The structure and the programs of school improvement must constantly be reassessed and extended to take into consideration new knowledge and new practices that can serve school improvement.

# The National Center for Effective Schools: Extending Knowledge and Practice of School Improvement

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## Introduction

Many groups and reformers are working to reshape schools to make them more effective for all students. Though many are calling for "restructured" schools, the core approaches to school improvement remain rooted in the early work on effective schools and school improvement. Over the past half-decade, those associated with the National Center for Effective Schools Research and Development (NCESRD) have been seeking ways to improve schools and to transform the school improvement process to make it consistent with current knowledge of practice and systematic research. Programs of school improvement

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through the center, while maintaining much of the early knowledge of effective schools, have come a long way from the focus of early "disciples" on a few correlates found in the pioneering research. Now, programs focus on restructuring decision-making and school improvement.

The "Effective Schools Movement" has been publicly identified over the last decade with the early research done by Brookover, Edmonds, and others (see Levine and Lezotte, 1990 for an extensive and current review) who studied the differences between schools where some students were achieving and schools where all students were achieving. The characteristics they identified in the more effective schools became known as "the correlates of effective schools" and were disseminated through the writings and technical assistance of Larry Lezotte, Beverly Bancroft, Barbara Taylor and others around the country (Taylor, 1990).

In 1987, the need for an organizational structure to support this effort and to expand the knowledge base became apparent, and the National Center for Effective Schools Research and Development (NCESRD) was formed. It moved to the Wisconsin Center for Education Research at the University of Wisconsin–Madison in September 1989. The NCESRD supports school improvement through several interlocking purposes that build and extend the early programs, including:

1. the dissemination of knowledge and information to public school districts and educators;
2. the training of facilitators for the school improvement process in educational laboratories, regional agencies, state departments, and local districts;
3. the provision of technical assistance and consulting services to public school districts and other educational units;
4. the conducting of research and investigations of various school improvement strategies, methods and techniques;
5. the provision of networking opportunities to educators interested in and involved with school improvement.

Specifically, the NCESRD has attempted to add systematic knowledge and practical wisdom to areas of concern that the early research did not address, inadequately elaborated, or simply ignored (Lezotte and Peterson, 1990). Through active work on programs of school improvement and through written accounts (Corbett, Dawson, and Firestone, 1984), the center staff learned there is more to school transformation than simply seeking to increase the measures of the five original correlates. Research on organizational theory, new knowledge about change and improvement (Fullan, 1983), studies of leadership and the school principalship (Peterson, 1989; Andrews and Soder, 1987; Andrews, Soder, and Jacoby, 1986), and the rapidly increasing body of studies on curriculum content, effective instructional strategies (Davis and Thomas, 1989), staff development design (Joyce and Showers, 1980) and adult learning (Herber and Nelson–Herber, 1988) have expanded the conceptualization of school effectiveness and school improvement into a broader perspective.

As more schools have sought to transform their programs, changes occurred in center activities to incorporate new knowledge and practical understandings gleaned from educators. As this model of school improvement developed from the early stages of initiation and implementation to institutionalization in school districts and in research, it was clear there was a need to assess and increase the clarity of the mission of the NCESRD and to expand knowledge of improvement strategies. Maintaining the momentum of school improvement is dependent on scanning the horizon

for new developments that shape the ability of schools to change and improve.

During the past several years as developments in research and practice have increased our understanding of the school improvement process, the center's role has of necessity addressed the following issues:

1. The 1980s' reforms too often focused on excellence at the expense of equity of educational opportunity for all;

2. A relative lack of understanding regarding the complexity of organizational change resulted in an overemphasis on school characteristics and inadequate attention to curriculum and instruction;

3. The seeming lack of technological tools and skills discouraged some practitioners from engaging in "hands-on" analysis of student outcomes to guide decision-making and goal identification;

4. School improvement plans implemented without long-range provisions for ongoing, continuous renewal and revitalization resulted in discouragement during the improvement process;

5. A confusion over the similarities and differences between the school improvement process and other change efforts led to frustration and, at times, exhaustion on the part of some school and district teams.

These are key issues to restructuring schools for effectiveness and are addressed in the programs of the NCESRD. How these problems are addressed programmatically is key to understanding the new approaches of "effective schools" restructuring around the country.

