This paper summarizes seven school-reform models demonstrating "strong" and "promising" evidence of effectiveness in improving student achievement according to a rating scale designed by the American Institutes for Research (AIR). The intent of this summary is to assist districts and schools in the Pacific region in identifying proven, reliable solutions to the problem of low-performing schools. Three reform models that received the "strong" rating include Direct Instruction, High Schools That Work, and Success for All. Four "promising" models are Community for Learning, Different Ways of Knowing, Expeditionary Learning Outward Bound, and School Development Program. Model descriptions include education philosophy, goals, structure (components), and key practices. This paper shows that educational research and development needs to be strengthened and that school-reform approaches need to be examined carefully over time to determine their effectiveness. Before adoption decisions are made, it is essential that educators consider impact information. With adequate impact information, educators can significantly increase the chances of choosing a successful approach that addresses their students' most pressing needs. Rigorous evaluations of school-reform models can serve as the catalyst for meaningful discussion among practitioners and parents as they go about the challenges of improving school performance. (RT)
Promising Programs for Schoolwide Reform

By Stan Koki*

Based on An Educators' Guide to Schoolwide Reform by American Institutes for Research

What do research and evaluation tell us about school reform programs or models that have strong evidence for the improvement of student achievement? There's not much out there! But now, a recently published guide provides "the most comprehensive" rating of school reform programs done by an independent research group (Olson, 1999). Prepared by American Institutes for Research (AIR), An Educators' Guide to Schoolwide Reform rates 24 whole-school reform models according to whether they improve student achievement in measurable ways such as higher test scores and better attendance rates. It also takes into consideration the amount of assistance provided to schools by the developers, and compares the programs' first-year costs. Included in the review are the 17 whole-school models that were originally identified in the federal legislation that created the $150 million Comprehensive School Reform Demonstration Program in 1997. Also included in the guide are evaluations of seven other widely used programs that schools could potentially adopt when implementing Obey-Porter grants, as the federal program is commonly known.

More than 130 studies of different reform models were reviewed and rated for their methodological rigor, based on such criteria as the quality and objectivity of the measurement instruments used, the time period over which the data were collected, the use of comparison or control groups, and the number of students and schools involved. Each evaluation study was assigned a final methodological rating by averaging across the categories. Only studies that met AIR's criteria for rigor were used to rate whether a program was effective in raising student achievement.

The guide's reviewers gave a "strong" rating to programs with the most conclusive research backing—those with four or more studies that have rigorous methodology and that found "statistically significant" improved achievement (Olson, 1999). A "promising" rating went to models with at least three rigorous studies that reflected some evidence of success. A "marginal" rating was given to reform models that had fewer rigorous studies with positive findings, or a higher proportion of studies showing negative or no effects. A "mixed or weak" rating was assigned to programs with

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ambiguous or negative findings, and a “no research” rating was given to programs that had no methodologically rigorous studies.

This briefing paper summarizes the three school reform models that demonstrated strong evidence of effectiveness in improving student achievement: Direct Instruction, High Schools That Work, and Success for All. These three programs received the highest ratings from AIR. Also included in the discussion are the four models that received “promising” ratings: Community for Learning, Different Ways of Knowing, Expeditionary Learning Outward Bound, and School Development Program. The intent of this summary is to assist districts and schools in the Pacific region in identifying proven, reliable solutions to the problem of low-performing schools. As greater amounts of tax dollars are spent on school reform models, it is essential to know which ones really work.

It is important for the reader to keep in mind that the models themselves do not represent comprehensive school reform—a model represents but one element of comprehensive school reform. For school reform to be comprehensive, additional elements must also be incorporated. For a fuller discussion of each model, consult An Educators’ Guide to Schoolwide Reform, published by Educational Research Service, 200 Clarendon Boulevard, Arlington, Virginia, 22201, website: www.ers.org.

**Direct Instruction**

Direct Instruction emphasizes the use of carefully planned lessons that are designed around a highly specified knowledge base and a well-defined set of skills for each subject. The goal of this approach is to increase student achievement through carefully focused instruction that involves identifying particular skills and showing students how to apply these skills in increasingly complex situations. A central theory underlying Direct Instruction is that clear instruction eliminates misinterpretations and can greatly improve and accelerate the learning of academic skills for all children, even the lowest performing ones.

Direct Instruction grew from work on teacher-directed instruction that was begun by Siegfried Engelmann at the University of Illinois in the late 1960s and that continued at the University of Oregon. Although the program’s original focus was on reading, language, and math, it now includes social and physical science, fact learning, and handwriting. The Direct Instruction model serves students in kindergarten through sixth grade and has been widely used among low-performing schools in high-poverty areas.

Although not required, the developer recommends that teachers vote to adopt Direct Instruction and discontinue any programs that conflict with it. Initially, resistance to the model can be high; teachers might dislike the highly structured approach of Direct Instruction, as well as the unannounced visits and “correction” given by Direct Instruction staff. However, according to interviews with teachers after one or two years of implementation, teachers gradually develop a more positive attitude toward the program, and many cite the positive results in terms of students’ test scores and better attitudes toward learning. Experience with the program suggests that the project manager (implementation provider) has a large influence on the model’s success.

