

CHAPTER 15

EDUCATIONAL REFORM AND THE ECOLOGY OF SCHOOLING

Teachers College Record, 1992, 93(4): 610–627

The aspiration to reform schools has been a recurrent theme in American education. This aspiration frequently is stimulated by changes outside the United States. For example, the successful launching of *Sputnik I* on October 4, 1957, was sufficiently traumatic to our sense of national security to motivate the Congress of the United States to provide funds for the development of curricula in science and mathematics in order to “catch up with the Russians.” During the 1960s over \$100,000,000 was spent in building new programs in these fields and in retraining teachers. Despite all the effort and all the money, there is little that now remains in American schools that reflects the aspirations of the curriculum reform movement of the 1960s: Few of the curricula are to be found. *Sputnik I* motivated many, but its educational residue is difficult to find.

Since *Sputnik I*, American schools have been subjected to numerous reform efforts. The latest was initiated at a presidentially sponsored education summit on April 18, 1991, a summit attended by the nation’s governors, by the US Secretary of Education, and by educators holding positions of high office, to announce Bush’s new plans for educational reform. Yet only a few years earlier another president supported another effort at educational reform. *A Nation at Risk*, a document that enjoyed the highest level of visibility of any American educational policy paper published during this century, caught not only the attention but the enthusiasm of almost everyone.¹ Despite these reform efforts, the major features of schools remain largely as they were. What went wrong? Is there anything to learn from past efforts that might make current efforts more successful? This article first describes some of the conditions that make change in school difficult and then presents a potentially useful framework for developing a more effective agenda for school reform.

Schools as robust institutions

One thing is clear: it is much easier to change educational policy than to change the ways in which schools function. Schools are robust institutions whose very robustness provides a source of social stability.² But what is it about schools that makes them so stable? Consider the following nine factors.

Internalized images of teachers’ roles

The images of what teachers do in classrooms, how they teach and organize children and tasks, are acquired very early in a child’s life. In one sense, teaching is

the only profession in which professional socialization begins at age five or six – when children begin school. In no other field do children have as much systematic opportunity to learn what a professional does in his or her work. Indeed, many children spend more time with their teachers than with their parents. This fact of early professional socialization should not be underestimated. Many young adults choose teaching because of their image of teachers and this image is not unrelated to what they believe being a teacher entails. Images of teaching and ways of being a teacher are internalized early in a child's life and bringing about significant changes in the ways in which teachers function requires replacing old images with new, more adequate ones. When a university teacher education program tries to promulgate a new image of teaching, but sends its young, would-be teachers back to schools that are essentially like the ones in which they were socialized, the prospects for replacing the old ideals in the all too familiar contexts in which new teachers work is dimmed: the new wine is changed when it is poured into the old bottle.

Attachment to familiar pedagogical routine

Being a teacher, if it requires any set of skills and understandings, requires the ability to manage a group of children so that the class remains coherent and intact; nothing can be done if the class as such is in a state of disarray. But matters of management are only one part of the equation. The other is having something to teach. Teachers acquire a useful pedagogical repertoire by virtue of their experience in classrooms and that repertoire includes some degree of mastery of both the content they wish to teach and the methods and tactics through which to teach it.³ This repertoire is extremely important to teachers, for it provides them with a source of security and enables them to cope with pedagogical demands efficiently. If a teacher does not know what to teach or is insecure about a subject, attention must be paid to matters of content. This can exacerbate both problems of management and problems of pedagogy. It is difficult to be pedagogically graceful when you are lost in unfamiliar territory. Teachers are often reluctant to relinquish teaching repertoires that provide an important source of security for them. New content areas might require new pedagogical routines. Given the overload that teachers typically experience in school – large numbers of students and many courses or subjects to teach – economy of effort is an important value.⁴ Familiar teaching repertoires provide economy of effort; hence changes in schools that require new content and new repertoires are likely to be met with passive resistance by experienced teachers who have defined for themselves an array of routines they can efficiently employ. To make matters even less promising for school reform, few efforts at reform in the United States have provided time for teachers to develop mastery of new content or the skills required for new forms of teaching. Typically, new expectations for teachers are “add-ons” to already overloaded curricula and very demanding teaching schedules.

