized U.S. context.

Students make decisions about their postsecondary plans in a larger social and cultural context. Race is a critical factor in how students develop and pursue their postsecondary aspirations and goals. We posit that research needs to acknowledge the presence of race and racism in the college-choice process, especially when one considers the complex set of relationships that students rely on when pursuing their aspirations and dreams.

CONCEPTUAL BLOCKAGES IN COLLEGE-CHOICE FRAMEWORKS

Research in college choice has developed along three lines. An economic approach looks at how students compare the costs of higher education (tuition and fees, financial aid, room and board, travel to and from a given campus, lost wages due to absence from the workplace, etc.) with the apparent benefits (increased future earnings and job satisfaction, the enjoyment of learning, social and cultural activities associated with higher education, increased standard of living, etc.). Using economic models, researchers have tried to determine how students will make decisions about attending particular institutions (Hossler, Braxton, and Coopersmith, 1989; McDonough, 1997; Perna, 2000). A frequent criticism of these models is that they often assume that all students have access to the same kinds of information about college costs and benefits, when, in fact, there is evidence to the contrary (Hurtado *et al.*, 1997). More specifically, this framework does not account for the ways in which racial segregation, both within and across schools, account for differential access to information, resources, and opportunities related to college.

The second important approach to studying college choice is based on a framework by Hossler and Gallagher (1987) that identifies three main phases of the college-choice process—the predisposition phase, where

students are exposed to the possibility of attending college; the search phase, where students are actively engaged in activities that directly impact their chances of going to college (taking the SAT, for example, or contacting an admissions office for information); and the choice phase, where students make a decision about the range of schools to which they will apply. The role that race plays in each of these phases has been of much interest to researchers but mostly as an independent variable. In other words, as a way to measure how students of different racial groups fare in each of the three phases; not as a way to understand the racialized processes, including the role of race and racism, involved at each stage.

The third approach addresses the differences in college choice by class and considers the kinds of social and socioeconomic environments in which students are choosing college. The work of McDonough (1997), for example, and many others, highlights the role of socioeconomic class in promoting or precluding college opportunity for young people. While each of these approaches constitutes an important contribution to our knowledge of how students select colleges, few of them have been able to explain with any certainty the important and dynamic role of race in the development of college choice.

We draw on a social capital framework to examine the ways in which the relationships that students have with different people afford different information and knowledge that play into the college decision-making process. This framework incorporates different aspects of students' educational processes with particular attention to context, such as the racialization of the college admissions process and the impact of living in and attending schools in a racially and economically segregated society.

SOCIAL CAPITAL THEORY: A FRAMEWORK FOR UNDERSTANDING THE COLLEGE-CHOICE PROCESS

In a macrosense, social capital is the set of relations among persons in a society. Coleman (1988) explains that social capital is transmitted among a network of individuals who provide information, social norms, and access to opportunity. Through social capital, individuals can gain access to economic resources, increase their cultural capital through contacts with experts, and gain access to institutional resources and opportunities (Loury, 1981; Portes, 1998). Stanton-Salazar and Dornbusch (1995) explain that through social capital, "an individual is potentially able to derive institutional support, particularly support that includes the delivery of knowledge-based resources, for example, guidance for college admissions or job placement" (p. 119). In short, it is not so much *what*

you know, but *who* you know and what meaning you derive from your interaction with those people.

Indeed, how information and knowledge are exchanged while students negotiate their postsecondary opportunities is important to understand, particularly because social capital can vary for different student populations, often determining who has access to information, knowledge, and opportunity. Stanton-Salazar (1997) has noted that “success within schools (or other mainstream institutions), has never been simply a matter of learning and competently performing technical skills; rather, and more fundamentally, it has been a matter of learning how to *decode the system*” (italics in text, p. 13). For racial and ethnic minorities, this system includes a variety of racial codes that make it even more difficult to convert social capital into educational attainment (Loury, 1981).

One approach to the study of social capital is through a network-analytic framework. Network analysis is an examination of how structural properties of institutions affect access to information, knowledge, and power through patterns of relationships in a network (Granovetter, 1973; Howard, 1974; Wellman, 1983). From this perspective, the processes through which resources are gained and mobilized, including exchange, dependency, competition, and coalition are examined (Wellman, 1983).