**High Schools That Work**

High Schools That Work, an initiative of the Southern Regional Education Board, provides a set of strategies designed to raise the academic achievement of career-bound high school students by combining the content of traditional college preparatory studies such as English, mathematics, and science with vocational studies. The developers specify the following key practices:
• High expectations for student learning;
• Rigorous vocational courses;
• More required academic courses;
• Opportunities to learn in work environments;
• Collaboration among academic and vocational teachers;
• An individualized advising system;
• Active engagement of students’ interest;
• Extra help outside of school and during the summer;
• Use of assessment and evaluation data to improve students’ learning.

Studies indicate that *High Schools That Work* improves student performance on the National Assessment of Educational Progress (NAEP), and on a test developed by the program developers and based on the NAEP. Studies of effects also show that students in the program, including vocational students, take more academic courses (especially in mathematics and science) than other students not in the program. The positive results seem stable across a variety of schools.

*High Schools That Work* encourages substantial curriculum changes in order to provide a more challenging high school experience for students who are not planning to attend college. Students are required to take at least four college preparatory English credit courses; at least three social studies credits; at least four credits in a broad field of vocational study; and at least two credits in a related academic or technical field, including one in computer science.

*High Schools That Work* is designed to be implemented over a three-year period. According to the developer, however, full implementation may take slightly longer since numerous key practices are embedded in the program.

**Success for All**

The *Success for All* approach was developed by Robert Slavin and Nancy Madden at Johns Hopkins University in response to a challenge from Baltimore City Public Schools to develop an approach that would address the problems of urban students. The goal of *Success for All* is to ensure success in reading for all students. Secondary goals include reducing the number of students who are retained or “held back”—which increases daily attendance—and addressing family needs. *Success for All* includes nine components:

• A reading curriculum designed to provide at least 90 minutes of daily instruction in classes that are regrouped according to reading performance rather than age;
• Continual assessment of student progress (at least once every eight weeks);
• One-to-one reading tutors;
• An Early Learning Program for pre-kindergarten and kindergarten that emphasizes language development and reading;
• An emphasis on cooperative learning as a key teaching strategy;
• A family support team to encourage parent support and involvement as well as to address problems at home;
• A local facilitator to provide mentoring, counseling, and support to the school as needed;
• Staff support teams that assist teachers during the implementation process;
• Training and technical assistance provided by the *Success for All* staff on such topics as reading assessment, classroom management, and cooperative learning.

*Success for All* requires schools to organize students according to their reading performance level. Multi-age groups of approximately 20 students meet for at least 90 minutes per day for reading.
instruction. For the rest of the day, students are in heterogeneous, age-grouped homerooms. The approach is geared to help all students learn to read in the regular classroom. Helping students learn to read vastly reduces the need for placement in special education classes, according to the developer. One of the tenets of Success for All is that children should be removed from the regular classroom only under extreme circumstances and when all other options have been exhausted.

**Community for Learning**
The goals of Community for Learning are to improve students' academic achievement, behaviors, and attitudes, and to promote independent learning habits. The program encourages coordination between classroom instruction and community services such as health care, libraries, social services, and law enforcement in order to improve individual student learning. The approach is based on research about the influence of school, family, and community on student learning. According to the developer, schools should remain the primary focus of efforts to improve the academic achievement of students; however, learning is affected by a variety of environments in addition to schools, such as the workplace, church, home, community organizations, social service agencies, and institutions of higher education. Although the program serves a variety of students, it is primarily geared towards "students placed at risk."

Community for Learning was established in 1990 by Margaret C. Wang, Professor of Educational Psychology and Director of the Temple University Center for Research in Human Development and Education. However, the roots of the approach extend back to the 1960s. During the 1970s, the program expanded to include all elementary and middle grades and to provide special education services in an "inclusion" environment. This version of the program became the instructional model known as the Adaptive Learning Environments Model (ALEM).

Community for Learning uses ALEM for instruction. This model is based on the premise that the key to high achievement is instruction that is tailored to the particular needs of individual students and that focuses first on literacy. In line with this philosophy, the approach requires an individualized learning plan for every student. ALEM encourages teachers to use a range of grouping strategies, such as working with students individually and in small-group and whole-group instruction. Teachers are expected to teach both individually and as a team.

Although a range of teaching strategies is prescribed, Community for Learning does not provide or promote specific curricula or frameworks. Rather, the developer attempts to align school curricula and instruction with district or state standards.

**Different Ways of Knowing**
Different Ways of Knowing is an approach that combines three elements: an education philosophy, a curriculum, and professional development activities. The education philosophy emphasizes positive expectations for students; thematic and interdisciplinary instruction; active student participation; early intervention; and parent involvement. The curriculum, which is organized around history and social studies, seeks to integrate the arts, literature, science, mathematics, and technology. Professional development activities, involving a three-year course of study for instructional staff, are designed to foster professional growth and community building.