Rigid and enduring standards for appropriate behavior

A third source of school stability resides in the persistence of school norms. Every social occasion from the birthday party to the funeral service is pervaded by social norms that prescribe implicitly, if not always explicitly, ways to be in the world. Schools are no different. What teachers are supposed to be, how children are supposed to behave, what constitutes an appropriate and fair set of expectations for

a subject, are defined by the norms of schooling. These norms have been described by Dreeben, Jackson, Lortie, Lightfoot, Powell, and Eisner, and decades earlier by Waller.⁵ In the past two decades educational scholars on the political Left such as Apple and Giroux have also examined the ways in which the pervasive and sometimes covert norms of schooling shape attitudes, create inequities, and often reproduce the inequities of the society at large.⁶ Undoubtedly some of their observations are correct, but my point here is not so much to make a statement about what Bourdieu has called “cultural reproduction”⁷ as to make it plain that if schools are to seriously address matters of intellectual development, the cultivation of sensibility, and the refinement of the imagination, changes must be made in educational priorities. Such changes will require institutional norms different from those now salient in schools.

Norms, after all, reflect values. They adumbrate what we care about. Trying to convert schools from academic institutions – institutions that attempt to transmit what is already known – into intellectual ones – institutions that prize inquiry for its own sake – will require a change in what schools prize. Most efforts at school reform fail to address this challenge. The tack taken in most educational policy papers is typically superficial and the language is technical. The problem is often thought to be solvable by curriculum “installation”; we are to “install” a new curriculum and then “align it” with other curricula. We typically employ a language of change that reveals a shallow and mechanistic conception of what real change requires. Policymakers cannot install new norms in schools any more than they can install new teaching methods. Both need careful cultivation and nurture. By persisting in using inappropriate mechanical metaphors for thinking about the process of school reform, we persist in misconceptualizing the problem and undermining genuine change.

Teacher isolation

A fourth factor that thwarts school reform is the fact that in the United States, we have structured schools and defined teaching roles in ways that make improved teaching performance difficult to achieve. Consider the ways in which teachers are insulated and isolated from their colleagues. Teaching, by and large, in both elementary and secondary schools is a lonely activity. It is not that teachers have no contact with people; after all, they are with students all day. The point is that they have very little contact with other adults in the context of their classrooms. Some school districts in the United States and some enlightened policies provide teachers with aides and with special assistance by certified professionals, but these human resources are relatively rare. Most teachers spend most of their time in their own classrooms, closed environments, with twenty-five to thirty-five children or adolescents. Of course, there are occasions – lunchtime and the occasional staff meeting, for example – where teachers see each other, but seldom in the context of teaching. Even teachers who have worked in the same school for twenty years are likely to have never seen their colleagues teach.

The result of professional isolation is the difficulty that teachers encounter in learning what they themselves do in their own classrooms when they teach. Classrooms, unlike the rooms in which ballerinas practice their craft, have no mirrors. The only mirrors available to teachers are those they find in their students’ eyes, and these mirrors are too small. Hence the teacher, whether elementary or secondary, must learn on his or her own, usually by reflecting on how things went. Such personal reflection is subject to two forms of ignorance, one type remediable, the other not.

The two types of ignorance I speak of are primary and secondary ignorance. Primary ignorance about teaching, or about anything else for that matter, is when you do not know something but you *know* that you do not know it. In such a situation, you can do something about it. Secondary ignorance is when you do not know something but do *not know* you do not know it. In this case, you can do nothing about the problem. The professional isolation of teachers fosters secondary ignorance. How can a teacher learn that he or she is talking too much, not providing sufficient time for student reflection, raising low-order questions, or is simply boring students? Teachers unaware of such features of their own performance are in no position to change them. Educational reform efforts that depend on new and better approaches to teaching yet make it difficult for teachers to learn about their own teaching are destined to have a poor prognosis for success. Despite what seems obvious, we have designed schools both physically and organizationally to restrict the teacher's access to other professionals. Discretionary time for teachers is limited and although the school principal could make the time to provide teachers with useful feedback, he or she often does not have the inclination or the skills or is so preoccupied with other matters of lesser importance that attention to the improvement of teaching become marginalized. As a result, it is not unusual for teachers to feel that no one really cares about the quality of their work.⁸

Inadequacies of in-service education

In-service education is the major means used in the United States to further the quality of teaching. But in-service education typically means that teachers will attend meetings or conferences to hear experts (often university professors who have had little contact with schools) provide advice on the newest developments in teaching mathematics, social studies, or the language arts. The assumption is that once teachers are exposed to such wisdom, they will implement the practices suggested in their own classrooms. The in-service seminar is one in which the advice-giver typically has never seen the teachers who comprise the audience. The advice-giver does not know the teachers' strengths or their weaknesses. The situation is much like a voice coach giving advice to a singer whom he or she has never heard sing. General recommendations go only so far.

Thus, we try to improve teaching by asking teachers to leave their classrooms so that they can travel to distant locations in order to get general advice from people who have never seen them teach. One does not need to be a specialist in learning theory to know that for complex forms of human action, general advice is of limited utility. Feedback needs to be specific and focused on the actor in context. What we do, however, is to decontextualize in-service education and, as a result, weaken its potential usefulness.