### Excellence at the Expense of Equity

The early work in school improvement based on the effective schools research and the writings of Edmonds suggested that an effective school was one defined by both quality educational programs and equity of achievement across subsets of the school population. Lezotte and Bancroft (1985) wrote on the definition of school effectiveness:

> Two outcome standards are anticipated in effective schools. First, the overall level of achievement to which the students rise on the outcomes measures must be sufficiently high to signify acceptable mastery of the essential curriculum. Second, the distribution of achievement must not vary significantly across the major subsets of the student population (that is, middle socioeconomic students versus lower socioeconomic students.) (p. 27).

The first indicator has focused on quality, the second on equity of outcomes.

During the past decade, the focus of educational reform has been on raising standards, adding curriculum requirements, and increasing the homework load on students. This so-called "push for excellence" may have had some effect in bringing test scores of students who were already achieving in school to somewhat higher levels. It has, however, been another example of adding "more of the same," an approach which time has often proved ineffective.

The preoccupation with excellence in educational reform at times neglected the equity issue for all children. One major report notes that 58 percent of America's school districts "have effective schools programs." The finding that only 12 percent of these are actually disaggregating student achievement data to determine the relative success of subsets of their student population is clear evidence of lack of attention to the equity criterion (U.S. GAO, 1989).

While approaches in some districts are relatively simplistic, programs of NCESRD have been diverse and broad based. Through the consulting, training and publication efforts of the center, a re-emphasis on the analysis of data to answer the equity question is communicated.

NCESRD's approach has moved to broaden the early definitions of quality and equity to other student subgroups. For example, the general concern about adequate preparation in math and science for females can be assessed by analyzing enrollment and achievement by gender. Some high schools are using the same technique to examine the success of students based on whether or not they are employed. Even in districts where the student population is relatively homogeneous, valuable information on equity of outcomes, now "hidden behind the statistical means," can be generated and used to guide decision-making within the school.

### The Complexity of Organization Change

While early research on effective schools pointed to many of the key characteristics of these enterprises, it did not point to *how* to recreate, restructure, or transform those schools through systematic change. Furthermore, as schools tried to become more effective based on the early research, they often overemphasized improving their scores on the "correlates" at the expense of working on more direct issues such as shaping teacher behavior and curricular aspects of classroom technology to influence student outcomes. Programs at the center have tried to overcome these early difficulties by drawing attention to organizational issues of decentralizing structure, dispersing leadership and empowering others, and fostering a school culture supportive of student success.

Increased attention to the characteristics of organizational theory and school improvement literature have pointed to a number of contingencies in changing schools. Organizational theory suggests that decentralized decision-making may increase productivity and commitment, with more decision-making occurring at the school level. Central office has to change its role as overseer and director of activities. School-level teams, oftentimes cited in the literature now as site-based management or restructuring, became an important approach in effective schools improvement programs. Training in new roles, responsibilities and planning structures (not mentioned in the original research) have become part of improvement programs sponsored by the center.

Similarly, though the original research suggested that instructional leadership came from the principal, leadership in effective schools programs at NCESRD was viewed as more dispersed and involving teachers and others. This came as a result of viewing effective change efforts in many schools where teachers and others were empowered to lead and shape the school's programs.

Transformations in the understanding of leadership in school improvement suggest that leadership needs to be reconfigured to include principals, teachers and others. Leadership that is *shared and collaborative* appears to not only build commitment, but to ensure better decisions and greater implementation at the school level.

Again, such changes in governance are part of the effective schools movement at the present time and have been picked up as a major restructuring theme. Instructional leadership is also viewed more broadly. While principals act as instructional leaders, schools that are improving also seek leadership from department chairs, individual teachers, and central office administrators who have knowledge and expertise in teaching and learning. Such new ap-

proaches to leadership are promoted and developed in NCESRD's training programs.

In short, the most successful improvement processes involve teachers, principals and central office personnel working together in collaborative efforts to shape the instructional and curricular programs of the schools. Increasingly, center programs build on the original correlates, but focus as well on characteristics of effective organizational change, new forms of leadership and restructured governance, attention to school culture, and close work on instructional and curricular approaches that improve student outcomes.

### Need for Technological Tools and Skills

Early programs of NCESRD promoted disaggregation of student performance data and analysis of school characteristics, but such approaches were slowed by a lack of user-friendly technology and skill in its use. The lack of school level computer capability to examine student performance data seems to have been a stumbling block in the use of data for decision-making at the school site.

