



SYNTHESIS OF RESEARCH ON IMPROVING SCHOOLS

Too often efforts at reform fail because they view schools too simplistically and too mechanically; they see schools and teachers as empty slates. Reformers should recognize that it is teachers, in constant interaction with each other and with the organization of the school, that make change happen and make it endure.

In the past decade, we have gained considerable knowledge about how schools improve. A good deal of that knowledge comes through three major studies: (1) the Concerns Based Adoption Model (CBAM) studies of individual teacher development, (2) the Rand Change Agent study of federal improvement projects, and (3) the I/D/E/A study of school improvements in individual schools over a five-year period. Briefly, the three studies indicate that the process of improvement happens simultaneously on two levels: the individual teacher level and the level of the school as an organization.

On the individual level, the studies provide us with the following understandings:

- Teachers adapt to change developmentally; "change takes time, is achieved in steps" (Hall and Loucks, 1978).
- Teachers are motivated by their sense of efficacy and belief that what they do in their classrooms makes a difference to the children they teach (Berman and McLaughlin, 1980).
- Teachers want and need training in new ideas and techniques that are information-rich and that provide supports for trying out new techniques in their classrooms.

Any improvement efforts in schools must begin with the concerns and

needs of teachers; small steps toward improved practice are more important than any grand design. Teachers must be actively engaged in the improvement process. They must see the connection between what they are trying to do and what effects those attempts have on students. Finally, teachers must be recognized for the things they do well already and supported by people and resources for the new behaviors and procedures they decide to take on.

While individual commitment is necessary for all improvement projects, individual changes are not sufficient to ensure that schools will improve. The studies indicate that without an organizational commitment to and engagement in improvements, efforts by teachers in isolated classrooms do not hold much promise for sustained success. An understanding of the process of school improvements on an institutional level indicates:

- Schools, like individuals, adapt to improvements developmentally. Again, change takes time and is achieved in steps.
- Schools in which programmatic or schoolwide concerns are linked to individual teacher concerns have the greatest possibility for positive change.
- Schools must provide the necessary conditions for improvement; these conditions are motivated primarily by the principal.

Thus, on an organizational level, attention is directed to the small details and regular routines of daily practice as the starting place for improvements. Positive change in any school requires the cooperative efforts of teachers working together and of a principal who is capable of leading the change effort.

While the three studies reviewed here do not offer us a recipe for school improvement, they do provide guidelines for school improvers:

- Approach teachers as the real "experts" about teaching and learning. The personal style they have developed has value; by helping teachers articulate what they are doing in the classroom, we can also help teachers evaluate their work and thereby open the possibility for improvement.

- Provide rewards for trying something new. Rewards, given either publicly or privately, are essential.

- Encourage dialogue among teachers; work to transform individual concerns into collective concerns. This can be done through meetings, informal get-togethers, and group projects during or after school.

- Realize that the power and influence of the principal is of paramount importance. The principal is responsible for the day-to-day operations of the school, for keeping the complex web of interactions under control, for presenting an image to the community. The principal is the critical person in making change happen.

These guidelines are incorporated into current approaches to school improvement that we have found to be particularly promising: staff development, networking, and problem-centered activities. *Staff development* can be either a remedial strategy to improve the teaching practices of individuals or an approach to school change. As a school improvement strategy, it "considers the effect of the whole school (the staff) on the individual (the teacher) and the necessity of long-term possibilities" (Lieberman and Miller, 1978). In other words, staff development provides the opportunity for imparting professional learning to teachers and administrators as part of the general improvement program of a school. Miller and Wolf (1978) reported on a program that began with individual teachers working on their immediate classroom concerns (such as curricu-

Ann Lieberman is a Professor at Teachers College, Columbia University, New York City; and Lynne Miller is Assistant Principal of Riley High School, South Bend, Indiana.

lum planning, testing, teaching techniques, or control issues) in seminars, classes, workshops, consultation, and in-class assistance. Teachers were encouraged to practice new behaviors. After they had some success in doing so, they were encouraged to share the effects of their actions with others. Discussion circles were instituted in which teachers talked about issues of mutual concern and planned possible joint actions. As collaborative actions were tested, the school began to change, creating an environment that supported individual change and incorporated organizational change. The process was cyclical, with staff development entering at any point.

Another approach to school improvements, which has been around a long time but not used extensively in education, is the *building of a network*. There are times when an organization is incapable of or inadequate for providing the kinds of supports it needs (Parker, 1977). Such a situation exists now in efforts at school improvement. Networks have some characteristics that differ significantly from those of a single institution; they are not difficult to form; and they can provide different sources and kinds of support. Parker describes five ingredients of networks:

- A sense of being alternative to established systems—informal.
- A feeling of shared purpose.
- A mixture of information sharing and psychological support.
- A person functioning as facilitator.
- Voluntary participation.