My remarks should not be interpreted to mean that in-service programs for teachers cannot be useful, but that in-service education without some direct observation of teachers in the context of their own classrooms is not likely to be adequate. In this case, as in so many others, we have greatly underestimated what it will take to improve what teachers actually do in their own classrooms.

Conservative expectations for the function of schools

Another factor that contributes to the robust quality of schools and their resistance to change is that the expectations of both students and parents regarding the function of

schools and the forms of practice that are appropriate are usually conservative. What does a good teacher do? What kinds of questions are appropriate for students to ask? How much freedom should teachers provide? What kinds of problems and projects should students be asked to engage in? How should students be evaluated? Should they have any role in their own assessment? Answers to each of the foregoing questions are related to expectations of what schools, classrooms, and teachers should be. The expectations of parents and students are often quite traditional on such matters.

The call for “back to basics” – a return to the educational practices of the past – is regarded by many as the way to save American schools from mediocrity or worse. Familiar practices are not threatening; the past almost always has a rosy glow. Practices that violate tradition are often regarded as subversive of high-quality education. School reform efforts that challenge tradition can be expected to encounter difficulties, especially from the segment of the population that has done well in socioeconomic terms and has the tendency to believe that the kind of schooling that facilitated their success is precisely the kind their own children should receive.

Expectations by students for practices with which they are familiar go beyond general forms of teaching practice; they include expectations for the way in which specific subjects should be taught. For example, students whose experience in art classes has not included learning about the history of art or writing about the qualities of particular works of art may regard such practices as distasteful; for many students reading and writing have no place in an art class. A program in social studies that requires group cooperation on project-centered work can be regarded as inappropriate by students whose concept of social studies is one that is devoted exclusively to individual tasks. Parents whose experience in learning mathematics emphasized drill and practice may regard an arithmetic program oriented toward the practical applications of arithmetic as less intellectual and less rigorous. The point here is that educational consumers can exercise a conservative function in the effort at educational reform. It is difficult for schools to exceed in aim, form, and content what the public is willing to accept.

Distance between educational reformers and teachers implementing change

Reform efforts in American education are almost always from the top down. For whatever reason, educational policymakers mandate change, often through national or state reports or through new educational legislation that sends the message of changed policies to those “on the front line.” The tacit assumption is that once new policies are formulated, a stream of change will begin to flow with little further assistance. When assistance is provided it sometimes comes in the form of new policy papers, curriculum guides, and district conferences. Typically, the structural conditions of schools stay the same. Teachers remain on the receiving end of policy and have little hand in its formation.

The attraction of providing teachers with a hand in shaping educational policy is quite limited if one believes educational practice, at its best, will be uniform across school districts and geographic regions. If one’s model of ideal educational practice is one of standardized practice, the way in which an efficient manufacturing plant might function, giving 2½ million American teachers the opportunity to determine what is best for their own school or school district can appear chaotic or even nihilistic. Thus, there is a real tension in the process of school reform. At one end there is

the desire to create a uniform and “equitable” program for children and adolescents, regardless of who they are or where they live. This requires centralized decision making. At the other end is the realization that unless teachers feel some commitment to change, they are unlikely to change. To feel such commitment it is important for teachers to have the opportunity to participate in shaping the change process.

Many veteran teachers, those who have seen educational reforms come and go, are skeptical about new reforms and respond with passive resistance: they simply ride out the new policies. This can be done without much difficulty for two reasons. First, educational reform policies come and go about every five or six years, more visible in the media than in the classroom. Second, once the classroom door is closed, the ways in which teachers teach is essentially a private affair. Elementary school principals rarely monitor teaching practice closely, and at the secondary level, they do not have the subject-matter expertise in a wide variety of fields to do so.

The growing desire to engage teachers in the change process has led to the notion of “teacher empowerment.” In general, the idea is that, as important stakeholders in what schools do, teachers need to have authority to plan and monitor the quality of the educational process in their schools. The effort, in a sense, is to democratize educational reform by giving teachers a say-so in what happens. This say-so includes defining curricular goals and content, improving teaching practice, and developing ways to assess what children experience during the school day. In some cases, it includes decision making about budget allocations through a process called site-based management.

A practice related to this general thrust of teacher improvement is called *action research*. Action research is intended to encourage teachers to collaborate with other teachers and, at times, with university professors in order to undertake research in their own school or classroom.⁹ The aim of the enterprise is to stimulate professional reflection by encouraging teachers to take a more reflective intellectual role in understanding and improving their own teaching practice.

