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ABSTRACT

Many low-performing high schools find it difficult to implement effective action plans because research is lacking and policy options are limited. Committees comprised of all major stakeholding groups, including administrators, teachers, counselors, support personnel, parents, and community members should be formed by schools to oversee every step of a reform program. These steps include a self-study, research-based reform, entry-level standards, intensive intervention programs, a safe learning environment, high academic standards, full certification, organizing personal communities, and creating student learning incentives. At present, little research backs block scheduling, year-round schools and late-start days, and interdisciplinary education is vague. Research suggests schoolwide reforms are more effective, and successful programs show evidence of reforms that help all students meet high standards. Schoolwide reforms have been independently proven, have been replicated beyond a pilot program, and are supported by a professional infrastructure. (Includes synopsis, contact information, and rating of high school programs in each of five areas: (1) schoolwide academic programs; (2) violence prevention; (3) reading and English language; (4) remedial reading; and (5) drop-out attendance and college attendance). (TEJ)



Improving Low-Performing High Schools

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Ideas & Promising Programs for High Schools

American Federation of Teachers

Table of Contents

Improving Low-Performing High Schools / 3 Introduction / 3 Starting Points / 3 Conduct a self-study / 3 Consider a research-based reform program / 4 Establish entry-level standards / 5 Establish an intensive intervention system / 5 Establish a safe and orderly learning environment / 6 Establish high academic standards / 6 Work to ensure that teachers are fully certified / 7 Organize schools into personal communities / 7 Create incentives for students to study and achieve / 8 Additional practices / 8 Block scheduling / 8 Other schedule changes / 10 Interdisciplinary instruction / 10 Promising High School Programs / 11 Introduction: Promising Programs for High School Reform / 12 Schoolwide Academic Programs / 13 High Schools That Work / 13 Expeditionary Learning Outward Bound / 14 Community for Learning / 15 School Climate and/or Violence Prevention Programs / 17 School Development Program / 17 Quantum Opportunities Program / 18 Consistency Management & Cooperative Discipline / 20 Bullying Prevention Program / 21 Reading/English Language Arts Programs / 22 Junior Great Books / 22 Exemplary Center for Reading Instruction / 23 Remedial Reading Programs / 25 Lindamood-Bell / 25 Exemplary Center for Reading Instruction / 26 Direct Instruction / 27 Dropout Prevention/College Attendance Programs / 29 Upward Bound / 29 Project GRAD / 30 Coca-Cola Valued Youth program / 32 Footnotes / 34 Note on Program Selection Methods / 36



Improving Low-Performing High Schools

Introduction

Raising student achievement in the nation's lowest performing schools is one of the AFT's highest priorities. Recent efforts to raise academic standards—and to the students, schools, and staff more accountable for performance against those standards—makes it a priority of growing urgency.

So how are excellent high schools created? Many people are able to give a good general answer. You need a disciplined and orderly learning environment; clear standards and a strong academic mission; high-quality curricula and professional development aligned to the standards; focused and effective leadership; a supportive and collegial atmosphere; parental and community engagement; an effective intervention system for students who fall behind; and so on. Unfortunately, many low-performing schools have found it difficult to translate these general principles into an effective action plan for improvement.

Thus, many low-performing schools are turning to research for solutions. Instead of attempting to reinvent the wheel, faculty members are choosing to adopt replicable, research-based reform programs that have a proven record of success in raising student achievement in similar schools. This reform strategy has been effective for many low-performing elementary schools. fortunately, at the secondary level, strong research

and goo loptions are much more limited. In addition, the root problem for many troubled high schools is that entering students are unprepared to do the level of work required in high school. Thus, reform at the elementary and middle school levels may represent the best long-term solution. Still, these high schools need help desperately, and they need it now.

This paper attempts to meet that need by offering several concrete ideas for reform. Some can be accomplished by individual schools, acting alone; others will require district (or even state) support. Which and how many ideas to pursue should depend on the particular circumstances of your individual school and district.

Starting points

Before beginning the school improvement process, schools should establish a reform committee to oversee and direct each step of the program selection phase. This committee should be comprised of representatives from the school's major stakeholding groups, including administrators, teachers, guidance counselors, support personnel, parents, and community members.

I. Conduct a self-study (audit) to identify the school's most pressing needs

Once a school has been identified as in need of improvement, an accurate diagnosis of the school's problems is vital. This, in turn, can help to suggest the



most appropriate and effective solutions.

The following should be examined as part of the self-study process: instruction; curriculum; assessment; school management and leadership; professional qualifications and professional development of staff; parent and community involvement; school discipline, safety and security; instructional supplies and materials; the physical plant and facilities; and the adequacy of the district's support for the schools.

At a minimum, an effective self-study process should address the three general areas outlined below:

- An accurate school profile should be developed; it should include test score data, dropout figures, student demographics, teacher qualifications, etc.
- The factors that promote effective schools should be reviewed, and a measure of their presence or absence in the school should be made.
- The school's compliance with federal, state, and district academic performance (or improvement) requirements should be reviewed. ■SA

II. Consider a research-based reform program

One way to increase the odds of success is to emulate what has worked for others. Instead of attempting

to reinvent the wheel, faculty members can choose to adopt replicable, research-based reform programs that have a record of success in raising student achievement in similar schools. (BSP)

Increasingly, schools in need of major reform are opting for a comprehensive improvement model. These "schoolwide" programs typically offer a range of integrated components, such as clear standards and curricula, aligned professional development, and an intervention system for students who are in trouble. Many lowperforming schools that have implemented such programs—especially at the elementary level—have been able to boost student achievement levels significantly. While secondary schools have fewer well-researched programs to choose from, several are worth serious consideration.1 For example, the Technical Center in St. Mary's County, Md., adopted High Schools That Work (HSTW), a reform program that focuses on upgrading school-to-career curricula. In 1990-91, senior SAT scores averaged 869. By 1994-95, with a similar student population and 50 percent more students taking the test, SAT scores had jumped 70 points to an average of 939. During the same years, the dropout rate fell from 7.2 percent to 3.6 percent, enrollment went up, and discipline problems were cut by half. 196

We also encourage schools to consider research-

Quick Reference AFT Resource Key

FOR POLICY RECOMMENDATIONS ON HOW TO IMPLEMENT REFORM

- American Federation of Teachers (1997). Raising Student Achievement: A Resource Guide for Redesigning Low Performing Schools. Washington D.C. On the web at http://www.aft.org/edissues/rsa/guide/index.html
- American Federation of Teachers (1997). Setting the Stage for High Standards: Elements of Effective School Discipline. Washington D.C. On the web at http://www.aft.org/edissues/elements/index.html

FOR DETAILED DESCRIPTIONS OF REPLICABLE PROGRAMS

- American Institutes for Research (1999). An Educator's Guide to Schoolwide Reform. Arlington, VA: Educational Research Service. On the web at http://www.aft.org/edissues/schlwrfm.htm.
- American Federation of Teachers (1998). What Works: Six Promising Schoolwide Reform Programs. Washington D.C. On the web at http://www.aft.org/edissues/whatworks/six/index.htm
- American Federation of Teachers (1998). What Works: Seven Promising Reading and English Language Art Programs. Washington D.C. On the web at http://www.aft.org/edissues/whatworks/seven/index.htm
- American Federation of Teachers (1999). What Works: Five Promising Remedial Reading Programs. Washington, D.C. On the web at http://www.aft.org/edissues/whatworks/five/index.html
- (BSP) See attached description of High School Programs



based programs that target specific areas of difficulty—reading, math, science, discipline, etc. Depending on the school, it may make sense to implement such proms individually, or to use them in concert to create a comprehensive improvement plan.

In order to determine if a schoolwide or a specific subject-area program can address their needs, schools should investigate a variety of approaches. We recommend a systematic process of exploration, similar to the one outlined below.

Ideas

- Identify any programs that appear to meet the school's needs (as revealed by the school self-study) and that match the school's goals and resources.
- Examine the research to see if the identified programs have a track record of success in similar schools.

 Contact the programs' developers to clarify any questions.
- Call a random selection of schools that are using the programs; this will help you verify results and identify any potential problems. In general, the weaker the research on program effectiveness, the greater the number of schools you should call.²
- nce the search for programs has been narrowed to a few top choices, arrange for school visits and presentations by program developers for the entire staff.
- Put the decision to a vote by staff, with supermajority (80 percent) approval necessary for adoption. Staff buy-in has been proven to be an important factor to the success of any reform program.

III. Establish entry-level standards for what first-year students need to know and be able to do—especially in reading

The first essential step in raising high school achievement is to ensure that all students can build on a solid foundation. The best way to accomplish this is for elementary and middle schools to graduate only well-prepared students—a goal that's far beyond the purview of high school staff. Even without this, however, schools can use common entry standards as a means to diagnose student problems quickly and to target early intervention programs.

Because reading is the main vehicle by which knowle is disseminated across subject areas, it should be

the main focus of an effective intervention system.

Ideas

- Work with feeder schools to align curriculum and assessments—including the establishment of reading and math "gateway" exams at the end of middle school—to ensure that entering students are prepared to do high-school level work.
- In the absence of a gateway exam, use entry-level screening and diagnostic tools—such as the Test of Word Reading Efficiency (TOWRE), the Multilevel Academic Survey Test (MAST), or any one of a number of commercial reading inventories³—to identify students in need of immediate, intensive assistance.

IV. Establish an intensive intervention system for students who are struggling to meet the standards

Unless every effort is made to provide early, quick, and effective intervention, struggling students are likely to fall further and further behind as they proceed through the system. Indeed, research finds that the most effective remedial strategy is to prevent students from falling behind in the first place.

In addition to policies that promote early intervention and prevention, schools and districts must also be ready to respond to the needs of students who have already fallen far behind. This is often difficult, but it is not impossible.

Ideas

- Place all students whose reading skills are substantially below grade level into an intensive pre-entry "reading academy," using a research-based reading program.
- In addition to a "reading academy," establish an intensive, research-based reading intervention program—operating during, after, or before school hours—so that students who need continued assistance can receive it throughout the school year. ⊕SP
- Identify an intensive, research-based intervention program in math that can be offered to struggling students.
- Target assistance to low-achieving students, with an emphasis on increasing instructional time with a



trained adult—e.g., one-on-one tutorials, Saturday classes, before- and after-school classes, summer school, and an extra period in the problem subject area ("double-dosing").

■ Consider the adoption of a research-based dropout prevention/tutoring program. ⊕SP

V. Establish a safe and orderly learning environment

Teaching and learning are almost impossible to achieve in an environment of disorder, disrespect, and fear. That's why, in poll after poll, educators rank school safety and discipline high on their list of education priorities. So do students, parents, and the general public. Although school staff cannot entirely reverse the deep-seated social and emotional problems of some students, there are many things that can be done to help schools become safe havens for learning.

Ideas

- Ensure that all school staff—including teachers, administrators, paraprofessionals, bus drivers, nurses, cafeteria workers, and other school-related personnel—have access to professional development in effective classroom and behavior management.
- Enact a strong discipline code in which the rules of student behavior, as well as the punishments for particular violations, are clearly stated. To be most effective, the code should be developed with parent and community input, and must be widely disseminated among all school staff, students, parents, and the public.
- Take steps to ensure that the code is consistently enforced. These include authorizing all school staff—not just administrators or administrators and teachers—to enforce discipline; issuing regular, honest public reports on implementation of the code; and creating a discipline oversight committee, composed of parents, teachers, and citizens, to help monitor and guide enforcement.
- Implement programs to modify student misbehavior. ⊕ ♥ •
- Establish a continuum of quality short-, medium-, and long-term alternative settings in which chronically disruptive or violent students can be placed. To be

effective, these facilities must address students' academic as well as their social and emotional needs.