The goals of Different Ways of Knowing are to raise academic achievement and improve students' attitudes toward school. The developer advocates building on the "multiple intelligences" of students, and developing their skills in various domains such as logic, mathematics, language, social skills, and artistic skills. The approach is built around a variety of research bases, including cognitive research; the effects of early and sustained intervention; and research on motivation and classroom
environments. In addition, the approach is based on research that supports using thematic, integrated instruction incorporated with artistic experiences. The program serves students in kindergarten through seventh grade.

Schools must agree to a number of conditions before becoming a *Different Ways of Knowing* school. They must: 1) commit to working with the program for multiple years; 2) allocate time for professional development; 3) attempt to integrate reform initiatives, curriculum programs, and family programs at the classroom level; 4) work to integrate the program’s philosophy and practices into reform plans; 5) build an evaluation plan; 6) design a process for sustaining and spreading successful practices; and 7) designate school community and district advisory teams that work closely with the developer and participating schools.

*Different Ways of Knowing* was developed in 1989 by the Galef Institute, a nonprofit educational organization dedicated to comprehensive school reform.

**Expeditionary Learning Outward Bound**

*Expeditionary Learning Outward Bound* is a comprehensive school design that aims to transform curriculum, instruction, assessment, and school culture and organization. It is based on two central ideas: that students learn better by doing than by listening; and that developing character, high expectations, and a sense of community is as important as developing academic skills and knowledge.

*Expeditionary Learning Outward Bound* includes five core practices. The first is “learning expeditions”—long-term, multi-disciplinary projects that combine academic, service, and physical elements. The second practice is “reflection and critique,” which involves teachers working with each other to examine their own instruction and students’ work. Third, the “school culture” emphasizes service, diversity, community and collaboration, and high expectations for all students. Fourth, the “school structure” is reorganized to share decision-making among staff, students, parents, and the community. The fifth practice is “school review”—assessment of implementation and student performance as measured against benchmarks provided by the developer.

*Expeditionary Learning Outward Bound* requires significant changes in instruction. A defining component of the approach is that students engage in learning expeditions and extended studies that focus on a single theme, while incorporating instruction in different subject areas. Expeditions typically involve service and fieldwork and culminate in student presentations or performances for families and community members.

This model was established in 1992 by Outward Bound USA. The approach is one of several sponsored by New American Schools, a national initiative to develop replicable schoolwide reform programs.

**School Development Program**

*School Development Program* is based on the theory that children learn better when they form strong relationships with the adults in their lives—including parents, teachers, and members of church and other community groups—in an environment of mutual respect. The program’s goal is to develop the personal, social, and moral strengths that students need to achieve success in school. *School Development Program* addresses these goals through nine essential elements:

- Three mechanisms: the School Planning and Management Team, the Student and Staff Support Team, and the Parent Team;
• Three operations: the Comprehensive School Plan, the Staff Development Plan, and Assessment and Modification;
• Three guiding principles: no-fault problem solving, consensus decision-making, and collaboration.

Although no particular curriculum is provided or required, the developers offer a curriculum called "Literacy Initiatives," which is designed to improve reading skills at the elementary school level. The developers also conduct a literacy audit with each school, involving a review of district and state standards (specifically in literacy, but across all subjects) as well as test score patterns over several years. School staff members, working with the developers, are expected to identify the standards upon which to focus.

*School Development Program* was founded in 1968 by James Comer, a child psychiatrist at Yale University. The program is currently accepting new members only in school districts that either already have or promise to have a sizable number of schools using the approach and that have a commitment from the superintendent, board of education, and teachers' union. An implementation checklist is provided to guide each school's implementation.

**Conclusion**

The research study upon which this briefing paper is based identified only a few approaches that have documented their positive effects on student achievement. Several approaches appear to hold promise, but they lack sufficient evidence to verify this conclusion. In some cases, this lack of evidence is understandable: the approach is just too new to have collected the necessary data. In other cases, systematic evaluation was not conducted by the developers for various reasons. These approaches may still be effective, but rigorous evaluations of their effectiveness must occur soon (*An Educators' Guide to Schoolwide Reform*, 1999, p. 2).

As a result of the study, two challenges confronting those concerned about educational improvement emerged. First, the nation's educational research and development enterprise needs to be strengthened. Second, once introduced in schools, school reform approaches need to be studied carefully over time to determine their effectiveness. Before adoption decisions are made, it is essential that educators consider impact information. With adequate impact information, educators can significantly increase the odds of choosing a successful approach that addresses their students' most pressing needs.

Although more work needs to be done, this initial in-depth review of school reform models suggests that school systems do have choices—and good ones—when it comes to improving student achievement. Rigorous evaluations of school reform models can serve as the catalyst for meaningful discussion among educators, administrators, and parents as they go about the challenges of improving the performance of schools.

**References**


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