It is not yet clear just how many teachers are interested in being “empowered.” It is not yet clear how many teachers want to do educational research. It is not yet clear how many teachers are interested in assuming larger responsibilities such as the formulation of educational policy. Many teachers gain their deepest satisfaction in their own classroom. The classroom is their professional home and they are not particularly interested in collaboration or in doing educational research. As I indicated earlier, conceptions of the teacher’s role are acquired early in development and teachers are often comfortable with these conceptions. If a bird has been in a cage for a decade and suddenly finds the door open, it should not be too surprising if the bird does not wish to leave. The familiar is often more comfortable than the uncertainty of the unknown.

Empowering teachers is more complex than I have suggested. When innovative reform policies are formulated or new aims or programs presented, they are often prescribed *in addition* to what teachers are already doing; they are add-ons. Given that the teacher’s day is already quite demanding, it should come as no surprise that taking on added responsibilities for the formulation of policy or for monitoring the school should be regarded by some as an extra burden. Put more bluntly, it is unrealistic to expect overworked teachers who have very little discretionary time in the school day to be more active in their school without relief from some of their current responsibilities. To provide relief will require restructuring. Restructuring is likely to require money, something that is in scarce supply in many school districts. As a result, much of the activity in the context of school reform is more at the level of rhetoric than at the level of practice.

As educational reformers have become increasingly aware of the difficulty of bringing about significant change in the ways in which schools function, they have talked about the restructuring of schools.¹⁰ For this term, which to me generates an image of fundamental rather than superficial change, there are almost as many meanings as there are writers. In my discussions with school principals and school superintendents, “restructuring” meant to them changing the ways in which funds were allocated rather than reconceptualizing the organization, content, and aims of schools. Conceptualized in terms of financial resource allocation, the power of the concept was neutralized.

Another complexity regarding teacher empowerment involves the question of authority and responsibility. If teachers are given the authority to change local educational policy in their schools, will they assume responsibility for the consequences of those policies? If so, how will those consequences be determined? What will be the responsibilities of the school district’s superintendent and the district’s central office staff? Just what is the appropriate balance between authority and responsibility and who is responsible for what when responsibility and authority are localized?

These questions are not yet resolved. The recent interest in giving teachers a genuine role in the reform of schools is seen by many (including me) as salutary, but how lines of authority and responsibility are to be drawn is far from clear. Can genuine school improvement occur without commitment from teachers? It seems unlikely. Just how can such commitment be developed? These questions are on the current agenda of school reform in the United States.

Artificial barrier between disciplines and between teachers

An eighth factor that impedes school reform pertains to the ways in which the school itself is organized. One of the most problematic features in the organization of schools is the fact that they are *structurally fragmented*, especially at the secondary level. By structurally fragmented I refer to the fact that curricula are divided and organized into distinct subject matters that make it difficult for students to make connections between the subjects they study.¹¹ In the United States, secondary school students will typically enroll in four to six subjects each semester. As a result, teachers must teach within narrow time blocks. They teach four to seven classes each day, see 130 to 180 students each day; students must move every fifty minutes to another teacher who teaches them another subject. There is no occupation in American society in which workers must change jobs every fifty minutes, move to another location, and work under the direction of a different supervisor. Yet this is precisely what we ask of adolescents, hoping, at the same time, to provide them with a coherent educational program.

Structural fragmentation also pertains to the fact that the form of school organization that we have created isolates teachers. And as I have already indicated, isolation makes it difficult for teachers to receive critical and supportive feedback about their work. Teachers experience little collegiality in the context of the classroom, and of course it is in the context of a classroom that the real business of education is played out. Unless there is significant change in the way in which teachers and students live and work together, any significant change in schools is illusory.

Because the forms of school organization are cultural rather than natural entities, they need not be regarded as being of necessity; that is, they can be other than the way they are. Moses did not receive instructions about school organization on

Mount Sinai, at least as far as I know. Yet we persist in maintaining school structures that might not be in the best interests of either teachers or students. I can tell you that the organizational structure and the curricular requirements of the secondary school I attended forty years ago are quite like the organizational structure and curricular requirements secondary school students encounter today. How much structural and curricular overlap is there between the secondary school you attended and today's secondary schools?

Feckless piecemeal efforts at reform

The last factor that impedes significant educational reform is the piecemeal and superficial way in which reformers think about educational reform. Minor efforts at change are eventually swamped by the factors in the school that do not change. Robust systems can withstand minor incursions. Thus the need, I believe, is to think about school reform ecologically, or at least systemically. Aspects of schooling that remain constant militate against those features of schooling that are being changed. For example, efforts to help teachers learn how to teach inductively are not likely to succeed if the evaluation system the school employs rewards other types of teaching. Efforts to encourage teachers to engage in reflective teaching are likely to be feckless if teachers have no time during the school day for reflection. Efforts to create intellectual coherence in the student's understanding are likely to fail if the form that the curriculum takes makes coherence impossible. Improvement in teaching is unlikely as long as teachers get no useful feedback on the work they actually do in their own classrooms.