VI. Establish high academic standards and provide *all* students with challenging coursework and the support they need to reach the standards

In many high schools, students who aren't assigned to a college-preparatory track leave school unprepared for a productive adulthood—without the knowledge and skills they need to further their education or begin a rewarding career. Yet, many school systems have been slow to eliminate low-level, dead-end tracks, fearing that demanding coursework will be too tough for these kids. Such fears are usually misplaced. In most cases, setting the bar too low for students is much more of a problem than setting the bar too high.

In one recent poll4, half of all American teenagers reported that their schools had failed to provide them with challenging work; 65 percent of the students said they could work harder and do better if they tried. Several studies also confirm that, when challenged, students tend to rise to the occasion, especially when they have access to the kinds of special intervention and support they need. For example, in states that have rais their standards for high school math and science, stu dent performance has increased without any corresponding increase in student failure or dropout rates.5 A follow-up study identified several districts that have been successful in eliminating low-level math, and in helping struggling students to bridge the gap between basic and college-prep coursework. The practices these districts employ include designing a two-year course of study for students who need extra time to master college-prep algebra, and replacing the ninth-grade general math course with a class that gives students the foundational skills they need to do college-prep work.6

Ideas

- Provide intervention, remedial, and tutorial programs (including before- and after-school classes, Saturday classes, double-dosing, and summer school) to all who need them, but don't give credit toward graduation for remedial and other low-level courses.
- Make four years of academic coursework in the core subject areas—math (including algebra, at a minimum), English, social studies, and science—a gradules.



tion requirement for all students.

- Develop transition courses for students who need help bridging the gap between basic and college-preparatory coursework.
 - Arrange for common planning time for teachers and other instructional staff in the same subject area across grade levels. This can enable educators to carefully construct and coordinate curriculum sequences, year by year, helping to end the reteaching of previously learned material and to eliminate gaps in students' knowledge base.
 - Make honors and Advanced Placement courses available to all students.
 - Consider adopting a research-based dropout prevention/tutoring program. ①SP

VII. Work to ensure that teachers are fully certified in the subjects they teach

You can't teach what you don't know. While this may seem obvious, many school districts aren't organized as if they believe this to be true. Too often, it seems that the only staffing priority is ensuring that the is a warm, adult body in front of the class. At that's what research seems to indicate.

According to a survey by the U.S. Department of Education, nearly one-fourth of all secondary teachers don't have even a college minor in their main teaching field. In high-poverty schools, the percentages are much higher. More than one-third of students in such schools were found to have been taught by an unprepared math teacher, and a staggering 71 percent were taught physical science by a teacher with no background in the subject.⁸

Ideas

- Aggressively recruit teachers licensed to teach in fields where qualified candidates are in short supply.
- Once teachers have been recruited, initiate programs to help ensure that they stay. Typically, 30 percent to 50 percent of new teachers leave the profession within the first five years. However, with supervised internship/mentorship programs—such as those provided to new architects, doctors, nurses, and engineers—it is likely that more new teachers will stay ith the profession. 10

- Offer incentives so that experienced teachers who are thinking of retiring will consider staying.
- Offer part-time teaching and flexible scheduling to retirees and teachers currently on child-care leave.
- Negotiate incentives to encourage qualified teachers in shortage areas to volunteer to take on additional classes.
- Give teachers the autonomy and flexibility to arrange classes of different sizes among themselves.
- Provide incentives for teachers to earn a credential in a second field, and provide access to quality professional development in the subject.
- Recruit paraprofessionals with college credits and offer them the support they need to obtain their teaching credentials.
- Initiate collaboration among the union, the district, and local colleges and universities to recruit undergraduates and to develop high-quality alternative certification programs, such as those designed to attract retired military personnel to teaching. Work to recruit subject-area experts—scientists, mathematicians, engineers, etc.—in fields where there are teacher shortages. Then focus on ensuring that these individuals develop the necessary teaching expertise, including the use of quality internship/mentorship programs.
- Organize cooperative relationships with neighboring schools, so that teachers and students can move to different schools for part of the day. Allow parents of children in classrooms without qualified teachers to transfer their children to another school or class in the district where there are enough qualified teachers.
- If necessary, staff classrooms with qualified supervisors and administrators rather than with uncertified individuals.

VIII. Organize schools into personal communities

Although there is still a lot of debate over the optimum high school size, research has consistently shown that when a school is too big, serious problems often arise. Smaller schools tend to have lower dropout rates, better attendance, fewer incidents of violence, and more



student participation in extracurricular activities."
Discipline problems can be more serious when students see themselves as being relatively anonymous. In a sea of faces, it is difficult for school staff to give personal attention to students, and kids begin to fall through the cracks. For example, early intervention systems only work when faculty members know each student well enough to recognize when he or she is just beginning to have problems.

As for academic achievement, the research suggests that at-risk students are at a particular disadvantage in overly large schools. At the same time, one study indicates that the achievement of at-risk students also suffers when schools are too small to offer specialized services and a rich curriculum. According to the study's authors, a student body between 600 and 900 is the ideal size for a high school—small enough to give students personal attention, but large enough to offer a full range of curricula and services.

Ideas

- Organize the school into separate "clusters," so that discrete groups of students share most of their teachers, lunch periods, break times, etc.
- Reorganize the building into separate schools-withina-school, each with its own leadership and subject matter/technical specialty.
- For small schools and schools-within-a-school organizations, arrange with neighboring schools to share access to specialists and shortage-area teachers.
- "Loop" classes to ensure that students retain the same teachers for the same subjects at least two years in a row.

IX. Create incentives for students to study and achieve

In all high-achieving Asian and European school systems, secondary students know they must work hard and pass rigorous exams if they want to get into a college, technical school, or an apprenticeship program. American students have no similar incentives. Our students know that many colleges have an open admissions policy and that most employers don't ask to see high school transcripts. In too many cases, a diploma signifies little more than high school attendance. One result is that a high number of U.S. college students are

required to take remedial classes. Another result is that quality businesses rarely hire recent high school graduates. Instead, they wait until those graduates have proven themselves over several years in low-level jobs or they hire those with college or postsecondary vocational degrees.

If we want all students to work hard, they must know that effort and achievement count. Businesses and continuing education institutions should be encouraged to review transcripts, ask for teacher recommendations, and adopt hiring practices that reward effort and achievement.¹³

Ideas

- If the state or district doesn't have one, develop a high school exit exam (or a series of end-of-course exams) that reflects high academic standards and is grounded in the curriculum.
- Design students' school records to provide information about the rigor of coursework. Where available, attach course outlines to students' academic records so that universities, potential employers, and parents know what was taught.
- Encourage local businesses that do not currently hire new graduates to consider doing so after reviewing their high school records.
- Work with local businesses that are already hiring students for part-time work during school and employment after graduation, encouraging them to review high school records prior to making hiring decisions.
- Design school records so that they are readable and useable by all stakeholders. 14

Additional practices

In addition to the practices outlined above, there are a number of high-school reform ideas which, although widely promoted, lack clear-cut research evidence to demonstrate their effectiveness. Here is a brief overview:

I. Block scheduling

Among secondary schools, block scheduling is one of the hottest reforms of the day. According to some estimates, between 25 percent and 40 percent of U.S.



high schools are already using or experimenting with block, and its popularity appears to be growing.

In a nutshell, block scheduling is the process of tructuring the school day into fewer classes that each an for a longer period—typically four 90-minute periods, instead of the traditional six to eight class periods per day. Although there are many variations, two basic block scheduling models predominate in the U.S. and Canada: (1) The most common model is the "Four-by-Four." In this model, students attend at least three academic courses daily. Students spend one period (about 90 minutes) in language arts, a second period in math, and a third in either social studies or science. The social studies/science block is rotated every other day, every other unit, by semester, or on some other basis. Physical education, music, and elective courses are taken during the fourth period. (2) The other basic model is called "Alternate Day." Students meet with teachers every other day for periods of 80 minutes to 120 minutes. Other names for this model include A/B, Odd/Even, Day 1/Day 2, and Week 1/Week 2. To ensure that students cover the same coursework with fewer class periods, some schools also work on a compressed semester schedule in which what would tradirionally be a year's worth of material is covered in an nsive half-year.

Despite its popularity, very little is known about block scheduling's effect on student achievement. Advocates cite the successes of individual schools, some of which report sharply higher grades and test scores, reduced disciplinary problems, and increased graduation rates. Opponents note that many schools also report negative results and point to a few Canadian studies that show declines in student achievement. While no study is considered definitive, two of the most interesting—a large study by the Canadian Ministry of Education and Training, and one by the College Board in relation to performance on Advanced Placement tests—show no impact on student achievement.

Given the lack of definitive research to guide reform decisions, school staffs are advised to weigh block scheduling's potential benefits and pitfalls carefully against the school's particular needs and circumstances. If block scheduling is adopted, we also recommend that all faculty members have access to extensive professional

elopment in the use of longer class periods. At its , block scheduling may aid in the delivery of curriculum and instruction; in and of itself, the practice will do nothing to improve the quality of either. Some things to consider:

Arguments in favor of block:

- Instruction is less fragmented, with greater time for serious discussions, cooperative activities, labs, group work, and projects.
- It allows for extended and variable instruction for students who may need additional support or have difficulty learning in short "sound bites."
- If structured correctly, teachers work with fewer students at a time, which allows for more personalized instruction and an improved school atmosphere.
- The usual 50-minute teacher preparation period is almost doubled to 90 minutes, which means more time to hone lessons, to collaborate with colleagues, and to work one-on-one with students.
- With fewer class changes, the number of times that thousands of teenagers are released into narrow hallways is reduced, thus cutting down on discipline problems, noise, and stress.

Arguments against block:

- Cognitive science shows that regular review, spaced over a long period of time, is beneficial to long-term memory of subject matter. Block scheduling diminishes opportunities for review, especially where "yearlong" courses are compressed into a single semester. Thus, the practice may actually serve to diminish student performance.
- Ninety minutes is a long time to hold students' attention, and few teachers or other instructional staff have been trained in how to use this period of time effectively.
- Student transfers to and from schools with block schedules can be highly problematic; in some subjects, an entire year's curriculum could be lost as the result of a mid-year transfer.
- Missing one day of school under block can be like missing almost a week under traditional scheduling. For students who miss a week due to illness or other problems, catching up may seem next to impossible.
- Some block schedules actually result in less instructional time, overall—e.g., a 50-minute class that



meets five times a week gives the instructor 500 minutes every two weeks; a 90-minute class that meets on alternating days for two weeks (a total of five days) gives the instructor only 450 minutes.

II. Other schedule changes

There are several other reform ideas that aim to maximize learning time, including proposals simply to lengthen the school year and/or school day. In addition to block scheduling, two of the most discussed reforms are year-round schools and late-start days.

Year-round schools in the U.S. have existed, in one form or another, for more than a century. In recent years, more and more districts have considered adopting a year-round calendar as a way to ease overcrowding. Today, there are many different variations on the theme. In one model, for example, the school only needs to accommodate 75 percent of the student body at any one time. Students and faculty are divided into four groups, called tracks, which begin school in staggered 60-day sessions. Only three tracks attend school at one time, while the fourth takes a 20-day vacation, called an intersession. Partly for academic reasons, and partly because the more frequent, short vacations may occur when both parents are working, many schools also offer enrichment, elective, and remedial classes during every intersession.