The power of network analysis resides in its fundamental approach to the study of social structures. Network analysts search for deep social structures through identifying and describing patterns of relationships to learn how network structures constrain social behavior and social change. Network analysis can help explain a particular web of social relations as they work for, or against, an individual or set of individuals in pursuit of a particular information need.

Granovetter (1973) developed a theory that captured how patterns of ties in a social system allocate resources unevenly. The advantage of acquaintances (weak ties) is that a person can resist dependency on any given individual and can explore more freely alternative options (Pool, 1980). In this chapter, we focus on institutional agents such as weak ties. Individuals with few weak ties will be deprived of information from distant parts of the social system and will be confined to the provincial news and views of their family and close friends (strong ties) (Granovetter, 1973, 1974). We conceptualize strong ties as protective agents. Granovetter (1973) has found that strong ties have a greater motivation to be of assistance and are typically more easily available. Strong ties also offer a faster flow of information and have greater credibility. Granovetter also found that strong ties are the most influential with regards to decision making.

Pool (1980) suggests that whether one uses weak or strong ties for various purposes depends on the number of ties and the utility of ties. Strong-ties networks are most utilized as an adaptive strategy in a context of few alternatives. Individuals that concentrate their networks in strong ties lose out on advantages with weak ties (Granovetter, 1973, 1974, 1982) resulting in isolation from important information and knowledge associated with weak ties. Thus, the absence of ties is also an important concept to examine. This is important when one considers how access to resources varies by race.

Network analysis allows us to understand more fully the role that race plays in directing students toward, or away from, opportunities in higher education. By examining the ways that race impacts everyday relationships between students and teachers, parents and children, and among peer groups, we can come closer to finding the locations at which information about college is distorted, misunderstood, absorbed fully, or rejected.

PROTECTIVE AGENTS

The support and guidance needed to develop, sustain, and socialize youth for life after high school is provided by a close-knit network of cooperating members of a kinship. This kinship can be referred to as protective agents (i.e., parents, relatives, and peers) because of the significant role they play in how students navigate the process of developing and realizing postsecondary aspirations and decisions (Stack, 1974; Stanton-Salazar, 1997). Social relationships with protective agents have often been considered the most important social spheres for a child's development because of their commitment and capacity to socialize the child for the future (Coleman, 1988; Sewell and Hauser, 1980; Stanton-Salazar and Dornbusch, 1995). Trust and norms are often considered central themes in social capital theory (Burt, 1992; Tsai and Ghoshal, 1998; Woolcock, 1998).

In college-choice research, the influence and involvement of protective agents has been found to be critical factors in the development of a student's postsecondary aspirations and plans (Galotti and Mark, 1994; Hossler, Schmit, and Vesper, 1999; McDonough, 1997). More specifically, students must go through a process of negotiating a web of social relationships that shape their postsecondary goals and strategies. An important feature of protective agents is that these social networks are the set of individuals who have the best interest of the student in mind and care the most about their futures (Burt, 1992; Woolcock, 1998). These

social networks provide students encouragement and guidance through expectations, obligations, and trustworthiness (Coleman, 1988), as well as tangible resources such as information, knowledge, support, and involvement (Hossler, Schmit, and Vesper, 1999). Under the best conditions, these networks are informed by a solid understanding of the U.S. educational system, a grasp of the language of instruction, and an appreciation for the role of educational attainment in improving life chances.

Among the protective agents, parents, in particular, have been found to play an exceptionally important role in the college-choice process (Galotti and Mark, 1994; Hossler, Braxton, and Coopersmith, 1989; Hossler, Schmit, and Vesper, 1999; Stage and Hossler, 1989). Some studies have found that the way in which parents participate in their child's college-choice process is one of the most important factors that can determine a student's educational outcomes (Hossler, Schmit, and Vesper, 1999). Parents play a particularly important role in the predisposition phase consisting of aspiration formation and goal seeking (Hearn, 1984, 1991; Stage and Hossler, 1989). Parents will often provide a set of expectations that set the tone for their child's educational pursuits, as well as guidance and involvement, which help students realize their educational goals.