It is important in educational reform to think big even if one must start small. These needs, I believe, to be an overall conception of what schools are as forms of shared communal life as well as persuasive and attractive visions of what such shared living might become. The next section describes a means for securing a better understanding of what schools are as living organisms. The last section provides a model or framework that identifies important candidates for educational change.

Schools as living systems

The place to begin school reform is in the effort to understand the ways that schools actually function, what it is they teach both implicitly and explicitly, and how they reward the people who spend so much of their lives there. Unfortunately, the effects of efforts at school reform are based on the results of standardized achievement testing and the results of such testing say little about the processes that lead to them. We cannot know much about the educational quality of schools simply by examining test scores. We need a finer, more refined screen, one that focuses on the processes as well as the outcomes of schooling.

Much recent research in the United States has focused on the quality and process of schooling.¹² Some of these studies have used ethnographic research methods or modifications of such methods.¹³ Some studies have been rooted in critical approaches¹⁴ and others in methods derived from the arts and humanities.¹⁵ As a result of this work a number of salient features of schools, many of which are quite common across a variety of schools, have been identified: structural fragmentation, teacher isolation, didactic teaching, treaties between teachers and students, the particular ways in which effective teachers and school administrators relate to students, the emphasis on extrinsic rewards, and the like. How salient are these features? Are there important differences? How can we know?

The only way I know to discover the salient and significant features of schools is to look. The implications of what is found will depend on what is found and on the educational values that give direction to the schools themselves.

To look at schools as I have suggested is not enough. Anyone can look. The trick is to see. Seeing requires an enlightened eye. It requires schemata through which different genres of teaching can be appreciated.¹⁶ It is a mistake to assume that all good teaching has identical characteristics, that one size fits all. Thus, to see what happens in classrooms requires a willingness and a set of sensibilities and schemata that can pick up the distinctive features of particular types of teaching. These types of teaching are not simply generic. They emerge within the constraints and possibilities of particular subject matters – *what* one teaches counts. As Stodolsky says, “the subject matters.”¹⁷ Even more than this, any given subject matter – history, for example, or mathematics – can have a wide variety of aims and methods. Perceiving school processes requires an understanding of the types of teaching possible within the subject-matter field and an awareness of the varieties of quality that can be manifested within each.

This article is not the place to describe in detail the forms of perception and description of life in schools I have in mind. Readers interested in what I have called “educational connoisseurship” and “educational criticism” can find the approach described in a variety of articles and particularly in my latest book.¹⁸ The point is that school reform should begin with a decent understanding of the schools themselves, not with old memories of schooling held by middle-aged men and women working in institutions far removed from schools. A major part of the current investment in school reform should be aimed, in my opinion, at trying to understand such processes as how teaching takes place in particular fields, what constitutes the implicit as well as the explicit norms of the school, the sense that students make of what they study, the aims that teachers say are important and the relationship of those aims to what they do in their classrooms. It should also deal with the intellectual quality of what is taught and the procedures that are used in the classroom to motivate and reward students and teachers. The aim of such inquiry is to secure an organic, cultural picture of schools as places to be. The basic questions direct attention to the value of what goes on in them. Such questions are easy to raise but difficult to answer, yet unless they are raised educational reform is likely to be predicated on very partial forms of understanding of what schools are like for teachers and students.

As I have indicated, the kind of study I am suggesting is one that is organic or cultural. To study schools in this way is likely to require an approach to educational research that is *qualitative* in character. It is an approach that pays attention to the processes of schooling and to the context in which those processes occur. I know of no way to find out what schools are like except by going to schools themselves to see, to describe, to interpret, and to evaluate what is occurring. Such an understanding can provide a foundation for reform that addresses what is genuinely important in education.

Five major dimensions of school reform

In the final section of this article, I identify five dimensions of schooling that I believe must be considered in order to think comprehensively about the reform of schools. I call these dimensions the *intentional*, the *structural*, the *curricular*, the *pedagogical*, and the *evaluative*.

My thesis is that meaningful and educationally significant school reform will require attention to each of these dimensions. Attention to one direction without

attention to the others is not likely to lead to change. Where change does occur, it is likely to be temporary and superficial.