As with block scheduling, there is no definitive research to show whether year-round schooling helps to increase learning. Some year-round schools, however, report significant gains in student achievement, often attributed to more time for review and less time between grades during which material is forgotten. Implementing a year-round plan is no easy matter, however. There are some reports of teacher and administrator burnout. And, unless the entire district is on a year-round schedule, providing support services, such as buses or food service, can become very complicated. In addition, many families resent the increased difficulty in scheduling family vacations.

Late-start days are a very recent idea, arising from sleep research which shows that students in their mid to late teens need more sleep than was previously thought, and that teens' internal clocks tend to make them naturally late to bed and late to rise. Thus, current school schedules may result in sleep deprivation, which may contribute to grogginess, lack of concentration, poor test performance, and increased disciplinary problems.

As a result, some researchers are recommending that schools begin later, between 8:30 and 10:30 in the morning. With this in mind, a few schools are experimenting with pushing back the start of school, but I data are yet available that show how this reform is working.

III. Interdisciplinary instruction

Interdisciplinary instruction is another reform that has been around for many years, has been defined to mean many different things, has a lot of anecdotal information showing that it has been done well or poorly and no definitive research as to its effect on student achievement. By one definition, interdisciplinary instruction means rearranging the curriculum so that students can apply the methods of different disciplines to examine a central theme, topic, or era. Students, for example, might study Enlightenment Europe in their social studies class, Isaac Newton and the foundations of physics in science, the Baroque and Neoclassical schools in art, and so forth. In another definition, it might mean folding two classes together into a block and team-teaching the disciplines together-e.g., combining English language arts and history, so that students study the Civil War in the same class where the read the Narrative of the Life of Frederick Douglass and the Red Badge of Courage.

At its best, interdisciplinary instruction can be a stimulating approach to teaching and learning, encouraging students to grasp concepts and make connections across disciplines. But it must also be noted that without clear standards, which define the content knowledge and skills that students must master in each core subject, interdisciplinary teaching easily can go astray. Strong standards in each of the core academic areas will ensure that interdisciplinary approaches incorporate the depth, breadth, integrity, and habits of mind of each of the disciplines involved. In other words, no matter how interesting the teaching method, the subject matter still must be focused and rigorous for the approach to work.



Program Descriptions

Quick Reference AFT Resource Key

FOR POLICY RECOMMENDATIONS ON HOW TO IMPLEMENT REFORM

- American Federation of Teachers (1997). Raising Student Achievement: A Resource Guide for Redesigning Low Performing Schools. Washington D.C. On the web at http://www.aft.org/edissues/tsa/guide/index.html
- American Federation of Teachers (1997). Setting the Stage for High Standards: Elements of Effective School Discipline. Washington D.C. On the web at http://www.aft.org/edissues/elements/index.html

FOR DETAILED DESCRIPTIONS OF REPLICABLE PROGRAMS

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- American Federation of Teachers (1998). What Works: Six Promising Schoolwide Reform Programs. Washington D.C. On the web at http://www.aft.org/edissues/whatworks/six/index.htm
- American Federation of Teachers (1998). What Works: Seven Promising Reading and English Language Art Programs. Washington D.C. On the web at http://www.aft.org/edissues/whatworks/seven/index.htm
- American Federation of Teachers (1999). What Works: Five Promising Remedial Reading Programs. Washington, D.C. On the web at http://www.aft.org/edissues/whatworks/five/index.html



Promising Programs for High School Reform

Why are some schools effective at educating most students, even those from disadvantaged, high-poverty areas, while others struggle fruitlessly to fulfill their academic mission? How can schools replicate the successes of their more effective counterparts?

Researchers, working for years to answer these questions, have described the characteristics of successful schools—e.g., high expectation for all students; challenging curricula; clear standards and a coherent, focused academic mission; high-quality professional development aligned to the standards; small class sizes, especially in the early grades; an orderly and disciplined learning environment; a supportive and collegial atmosphere; and an intervention system designed to ensure that struggling students can meet the standards. But, while we now know a great deal about which reforms are effective, comparatively little is known about how to achieve them.

As many schools have discovered the hard way, systemic reform is very difficult—especially when it must occur simultaneously on many fronts, and is begun without benefit of high-quality curriculum materials, appropriate professional development, or readily available technical assistance. In fact, a number of schools have learned firsthand that lasting improvement is impossible without concrete, step-by-step implementation support.

According to a study of efforts to raise academic achievement for at-risk students, the reform strategies that achieve the greatest academic gains are those chosen and supported by faculty, as well as administrators. Success is also dependent on the existence of a challenging curriculum, and on paying a great deal of attention to issues of initial and long-term implementation, and

to institutionalizing the reforms. This and other studies also have found that schoolwide reforms tend to be more effective than pull-out or patchwork programs, and that externally developed programs—particularly those with support networks from which schools can draw strength and tangible assistance—tend to do better than local designs.

Given these and similar research findings, we developed the following criteria to help identify promising programs for raising student achievement, especially in low-performing schools. The program descriptions are designed to provide a quick overview and classificate of research-based programs that, when properly implemented, show promise for raising student achievement significantly. Although each particular program has its own strengths and weaknesses, all show evidence of:

- **High Standards.** The program helps *all* students acquire the skills and/or knowledge they need to successfully perform to high academic standards.
- Effectiveness. The program has proven to be effective in raising the academic achievement levels of atrisk students in low-performing schools, based on independent evaluations.
- Replicability. The program has been implemented effectively in multiple sites beyond the original pilot school(s).
- Support Structures. Professional development, materials, and ongoing implementation support are available for the program, either through the program's developer, independent contractors, or dissemination networks established by schools already in the program.



Schoolwide Academic Programs

High Schools That Work

Overview

An initiative of the Southern Regional Education Board (SREB), High Schools That Work (HSTW) 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 (e.g., English, mathematics, science) with vocational studies. The developers specify the following practices:

- High expectations for student learning
- Rigorous vocational courses
- More required academic courses
- Learning in work environments
- Collaboration among academic and vocational

An individualized advising system

- Active engagement in students' interests
- Extra help outside school and in the summer
- Use of assessment and evaluation data to improve student learning

Program Content

HSTW encourages substantial changes in the curriculum to provide a more challenging high school experience for students who are not planning to attend college. Some of these curricular changes include setting high standards based on the National Assessment of Educational Progress (NAEP); enrolling career-bound students in college-prep academic courses; and discontinuing credit for remedial courses, such as math 101.

Students in an HSTW program are required to participate in an annual math, science, and reading assessment related to NAEP. Students must also maintain logs and journals, participate in group problem-solving

cises, and complete other tasks that monitor their is emic growth daily.

Family and community, particularly local business leaders, are essential to HSTW. Students, parents, teachers, community members, and business leaders serve on a school advisory council, which is responsible for providing feedback to the school on the program and for coordinating implementation.

Prior to implementation, the developer provides a mandatory two-day workshop where school staff, parents, and members of the community develop a school action plan. SREB staff members make at least two follow-up visits to the school during the course of the year to help schools implement the action plan.

Professional Development

In addition to the action plan development workshop, required professional development in the first year of implementation includes a three-day training session in leadership and a three-day retreat for school leaders.

VITAL STATISTICS

Number of schools

900

Grade-level focus

High school (9-12)

First-year costs \$48,000

High Schools That Work

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Additional program summaries: http://www.ecs.org

For more information:

Promising Schoolwide Reform Programs. Washington, D.C.: American Federation of Teachers. On the web at http://www.aft.org/edissues/whatworks/six/index.htm

(1999). An Educator's Guide to Schoolwide Reform. Arlington, Va.:

Educational Research Service.

On the web at http://www.aft.org//edissues/schlwrfm.htm



13

HSTW staff and school staff also work together to develop a customized staff development program, specific to the school's needs. Each year, SREB provides two to four workshops to help schools address these needs. Some examples of past workshops include: indicators of progress and performance, learning through projects, using data to update the site action plan, and developing syllabi. SREB also recommends that school staff read At Your Fingertips: Using Everyday Data to Improve Schools (a 250-page workbook containing a sixstep approach to monitoring school improvement) and the Practitioners Guide to Getting to Work (a package of strategies, activities, and case studies for use by teachers and administrators). In the second and third years of implementation, the developer visits the school two to five times to provide technical assistance and make recommendations regarding next steps.

Results

Overall, the research base on HSTW is strong. Of the 10 studies that report results on student achievement, four use sufficiently rigorous methodologies to report their findings. The remaining studies focus primarily on implementation of the approach. Effects were studied in a large number of schools, including original and replication sites, and urban and rural schools. The number and variety of the schools that have been studied contribute to the strength of the research base.

The available research shows positive effects on students. Studies indicate the HSTW improves student performance on the National Assessment of Educational Progress and a test developed by HSTW based on NAEP. Studies of effects also demonstrate that HSTW students, including vocational students, take more academic courses (particularly in mathematics and science) than students at the same schools did before the approach was implemented.

The positive results seem stable across a variety of schools. Specifically, effects seem consistent across urban and rural schools and seem to persist for schools that were not in the original set of pilot schools. This suggests that HSTW has positive effects and that these effects can be replicated.¹⁵

Expeditionary Learning Outward Bound

Overview

First implemented in 1992, Expeditionary Learning Outward Bound (ELOB) is a comprehensive school-wide reform program for K-12. It is based on two central precepts: students learn better by doing than by listening; and developing character, high expectations, and a sense of community is as important as developing academic skills and knowledge.

Program Content

Expeditionary Learning Outward Bound includes five core practices:

- 1. Learning Expeditions—long-term, multidisciplinary projects that combine academic, service, and physical elements.
- 2. Reflection and Critique—teachers working together to examine their own instruction and students' work.
- 3. School Culture—an emphasis on community and col-

VITAL STATISTICS

Number of schools 65
Grade-level focus K-12
First-year costs \$81,000

Expeditionary Learning Outward Bound

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For more information:

Guide to Schoolwide Reform. Arlington, Va.: Educational Research Service. On the web at

http://www.aft.org//edissues/schlwrfm.htm



laboration, high expectations for all students, service, and diversity.

School Structure—reorganizing the school hierarchy to accommodate shared decision-making among teachers and administrators and to develop relationships among staff, students, parents, and the community.

5. School Review—assessing the student performance and degrees of implementation as measured against benchmarks provided by ELOB.

ELOB helps schools implement organizational as well as instructional changes. Organizationally, schools are required to commit to a system of shared decision-making. Instructionally, major changes must occur as well. A defining component of the approach is that students engage in learning expeditions—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 to families and community members. Instructional staff are expected to align expedition topics and goals with state and district standards and curriculum guidelines.

Another significant change that must occur under B is overhauling the daily schedule. Schools must replace the traditional 50-minute class period with a schedule that accommodates learning expeditions. Schools implementing ELOB also are required to provide instructional staff with weekly common planning time.

Professional Development

Professional development and technical assistance are integral to the success of ELOB. A minimum of 15 days of technical assistance are provided each year by the developer—including a two-day leadership institute (designed to help schools assess their readiness to implement ELOB) and a five-day summer institute for instructional staff. In addition, faculty attend midyear mini-institutes (lasting two to three days) during which they plan their spring expeditions.

ELOB staff or experienced ELOB instructors provide schools with on-site professional development focused on helping teachers develop learning expeditions, aligning the expeditions with state standards,

ching teachers in the classroom, and providing assiste related to assessment. ELOB also encourages

schools to send one-quarter to one-third of their faculty each year either to weeklong summer institutes or to participate in Outward Bound courses for educators, as well as the national leadership conference for ELOB teachers and administrators.

