# Implementation as Mutual Adaptation: Change in Classroom Organization

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MOST OBSERVERS BELIEVE THAT THE EDUCATIONAL innovations undertaken as part of the curriculum reform movement of the 1950s and early 1960s, as well as the innovations that comprised the initiatives of the "Education Decade," generally have failed to meet their objectives.¹ One explanation for these disappointments focuses on the type of innovations undertaken and points out that until recently few educators have elected to initiate innovations that require change in the traditional roles, behavior, and structures that exist within the school organization or the classroom. Instead, most innovative efforts have focused primarily on technological change, not organizational change. Many argue that without changes in the structure of the institutional setting, or the culture of the school, new practices are simply "more of the same" and are unlikely to lead to much significant change in what happens to students.

Since 1970, however, a number of educators have begun to express interest in practices that redefine the assumptions about children and learning that underlie traditional methods—new classroom practices that attempt to change the ways that students, teachers, parents, and administrators relate to each other. Encouraged and stimulated by the work of such writers as Joseph Featherstone, Charles Silberman, and William Glasser, some local schoolmen have undertaken innovations in classroom organization such as open education, multiage grouping, integrated day, differentiated staffing, and team teaching. These practices are not based on a "model" of classroom organization change to be strictly followed, but on a common set of convictions about the nature of learning and the purpose of teaching. These philosophical similarities, which can be traced to the work of the Swiss psychologist Piaget, are based on a belief that humanistic, individualized, and child-centered education requires more than incremental or marginal change in classroom organization, educational technology, or teacher behavior.

Because classroom organization projects require teachers to work out their own styles and classroom techniques within a broad philosophical framework, innovations of this

type cannot be specified or packaged in advance. Thus, the very nature of these projects requires that implementation be a *mutually adaptive process* between the user and the institutional setting—that specific project goals and methods be made concrete over time by the participants themselves.

Classroom organization projects were among the local innovations examined as part of Rand's Change-Agent Study.<sup>2</sup> Of the 293 projects surveyed, eighty-five could be classified as classroom organization projects; five of our thirty field sites were undertaking innovation of this nature. The findings of the change-agent study suggest that the experience of these projects should be examined in some detail. At the most general level, the change study concluded that implementation—rather than educational treatment, level of resources, or type of federal funding strategy—dominates the innovative process and its outcomes. The study found that the mere adoption of a "better" practice did not automatically or invariably lead to "better" student outcomes. Initially similar technologies undergo unique alterations during the process of implementation and thus their outcomes cannot be predicted on the basis of treatment alone. Further, the process of implementation that is inherent in classroom organization projects was found to describe effective implementation generally. Specifically, the change-agent study concluded that *successful implementation is characterized by a process of mutual adaptation*.

Contrary to the assumptions underlying many change strategies and federal change policies, we found that implementation did not merely involve the direct and straightforward application of an educational technology or plan. Implementation was a dynamic organizational process that was shaped over time by interactions between project goals and methods, and the institutional setting. As such, it was neither automatic nor certain. Three different interactions characterized this highly variable process.

One, *mutual adaptation*, described successfully implemented projects. It involved modification of both the project design and changes in the institutional setting and individual participants during the course of implementation.

A second implementation process, *cooptation*, signified adaptation of the project design, but no change on the part of participants or the institutional setting. When implementation of this nature occurred, project strategies were simply modified to conform in a proforma fashion to the traditional practices the innovation was expected to replace—either because of resistance to change or inadequate help for implementers.

The third implementation process, *nonimplementation*, described the experience of projects that either broke down during the course of implementation or were simply ignored by project participants.

Where implementation was successful, and where significant change in participant attitudes, skills and behavior occurred, implementation was characterized by a process of mutual adaptation in which project goals and methods were modified to suit the needs and interests of participants and in which participants changed to meet the requirements of the project. This finding was true even for highly technological and initially well specified projects: unless adaptations were made in the original plans or technologies, implementation tended to be superficial or symbolic and significant change in participants did not occur.

Classroom organization projects provided particularly clear illustration of the conditions and strategies that support mutual adaptation and thus successful implementation. They are especially relevant to understanding the operational implications of this

change-agent study finding for policy and practice not only because mutual adaptation is intrinsic to change in classroom organization, but also because the question of institutional receptivity does not cloud the view of effective implementation strategies afforded by these projects.