The intentional refers to what it is that schools are intended to accomplish. What really counts in schools? Defining intentions pertains to both the general aims of schooling and the aims of the particular subject matters being taught. Consider, for example, intentions that are typically *not* given high priority in schools or in reform efforts: fostering a desire to continue learning what schools teach, the development of curiosity, stimulating the ability to think metaphorically, creating a caring attitude toward others, the development of productive idiosyncrasy, the ability to define one's own goals and the ability to pursue them, the ability to raise perceptive questions about what one has studied. An argument for each of these intentions could be made that is cogent and relevant to the world in which children live. If such intentions were taken seriously, their ramifications for educational practice would be considerable. My point here is not to advocate such intentions (although I do not reject them) but rather to illustrate the idea that the conventional intentions schools serve are not necessarily the most important ones. What is important will depend on an argued set of educational values and an understanding of the students and society schools serve.

Most efforts at school reform operate on the assumption that the important outcomes of schooling, indeed the primary indices of educational success, are high levels of academic achievement as measured by standardized achievement tests. Just what do scores on academic achievement tests predict? They predict scores on other academic achievement tests. But schools, I would argue, do not exist for the sake of high levels of performance in the context of schools, but in the context of life outside of the school. The significant dependent variables in education are located in the kinds of interests, voluntary activities, levels of thinking and problem solving, that students engage in when they are not in school. In other words, the real test of successful schooling is not what students do in school, but what they do outside of it.

If such intentions were genuinely central in our educational planning, we would probably make other arrangements for teaching, curriculum, and evaluation than those we now employ. Significantly new intentions are likely to require new ways of leading educational lives.

The structural aspects of schooling pertain to the ways in which we have organized subjects, time, and roles. I have already alluded to the fact that we structure subjects by type. We use what Bernstein has called a collectiontype curriculum.¹⁹ Each subject is bounded and kept distinct from others. This boundedness is reinforced by how time is allocated, what is taught, and in some secondary schools, where on the school campus a subject matter department is located. In some schools there is a section of the school devoted exclusively to the sciences, another to the fine arts, another to business and computer studies. We emphasize separateness and reinforce that separateness through a departmentalized structure.

Departmentalization might be, in the long run, the most rational way to structure schools, but it is not the only way. My aim here is not to advocate a particular change, but to problematize the structures we have lived with for so long that we come to think about them as natural entities rather than as the results of decisions that could have been otherwise. Is a departmentalized structure the best way to organize schools? It depends on a set of educational values and an exploration of alternative modes of organization. In the United States very few efforts at school reform – open schooling being a vivid exception – have tried to restructure schools. The curriculum reform movement of the 1960s attempted to create curricula

designed to fit into existing school structures. Can new messages change the school or will the school change the messages?

The structure of the school also influences the way in which roles are defined. In American schools there are basically two roles for adults: teacher and principal. The teacher spends his or her day with children or adolescents. The principal seldom is responsible for teaching functions and has far more discretionary time than do teachers. If a teacher wants to secure more professional life-space, he or she must leave teaching and become a school administrator. Once such a decision is made, for all practical purposes, there is no return to the classroom – as the caterpillar, once it becomes a butterfly, remains a butterfly until it dies.

Working as an educator in a school need not be limited to two roles, nor must these roles be conceived of as “permanent.” Schools can be structured so that teachers who are interested can devote some years or parts of some years to curriculum development, to the design of better evaluation methods for their school, to serving as mentors to beginning teachers. Teachers could create liaisons with community agencies such as museums, hospitals, cultural centers, retirement homes, in order to secure services that could enhance and enrich school programs. Teachers could devote time to research in their own school and assist parents with children who are having difficulty in school. There is a host of possible roles that could make important generic contributions to a school’s way of life, but for these contributions to be made, educators need to create school structures that permit them to be developed. American schools, with few exceptions, are structured to inhibit these roles rather than to encourage their formation. The paradigms we have internalized about the nature of schooling – the way time is allocated, the way subjects are defined, the way in which roles are specified – are so strong that efforts at reform are typically conceptualized to fit into the constraints of those structures, thus defining the parameters within which reform efforts are to occur.

The curricular is the third dimension that needs attention in any effort to create genuinely significant educational reform. Decisions about curriculum can be made about several of its features. Among the most important are those about the content that is to be provided, about the kind of activities that are to be used to help students experience that content, and the way in which the curriculum itself is to be organized. As I have indicated, most efforts at curriculum reform in the United States have left the organization of curriculum intact: separate subjects separately taught has been the dominant mode of organization, although at the elementary level such organization is less prevalent than at the middle or secondary school levels. Yet in spite of frequent admonitions by educational scholars to reduce curriculum fragmentation,²⁰ the separation of subject matters persists and is supported by the infrastructure of professional education: testing programs, university admissions criteria, teacher training programs, specialization among subject-matter teachers. This collection-type form of curriculum organization²¹ is not the only way in which curriculum can be organized. Whether it is the most appropriate form, given the potential costs of other forms of organization, depends upon our educational intentions. If integration of learning is desired, separation may indeed be problematic. Again, my point here is not to argue for a specific form of curriculum reorganization as much as to urge the careful rethinking of the organization that now prevails.