Preliminary Results

Despite the fact that this is a relatively new approach, ELOB already has amassed a promising research base on student achievement. Three studies, one of which was conducted by an independent researcher, were reviewed. All three were sufficiently rigorous to report their findings here.

The research results indicate that ELOB can help to improve student achievement. Students tend to perform well compared to state and district averages on standardized tests, such as the Iowa Tests of Basic Skills and the Georgia Curriculum-Based Assessment Test. Positive results have been found across subjects (e.g., reading, writing, math, science, and social studies).

One study found significant two-year gains in standardized test scores in reading and mathematics for students in grades 5 through 8. The other two studies found that students in ELOB schools improved on standardized and state tests compared to district and state averages in reading, mathematics, science, and social studies. 16

Community for Learning

Overview

Established in 1990, Community for Learning is a K-12 schoolwide reform program developed by Margaret Wang, director of the Temple University Center for Research in Human Development and Education. This program—which arose out of research on the influence of school, family, and community on student learning—seeks to improve students' academic achievement, behaviors, and attitudes and to promote independent learning habits. The program encourages the coordination of classroom instruction with community services (e.g., health, libraries, social services, and law enforcement) in an effort to improve individual student learning.

Program Content

Community for Learning encourages a system of shared



decision-making involving school staff, parents, and the surrounding community and employs the Adaptive Learning Environments Model (ALEM) for instruction. ALEM is based on the premise that the key to high achievement is to continuously tailor instruction across all subjects to the particular needs of individual students. Students progress at their own pace, and teachers provide regular feedback to students.

Instructional staff are expected to keep daily records on performance, and teachers use grouping strategies (working with students individually and in small- or whole-group instruction) and work to align school curricula and instruction with district and state standards. Criterion-referenced assessments are used to assess each student's skill level. If students are performing significantly below or above expectations based on the assessments, the plan for instruction is modified.

Each district is required to have a staff member work part-time to coordinate among Community for Learning schools in the district and with community social service agencies. Districts also are expected to create a school council leadership team and an instructional team.

Professional Development

Professional development activities begin before the

VITAL STATISTICS

Number of schools 92
Grade-level focus K-12

First-year costs

With new staff \$157,000 With current staff reassigned \$82,000

Community for Learning

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Additional program summaries: http://www.ecs.org

For more information:

Guide to Schoolwide Reform. Arlington, Va.: Educational Research Service. On the web at

http://www.aft.org//edissues/schlwrfm.htm

approach is implemented and continue throughout the school year. In pre-implementation, all staff spend two or more days discussing the Community for Learning approach with school staff and community members and school staff spend another one or two days assessing the particular needs of their school. Following the initial training, the developer spends four days each with principals, facilitators, school staff, and district staff providing more detailed instruction in the methods of the approach. Ongoing staff development during the school year consists of eight to 10 days of on-site professional development and technical assistance for school staff, additional training for the facilitator, and program evaluation assistance for district staff.

Preliminary Results

There are a substantial number of studies on the student achievement effects of this approach. Five of the 13 studies reviewed were sufficiently rigorous to discuss here. Two of these, including one study that was the culmination of longitudinal research, were conducted by independent researchers.

Evidence of positive effects on student achievement is promising, based on the outcomes from the five studies. One study, by the developer, found that students using the approach had higher reading and mathematics achievement than students not using the approach and test scores in schools using the approach improved while scores in similar schools declined. A second study, also by the developer, found that standardized test gains in mathematics and reading were significantly higher for students in Community for Learning schools compared to national norms. This study also found that mainstreamed special education students in Community for Learning schools scored significantly higher than similar students not using the approach.

The only two rigorous studies conducted by independent researchers did not find such positive results. One study found no differences in student achievement with respect to the amount of time spent in Community for Learning classes, and it found no significant differences in achievement across three years of implementation. These findings may be due to the students' high levels of initial achievement. The other study investigated differences in students' rates of progress. This study found that Title I students and special education students in a Community for Learning school progressed at a significantly slower



pace than regular education students. Because both of these studies compared different groups of students within Community for Learning schools, they do not

show whether the approach as a whole is more or less effective than other approaches.¹⁷

School Climate and/or Violence Prevention Programs

School Development Program

Overview

James Comer, a child psychiatrist at Yale University, founded the School Development Program (SDP) in 1968. The approach 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 main goal of the program is to develop in students the personal, social, and moral strengths necessary to achieve success in school. The School Development Program addresses e issues with 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)

It is important to note that SDP currently is accepting new members only in school districts that either already have or promise to have a sizable number of schools using the approach and have a commitment from the superintendent, board of education, and teachers union.

Program Content

SDP requires significant organizational changes. Three mechanisms, three operations, and three guiding principles must be implemented, each of which affects school organization, staff, and administration.

The first mechanism, the School Planning and hagement Team is composed of approximately 12

teachers, parents, professional support staff (e.g., social workers and school psychologists), and paraprofessional staff (e.g., classroom aides, secretaries, janitors). This team is responsible for establishing policies that affect curriculum, school environment, and staff development; carrying out school planning, resources assessment, program implementation, and evaluation of the curriculum; coordinating the activities of all individual groups and programs in the school; and working with parents to establish a calendar of social activities for the school.

The second mechanism, the Student and Staff Support Team, is composed of teachers, school psychologists, social workers, special education teachers, counselors, and other support service staff. It provides input to the School Planning and Management Team on ways to integrate mental health principles into school man-

VITAL STATISTICS

Number of schools 700
Grade-level focus K-12

First-year costs

With new staff \$45,000 With current staff reassigned \$32,000

School Development Program

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Additional program summaries: http://www.ecs.org

For more information:

Promising Schoolwide Reform Programs. Washington, D.C.: American Federation of Teachers. On the web at http://www.aft.org//edissues.whatworks/six/index.html



agement to ensure that the school environment supports the students' learning and developmental needs. The third mechanism, the Parent Team, supports activities to involve parents in the school.

The operations that must be put into place include: adopting a Comprehensive School Plan, which lays out specific goals for the school in terms of both climate and academic areas; adopting a Staff Development Plan, which focuses teacher training on needs related to the goals specified in the Comprehensive School Plan; and developing a monitoring and assessment system to track progress toward meeting the school's goals.

The behavior and actions of staff are expected to be guided by three principles: No-fault problem solving (finding solutions, rather than assigning blame), consensus decision-making (reaching consensus by majority vote), and collaboration (principals must work with the various teams to lead the school reform process).

Professional Development

In the spring prior to the first year of implementation, SDP holds a training session at Yale University to orient practitioners to the approach. School district participants in this weeklong session include district facilitators, principals from participating schools, and sometimes teachers and parents. The following February, the same group attends a second weeklong session to address instructional and other issues that arise during implementation. At the end of the first year, principals may attend-a Principals Academy, also held at Yale.

Subsequent professional development activities are based on the training needs associated with the school's Comprehensive School Plan and School Planning and Management Team. SDP staff train local facilitators to provide professional development at the school. SDP staff visit schools twice a year to assess how well the approach is being implemented, facilitate district meetings, and provide guidance and training.

Results

Because of SDP's purpose and design, the outcomes most closely associated with the program tend to be non-academic, such as better student self-concept and a more positive school climate. On academic measures, results have been mixed. Nevertheless, several studies indicate that, when properly implemented, SDP can help raise student achievement in some low-performing schools. For example, the program was piloted in 1968 in two inner-city schools in New Have, Conn. At the

time, they ranked 32nd and 33rd out of 33 elementary schools in the district. By 1980, academic performance at both schools was above the national average, and truancy and discipline problems had declined markedly. There also have been a few studies in which SDP students have significantly outscored randomly selected students in matched schools on standardized tests of reading and math.¹⁸

Quantum Opportunities Program

Overview

The Quantum Opportunities Program (QOP) was designed as a youth development program to serve disadvantaged adolescents over a four-year period, from ninth grade through high school graduation. First implemented in 1989, QOP provides education, development, and service activities, coupled with a sustained relationship with a peer group and a caring adult, over the four years of high school for small groups of disadvantaged youth. The goal of QOP is to help high-risk youth from poor families and neighborhoods to gradate from high school and to attend college.

Program Content

QOP incorporates many features of past youth programs, such as case management, mentoring, computer-assisted instruction, work experience, and financial incentives. These features form a comprehensive framework for schools to follow.

Because QOP is an after-school program, participating schools are required to establish a dedicated QOP learning center. The center, which must be located in a room either at the school or a nearby location, must be at least 750 square feet and have electrical outlets and a telephone connection for a modem. This space is essential since QOP involves a turnkey curriculum package that includes 72 individualized, self-paced courses including lessons, activities, and tests covering K-12 academics and functional skills at all levels; seven advanced multimedia computers with specialized management and instructional software; one CD ROM library with 80 selected multimedia CDs including encyclopedias, books, academic and functional instructional programs, electronic electives, and advanced



computing tools; four TV/VCR units and a collection of 120 functional videos plus 25 commercial movies used for video discussion development activities; one inter, one test scanner, and one modem.

In QOP, students (referred to as "Associates" by the program developers) are divided into groups of 25. Each group remains constant throughout the four-year period, regardless of attendance. This is fundamental to the QOP philosophy, "Once in QOP, always in QOP." Each year, QOP participants are eligible for:

- 250 hours of education—participating in computerassisted instruction, peer tutoring, and assistance with homework
- 250 hours of development activities—participating in cultural enrichment and personal development, acquiring life/family skills, planning for college or advanced technical/vocational training, and job preparation
- 250 hours of service activities—participating in community service projects, helping with public events, and working as a volunteer in various agencies

Groups are led by a QOP coordinator who oversees

7 sites and 11 schools

VITAL STATISTICS

Number of schools Grade-level focus

High school (9-12)
The one-time charge for the QOP turnkey curriculum package is \$100,000. The total cost of operating a model with fidelity for a four-year period is approximately \$10,600 per student (slightly more than \$2,600 per year), which includes stipends and bonuses, opportunity accounts,

coordinators, and program activities.

Quantum Opportunities Program

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For more information:

Center for the Study and Prevention of Violence, Institute of Behavioral Science, University of Colorado at Boulder (1999). Blueprints for Violence Prevention: Quantum Opportunities Program. Boulder, Colo. On the web at tp://www.colorado.edu/cspv/blueprints

all aspects of the program. Each coordinator is responsible for recruiting students, encouraging active participation, brokering all service activities, counseling students, communicating with families, assisting with college applications and aid, and tracking data. QOP instructors and students share in performance-based incentives. QOP offers students cash and scholarship incentives to provide short-term motivation. Incentives also are provided for staff and agencies based on student participation hours.

Professional Development

Training sessions, conducted by Opportunities Industrialization Centers of America (OICA), for QOP coordinators and instructors take place once a year and last four days, except for the initial training session which lasts six and a half days. Sessions, which are conducted in the QOP learning center, focus on the cornerstone elements of the program (education, development, service, and support) and include sessions on evaluation. Site-specific follow-up sessions also are available through OICA.

Results

An evaluation was conducted on the five sites that implemented the QOP program throughout the four years that Associates and a control group were in high school, with a follow-up one-year after QOP ended. Results indicate that Associates, especially those from the Philadelphia site, had more positive outcomes in terms of educational attainment and social achievement. In the year following the end of QOP, Associates were more likely to have graduated from high school and gone on to a post-secondary institution than control group members, and Associates were less likely to be dropouts.