Students' siblings, extended relatives (aunts, uncles, cousins, or grandparents), and friends are another important set of social networks. Studies have found that children are seldom raised and socialized exclusively within the confines of their parents; rather they are raised in embedded social networks that extend into a wider range of individuals that constitute family and community kinship (Coleman, 1988; Stanton-Salazar, 1997; Valenzuela and Dornbusch, 1994). These protective agents are also trusted sources of information and guidance for students. Often, these protective agents serve as role models for students as they develop and pursue their postsecondary aspirations. In some cases, students' network of protective agents often mobilizes to form localized or microscaled coalitions.

INSTITUTIONAL AGENTS

In schools, institutional agents, such as teachers or counselors, have the capacity and responsibility to transmit complex institutional resources and opportunities for students as they plan and prepare for their postsecondary prospects (Stanton-Salazar, 1997). During the process of choosing a college, institutional agents also exist in the forms of college admissions officers, outreach personnel, and other vehicles (such as the internet, books, magazines, or television) for colleges to inform and guide students. The orchestration of institutional agents and resources in students' social

networks play a critical role in determining the quantity and quality of information, guidance, and opportunity the students have during their process of developing and pursuing postsecondary aspirations (McDonough, 1997). More specifically, research on college choice has found that institutional resources begin to play their most important role when students are in the process of searching for information to help them consider or pursue different colleges (Galotti and Mark, 1994; Hossler and Gallagher, 1987; Hossler, Schmit, and Vesper, 1999; McDonough, 1997).

Teachers are a particularly important set of institutional agents that can either provide or undermine the postsecondary opportunities that are available for students. Teachers can often be a significant source of information, guidance, and encouragement for students. However, the quality and amount of information about college that students have is often mediated by the quality and quantity of interactions students have with teachers. The interactions that students have with teachers are often determined by the structural conditions in which the teachers are situated (i.e., college preparatory classes vs. vocational and remedial classes) (Noguera, 2003; Stanton-Salazar, 1997).

Counselors are other important institutional agents who play a significant role in students' postsecondary planning and decision making (McDonough, 1997). Academic advising is the primary source of students' contact with counselors. Students talk to their academic counselors the most, when they are determining which courses to take. In some cases, students have access to college counseling. College counselors can tell students how to strategize to get into different colleges, provide students with a range of colleges which the students should consider, and facilitate college tours and access to other institutional agents (Hossler, Schmit, and Vesper, 1999). However, the design of each school's counseling program plays a significant role in the type and amount of college information and guidance students received from their counselors. More specifically, some schools have counseling programs that enable counselors to provide college advising, whereas other schools do not have college counseling programs and the academic counselors often do not advise much regarding students' futures beyond high school (McDonough, 1997).

Because institutional agents play such a key role in determining the information and knowledge that students have access to, they can be considered gatekeepers to college opportunities. School agents, in particular, have the responsibility of making decisions about the distribution of scarce resources and unequal distributions of opportunities. Furthermore, the social and institutional contexts are instrumental in creating social capital that provides students with differential opportunities.

In many cases, students must rely on their teachers and counselors as their primary information and guidance sources. They use the guidance from institutional agents to gauge their preparedness and qualifications for college to determine where to go to college. The significance of institutional agents is heightened by the lack of experiential information and knowledge that their protective agents are able to offer.

SOCIAL CAPITAL, RACE AND ETHNICITY, AND RACISM

The concept of social capital involves two distinct, yet interrelated, propositions about human behavior. The first states that individuals are successful because they rely on family members, friends, and other members of their social networks for assistance (Lee and Croninger, 1998). The second proposition looks at social capital as a collective resource that are collective attributes and attitudes that influence the quality of relationships.