The receptivity of the institutional setting to a proposed innovation varied greatly among the projects we examined—from active support to indifference to hostility. The amount of interest, commitment, and support evidenced by principal actors had a major influence on the prospects for successful project implementation. In particular, the attitudes and interest of central administrators in effect provided a "signal" to project participants as to how seriously they should take project goals and how hard they should work to achieve them. Unless participants perceived that change-agent projects represented a school and district educational priority, teachers were often unwilling to put in the extra time and emotional investment necessary for successful implementation. Similarly, the attitudes of teachers were critical. Unless teachers were motivated by professional concerns (as opposed to more tangible incentives such as extra pay or credit on the district salary scale, for example), they did not expend the extra time and energy requisite to the usually painful process of implementing an innovation.

Classroom organization projects were almost always characterized by high levels of commitment and support for their initiation, both at the district and at the building level. This is not surprising when we consider the risk and difficulty associated with these projects; it is unlikely that a district would elect to undertake a project of this nature unless they believed strongly in the educational approach and were committed to attempting the changes necessary to implement it.

In fact, classroom organization projects possess none of the features traditionally thought to encourage local decision makers to adopt a given innovation:

- 1. Ease of explanation and communication to others.
- 2. Possibility of a trial on a partial or limited basis.
- 3. Ease of use.
- 4. Congruence with existing values.
- 5. Obvious superiority over practices that existed previously.<sup>3</sup>

Innovations that focus on classroom organization are at odds with all five of these criteria. First, since there is no specific "model" to be followed, it is difficult to tell people how these approaches operate. Advocates can only offer general advice and communicate the philosophy or attitudes that underlie innovation in classroom organization and activities.

Second, although open classroom or team-teaching strategies can be implemented slowly, and can be installed in just one or two classrooms in a school, it is generally not possible to be "just a little bit" open or just a "sometime" part of a team-teaching situation. The method is based on fundamental changes which are hard to accomplish piecemeal.

Third, change in classroom organization is inherently very complex. Innovations of this nature require the learning of new attitudes, roles and behavior on the part of teachers and administrators—changes far more difficult to bring about than the learning of a new skill or gaining familiarity with a new educational technology. Classroom organization changes also typically require new arrangements of classroom space, the provision of new instructional materials, and usually new school scheduling and reporting practices.

Fourth, strategies of open education or team teaching are a radical departure from the traditional or standard practices of a school, district, or teacher. Change in classroom organization means changing deeply held attitudes and customary behavior. These projects, by attempting to change organizational structure and goals, attempt to affect the fundamental nature of the organization and are therefore basically incongruent with existing values.

Fifth, although proponents argue that humanistic, child-centered education represents a big advance, the objective evidence is ambiguous. Most evaluations of informal class-rooms conclude that participating children do better on affective measures, but there is little evidence of significant cognitive differences that could confidently be attributed to open classrooms themselves. An administrator contemplating a change in classroom organization is confronted with a complicated innovation that shows no clear advantage over existing practices—at least in the ways that often matter most to school boards, voters, and anxious parents.

Thus, given the complex, unspecified, and inherently difficult nature of these projects, they were rarely initiated without the active support and commitment of district officials and participants. Consequently, the insufficient institutional support that negatively influenced implementation in other projects and so made it difficult to obtain a clear picture of the strategic factors affecting project implementation (i.e., did disappointing implementation result from a lack of enthusiasm or from inadequate training?) generally was not a problem for classroom organization projects. Variance in the implementation outcome of classroom organization projects, consequently, can be attributed in large measure to the project's particular implementation strategy.

For classroom organization projects, as for other change-agent projects, *institutional receptivity was a necessary but not a sufficient condition for successful implementation*. Unless project implementation strategies were chosen that allowed institutional support to be engaged and mutual adaptation to occur, project implementation foundered. A project's particular implementation strategy is the result of many local choices about how best to implement project goals and methods. What seems to be the most effective thing to do? What is possible given project constraints? What process fits best with local needs and conditions? Decisions about the type and amount of training, the planning necessary, and project participants are examples of such choices. They effectively define how a proposed innovation is put into practice. Implementation strategies are distinguishable from project treatment. That is, the educational method chosen for a project (i.e., team teaching, diagnostic/prescriptive reading) is different from the strategies selected for implementing the method. No two reading projects, for example, employ quite the same process or strategy for achieving their almost identical goals.