Expectations for post-secondary education also were higher for Associates than for control group members. One year after QOP ended, Associates and control group members were asked whether they had received any honors or awards during the past 12 months. The proportion of Associates receiving honors or awards was nearly three times higher than the proportion of control group members. At the end of high school, Associates were less likely than controls to report trouble with the police in the past 12 months. In a study conducted two years after the program ended, Associates had half the arrests of controls. Associates also had fewer children than the control group.¹⁹



Consistency Management & Cooperative Discipline

Overview

Consistency Management & Cooperative Discipline (CMCD) was designed to help schools establish and maintain order in the classroom. Developed in the mid-1980s by H. Jerome Freiberg at the University of Houston, CMCD attempts to increase student motivation and self-discipline, and works to equip students to share in the responsibility for classroom management and discipline. CMCD provides a framework for school staff to develop a site-specific plan to tackle their unique discipline problems.

Program Content

As the name suggests, CMCD contains two primary components: (1) Consistency Management and (2) Cooperative Discipline.

- Consistency Management focuses on classroom organization and planning by the teacher and other school staff. The teacher is trained to organize all classroom activities—from making seating arrangements, to passing out papers, sharpening pencils, taking attendance, using time, and providing equal opportunity to participate in class—to create an orderly and supportive environment in which all students can participate and learn.
- The Cooperative Discipline component of the framework works to teach students to share in the classroom management role of teachers and paraprofessionals. All students are given an opportunity to serve as leaders. As they progress through school, students assume responsibility for classroom management functions that range from passing out papers to assisting substitute teachers. Jobs are posted in the classroom, and students submit applications based on interest. Each position is rotated every four to six weeks. Under the program, students also are allowed to assume responsibility for resolving disputes, solving problems, and making decisions. In this way, students gain the experience necessary to become selfdisciplined and to act as responsible citizens of the school community.

Professional Development

CMCD includes a four-phase program for professional development: awareness, implementation, follow-up, and sustaining support. The implementation phase consists of two on-site training sessions led by CMCD

staff during the spring prior to implementation. A second two-day workshop is provided before school begins in August. The follow-up phase of staff development includes four three-hour workshops held after school approximately every two months between September and March of the first academic year of implementation. Sustaining support is provided in years two and three, during which an orientation training session and occasional workshops are provided to new teachers. During this phase, veteran teachers from the school are selected to become program facilitators, providing additional training and support to new staff. CMCD staff are also available for additional schoolwide training as needed.

Results

Most evaluations of CMCD (primarily conducted in inner-city Houston schools) have shown positive results in the areas most closely associated with the program—i.e., reduced discipline referrals and an improvement in school climate. A few studies have also found that the program has helped to raise student achievement in some low-performing schools.

One early study tracked five low-performing elementary schools that had adopted CMCD and five matched control schools over a three-year period. Of

VITAL STATISTICS

Number of schools

78 schools in seven states

Grade-level focus First-year costs PreK-12 Price varies depending on size of

school. Approximate cost for a school of 500 students ranges between

\$49,000 and \$98,000.

Consistency Management & Cooperative Discipline

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For more information:

WWS American Federation of Teachers (1998). What Works: Six Promising Schoolwide Reform Programs. Washington D.C. On the web at

http://www.aft.org/edissues/whatworks/six/index.htm



standardized achievement tests, statistically significant positive effects were found for CMCD students. A more recent evaluation compared the effectiveness of a ath intervention in schools implementing CMCD and the math program and schools implementing the math program alone. Students in schools using the combined approach outscored students in the mathonly program schools.

While results are encouraging, only one independent study of this program has been conducted, thus far, and achievement results were not measured. This evaluation looked at a blend of intervention programs, K-12, including Project GRAD, CMCD, Success for All, and Move It Math. While the achievement effects of CMCD were not quantified, teachers indicated that, after three years of using the program, a reduction in discipline problems had increased daily instructional time by an average of 36 minutes.20

Bullying Prevention Program

Overview

The Bullying Prevention Program was developed in §3 in Bergen, Norway, to reduce the number of vic-M/bully problems among primary and secondary school children. This K-12 program aims to increase awareness and knowledge about behavior problems, to achieve active involvement on the part of teachers and parents, to develop clear rules against bullying behavior, and to provide support and protection for the victims of bullying.

Program Components

The Bullying Prevention Program involves the entire school, from teachers and students to cafeteria workers and bus drivers. The core components of the program are implemented at the school level, the class level and the individual level.

Schoolwide components include the administration of an anonymous questionnaire to assess the nature and prevalence of bullying at each school, a school conference day to discuss bullying at school and plan interventions, formation of a Bullying Prevention Coordinating Committee to coordinate all aspects of the school's program, and increased supervision of stupts at bullying "hot spots." The Coordinating Inmittee is composed of a school administrator, a

teacher representative from each grade, a guidance counselor and/or a school-based mental health professional, and parent and student representatives.

Classroom components include the establishment and enforcement of class rules against bullying, and holding regular class meetings with students. Class meetings are used to engage students in a variety of activities, including role playing, writing, and small group discussions.

Individual components include interventions with children identified as bullies and victims, and discussions with parents of involved students. Teachers may be assisted in these efforts by counselors and schoolbased mental health professionals.

Professional Development

All members of the Bullying Prevention Coordinating Committee and the program coordinator receive an initial one- or two-day on-site training to prepare them to lead teacher discussion groups and to assess the results of the initial questionnaire. Teachers and non-teaching staff (e.g., cafeteria workers, bus drivers, etc.) participate in a half- to full-day in-service meeting to acquire

VITAL STATISTICS

Number of schools

Not available

Grade-level focus First-year costs

K-12

In addition to costs associated with compensating an on-site coordinator for the project, costs for the program include approximately \$130 per school for the questionnaire and computer program, plus \$60/teacher for class-

room materials.

Bullying Prevention Program

Sue Limber

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For more information:

Center for the Study and Prevention of Violence, Institute of Behavioral Science, University of Colorado at Boulder (1999). Blueprints for Violence Prevention: Bullying Prevention Program. Boulder, Colo. On the web at

http://www.colorado.edu/cspv/blueprints



a deeper understanding of the program's goals and methods. This training is lead by program consultants and members of the Coordinating Committee. The developers also offer yearly booster training sessions for teachers and staff who wish to participate.

Results

Research on the Bullying Prevention Program focuses on implementation sites in Bergen, Norway. After only two years, schools in Bergen reported an overall decrease in the frequency of bully/victim problems by 50 percent or more. These results applied to students across all grade levels. Schools using the approach also reported that school climate had improved, and antisocial behavior (e.g., theft, vandalism, and truancy) had dropped as well.

Case studies also have been completed in the United States (South Carolina), England (Sheffield), and Germany (Schleswig-Holstein). In South Carolina, results from the evaluation study suggest that the firs year of the bullying program affects students' involvement in bullying and antisocial behavior. After only seven months of implementation, students reported a 25 percent drop in the frequency with which they bullied other children, while students in control schools reported a corresponding increase. As expected, there was an increase over time in the frequency of selfreported antisocial behavior among control students, while for the intervention students, there was either no increase or a slower rate of increase with regard to general delinquency, vandalism, school misbehavior, and punishment for school-related misbehavior.21

Reading/English Language Arts Programs

Junior Great Books (JGB)

Overview .

Junior Great Books (JGB), a supplementary literature program for grades K-12, was launched in 1962 by the Chicago-based Great Books Foundation, a nonprofit organization that promotes reading and discussion of the classics. The goal of the program is for students to develop the skills, habits, and attitudes of successful readers, allowing them to develop their analytic and interpretive skills and to read for understanding, as well as pleasure. The JGB program is shaped around discussion of literary texts and can be used in conjunction with both regular and compensatory education programs.

Program Content

The cornerstone of the Junior Great Books program is "Shared Inquiry." Teachers engage students in formal interpretive discussions, encouraging their search for answers to fundamental questions about literary selections. Teachers guide pupils toward developing their own text-based analyses and understandings by posing provocative, open-ended "how" and "why" questions for

which there may be several reasonable answers.

The JGB anthologies contain a culturally diverse of classic and modern literary and expository pieces. Texts (usually short stories or novellas) raise genuine

VITAL STATISTICS

Number of schools

Grade-level focus

9,500 K-12

First-year costs

Total cost per teacher is approxi-

mately \$2,100 and includes train-

ing, consulting, and materials.

The Great Books Foundation

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35 East Wacker Drive, Suite 2300

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Fax: 312/407-0334

E-mail: mantia@gbf.mhs.compuserve.com Web site: http://www.greatbooks.org

For more information:

WWB American Federation of Teachers (1998). What Works: Seven Promising Reading and Language Arts Programs.

Washington D.C. On the web

http://www.aft.org/edissues/whatworks/seven/index.htm



questions for teachers and students, and are limited in length to allow students to read each piece at least twice.

The JGB program involves a six-step process. First, he instructor engages the class in a brief introductory discussion about an issue that will be encountered in the text. The class then reads the literary selection for the first time and, in discussion groups, shares questions that arise from the reading. Next, students read the text carefully a second time, making notes in response to interpretive questions posed in their discussion groups. The class discusses and interprets words/phrases, often with multiple meanings, that are important to the text. The teacher leads students through a Shared Inquiry discussion, the culmination of the JGB process. Finally, students express their personal reactions to a text by writing stories, poems, or essays related to the theme or literary form of the selection.

Professional Development

Teachers who participate in the JGB program are required to complete a two-day "Basic Leader Training" in which teachers receive a course manual, a grade-appropriate instructional guide, and various support

es. This course provides instruction in JGB's Shared uiry method, modeling, and practice discussions.

JGB also offers a follow-up support program for teachers and administrators to ensure successful implementation. Follow-up activities include on-site consultations and training to provide teachers with guidance and feedback and to establish and review benchmarks for student performance. Schools implementing JGB are required to schedule six on-site/in-service days for participating teachers in each of the first two years of implementation.

Further professional development and technical assistance are provided to schools using JGB in the form of a toll-free number with regional specialists and JGB's web site (see *Vital Statistics*). JGB also offers two intermediate and three advanced-level workshops on integrating the program into existing curricula, refresher courses, and peer coaching.

Preliminary Results

Although research on the achievement effects of JGB as a classroom program is still preliminary, several indedent controlled studies indicate that English lange arts students may benefit from its use. On an

assessment of students' critical-thinking abilities, one study found that high-achieving students using JGB as either a mixed or a full-time alternative to basals scored significantly higher than their control group counterparts. Another study, involving Title I summer school students, concluded that JGB had a significant effect on the ability of low-achieving students to recall textual details with accuracy, including information about characters, events, and major themes. And a small study involving 30 fifth-grade students found that both high-and low-performing students improved their reading comprehension scores, as measured by a standardized assessment.²²

Exemplary Center for Reading Instruction (ECRI)

Overview

Exemplary Center for Reading Instruction (ECRI) is a research-based, K-12 instructional program designed to improve students' ability to read, understand, and communicate in English. The program focuses on pre- and in-service professional development for teachers and is meant to strengthen and supplement, not replace, existing curricula. Teachers using ECRI are trained in a

VITAL STATISTICS

Number of schools

More than 700 K-12

Grade-level focus First-year costs

Start-up cost for a school of 500 stu-

dents is about \$7,000, including \$600/day honorarium for ECRI staff and \$228/teacher for required texts.