What is taught in the first place is of primary importance. One way to increase the probability that something *will not be learned* is to ensure that it *will not be taught*, that is, to make a subject matter a part of a *null curriculum*.²² The fine arts are often relegated to this position. For many citizens the arts are someone else’s

pleasures. Large and important legacies of culture go unseen, unheard, unread, and as a result, unloved. Schools perpetuate this state of ignorance by withholding from the young important parts of their cultural legacy. The list could be expanded.

Regarding the activities that allow students to grasp or experience what is taught in schools, according to Goodlad, the lecture still dominates at the secondary school level.²³ Students typically have few opportunities to formulate their own questions and to pursue them. They are expected to do what the teacher requests; their role is in the application of means rather than the formulation of ends. They become, says Apple, deskilled, unable to formulate the aims and goals they seek to attain.²⁴

The provision of opportunities for students to define at least some of their purposes is arguably an important educational aim and the ability to do so an important educational achievement. To what extent does it occur? Genuine reform of schools will require attention not only to intentions and school structure, but to the content, tasks, and forms of organization of the school curriculum. Which aspects of curricula should receive attention will depend on what is now occurring in schools; the only way to know that is to go to the schools to see.

The fourth dimension needing attention in genuine school reform is *the pedagogical* aspects of educational practice. If the curriculum is the systole of education, teaching is the diastole. No curriculum teaches itself and how it is mediated is crucial. In fact, I find it useful to distinguish between the *intended* curriculum and the *operational* curriculum.²⁵ What we plan to teach – materials, outlines, projected activities, and goals – constitutes the intended curriculum. The operational curriculum is the curriculum that is played out in the context of classroom life. In this process pedagogy plays a crucial role. When programs call for new teaching skills that teachers do not possess – inductive teaching, for example – teachers understandably use the skills they possess and these may not be adequate to the task.

No intended curriculum can be followed by teachers as a script; the classroom is too uncertain a place for recipes. The professional teacher needs to use the curriculum as a resource, as an amplifier of his or her own ability. Different teachers need different amounts of guidance and specificity. Thus, the pedagogical is a central aspect of school reform. Unless classroom practices change, changes on paper, whether in policy or in curriculum, are not likely to be of much consequence for students.

How can students of education know about the ways in which teaching occurs? What are the strengths teachers possess and what are their weaknesses? Are there important educational consequences on both sides of the ledger? These questions are, of course, easy to pose but difficult to answer. At minimum, qualitative studies of classroom life must be undertaken. Such studies could provide the basis on which effective change strategies could be initiated and could provide a focus for efforts aimed at pedagogical issues. *Both* curriculum and pedagogy need to be seen in context and both need attention for strengthening school reform.

Finally, the fifth dimension needing attention in school reform is *the evaluative*. It makes no sense whatsoever to write policy papers about educational reform and to prepare syllabi and curriculum guides for teachers that advocate a new direction for educational practice and continue to assess the outcomes of schooling on instruments that reflect older, more traditional views. Yet, this is what we often do. Consider the proposition that good schools increase individuality and cultivate productive idiosyncrasy. Consider the idea that good schools increase differences

among students, not diminish them. If we truly embraced these views, how would we go about evaluating the educational effectiveness of schools? Would commensurability remain an important criterion? What kinds of opportunities could be provided to students to develop what they have learned? To what extent would we use closed-ended examinations?

High-stake assessment procedures symbolically and practically represent what “higher-ups” care about and performance on such procedures significantly affects both the options students have and the professional reputation of teachers. How outcomes are evaluated is a major agent influencing what teachers and school administrators pay attention to. Thus, the redesign of assessment instruments so that they provide information about what teachers and others care about most from an educational perspective is a fundamental aspect of school reform. Schools cannot move in one direction and assess teachers and students using procedures that represent values in quite another direction.

Evaluation, however, should not be conceived of exclusively in terms of outcome assessment. Evaluation, it seems to me, should be regarded as an educational medium. The processes of teaching and the quality of what is taught, as well as their outcomes, are the proper subject matter of an adequate approach to educational evaluation. If the quality of the content being taught is poor, it does not matter much if the quality of teaching is good. Indeed, if the content being taught is pernicious, excellence in teaching is a vice.

Evaluation is an aspect of professional educational practice that should be regarded as one of the major means through which educators can secure information they can use to enhance the quality of their work. Evaluation ought to be an ongoing part of the process of education, one that contributes to its enhancement, not simply a means for scoring students and teachers.