#### IMPLEMENTATION STRATEGY

Each project employs its own combination of strategies that effectively defines its *implementation strategy*. Thus, in addition to identifying especially effective component strategies, it is meaningful to examine how and why the various individual strategies interact with each other to form a "successful" implementation strategy and to promote mutual adaptation. The experience of classroom organization projects suggests at least three specific strategies that are particularly critical and that work together to form an adaptive implementation strategy: local materials development; ongoing and concrete staff training; iterative, on-line planning combined with regular and frequent staff meetings.

## **Local Material Development**

In almost all of the classroom organization projects, the staff spent a substantial amount of time developing materials to use in the project classrooms. These materials either were developed from scratch or put together from bits of commercially-developed materials. Although these activities were sometimes undertaken because the staff felt they couldn't locate appropriate commercial materials, the real contribution lay not so much in "better pedagogical products" but in providing the staff with a sense of involvement and an opportunity to "learn-by-doing." Working together to develop materials for the project gave the staff a sense of pride in its own accomplishments, a sense of "ownership" in the project. It also broke down the traditional isolation of the classroom teacher and provided a sense of "professionalism" and cooperation not usually available in the school setting. But even more important, materials development provided an opportunity for users to think through the concepts which underlay the project, in practical, operational terms—an opportunity to engage in experience-based learning. Although such "reinvention of the wheel" may not appear efficient in the short run, it appears to be a critical part of the individual learning and development necessary for significant change.

# **Staff Training**

All the classroom organization projects we visited included both formal and informal, preservice and inservice staff training. For example, one project's formal training took place in a two-week summer session before the project began; its informal development activities had been extensive, providing for almost constant interaction among project staff. Almost all of these projects provided preservice training that included observations in operating classrooms. One open classroom project staff even participated in a trip to observe British infant schools. All projects also conducted regular workshops throughout the first three years of project implementation.

One-shot training, or training heavily concentrated at the beginning of the project, was not effective. Although such training designs have the virtues of efficiency and lower cost, they ignore the critical fact that project implementors cannot know what it is they need to know until project operations are well underway. This is generally true for all innovative efforts, but particularly salient in the case of amorphous classroom organization projects. There is just so much that a would-be implementor can be taught or can understand until problems have arisen in the course of project implementation, and solutions must be devised. Training programs that attempt to be comprehensive and cover all contingencies at the outset are bound to miss their mark and also to be less than meaningful to project participants.

Project staffs agreed that staff development and training activities were a critical part of successful implementation. They also agreed that some kinds of training activities were more useful than others. With few exceptions, visits by outside consultants and other outside "experts" were not considered particularly helpful. Teachers in all the change-agent projects we examined complained that most visiting consultants could not relate to the particular problems they were experiencing in their classrooms, or that their advice was too abstract to be helpful. Where outside experts were considered useful, their participation was concrete and involved working closely with project teachers in their classrooms or in "hands-on" workshops. However, it was unusual for outside consultants to have either the time or the inclination to provide assistance in other than a lecture format. Such expert

delivery of "truth and knowledge," however, was seldom meaningful to participants, and foreclosed more powerful learning opportunities.

The sessions participants thought most useful were regular meetings of the project staff with local resource personnel in which ideas were shared, problems discussed, and support given. Materials development often provided the focus for these concrete, how-to-do-it training sessions. Visits to other schools implementing similar projects were also considered helpful; the teachers felt that seeing a similar program in operation for just a few hours was worth much more than several days of consultants delivering talks on philosophy.

Some commentators on the outcomes of planned change contend that where innovations fail, particularly innovations in classroom organization, they fail because their planners overlooked the "resocialization" of teachers. Even willing teachers have to go through such a *learning (and unlearning) process* in order to develop new attitudes, behaviors, and skills for a radically new role. Concrete, inquiry-based training activities scheduled regularly over the course of project implementation provide a means for this developmental process to occur.

# Adaptive Planning and Staff Meetings

Because of their lack of prior specification, almost all classroom organization projects engaged in adaptive or on-line planning. Planning of this nature is a continuous process that establishes channels of communication and solicits input from a representative group of project participants. It provides a forum for reassessing project goals and activities, monitoring project activities, and modifying practices in light of institutional and project demands. Planning of this nature has a firm base in project and institutional reality; thus issues can be identified and solutions determined before problems become crises. Just as one-shot training activities can neither anticipate the information needs of implementors over time nor be comprehensible to trainees in the absence of direct experience with particular problems, neither can highly structured planning activities that attempt extensive prior specification of operational procedures and objectives effectively address all contingencies in advance or foresee intervening local conditions. Often problems arise and events occur during the course of implementation that are unexpected and unpredictable. As a result, project plans drawn up at one point in time may or may not be relevant to project operations at a later date. Planning activities that are ongoing, adaptive, and congruent with the nature of the project and the changing institutional setting are better able to respond to these factors.