These structural characteristics include the extent to which the group promotes cooperation, builds trust, and maintains effective norms or sanctions (Coleman, 1990). The more connected one is to individuals, communities, or institutions that have access to resources, the greater the possibility that one can obtain concrete material and social benefits. We posit that race makes a difference in how students of color make and maintain relationships within these three vital constituencies—individuals, communities, and institutions. In the following section, we explore some ways that race and racism can affect how students of color interact with their teachers and counselors on an individual level, how ethnic and racial segregation of communities might limit the kinds of community resources students can access for information about higher education, and, on a macrolevel, how institutional policies can strain relationships between students of color and educational organizations.

RACE AND INSTITUTIONS

The role of institutions in providing social capital is particularly significant because many students of color, and particularly first-generation students, must rely heavily on institutional resources owing to the lack of information, guidance, and opportunities they have access to in their homes and communities. Stanton-Salazar (1997) argues that it is especially important for underrepresented students to learn how to navigate the cultural expectations of school by building meaningful relationships with institutional agents if they are to succeed.

Where connections between institutions and students are weak or characterized by fear and distrust, it is more likely that the institution will serve as a source of negative social capital. However, when a genuine partnership based on respect and a shared sense of responsibility exists between institutions and individuals, positive forms of social capital can be generated.

One example of this type of relationship is the interactions that students have with role models. For many students, being able to see themselves in another person's shoes is a key factor in their decision to pursue a dream. Another example of this type of partnership is the various outreach programs that help prepare students academically and socially for higher education. Students' relationships with institutional agents, however, can also be problematic. This is due to an educational system that is still largely segregated on the basis of race, the structure of schooling and the way students are tracked within the system, and the content and form of communication between higher education institutions and students of color.

Although public education in the United States is open to all students, it has produced differential outcomes despite numerous federal educational reform movements, such as the school desegregation movement in the 1950s and 1960s (Orfield, 1993; Zhou and Bankston, 1998). The Coleman Report (Coleman *et al.*, 1966) found that following such reform, children have continued to encounter inequality in educational opportunities that was sharply divided by racial and social class segregation.

Today, inequalities persist where one's race and racism continue to have implications on access to quality secondary education.

Children who live and attend schools in concentrated pockets of urban, inner-city communities are almost exclusively low-income students of color. Gandara (1995) illuminates that low-income and minority students often attend ethnically isolated schools that have poorer funding, fewer resources, teachers with less training and fewer credentials, fewer college-preparation courses, and other conditions that negatively affect student learning compared to schools populated by students with a diversity of income levels.

As college admissions become increasingly competitive at the most desirable colleges, a college preparatory curriculum, such as honors or Advanced Placement (AP) courses, plays an increasingly vital role (Adelman, 1998; Anderson and Hearn, 1992; Astin, 1982, 1985). For example, for the fall 2000 term at the University of California, Los Angeles, first-time freshmen had an average of 17 honors and/or AP courses

during high school, bringing the average grade point average (GPA) among the first-time freshmen to 4.20 (UC Office of the President, 2000). Unfortunately, different racial and ethnic groups have differential access to a college preparatory curriculum such as AP courses. Top students at an affluent school with a wide range of advanced and demanding courses will have an advantage to attend the most selective colleges over their counterparts at a high-poverty school that offers less of a college preparatory curriculum (Oakes *et al.*, 2000; Wilds and Wilson, 1998).

There are also within-school variations across race and class that can impact students' preparation and access to higher education (Coleman, 1988). Within-school variations across race and class have been identified as the "school-within-a-school" phenomena (Horvat, 1996; Oakes *et al.*, 2000). Ability grouping and tracking practices result in disproportionate (and often inappropriate) placement of racial and ethnic minority students in the lowest groups. Tracking has resulted in a number of problems related to college admissions. There are a large number of students who are not able to access courses necessary to fulfill the academic requirements of many selective universities (Oakes *et al.*, 2000). There is also evidence that many students enter higher education needing remedial education because of the poor academic preparation they received prior to entering college (Parker, 2005). These long-standing practices have had a significant negative effect on these students' opportunity to learn.

As discussed earlier, institutional agents are key elements for students' processes of making decisions about college (Alexander and Eckland, 1977; Horvat, 1996; McDonough, 1997). Counseling and guidance informs students of options, provides important information, and helps students make decisions that may impact their postsecondary outcomes. Because of the important role of counseling in college choice, high school guidance counselors are gatekeepers to college access (McDonough, 1997). Institutional agents play a particularly important role as admissions to more selective colleges become more complex, competitive, and challenging. Institutional agents, such as guidance counselors, are often the sole people who possess the knowledge and information necessary for students to make the right decisions to prepare for and enroll in college.