The Reid Foundation

Exemplary Center for Reading Instruction

3310 South 2700 East Salt Lake City, UT 84109

Phone: 801/486-5083 or 801/278-2334

Fax: 801/485-0561

E-mail: lewallen@cue.uga.edu or ereid@xmission.com Web site: http://www.xmission.com/~ereid/ecri.htm

For more information:

WWR American Federation of Teachers (1998). What Works: Seven Promising Reading and English Language Arts Programs. Washington D.C. On the web at http://www.aft.org/edissues/whatworks/seven/index.htm



highly structured, teacher-directed approach to instruction that focuses on establishing high levels of student mastery, maintaining on-task behavior, and providing ample time for hands-on work and practice.

Program Content

ECRI employs an integrated approach to teaching reading and English language arts, with a focus on individualized instruction techniques and positive reinforcement. ECRI teachers learn strategies for instruction in word recognition; vocabulary; study skills; spelling; literature; penmanship; literal, critical, and interpretive comprehension; and creative and expository writing. Teachers are trained in the use of "directives" (scripted lessons) designed to help increase student motivation, to make more efficient use of class time, and to introduce multisensory instructional techniques.

Students are assigned to reading groups based upon their instructional reading level. In a typical ECRI lesson, teachers introduce new words and teach a comprehension skill, a study skill, and a grammar or creative writing skill. Lessons for secondary students include reviewing vocabulary and word recognition skills, as well as applying "backup" skills such as proofreading. Throughout each lesson, teachers focus on eliciting responses from students, providing time for supervised practice, teaching students to monitor their own progress and to schedule their study time, and addressing errors as they occur.

High levels of student mastery (correct responses of 83 percent to 100 percent) are expected from all students. Students demonstrate mastery through class participation, small-group discussions, written work, and regular curriculum-based assessments developed by ECRI staff for use with classroom materials. Student

progress is measured individually, and no student is allowed to proceed to the next skills sequence until he or she has fully mastered the previous material.

Professional Development

ECRI provides a five-day seminar for teachers that focuses on basic ECRI techniques for reading and language arts instruction, effective scheduling of class time, and methods for diagnosing and correcting reading problems. During the seminar, participants observe demonstrations, teach sample lessons, and pass proficiency tests on the use of new approaches. ECRI also offers intermediate and advanced seminars. In addition, ECRI staff are available to visit implementation sites to demonstrate and/or monitor implementations.

Results

There have been more than 20 years of field tests to demonstrate ECRI's effectiveness in helping raise student achievement in reading and language arts, with benefits for students from all socioeconomic, racial, and ethnic backgrounds. When the program is properly implemented, students' achievement gains can be stunning.

One early study found that the average achievement level of ECRI students in second grade was in the 95th to 99th percentile range, with Title I students avera 1.4 to 3.2 years' gain for each year of instruction. Data from several other sites also indicate that ECRI is effective for regular education students, as well as for special needs (bilingual, Title I, remedial) and special education students. There are also indications that ECRI instruction accelerates the achievement of gifted and talented students.²³



Remedial Reading Programs

Lindamood-Bell (L-B)

Overview

Developed in the late 1960s, Lindamood-Bell (L-B) has pioneered programs to help reading-disabled students develop the sensory/cognitive processes that underlie reading, spelling, language comprehension, math, and visual motor skills. This approach has extensive research on its use in clinical settings but comparatively little data on its classroom applications. A number of these adaptations for struggling regular and special education students are now available, including the Lindamood Phonemic Sequencing Program (LiPS), a highly structured reading and spelling tutoring program for students from kindergarten through adulthood, and the Human Learning Model (HLM), which can be implemented as a schoolwide program. Other classroom-based programs related to Lindamood-Bell include the Visualizing and alizing Program, the Seeing Stars Program, the rawing with Language Program, and the On Cloud Nine Math Program.

Program Content

Students who are referred to L-B are administered an initial needs assessment—a battery of tests designed to explore the reading skills of the students, i.e., their strengths and weaknesses. This battery includes the results of any state or district assessments that may have been previously administered. Once students have been assessed, the intervention team designs an education plan specific to the needs of each student. The results of the assessment determine the length of time the student will be involved in the program, the types of lessons to be taught, and the individual skills that will be focused on in each lesson. Although lessons are individualized, there are certain underlying characteristics shared with other multisensory, structured reading intervention approaches. Specifically, each lesson is structured, progressive, cumulative, cognitively based, and sequential.

L-B assumes that information from the eye, ear, and th can be used to identify, classify, and label sounds, ding to greater understanding of language. L-B works to develop phonemic awareness and its application to reading and spelling in a specific progression. Students are first trained to be aware of consonants and vowels. Students then learn about the speech actions that produce phonemes; and they learn how to identify, classify, and label phonemes; after this, the students choose mouth pictures to represent the phonemes. The next step is for students to learn which letters to associate with specific mouth movements and sounds.

Students apply this knowledge to spelling and reading by using letters printed on tiles for spelling and then using their own writing skills to spell words. Students receive instruction in distinguishing between phonetically regular words from irregular words. In the final stage, students learn to read, beginning with lettered tiles, and then moving on to print.

Fundamental to the L-B approach is the use of "guided discovery," in which a teacher questions students in order to help them discover the alphabetic principle on their own, and students correct their own work.

Professional Development

The various classroom spin-offs of L-B offer a range of professional development services. LiPS and HLM, in particular, offer introductory courses and seminars on

VITAL STATISTICS

Number of schools Grade-level focus First-year costs Not available K-12 and adults Not available

Lindamood-Bell Learning Processes

416 Higuera Street

San Luis Obispo, CA 93401

Phone: 800/233-1819 Fax: 805/541-8756

Web site: http://www.lblp.com or http://www.proedinc.com

For more information:

WWBB American Federation of Teachers (1999). What Works: Five Promising Remedial Reading Intervention Programs. Washington D.C. On the web at

http://www.aft.org/edissues/whatworks/five/index.html



25

how to use the programs. Levels of training range from basic introductory training through consultant certification. Teachers trained in HLM are expected to implement the program after the initial training.

Preliminary Results

Most research on the effectiveness of the Lindamood-Bell approach has focused on its use as an individualized instructional or tutorial program, usually in a clinical, not classroom, setting. Thus, results on its school-based applications are still preliminary.

Several studies indicate that this approach can be used effectively with dyslexic and severely disabled poor readers of all ages. The same techniques have also been modified for use with small groups in classrooms or even for whole-class instruction. One study compared the reading achievement of two groups of struggling first-grade readers. The experimental group was taught using LiPS for four months, then phased back into the regular reading program. At the end of first grade, the LiPS students outscored control students on multiple reading measures. A follow-up study showed that these achievement gains were sustained through the fifth grade. Another study found LiPS to be an effective remedial program for middle-grade students with poor reading skills. And recently, researchers examined the effect that different interventions had on reading-disabled first-grade students. The students were randomly assigned to one of four programs. At the end of the second grade, students in the Lindamood group significantly outscored other students on program-aligned measures of reading ability.24

Exemplary Center for Reading Instruction (Remedial Reading)

Overview

Although Exemplary Center for Reading Instruction (ECRI) has been used mostly to enhance regular class-room reading and language-arts instruction, it also has been used successfully as a summer school or after-school remedial tutoring program.

Program Content

Similar to the ECRI method for teaching reading/English language arts, remedial ECRI is a mastery learning program that employs an integrated approach with a focus on individualized instruction techniques and positive reinforcement. Teachers using ECRI are trained in a highly structured, teacher-directed approach to instruction with a focus on establishing high levels of student mastery, maintaining on-task behavior, and providing ample time for hands-on work and practice.

ECRI teachers learn strategies for instruction in word recognition; vocabulary; study skills; spelling; literature; penmanship; literal, critical, and interpretive comprehension; and creative and expository writing Teachers are trained in the use of "directives" (scripte lessons) that are designed to help increase student motivation, to make more efficient use of class time, and to introduce multisensory instructional techniques.

High levels of student mastery (correct responses of 83 percent to 100 percent) are expected from all students. Students demonstrate mastery through class participation, small-group discussions, written work, and regular curriculum-based assessments developed by ECRI staff for use with classroom materials. Student progress is measured individually and no student is allowed to proceed to the next skills sequence until he or she has fully mastered the previous material.

Professional Development

ECRI provides a five-day seminar for teachers that focuses on basic ECRI techniques for reading and language arts instruction, effective scheduling of class time, and methods for diagnosing and correcting reading problems. During the seminar, participants observe demonstrations, teach sample lessons, and pass proficiency tests on the use of new approaches. ECRI als



offers intermediate and advanced seminars. In addition, ECRI staff are available to visit implementation sites to demonstrate and/or monitor implementations.

sults

For an explanation of effect size (ES), see page 36.

ECRI can be used as a program to strengthen regular classroom instruction or as a remedial intervention. There have been more than 20 years of field tests to demonstrate ECRI's effectiveness in helping to raise student achievement in reading and language arts, with benefits found for students from all socio-economic, racial and ethnic backgrounds. Research shows that the program is effective with regular education students. In addition, achievement gains have been found for Title I, remedial, and special education students, as well as for students who don't qualify for special education but who still have special needs. In studies of student achievement effects, special education students made normal curve equivalent (NCE) gains ranging from +7.76 to +23.29. Students receiving Title I services posted NCE gains from +7.99 to +25.66. And finally, students eligible for remedial services made gains ranging from +6.41 to +11.60.

The main evaluation of ECRI as an after-school

VITAL STATISTICS

Number of schools Grade-level focus

109 schools K-12

Costs

\$39.95 (plus shipping) per 100 students. There is a recurring charge of \$0.26/student each month for materials. Cost for the seminars is \$600 per day for the trainer, plus travel expenses.

The Reid Foundation

Exemplary Center for Reading Instruction

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For more information:

WWBB American Federation of Teachers (1999). What Works: Five Promising Remedial Reading Intervention Programs. Washington D.C. On the web at

tp://www.aft.org/edissues/whatworks/five/index.html

program used volunteers to tutor two groups of randomly assigned students who had reading difficulties. The experimental group was taught by parents who had been trained to use ECRI, while the control group was taught using a generic reading intervention. ECRI students received lessons in reading, writing, and spelling. At the end of the school year, students in both groups were tested using a standardized test (Durrell Analysis of Reading Difficulty), which showed that ECRI students had made significantly greater gains (ES +1.21).

A second study included students from grades 2 to 12. Prior to ECRI, remedial students had a shockingly low achievement gain of only three months (.3) for each year in school. Once ECRI was implemented, schools saw gains of 17 months in the Gates-MacGinite test of oral and silent reading rates, and gains of 25 months in oral reading comprehension and spelling.

Another study of the use of ECRI as a remedial reading program showed the results of students in grades 1 to 6. This study included 114 students who were not reading on grade level. At the end of the school year, after approximately 45 hours of ECRI instruction, results showed NCE gains in all grades, ranging from 11 to 19.88 NCE scores.

An additional study of the use of ECRI as a remedial program involved 17 students in Hawaii in grades 2 to 4. At the end of the first year, the students showed NCE gains of 14.71.25

Direct Instruction

Overview

First used in the mid-sixties, Direct Instruction (DI) is a highly structured (scripted) instructional approach that is designed to accelerate the learning of at-risk students. Curriculum materials and instructional sequences attempt to move students to mastery at the fastest possible pace. Although the early mastery of basic skills is a key element of the program, DI also addresses students' general comprehension and analytic skills. DI has a long history as an effective elementary school reading and/or schoolwide reform program, but also has a reading intervention program—Corrective Reading (CR), available for elementary, secondary, and adult regular and special education students, which can be implemented separately.