Frequent and regular staff meetings were often used as a way to carry out project planning on a continuous basis. Projects that made a point of scheduling staff meetings on a frequent and regular basis had fewer serious implementation problems and greater staff cohesiveness. Staff meetings not only provided a vehicle for articulating and working out problems, but they also gave staff a chance to communicate project information, share ideas, and provide each other with encouragement and support.

Finding time for these meetings or planning activities was a problem that some districts were able to solve and others were not. One classroom organization project, for example, arranged time off one afternoon a week for meetings. Project participants almost universally singled out these meetings as one of the most important factors contributing to project success. Such time to share ideas and problems was, in the view of all classroom

organization respondents, especially important in the rough and exhausting first year of the project. Where meetings were infrequent or irregular, morale was noticeably lower and reports of friction within the project were higher.

Past research on implementation is almost unanimous in citing "unanticipated events" and "lack of feedback networks" as serious problems during project implementation. A Routinized and frequent staff meetings combined with ongoing, iterative planning can serve to institutionalize an effective project feedback structure, as well as provide mechanisms that can deal with the unanticipated events that are certain to occur.

# TWO OPEN CLASSROOM PROJECTS<sup>5</sup>

The critical role that such elements of an adaptive implementation strategy play in project implementation and outcomes is best illustrated by describing the experiences of two open classroom projects that were similar in almost every respect—resources, support and interest, target group background characteristics—but differed significantly in implementation strategy and in implementation outcome. The Eastown open education project had extensive and ongoing staff training, spent a lot of staff time and energy on materials development, arranged for staff to meet regularly, and engaged in regular formative evaluation. This project was also well implemented, ran smoothly, and met its objectives. In fact, this project received validation as a national exemplary project in its second year—a year before it was theoretically eligible.

The very similar Seaside project, in contrast, did not employ such an implementation strategy. Because of late funding notification, there was little time for advance planning or preservice training; project teachers were asked to implement a concept that they supported but that few had actually seen in operation. The planning that was done subsequently was mainly administrative in nature. The inservice training was spotty and was offered almost totally by "outside experts." The Seaside project did no materials development but instead tried to convert traditional materials to the goals of open education. This project has not only been less successful than hoped, but in our judgment, its central percepts and objectives are yet to be fully implemented. Teacher classroom behavior exhibits only a very superficial understanding of the rhetoric of open education; our observations led to the conclusion that teachers have yet to understand the practical implications of the tenets of open education, and have made only symbolic use of the more standard methods. For example, in many of the classrooms we visited, although the teacher had set up interest centers, these centers had not been changed in six or seven months. Thus they failed to serve their purpose of providing a continually changing menu of material for students. Teachers in the Seaside project had dutifully rearranged their classroom furniture and acquired rugs— as befits the open classroom—but even in this changed physical space, they continued to conduct their classes in a traditional manner. A student teacher commented that many of the teachers in this school conducted their class in the small groups or individualized manner appropriate to this educational philosophy only on visitors' day. In our judgment, many of the teachers in the school honestly wanted to implement open education, and many sincerely believed that they had accomplished that goal. But, in our view, implementation in this project was only pro forma—largely because of the absence of implementation strategies that would allow learning, growth, and development or mutual adaptation to take place.

#### **SUMMARY**

In summary, overcoming the challenges and problems inherent to innovations in class-room organization contributes positively and significantly to their effective implementation. The amorphous yet highly complex nature of classroom organization projects tends to *require* or *dictate* an adaptive implementation strategy that permits goals and methods to be reassessed, refined and made explicit during the course of implementation, and that fosters "learning-by-doing."

The adaptive implementation strategies defined by effectively implemented local projects were comprised of three common and critical components—local materials development; concrete, ongoing training; on-line or adaptive planning and regular, frequent staff meetings. These elements worked together in concert to promote effective implementation. Where any one component was missing or weak, other elements of the overall implementation strategy were less effective than they might be. A most important characteristic these component strategies hold in common is their support of individual learning and development—development most appropriate to the user and to the institutional setting. The experience of classroom organization projects underlines the fact that the process of mutual adaptation is fundamentally a learning process.

## **General Implications**

It is useful to consider the implications of the classroom organization projects and the general change-agent study findings in the context of the ongoing debate about the "implementation problem."