One example of a network as an alternative system was the League of Cooperating Schools (Bentzen, 1974; Goodlad, 1975; Culver and Hoban, 1973). From 1966-1971, under the sponsorship of the Institute for Development of Educational Activities (/I/D/E/A/), a network of 18 schools was formed in Southern California. For a five-year period, people met, posed problems, struggled with curricular and organizational problems, and began to view the "League" as a group that provided innovative norms for its members. The group was informal. Members played central and peripheral parts. For some, it was a powerful experience; for others, it was participation in an occasional meeting. This network stood

as an alternative group to the district or school and served as a clearing-house for many ideas and practices.

One of the first tasks in both staff development and networking approaches is deciding on a focus for school improvement activities. *Problem-centered* strategies offer great promise as school improvement tools. More than 30 years ago, "action research" (Corey, 1953; Miel and others, 1952) made the case for the active involvement of practitioners in systematic and scientific problem-posing and problem-solving activities. A contemporary strategy that considers and builds on "action research" is the Interactive Research and Development on Teaching (IR&DT) approach developed at the Far West Laboratory and tested in two sites so far (Tikunoff and others, 1980). This strategy attempts to fill gaps between research and practice by the provision of several key features:

- A team is created that consists of teachers, a researcher, and a developer-trainer. Each member of the team has an equal voice and assumes equal responsibility.
- The team's task is to find a problem, check it out with a like group to see that it has universality, gather evidence, and use the evidence as an intervention strategy.
- The team makeup provides for both an insider and an outsider's perspective.
- The problem arises from the practical needs of teachers and the evidence is collected in the reality of classrooms
- After the evidence is analyzed and teachers intervene in their own behalf, they can provide professional development for their peers.

Still in its infancy, the IR&DT approach may well prove to be one of the most effective school improvement efforts on the local level.

While staff development, networking, and problem-centered approaches appear to be different in content and focus, they do share some common features that we associate with successful school improvement projects. That is, all three approaches are grounded in notions of *linkage* and *developmentalism*, have an operating style that can best be called *systematic ad hocism*, and

allow specifically for *local adaptation*.

Linkage simply means "linking two organizations or bringing information from one place to another" (Lieberman, 1977). Linkages can take place across or within organizations. In either case, the role of the linking agent is central. That person observes the organization and participates in its improvement; moves freely from one environment to another, trying to match needs with resources; and brings together the most workable parts of separate systems. Linkage requires commitment to the process of change in a school and requires that the linking agent be always a present and active participant in the change. Such a role can be assumed by many people already in place in school districts (curriculum people, principals, specialists, teachers).

Developmentalism refers to an understanding of how systems and people change. The developmental approach is gradual; it begins where people are at the present moment and provides a variety of structures and opportunities for growth and movement. Such structures and opportunities are designed to challenge what is "given" in an environment without undermining the strengths that people bring to their work. In developmental perspective, people and institutions have the potential for change and they are provided with the tools and supports to undertake that change in a positive way.

Systematic ad hocism refers to a style of working in a change project in schools that is neither rationalized planning nor "seat of the pants" management. It is based on four premises: (1) it is more important to have a map than an itinerary; a map provides conceptualizations of where to go without limiting the number of ways to get there; (2) it is important to have long-range perspectives in planning; long-range planning allows for a number of alternative futures from any given action without limiting vision to one and only one desirable end; (3) it is important to be adaptive; responsiveness to an organization means being active and challenging and it allows for change in the organization and in the change itself; (4) it is important to have a clear set of underlying principles and values about what needs changing in

Four Strategies for School Improvement

A recent book on **Strategies for School Improvement**¹ describes four approaches "for moving a particular school or group of schools through the stages of organization development." Each model, the authors say, rests on a significant body of research, theory, and practice. They are:

- Ronald G. Havelock's Linkage Model, which conceives of innovation as a process of linking knowledge producers to knowledge users.
- Richard A. Schmuck's Organization Development in Schools, which describes a self-renewing school as characterized by feelings of trust, warmth, openness, and informality.
- John I. Goodlad's Responsive Model of Educational Improvement, which summarizes efforts to join local schools in networks for self-renewal.
- The Rand Change Agent Study Model, which grew from a comprehensive research study of federal programs in support of educational change.

¹Daniel C. Neale, William J. Bailey, and Billy E. Ross, **Strategies for School Improvement: Cooperative Planning and Organization Development** (Boston: Allyn and Bacon, Inc., 1981.) Available from Allyn and Bacon for \$16.95.

schools and how those changes should happen; a strong value base is the "system" that guides the seemingly "ad hoc" activities of change (Miller and Wolf, 1978).

Finally, *local adaptation* means that each setting approaches improvements in a different way, that general plans are altered to accommodate specific situations, and that often it is necessary to reinvent the wheel. Local adaptation also means that people most affected by an improvement effort are those most involved in it; they develop a commitment to something new by having had the opportunity to shape it and make it their own.