Unfortunately, many institutional agents have little exposure to college planning and are ineffective in helping to prepare students and parents for making postsecondary transitions (Boyer, 1987; McDonough, 1994, 1997). Students often lack information about college options and opportunities because of a lack of high school guidance services (McDonough,

1994; Orfield, 1992). In some schools, counselors are not always available to students. One study indicated that the average counselor-to-student ratio at low-income, inner-city schools was 1:740 (Fitzsimmons, 1991).

This is particularly compelling considering first-generation students of color who may not have resources in the home and rely more heavily on counseling and guidance from institutional agents at school (McDonough, 1997). Institutional agents in schools concentrated with racial and ethnic minorities that often deal with scheduling, discipline, and maintaining dropout prevention (McDonough and Perez, 2000), rather than guidance for helping students with their academic achievement or postsecondary plans. There also exists within-school variability in access to counseling resources that is often influenced strongly by a lack of resources available to serve all students (Teranishi, Allen, and Solorzano, 2004). Students are often tracked or targeted as priority for receiving service where others are assumed to not be “college material.”

There are two key issues that are critical to consider related to students' relationships with institutional agents. First, according to Granovetter (1973), individuals with few weak ties, or poor relationships with institutional agents, will be deprived of information from distant parts of the social system and will be confined to the provincial news and views of their family and close friends. Second, the quality of the relationship that students have with institutional agents has been found to be mediated by race and racism (Stanton-Salazar, 1997). Teranishi and Briscoe (2004) find that institutional agents themselves are influenced by media, institutional policy changes, and heated discussions about race and higher education that affect how they distribute information about college opportunity to students. After changes in the University of California's policy on affirmative action, for example, Black students reported that guidance counselors were steering them away from college opportunities within the state public higher education system (Teranishi and Briscoe, 2004). These reports find confirmation in the relative decline in applications by Black applicants to the University of California immediately following Proposition 209 and a subsequent increase in Black applications to the state's private colleges (Teranishi and Briscoe, 2004). Students also described racial tensions in their interactions with school guidance counselors and teachers. This research points out quite clearly that the guidance counselor-student relationship is not race neutral and is fraught with many of the same prejudices and problems that occur in the society at large.

There are other institutionalized information and guidance resources that students tap into during their pursuit for college. The two most common vehicles for information and guidance, aside from school agents,

are college outreach resources and media-type information sources (such as books, magazines, television, or the internet). In some cases, the information students gather from these information sources enhance their understanding about college, and in other cases, it is students only source of information. The problem with media-type resources is that they do not enable interaction with students or tailor the delivery of information to students in a way that is suited to each student's needs. In other words, the information is static and one-dimensional. Therefore, students who know how to utilize this information are usually students who are looking for information that would enhance what they have already learned from their protective or institutional agents. In other words, knowing how to get information does not equate to knowing what to do with it once the information is acquired.

Many media resources from colleges and universities emphasize the role of test scores and high school academic records in college admissions. While this emphasis may provoke anxiety for any student, the history of standardized testing and academic preparation for racial and ethnic minorities—particularly, in this case, Black and Latino students—constitutes something of a special case. For many of these students poor academic preparation is a result of their concentration in underresourced schools. But Ogbu (2003) finds that even in highly efficient, well-endowed schools, differences in academic attainment of Black and White students persist, including differences in course level enrollment, GPA, and proficiency test scores. These differences can be attributed not to class differences but to the lower expectations of teachers for Black students, and the difficult and often contentious social environments for Black students in majority-White schools that lead to lower self-esteem and, consequently, lower achievement.