The change-agent study is not the first research to point to the primary importance of implementation in determining special project outcomes. A number of researchers and theoreticians have come to recognize what many practitioners have been saying all along: Educational technology is not self-winding. Adoption of a promising educational technology is only the beginning of a variable, uncertain, and inherently local process. It is the unpredictability and inconsistency of this process that have generated what has come to be called the "implementation problem."

There is general agreement that a major component of the "implementation problem" has to do with inadequate operational specificity.<sup>7</sup> There is debate concerning *who* should make project operations more specific, *how* it can be done, and *when* specificity should be introduced.

One approach prescribes more specificity prior to local initiation. Adherents of this solution ask that project planners and developers spell out concrete and detailed steps or procedures that they believe will lead to successful project implementation. It is hoped that increased prior operational specificity will minimize the necessity for individual users to make decisions or choices about appropriate project strategies or resources as the project is implemented. This essentially technological approach to the "implementation problem"—exemplified at the extreme by "teacher-proof" packages—aims at standardizing project implementation across project sites. It is expected that user adherence to such standardized and well-specified implementation procedures will reduce local variability as project plans are translated into practice and so lead to predictable and consistent project outcomes, regardless of the institutional setting in which the project is implemented.

A second approach takes an organizational rather than a technological perspective and focuses primarily on the development of the user, rather than on the prior development of

the educational treatment or product. This approach assumes that local variability is not only inevitable, but a good thing if a proposed innovation is to result in significant and sustained change in the local setting. This approach also assumes that the individual learning requisite to successful implementation can only occur through user involvement and direct experience in working through project percepts. Instead of providing packages which foreclose the necessity for individuals to make decisions and choices during the course of project implementation, proponents of this perspective maintain that implementation strategies should be devised that give users the skills, information, and learning opportunities necessary to make these choices effectively. This approach assumes that specificity of project methods and goals should evolve over time in response to local conditions and individual needs. This second solution to the "implementation problem," in short, assumes that mutual adaptation is the key to effective implementation.

The findings of the change-agent study strongly support this second perspective and its general approach to the "implementation problem." We found that *all* successfully implemented projects in our study went through a process of mutual adaptation to some extent. Even fairly straightforward, essentially technological projects were either adapted in some way to the institutional setting—or they were only superficially implemented and were not expected to remain in place after the withdrawal of federal funds. Where attempts were made to take short cuts in this process—out of concern for efficiency, for example—such efforts to speed up project implementation usually led to project breakdown or to only *pro forma* installation of project methods.

Viewed in the context of the debate over the "implementation problem," these findings have a number of implications for change-agent policies and practice. At the most general level, they suggest that adaptation, rather than standardization, is a more realistic and fruitful objective for policy makers and practitioners hoping to bring about significant change in local educational practice. Such an objective would imply change-agent policies that focused on implementation, not simply on adoption—policies that were concerned primarily with the development of users and support of adaptive implementation strategies. Specifically, the classroom organization projects suggest answers to the strategic issues of "who, how, and when" innovative efforts should be made operationally explicit, and how user development can be promoted.

Furthermore, the classroom organization projects, as well as other innovative efforts examined as part of the change-agent study, imply that the would-be innovator also must be willing to learn and be motivated by professional concerns and interests if development is to take place. Thus, change-agent policies would be well advised not only to address the user needs that are part of the implementation process *per se*, but also to consider the developmental needs of local educational personnel that are requisite to the initial interest and support necessary for change-agent efforts. It is not surprising that teachers or administrators who have not been outside their district for a number of years are less eager to change—or confident in their abilities to do so—than planners would hope. Internships and training grants for administrators, or travel money and released time for teachers to participate in innovative practices in other districts, are examples of strategies that may enable educational personnel to expand their horizons and generate enthusiasm for change.

The findings of the change-agent study and the experience of the classroom organization projects also have implications for the dissemination and expansion of "successful" change-agent projects. They suggest, for example, that an effective dissemination strategy should have more to do with people who could provide concrete "hands-on" assistance than with the transcription and transferral of specific successful project operations. It is somewhat ironic that staff of the "developer-demonstrator" projects who last year pointed to the central importance of local materials development are, in their dissemination year, packaging their project strategies and materials without a backward glance. Indeed, the change-agent findings concerning the importance of mutual adaptation and "learning by doing" raise a number of critical questions for educational planners and disseminators. For example, to what extent can this developmental process be telescoped as project accomplishments are replicated in a new setting? What kinds of "learning" or advice can be transferred? If adaptation is characteristic of effective implementation and significant change, what constitutes the "core" or essential ingredients of a successful project?