Program Content

All DI lesson plans, including those for CR, have been written, tested, rewritten, and polished in a cycle of classroom field-testing and revision that ends only when trials show that 90 percent of students grasp a lesson the first time around. With each lesson building on previously mastered skills and understandings, teachers are able to dramatically accelerate the pace of learning, even for the most disadvantaged students. Though the lesson plans are highly structured, the DI program is meant to serve as a template that ensures that beginning teachers will be successful and that veteran teachers can fill any holes in their teaching skills.

The emphasis of CR is on both decoding and comprehension skills. Before a student begins CR, an assessment is administered to determine his or her skill level. This assessment also acts as a placement test, ensuring that students can be grouped and taught at the appropriate skill level. Skills are taught in sequence until students have fully internalized them and are able to generalize their learning in new, untaught situations. Each lesson sequence is extensively field-tested to determine

VITAL STATISTICS

Number of schools Grade-level focus 150 PreK-12

First-year costs

Cost of implementing the Direct Instruction Corrective Reading Program schoolwide is approximately

\$25/student plus \$8,000 for training and on-site technical assistance.

Association for Direct Instruction

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E-mail: ADIhome@aol.com

Web site: http://www.adihome.org or

http://darkwing.uoregon.edu/-adiep

For more information:

WWBB American Federation of Teachers (1999). What Works: Five Promising Remedial Reading Intervention Programs. Washington D.C. On the web at

http://www.aft.org/edissues/whatworks/five/index.html

(1999). An Educator's Guide to Schoolwide Reform. Arlington, Va.: Educational

Research Service. On the web at

http://www.aft.org//Edissues/Schlwrfm.htm

the most effective and efficient way to lead students to mastery.

Reading/language arts lesson plans begin by focusing on phonemic awareness, and are followed by increasingly complex phonics and decoding lessons, which a followed by lessons that focus on comprehension and analysis of content.

Professional Development

DI is a commercially published program, and materials may be purchased by individual grade and subject or in a package suitable for schoolwide implementation. Professional development and implementation support of differing levels of quality can be contracted from various providers.

Results

For an explanation of effect size (ES) see page 36.

Although Direct Instruction has been evaluated among many populations over the years, the following only addresses the use of Direct Instruction as a remedial reading intervention or as a regular education program serving a student population composed of a very large proportion of struggling readers. One study followed the effects of DI on a rural population of thirdgrade students from 1973 to 1980. Results showed that DI students outscored their counterparts in a compa son group by ES=+.61. Another study of mildly retard ed students showed DI students outscoring control group students by ES=+.64. A third study, evaluating the effects of DI on both reading and spelling, showed DI students outperforming a control group by ES=+.75. A fourth study also showed DI students outscoring a control group in spelling and reading, this time by ES=+.32.

A summary meta-analyses of Direct Instruction showed overall large effect sizes for students in regular education (ES=+.82) and special education (ES=+.90). DI also showed large effect sizes when used with struggling middle and junior high school students (ES=+1.11).²⁶



Dropout Prevention/ College Attendance Programs

Upward Bound

Overview

Upward Bound (UB) is a federally funded education program focused on increasing the academic and motivational levels of high school students so that they may graduate from their high schools and pursue a college education. One of the six college entrance programs administered by the U.S. Department of Education (collectively known as the TRIO programs), UB provides opportunities for students ages 13 to 19 to succeed in pre-college performance and ultimately in higher education. First implemented in 1965 as a Great Society program, UB seeks t - improve students' academic skills through intensive classroom instruction; to provide education opportunities not usually available to low-income youth; and to motivate students through successful high school graduation and matriculation to ue a post-secondary education.

Program Content

UB projects are required to provide a multiyear program of weekly activities during the academic year and an intensive summer program that simulates the college experience. Programs are typically housed at institutions of higher education; public or private not-for-profit agencies; a combination of institutions, agencies, and organizations; and—in exceptional cases—secondary schools. Schools wishing to participate in UB must either join an existing UB program or submit a grant application to the U.S. Department of Education.

UB serves high school students from low-income families, high school students from families in which neither parent holds a bachelor's degree, and low-income, first-generation military veterans who are preparing to enter post-secondary education. To enroll in a UB program, a student must fall into one of the following categories: have completed the eighth grade, be between the ages of 13 and 19, or have a need for academic support in order to pursue a program of post-ndary education. Two-thirds of participating stu-its must be potential first-generation college students

and meet federal income guidelines. The remaining third must either be potential first-generation college students or meet federal income guidelines.

Programs are required to offer instruction in math (through pre-calculus), lab science, foreign languages, English, and composition. Students participate in an intensive six-week summer residential or non-residential program held on a college campus and receive academic support services during the school year (typically on weekends or after school).

UB programs also must offer cultural, social and recreational activities designed to foster personal growth and broaden student awareness and appreciation of the world; an academic year follow-up program with weekly grade-specific academic courses; bi-weekly tutoring in academic subjects; advising and counseling; monitoring and tracking of student academic and co-curricular activities; assistance with college selection, admission, entrance exams, final examinations, and financial-aid applications; and intervention methods to assist and encourage students toward positive achievement.

Professional Development

With the exception of professional development opportunities at annual TRIO meetings or through federal training grants, project and target school staff are left largely on their own to develop and implement ideas for improving program practice. However, studies sug-

VITAL STATISTICS

Number of schools Grade-level focus First-year costs 3,300 high schools High school (9-12) Not available

Upward Bound

Higher Education Preparation and Support

U.S. Department of Education 600 Independence Avenue, SW Washington D.C. 20202

Phone: 202/708-4804 E-mail: TRIO@ed.gov

Web site:

http://www.ed.gov/offices/OPE/OHEP/hepsss/upbound.html



gest that UB programs are reluctant to introduce substantial innovations in their programs due to the fact that such innovations involve risks that could result in the loss of the grant. Critics have suggested that changes to the federal regulations governing UB programs and the grant renewal process are necessary in order to ensure that project and target school staff are given more consistent opportunities to develop their professional skills and the freedom to adopt new, more effective approaches to teaching and learning.

Results

UB is the oldest and largest of the U.S. Department of Education's TRIO programs and has been evaluated the most thoroughly. The first comprehensive evaluation of the program was conducted in 1976. This study, along with a follow-up study in 1979, focused on high school retention rates of UB students and the program's effectiveness in preparing students for post-secondary education. Initial results demonstrated that UB participants remained in high school at a slightly higher rate than their control group counterparts. Evidence also suggested that the longer students stayed in the program, the less likely they were to drop out of school. College attendance rates for UB students were considerably higher than those of the control group. Seventy-one percent of UB students were eligible to attend college following graduation from high school, versus 47 percent of the control group. Of the eligible UB students, 65 percent enrolled in post-secondary education.

A more recent evaluation (conducted by Mathematica Policy Research, Inc.) looked at the shortterm academic impact of UB on students during the first two years of high school, as well as length of participation, attrition rates, reasons for leaving the program, and what types of students benefited most from the program. In this study, eligible participants were selected from UB applicants at 67 sites and assigned to either a UB group or a control group. Analyses of UB revealed that, though UB participants earned more academic credits during high school than the control group, grade point averages for both groups remained virtually unchanged, as were attitudes about high school, and parental involvement. However, with respect to GPA, it should be noted that students in the control group were not required to take academic courses and were less likely to do so. In other words, UB students were maintaining their GPA while taking more rigorous academic courses. UB students also were

much more likely to enter college than their counterparts—perhaps the most encouraging statistic to emerge from the study.²⁷

Project GRAD (Graduation Really Achieves Dreams)

Overview

Project GRAD was designed as an inner-city curricular initiative aimed at producing college-bound high school graduates of distinction. Launched by the Houston Independent School District in 1989, initial results were dubious in that more students were attending college, but achievement levels were not rising. To balance the equation, the developers decided to expand the program to include other systemwide reform efforts (e.g., Success for All, University of Chicago School Math Project) in order to bring comprehensive systemic change to an entire feeder system of schools. The overall objectives of the program are to increase test scores of students to exceed national norms and to reduce the dropout rate to acceptable levels. Project GRAD seeks to prove that the problems facing inner-city school tems can be overcome with the right resources, strat gies, and school-community collaboration.

Program Content

Guided by the philosophy that all pre-kindergarten through 12th grade students can be effective learners if appropriate and timely programmatic interventions are infused into the primary grades, Project GRAD serves as a framework for districtwide reform.

The program introduces into its primary and middle schools a strong curriculum designed to build students' self-discipline, confidence, and resilience; and this works to generate excitement about learning. Focusing on four interdependent and mutually reinforcing instructional centers—mathematics, reading, quality of instructional environment, and parental/community involvement—Project GRAD employs four established curriculum models:

■ University of Chicago School Math Project (UCSMP)

Secondary Component—designed by the University of Chicago, this program provides students with the following sequence of mathematics courses: transitio mathematics, algebra, geometry, functions, statistic



and trigonometry, and pre-calculus and discrete mathematics.

- Communities in Schools (CIS)—a nonprofit, dropout prevention program and social service agency that provides guidance, counseling, community outreach, and family case-management service to at-risk children. CIS works with students and their families to make them aware of private and community resources that can assist them with social, economic, health, and other needs.
- Success for All (SFA)—a schoolwide reading and writing program for students in pre-kindergarten to middle school that emphasizes early intervention to ensure that every student succeeds in reading throughout the elementary grades. Components of SFA include a reading and writing program, cooperative learning techniques, tutors, eight-week assessments, pre-school and kindergarten instruction, family support teams, staff support teams, and professional development for teachers.
- Consistency Management Program—a comprehensive instructional program tailored to respond to individual campus needs that builds on shared responsibility or learning and classroom organization between eachers and students. Consistency management combines instructional effectiveness through consistency in classroom organization with student self-discipline developed cooperatively. Components of the Consistency Management Program include prevention, caring, cooperation, organization, and community.

Key to the development of the program is the initia-

VITAL STATISTICS

Number of schools Three feeder patterns serving 42

schools

Grade-level focus

K-12

First-year costs

\$10,000

Project GRAD

Sharon L. Jacobson, Director of Operations

P.O. Box 2511

Houston, TX 77252-2511

Phone: 713/757-5973

Fax: 713/757-3144

E-mail: shjacob@socrates.hern.org b site: http://www.hern.org/-grad/ tion of a college scholarship program at each high school within the system. The developers of the program work with corporations and foundations to sponsor a scholarship program at the Project GRAD high school prior to the installation of the program's components. Typically the scholarship is a guarantee of a \$1,000 college scholarship per year for students who meet basic academic criteria.

Project GRAD is almost entirely funded by private organizations and individuals. Therefore, the availability of stable funding is essential to implementation, and a minimum of two years of funding is required to ensure that implementation of the program can be sustained.

Professional Development

Project GRAD offers extensive staff development to all faculty members; and these development opportunities are ongoing, not one-shot workshops. Facilitators and trainers conduct the staff development for the four subunits of the instructional model, and a full-time facilitator is on staff to aid in the set-up and implementation of each of the programs. Project GRAD also offers principals' leadership training, summer institutes, and the Bridge Program (for incoming ninth-grade students).

Preliminary Results

In the years since its initial implementation in the Davis feeder system of the Houston Independent School District, there have been several evaluations of Project GRAD's effectiveness. Each of these studies, funded by the University of Houston system and conducted by Kwame Opuni, has focused on the program's implementation status, impact on curriculum and achievement, and impact on discipline—as well as on strengths and weaknesses of the project itself.