This problem has been addressed by a number of districts such as Spencerport, New York and Prince George's County, Maryland as well as by NCESRD (Taylor, 1990). Presently, the center is developing a *Management Information System* (MIS) that can be used at the school level to store, analyze and assess student performance of many types. Schools with local decision-making teams will be able to examine any number of student outcomes and disaggregate by variables such as gender, ethnicity and socio-economic background. This software will make it possible to decentralize much of the analysis necessary for *data-driven decision-making*. It will dramatically restructure the decision-making capabilities of schools, giving teachers and administrators the power to closely monitor their own students. It will also foster greater attention to authentic assessment (Newmann and Archbald, 1990) and the measurement of higher order skills.

Using a system where school teams can easily analyze student performance information of many types, teachers and principals can gain a greater understanding of the programs and curricula that work for different students. They will be able to develop skills in assessment that can increase their ability to shape the learning of all students.

With schools piloting the MIS, we are seeing schools develop a different, perhaps more elaborated, level of understanding performance assessment and planning. Teachers and principals have the tools to take a more accurate, detailed look at how students are doing. This makes it possible to shape programs, curricula and instruction to serve more students.

### Maintaining the Momentum for Long-Range Change

The programs of the center also focus on ways to design school improvement for long-range change. The greatest test to any improvement effort appears to occur near the end of the second or in the third year, once initial changes have been implemented. Original levels of enthusiasm can evaporate. Those involved in the change process can become pressured or demoralized. This is in part due to the fact that clear evidence of improved results often does not appear for 3–5 years. All too often, disillusionment sets in, political pressures increase and reform efforts are abandoned for the next popular program. This occurs just when the improvement process has the potential to become effective and a part of the organizational culture.

Due to the complexity of the change process and the length of time needed to measure results, commitment and ways to monitor success must be developed. NCESRD recommends that when school teams plan improvement, they build in a monitoring system right from the beginning. This involves describing the behaviors that are to be practiced, and the ways to determine whether and how they are taking place. The timeline for monitoring involves establishing points of success at which reports will be given and celebrated so that energy and interest remain high until the results can be seen in actual student achievement. This evidence of accomplishment then motivates additional energy and effort for the next improvement cycle (Guskey, 1990).

### Effective Schools/School Improvement and Other Change Efforts

Closely related to the issue of demand for immediate results is the tendency for school districts to undertake one change effort, then add another change on top of it. Instead of maintaining their focus, they may layer one program upon another until those involved are exhausted and the district is in chaos. NCESRD responds to these concerns by emphasizing that the current approach to school improvement based on effective schools research is not limited to a set of characteristics, but is an evolving *process* that can, and should, integrate other approaches such as site-based management, outcome-based education, and restructuring. The center's approach to restructuring for student success is a framework that helps all parts of a school function as a whole and assists in balancing the demands of competing interests (Guskey, 1990).

Such integration and restructuring requires a clear idea of purpose, direction, and mission. To insure a long-range process of improvement, one of the first and foremost activities undertaken is the development of a clear and shared description of the school's mission. This mission almost always refers to "minimum academic mastery" or "the essential curriculum" and specifies a desired level of student outcomes. The need to align curriculum with classroom teaching and assessment procedures is not unique to outcome-based education, but has been recognized and undertaken by many teams of teachers working to improve the effectiveness of instruction in schools.

Restructuring (which at this point has as many definitions as its advocates and writers) claims to be a more comprehensive look at the rules, roles and responsibilities of participants in schooling (Lewis, 1989; Schlechty, 1990). It is true that many "effective schools" improvement efforts have stopped short of comprehensive change because they have limited themselves to assessment and development of the correlates identified in the early research. However, many have enlarged the scope of their efforts to include close examination of (1) curriculum, (2) instructional strategies, (3) methods of assessment, and (4) new forms of governance for their schools.

It is clear to NCESRD that greater effort must be invested in communicating its broader vision and mission to researchers, policymakers, and practitioners, so that promising practices and change efforts are not abandoned at the threshold of success in favor of a similar process with similar goals, but only a new terminology.

### Conclusion

For school improvement programs to be effective they must be ongoing, continuous and systematic, employing a clear mission for student performance, regularly using data to shape decisions, and having strong support for decisions made by teams of teachers and administrators. The structure and the programs of school improvement must constantly be reassessed and extended to take into consider-

ation new knowledge and new practices that can serve school improvement. The National Center for Effective Schools Research and Development continues to extend the ideas and models of school effectiveness to serve schools and districts in new ways, through new programs, with current ideas shaping teaching and learning for all students.

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