Standardized testing is a consistent barrier to college access for many racial and ethnic minorities. Since their inception, they have always—without fail—produced wide and persistent differences between Black and White test takers. While the gap has shrunk dramatically in recent years, the reasons for its existence are still in debate. Once thought to register an accurate disparity between the intellectual capabilities of Black and White students, scholars now believe that most, if not all, of the difference in test scores can be attributed to differences in class (Jenks and Phillips, 1998). Students of lower socioeconomic resources have limited access to test preparation materials and courses, and attend schools that provide them with substandard academic programming.

But Steele and Aronson demonstrate a more intriguing explanation for the “Black-White test score gap.” As noted earlier, Steele and Aronson

(1995) find that Black students have internalized the negative stereotypes associated with Black intellectual inferiority and subconsciously act in ways that are consistent with those stereotypes. Specifically, Steele and Aronson find that Black students underperform on standardized tests when they are tested under conditions that emphasize or even intimate that their race may be a factor in their performance. This data brings into question what *psychological* differences are at play when Blacks and Whites contemplate the college application process.

STUDENTS AND COMMUNITIES: THE ROLE OF ETHNIC SOCIAL CAPITAL

Zhou and Bankston (1998) have noted that social capital has a powerful effect on the academic success of students within immigrant communities and schools. This is because communities and schools provide a context in which social capital is formed (Coleman, 1988; Zhou and Bankston, 1998). The close-knit social relations within ethnic communities can provide constructive “patterns of social relations involving shared obligations, social support, and social controls” (Zhou and Bankston, 1998, p. 12). Therefore, the social capital that exists within ethnic social relations in a community has a unique and powerful effect on shaping aspirations and educational values among ethnic immigrant children.

The neighborhoods that people live in can affect access that youth have to protective and institutional agents with quality information and resources. Many ethnic and racial neighborhoods that are largely of a single ethnic or racial group also have schools that are largely of the same ethnic or racial group (Orfield, 1996). Examples of this exist in California which include schools in the East Los Angeles that are almost exclusively of Chicano students (99% at Garfield High School and Roosevelt High School) or schools in some parts of the San Gabriel Valley that are largely Asian American students (70% at Mark Keppel High School). In the Los Angeles Basin, Chinese, Koreans, and Southeast Asians have formed ethnic enclaves downtown, in the San Gabriel Valley, the City of Westminster, and the City of Long Beach (see Ceja, 2001).

Chinese, Filipinos, and Southeast Asians in the Bay Area have developed ethnic communities in the cities of San Francisco, Oakland, and San Jose. In New York City, there are well-established communities of Dominicans, Haitians, Puerto Ricans, and African immigrants. These communities have assumed names such as “Chinatown,” “Koreatown,” “Little Saigon,” and “Spanish Harlem” (see Teranishi, 2004).

Ethnic enclaves have become popular locations for the settlement of newly arrived immigrants as well as the resettlement of migrating

immigrants, providing opportunity for immigrant-owned businesses and ethnic labor markets that are not available in the mainstream society (Portes and Rumbart, 1990; Zhou, 1992). The majority of new immigrants live in non- to limited-English-speaking environments. These communities tend to be densely populated inner-city neighborhoods with schools mostly populated by students of color (Gandara, 1995).

Immigrants with economic resources will often avoid the dense urban conditions of inner-city enclaves. As a result, there has been a rise of ethnic enclaves in suburbs—"ethnoburbs" associated with socioeconomic status (Fong, 1994; Li, 1999). Two examples of these suburban enclaves for Asian Americans are Monterey Park in Los Angeles and the Richmond District in San Francisco (Fong, 1994; Sanjek, 1998). It is assumed that ethnic groups that have moved into these ethnic suburbs are able to achieve access to relatively advantaged resources (Massey and Fischer, 1999).

The study of ethnic and racial enclaves is complicated by the fact that students often view their own ethnic backgrounds as vastly different from the way they are perceived and received by institutions and institutional agents. The first-generation Vietnamese student, who may be marked as "Asian" for institutional and statistical purposes, has access to a social network that is very different in substance and context than a Chinese student, or a third-generation Japanese American student (Teranishi, 2003). And yet, all of these students must operate within a system that assigns them a common background and common socioeconomic status. The same can be said for students of West Indian or Nigerian nationality, and the respective African American population in the United States. The racialization of particular ethnicities can have enormous effects on the possibilities for upward or downward mobility of high school students (Teranishi, 2005). A failure to understand how ethnicity is complicated by processes of racialization mean that students must navigate their own social networks, as well as contend with issues of race that are sometimes foreign to their own experience.