While the notions of *linkage*, *developmentalism*, *systematic ad hocism*, and *local adaptation* may seem very general and abstract, they can

be understood in very concrete terms when examined in the context of a school improvement project.

Case Study

A school improvement project had been in operation for an academic year at a moderately-sized urban high school. During that year, temporary groups of teachers had come together to deal with issues of common concern. These groups were facilitated by a staff developer who, though from outside the school system, had school experience and access to human and material resources (*linkage*).

One group that formed that first year was composed of four math teachers who were encountering similar problems in teaching their first-

year classes. They were troubled by the varying ability levels of their students (all of whom were new to the school) and the difficulty in dealing effectively with so many levels in one 42-minute period a day. The group decided to work together during the summer in a staff development course; their goal was to decide on a workable solution to their common problem. By the end of the summer, the group had not managed to solve their problem. They did manage, however, to decide on a new approach to it. Through the staff developer, the math group contacted a consultant who had developed a curriculum for dealing with multi-level math groupings (*more linkage*).

The group began to work with the consultant in weekly meetings when the new semester began in the fall. By Christmas vacation, they decided once again to revise their plan. Though helpful in many ways, the consultant seemed more intent on having the teachers *adopt* the program he had developed than he was on assisting them in developing their own solutions to their own situations. The math teachers thought that many of the instructional strategies suggested by the consultant were useful and could be applied to the school situation; they also felt that adaptations and modifications were essential. When school re-opened in January, the consultant did not return and the teachers continued to meet together to plan improvements for teaching first-year mathematics (*local adaptation*).

From January until spring vacation, the teachers developed an improvement plan. They decided that by organizing the school schedule so that all first-year math classes would meet at the same time, they could pool their resources. For the first six weeks of the term, students would meet in their originally assigned classes for diagnostic activities. At the end of that period, students would be reassigned according to their ability levels. Every six weeks thereafter, students would be reevaluated and reassigned. And every six weeks, teachers would rotate among the various classes.

With their plan in hand, the teacher group began discussions with the department chairperson who presented the plan to the entire department at

their regularly scheduled meeting. After some discussion, the department approved the plan. At the end of April, the chairperson, the original group of math teachers, and the staff developer met with the principal to discuss the math plan. When school opened in September, the new math program was in operation. Throughout the year, the math teachers continued to meet and make modifications in the original plan. The entire process took two calendar years and went through a variety of stages and transformations (*developmentalism*).

The role of the staff developer throughout the process was essential. She provided opportunities for teachers to think about their own teaching, and she organized activities that promoted discussion among colleagues.

She was attentive to the expressed needs of individuals, and she was able to bring groups of people together who shared concerns. She allowed the teacher group that formed to take the lead in dealing with the issues that concerned it, and she acted as a resource-gatherer and group facilitator throughout the two years of the project. She responded to needs, concerns, and interests as they were expressed. She also acted from a clear set of values and assumptions about individual professional growth and school improvements. She helped teachers develop a system for dealing with emergent problems (*systematic ad hocism*).

This case illustrates our four common concepts in action. We think they can be useful in thinking about

plans and anticipating activities. They also are useful in understanding that movement in several directions at the same time, or two steps forward and one step backward, is not only a legitimate way to work, but may in fact be the way schools improve. ■

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Highlights of Research on Improving Schools

School improvement occurs on two levels—the teacher level and the school organization level—at the same time. At the teacher level, change is developmental, happening step-by-step. It is motivated when teachers believe that their efforts really count, and it is facilitated when teachers receive quality training and positive support. Change at the whole-school level also occurs developmentally. It produces the best results when the school's concerns are related to teacher concerns, and it is facilitated the most by the school's principal.

Those in charge of programs for change should:

- value the teacher's expertise in the classroom
- provide rewards when new ideas or techniques prove successful
- provide opportunities for teachers to exchange ideas
- value the principal as the prime mover in initiating and maintaining change

School improvement involves staff development, networking, and problem-centered activities.

Staff development can be used for making changes either on the teacher level or on the whole-school level. As individuals make changes for the better, the institution itself improves.

Networking literally creates a network of resources among people and institutions with similar goals. With one person acting as facilitator, the network informally provides information and support between participants who are open to alternative ideas.

Problem-centered activities use a team approach to improvement. Team leadership is shared equally. The team defines and examines a problem, obtains different perspectives of it, and determines procedures for problem intervention.

These approaches share four common features: linkage, developmentalism, systematic ad hocism, and local adaptation. A linking agent is a person who observes and takes part in the change effort, coordinates resources, and works to unite separate elements of the whole. Developmentalism allows for gradual change, encouraging participants to use resources maximally to progress from where they are to where they want to be. Systematic ad hocism, although based on a clear understanding of solid values and principles, permits flexibility in change procedures and in long-range goals. Local adaptation encourages the participation of those who will be most affected by change. Because the participants themselves have a hand in designing a plan for improvement, they are more committed to both the plan and the improvement.

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