The early evaluations (for the 1994-95 and 1995-96 school years) revealed tremendous gains in student math and reading achievement, passing rates, and college attendance, as well as corresponding decreases in disciplinary levels, student referrals, and instructional time on task. The most recent evaluation (1996-97) followed suit, unveiling another increase in achievement levels. Despite Texas Assessment of Academic Skills (TAAS) average percent passing rates rising across the school district, the Davis feeder system has kept pace, raising passing rates in math from 36 percent in 1994 to 65 percent in 1997, and passing rates in reading from 56 percent (1994) to 69 percent (1997). At the secondary school level (Davis High School), 10th-grade TAAS passing



rates rose from 29 percent to 53 percent in math, and from 51 percent to 76 percent in reading. Furthermore, Davis High School's graduating class increased its college attendance rate from 54 percent in 1994-95 to 65 percent in 1995-96.

Project GRAD also has had a significant impact on student discipline. Since its implementation in 1994-95, student referrals to principals' offices have declined by more than 71 percent in each of the schools. In just two years, referrals had dropped 48 percent in Marshall Middle School alone. An assessment in 1996-97 of disciplinary-related time saved by teachers due to proficiency in the use of Consistency Management & Cooperative Discipline practices, showed that teachers in the Davis feeder pattern were gaining 15 to 18 days per year, saving the school district more than \$425,000. Preliminary reports from replication sites in other school districts are also encouraging.²⁸

Coca-Cola Valued Youth Program

Overview

Developed by the Intercultural Development Research Association in 1984, the Coca-Cola Valued Youth Program (VYP) is a cross-age tutoring program designed to help students who are at-risk of dropping out of school. The program has seven tenets:

- 1. All students can learn.
- 2. The school values all students.
- 3. All students can actively contribute to their own education and to the education of others.
- All students, parents, and teachers have the right to participate fully in creating and maintaining excellent schools.
- 5 Excellence in schools contributes to individual and collective economic growth, stability and advancement.
- 6. Commitment to educational excellence is created by including students, parents, and teachers in setting goals, making decisions, monitoring progress, and evaluating outcomes.

7. Students, parents, and teachers must be provided extensive, consistent support in ways that allow students to learn, teachers to teach, and parents to be involved.

Program Content

The Coca-Cola Valued Youth Program works by placing junior high and high school students in positions of academic responsibility as tutors to elementary school children. The program emphasizes elimination of non-academic and disciplinary factors that contribute to students dropping out of school. Generally speaking, VYP works to develop students' senses of self-control, decrease student truancy, and reduce disciplinary referrals.

Students who want to participate in the program are required to enroll in a special tutoring class, which allows them to improve their own basic academic skills. VYP involves a range of instructional and administrative strategies designed to support the program. Curriculum for VYP is focused on preparing the secondary school students to tutor elementary students. The objectives of the curriculum are to improve students' tutoring skills, literacy skills, and self-concept.

Tutors are paid a minimum wage stipend, which serves to reinforce the worth of students' participation in the program; the student tutors work with three ementary school students at a time for a total of about four hours per week. Tutors are further rewarded for their participation with T-shirts, caps, and a certificate of merit for their efforts.

VITAL STATISTICS

Number of schools Grade-level focus Costs

90 schools in 17 cities Middle and high school Cost per student/user (based on 25 tutors and 75 tutees) ranges from \$150-\$250 including tutor stipends, recognition awards, staff training, technical assistance, and evaluation.

Coca-Cola Valued Youth Program

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Schools choosing to implement the program must first form a Valued Youth implementation team, which includes a program administrator, the principals of the mentary and secondary schools, a teacher/coordinate at the secondary school, an elementary receiving teacher representative, a family liaison, and an evaluation liaison. The team's major responsibility is to coordinate and monitor project activities.

Professional Development

VYP's support strategy involves curriculum, coordination, staff enrichment, family involvement, and evaluation activities. Technical assistance and training, offered in the form of workshops, are focused on creating a cohesive group that is dedicated and committed to the success of the program and that has high expectations for the students and adults involved. Specific topics covered in workshops include developing a tutor training program, bilingual education, organizational change, involving parents in their child's education, and classroom management. A minimum of 10 training and technical assistance days are required.

Results

The main evaluation of the Coca-Cola Valued Youth Program (conducted by Cardenas, Montecel, Supik, and Harris in 1992) compared 63 VYP tutors to 70 students in a comparison group. Students in four San Antonio schools were matched on the basis of age, ethnicity, lunch eligibility, percentage of students retained in grade; and scores on tests of reading, quality of school life, and self-concept. Although the students were not randomly assigned to the program, students in the comparison group were slightly less disadvantaged than the control group. They were less likely to qualify for free lunch or to have been retained in grade than the comparison group. Two years after the program began, 12 percent of the comparison students, as opposed to only one percent of the VYP students, had dropped out. Reading grades were significantly higher for the VYP group, as were scores on a self-esteem measure and on a measure of attitude towards school.29



Footnotes

- ¹ To date, only a few high school programs have managed to amass strong, independent evidence that shows they actually work in raising student achievement and that they can be replicated. Several more have been designed around respected theoretical research. Some of these programs are at the pilot stage; some are already in wide use. Many are the subjects of serious, independent evaluations, which the AFT is monitoring. Although the odds of success with these models are still unknown, some may warrant exploration and experimentation.
- ² Phone numbers for schools using several promising programs can be found through the AFT Web page.
- ³ TOWRE is published by Pro-Ed; MAST is published by Psych. Corp.
- ⁴ Public Agenda (1997). "Getting By: What American teenagers really think about their schools."
- ⁵ Porter, A.C., et al. (1994). "Reform of high school mathematics and science and opportunity to learn." *CPRE Policy Brief* (www.upenn.edu/gse/cpre/docs/pubs/briefs.html).
- 6 White, P.A., Porter, A.C., Gamoran, A., and Smithson, J. (1996). "Upgrading high school math: A look at three transition courses." *CPRE Policy Briefs* (www.upenn.edu/gse/cpre/docs/pubs/briefs.html).
- 7 Ibid.
- ⁸ Out-of-field teaching and educational equity. October 1996. National Center for Education Statistics (NCES).
- Darling-Hammond, L. (1994). "The current status of teaching and teacher development." Briefing Paper: National Commission on Teaching and America's Future.
- ¹⁰ Smylie, M.A. (1994). "Redesigning teachers' work: Connections to the classroom." *Review of Research in Education* (20): Association for Supervision and Curriculum Development (ASCD).
- ¹¹ Irmsher, K. (1997). "School size." *ERIC Digest* #11: U.S. Education Department. Cotton, K. (1996). "School size, school climate and student performance." *School Improvement Series*, *Close-up* #20: Northwest Regional Educational Laboratory (NWREL).
- ¹² Lee, V. E. and Smith, J.B. (1996). "High school size: Which works best and for whom?" New York: Paper presented at American Educational Research Association (AERA).

- ¹³ For an overview of the various legal ways that employers can incorporate a review of school records in their hiring processes, see the Equal Employment Advisory Council's Employer's Guide to Using School Records in Hiring Decisions, by Robert E. Williams and Erin Quinn Gery. (202) 789-8650.
- 14 More information on this subject will be available in an upcoming publication from the National Alliance of Business (NAB) and on the web at http://www.makingacademicscount.org.
- ¹⁵ American Institutes for Research (1999). An Educator's Guide to Schoolwide Reform. Arlington, Va.: Educational Research Service. On the web at http://www.aft.org/edissues/schlwrfm.htm.
- 16 Ibid.
- 17 Ibid.
- ¹⁸ American Federation of Teachers (1998). What Works: Six Promising Schoolwide Reform Programs. Washington, D.C. On the web at http://www.aft.org/edissues/whatworks/six/index.htm.
- Oenter for the Study and Prevention of Violence (1999). Blueprints for Violence Prevention: Quantum Opportunities Program. Boulder, Colo.: University of Colorado. On the web at http://colorado.edu/cspv/blueprints.
- ²⁰ AFT (1998), op. cit.
- ²¹ Center for the Study and Prevention of Violence (1999).

 Blueprints for Violence Prevention: Bullying Prevention Program.

 Boulder, Colo.: University of Colorado. On the web at http://colorado.edu/cspv/blueprints.
- ²² American Federation of Teachers (1998). What Works: Seven Promising Reading and English Language Arts Programs.
 Washington, D.C. On the web at http://www.aft.org/edissues/whatworks/seven/index.htm.
- 23 Ibid.
- ²⁴ American Federation of Teachers (1999). What Works: Five Promising Remedial Reading Intervention Programs. Washington, D.C. On the web at http://www.aft.org/edissues/whatworks/five/index.htm.
- 25 Ibid.
- 26 Ibid.
- ²⁷ Slavin, R.E. & Fashola, O.S. (1998). Show Me the Evidence! Proven and Promising Programs for America's Schools. Thousand Oaks, Calif.: Corwin Press.
- 28 Ibid.
- 29 Ibid.



Note on Program Selection Methods

The following program descriptions were designed to provide a quick overview of research-based programs that, when properly implemented, show promise for raising the achievement level of low-performing high schools students.

For this effort, we solicited program recommendations from experts in the field and drew on the findings of a number of program reviews—including work previously conducted by AFT, the American Institutes of Research, Johns Hopkins University, the University of Colorado, and the U.S. Department of Education. We then attempted to obtain descriptive information and copies of all published evaluation studies—including research designs, field-test data, and replication histories—from the developers of all programs, thus identified.

All available materials were then reviewed against the following criteria:

- When properly implemented, the program helps students acquire the skills and/or knowledge they need to successfully perform to high academic standards.
- The program has been effective in raising academic achievement levels, especially for at-risk students, based on independent evaluations.
- The program has been effectively implemented in multiple sites beyond the original pilot school(s).
- Professional development, materials, and ongoing implementation support are available for the program, either through the program's developer, independent contractors, or dissemination networks established by schools already in the program.

The standards by which program effectiveness was gauged are as follows:

■ Evaluations demonstrate that the program can help produce educationally significant student achievement gains, as measured in effect sizes. An effect size (ES) is a standard means of expressing achievement gains and losses across studies, showing differ-

ences between experimental and control groups in terms of standard deviation. An effect size of +1.00 indicates that the experimental group outperformed the control group by one full standard deviation. To give a sense of scale, this would be equivalent to an increase of 100 points on the SAT scale, two stanines, 21 NCEs (normal curve equivalent ranks) or 15 points of IQ—enough to move a student from the 20th percentile (the normal level of performance for children in poverty) to above the 50th percentile (in range with mainstream America). Because of differences among study designs and assessments, this can only be considered a "rough" measure of comparison. In general, an effect size of +.25 or more is considered to be educationally significant.

- Ideally, evaluations include findings from matched comparison or large randomly assigned control group studies—or, failing this, compare the standardized test gains of program students to appropriate state- or nationally normed samples.
- Evaluations include data from third-party researchers using independently developed assessments, as well as data from program developers using program-designed tests.
- Evaluations include and/or compare data from multiple replication sites.

For programs in each category, profiles were prepared only for those that came closest to meeting the above criteria. It should be noted, however, that there may be additional programs that qualify for inclusion but for which we were unable to locate adequate data. We hope to be able to include additional profiles for any such programs in future editions. It should be noted, as well, that in an effort to present a broader selection of programs, a few were included that came close to, but did not quite meet the above criteria. In these cases, the preliminary nature of the data has been noted in the profile text.









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