District administrators hoping to expand successful project operations face similar issues. Our findings suggest that—even within the same district—replication and expansion of "success" will require that new adopters replicate, in large measure, the developmental process of the original site. While there are, of course, general "lessons" that original participants can transfer to would-be innovators, there is much that the new user will have to learn himself.

In summary, the experience of classroom organization projects together with the general change-agent study findings suggest that adaptation should be seen as an appropriate goal for practice and policy—not an undesirable aberration. These findings suggest a shift in change-agent policies from a primary focus on the delivery system to an emphasis on the deliverer. An important lesson that can be derived from the change-agent study is that unless the developmental needs of the users are addressed, and unless project methods are modified to suit the needs of the user and the institutional setting, the promises of new technologies are likely to be unfulfilled. Although the implementation strategy that classroom organization projects suggest will be effective represent "reinvention of the wheel" to a great extent—an unpalatable prospect for program developers, fiscal planners, and impatient educational policy makers—the experience of these projects counsels us that a most important aspect of significant change is not so much the "wheel" or the educational technology but the process of "reinvention" or individual development. Though new education technologies are undoubtedly important to improved practices, they cannot be effective unless they are thoroughly understood and integrated by the user. The evidence we have seen strongly suggests that the developmental process mutual adaptation is the best way to ensure that change efforts are not superficial, trivial, or transitory.

#### **NOTES**

- 1. This essay is a revision of a paper presented at the March 1975 American Educational Research Association meeting in Washington, D.C. It is based on the data collected for The Rand Corporation study of federal programs supporting educational change. However, the interpretation and speculations offered in this paper are my sole responsibility and do not necessarily represent the views of The Rand Corporation, or the study's sponsor, the United States Office of Education, or my colleague Paul Berman, who has been so helpful in formulating this paper.
- The conceptual model, methodology, and results of the first year of the Rand Change-Agent Study are reported in four volumes: Paul Berman and Milbrey Wallin McLaughlin. Federal Programs Supporting Educational Change, Vol. I: A Model of Educational Change. Santa Monica, Calif.: Rand Corporation, R-1589/1-HEW, April 1975; Paul Berman and Edward W. Pauly, Federal Programs Supporting

Educational Change, Vol. II: Factors Affecting Change Agent Projects. Santa Monica, Calif.: Rand Corporation, R-1589/2-HEW, April 1975; Peter W. Greenwood, Dale Mann, and Milbrey Wallin McLaughlin. Federal Programs Supporting Educational Change, Vol. III: The Process of Change. Santa Monica, Calif.: Rand Corporation, R-1589/3-HEW, April 1975; and Paul Berman and Milbrey Wallin McLaughlin. Federal Programs Supporting Educational Change, Vol. IV: The Findings in Review. Santa Monica, Calif.: Rand Corporation, R-1589/4-HEW, April 1975. Four technical appendices to Volume III describe in detail the federal program management approach, state education agency participation, and case studies for each of the programs in the study.

- 3. E. Rogers and F. Shoemaker. Communication of Innovation. New York, N.Y.: Free Press, 1962.
- 4. See for example, W. W. Charters et al. Contrasts in the Process of Planning Change of the School's Institutional Organization, Program 20. Eugene, Ore.: Center for the Advanced Study of Educational Administration, 1973; O. Carlson et al. Change Processes in the Public Schools. Eugene, Ore.: Center for the Advanced Study of Educational Administration, 1971; M. Fullan and A. Pomfret. Review of Research on Curriculum Implementation. Toronto, Ont.: The Ontario Institute for Studies in Education, April 1975; M. Shipman. Inside a Curriculum Project. London, Eng.: Methuen, 1974; N.C. Gross et al. Implementing Organizational Innovations. New York, N.Y.: Basic Books, 1971; and L.M. Smith and P.M. Keith. Anatomy of Educational Innovations: An Organizational Analysis of an Elementary School. New York, N.Y.: John Wiley, 1971.
- 5. Project and site names are fictitious.
- 6. See especially the analysis of this debate in Fullan and Pomfret, *op. cit.* See also E.C. Hargrove. *The Missing Link: The Study of the Implementation of Social Policy*, Washington, D.C.: The Urban Institute, 1975, paper 797–1; and W. Williams, "Implementation Analysis and Assessment," Public Policy Paper No. 8, Institute of Governmental Research, University of Washington, February 1975.
- 7. See Fullan and Pomfret, op. cit.