These factors, the *intentional*, the *structural*, the *curricular*, the *pedagogical*, and the *evaluative*, are all important and interacting dimensions of schooling. Collectively they constitute a kind of ecology of schooling. To bring about reform in schools that is more than superficial and short-term requires attention to all of them.

To consider these dimensions not simply as an academic enterprise but as an activity leading to an agenda that can be acted on is the tough test of educational reform efforts. In some way that agenda has to be set. In setting this agenda teachers will need to be involved, as well as school administrators who themselves are not afraid of new forms of practice. The details of this agenda – the role, for example, that universities might play in school reform – cannot be addressed in this article. Yet unless the plan for school reform is comprehensive, it is likely to leave little residue in the long run. We sometimes say in the United States that educational reform is like a pendulum swing – we go back and forth. Pendulums are objects that move without going any place. Recognizing the ecological character of schools and facing up to the magnitude of the task of educational reform are important beginning efforts in dismounting from the pendulum.

Notes

- 1 USA Research, *A Nation at Risk: The Full Account* (Cambridge, MA: USA Research, 1984).
- 2 Larry Cuban, “Reforming Again, Again, and Again,” *Educational Researcher*, 19(1) (January–February 1990), 3–13.
- 3 David Berliner, “In Pursuit of the Expert Pedagogue,” *Educational Researcher*, 15(7) (1986), 5–10.

- 4 D. Flinders, "What Teachers Learn from Teaching: Educational Outcomes of Instructional Adaptation" (PhD dissertation, Stanford University, 1987).
- 5 Robert Dreeben, *On What Is Learned in School* (New York: Addison-Wesley, 1968); Philip W. Jackson, *Life in Classrooms* (New York: Holt, Rinehart & Winston, 1968); Dan C. Lortie, *School Teacher: A Psychological Study* (Chicago, IL: University of Chicago Press, 1975); Sara Lawrence Lightfoot, *The Good High School: Portraits of Character and Culture* (New York: Basic Books, 1983); Arthur G. Powell, Eleanor Farrar, and David K. Cohen, *The Shopping Mall High School: Winners and Losers in the Educational Marketplace* (Boston, MA: Houghton Mifflin, 1985); Elliot W. Eisner, *What High Schools Are Like: Views from the Inside* (Stanford, CA: Stanford School of Education, 1985); and Willard W. Waller, *The Sociology of Teaching* (New York: John Wiley, 1932).
- 6 Michael Apple, *Education and Power* (Boston, MA: Routledge & Kegan Paul, 1982); and Henry Giroux, *Critical Pedagogy, the State, and Cultural Struggle* (Albany, NY: University of New York Press, 1989).
- 7 Pierre Bourdieu, *Reproduction in Education's Society and Culture* (London: Sage Publications, 1977).
- 8 Eisner, *What High Schools Are Like*.
- 9 J. M. Atkin, "Can Educational Research Keep Pace with Education Reform?" *Kappan* 71(3) (November 1989), 200–205.
- 10 *Restructuring California Education: A Design for Public Education in the Twenty-first Century, Recommendations to the California Business Round Table* (Berkeley, CA: B. W. Associates, 1988).
- 11 Eisner, *What High Schools Are Like*.
- 12 John I. Goodlad, *A Place Called School: Prospects for the Future* (New York: McGraw-Hill, 1984); Theodore R.Sizer, *Horace's Compromise: The Dilemma of the American High School* (Boston, MA: Houghton Mifflin, 1984); Powell, Farrar, and Cohen, *The Shopping Mall High School*; and Eisner, *What High Schools Are Like*.
- 13 H. Wolcott, *The Man in the Principal's Office* (Prospect Heights, IL: Waveland Press, 1984).
- 14 P. Willis, *Learning to Labor* (Lexington, KY: D.C. Heath, 1977).
- 15 Lightfoot, *The Good High School*.
- 16 Elliot W. Eisner, *The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational Practice* (New York: Macmillan, 1991).
- 17 S. S. Stodolsky, *The Subject Matters* (Chicago, IL: University of Chicago Press, 1988).
- 18 Eisner, *The Enlightened Eye*.
- 19 Basil Bernstein, "On the Classification and Framing of Educational Knowledge," in *Knowledge and Control*, M. Young (ed.) (London: Collier-Macmillan, 1971), pp. 47–69.
- 20 Eisner, *What High Schools Are Like* and Sizer, *Horace's Compromise*.
- 21 Bernstein, "On the Classification and Framing of Educational Knowledge."
- 22 Eisner, *What High Schools Are Like*.
- 23 Goodlad, *A Place Called School*.
- 24 Apple, *Education and Power*.
- 25 Eisner, *What High Schools Are Like*.