RACE AND INTERPERSONAL RELATIONSHIPS

Feagin and McKinney (2003) chronicle the many ways in which race and racism impact the interpersonal relationships of Black Americans in a variety of settings and contexts including the workplace, health-care institutions, and the educational system. They remind us that Black parents still counsel their children on how to cope with racism from an early age and that students, on their own, feel the need to learn and use coping

strategies to deflect and confront racist behavior. In 1974, Chester Pierce coined the phrase “racial microaggressions” to describe the frequent, subtle verbal or nonverbal racist insults directed at minorities. These incidents of racism, he claimed, while neither overt nor obvious, can cause high levels of stress and psychological dysfunction when suffered over a long period of time (Pierce, 1974). Classic examples of racial microaggressions include: assumptions about guilt or innocence/criminal intent based on a person’s race, the denial of service in a restaurant or store, or the assumption that one person’s viewpoint is representative of what a larger racial or ethnic community thinks about an issue. According to Pierce, racial microaggressions “stem from unconscious attitudes of white superiority and constitute a verification of black inferiority” and “in and of itself a microaggression may seem harmless, but the cumulative burden of a lifetime of microaggressions can theoretically contribute to diminished mortality, augmented morbidity, and flattened confidence.” Additional research has demonstrated that racial microaggressions can cause significant psychological damage (Solorzano, Allen, and Carroll, 2002; Solorzano, Ceja, and Yosso, 2000; Steele and Aronson, 1995).

Because of the highly segregated nature of schools and communities in the United States, racial and ethnic minority students rely heavily on the information and feedback of other minorities during the college-decision process. While class is a large reason that many racial and ethnic minority high school students have few peers, siblings or parents with first-hand experience with postsecondary education, those students who do have access to this invaluable resource are likely to receive and perceive this information and advice in a racialized way.

The experience of racial and ethnic minorities in college has largely been fraught with racial tension. Freeman (1997) found that Black students, regardless of socioeconomic status, perceived psychological and social barriers to college attendance including a feeling of intimidation about the college process and the college experience. In fact, Freeman notes that “the intimidation factor” was the most prevalent theme in her interviews with Black high school students when she asked them about barriers to college access. Freeman found that Black students had a fear of feeling isolated on White campuses, which was a substantial barrier to college access, particularly for students who had been raised in racially segregated neighborhoods. In an earlier study, Allen (1985) had similar results finding that Black students on White campuses experience alienation, perceive hostility and racial discrimination, and have difficulty integrating themselves into the mainstream campus culture. These results are consistent with other research that has examined the impact of a negative

campus racial climate on Black students (Duster, 1992; Hurtado *et al.*, 1998; Steele and Aronson, 1995).

We highlight these issues because they point to questions about the college experience for racial minorities that are beyond the scope of the literature on issues of socioeconomic status differences in college access, and because they address directly a point that is disappearing from our discussions of race in college choice. Students fear and perceive racism on college campuses. This is in part due to the actual experiences of racial minorities on college campuses but also speaks to the issue of the networks racial and ethnic minorities use to access information about college.

CONCLUSION

Racial and ethnic minorities face a number of barriers to higher education in the United States. As the literature has aptly demonstrated, some of these barriers are socioeconomic. But barriers of racism and prejudice have deep roots in the social history of this nation and race remains a principle organizing feature of how people of color approach and perceive their postsecondary opportunities. To understand why inequalities in access to higher education among different racial groups exist requires an examination of the racialized features of our school system and college admissions process.

Social network analysis allows us to see more precisely how race, racism, and continued (and arguably intensified) residential segregation preclude equal access to valuable and necessary information about college opportunity for minority students and undermine efforts to achieve greater access to higher education for students of color. The relationships among students, gatekeepers, admissions offices, and family and neighborhood support systems can be strengthened if there is renewed attention on the ways that those relationships are made more complex for students of color.

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