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ABSTRACT

This booklet presents information on the achievement gaps in education between white, Asian, and economically advantaged students and their African American, Hispanic, Native American, and economically disadvantaged peers. It provides examples from higher education, district, and school levels and summarizes available resources and tools to help all schools meet their goals of closing the achievement gap. "Identifying and Eliminating the Achievement Gaps: A Research-Based Approach" (Ginger M. Reynolds), serves as a companion to two audio CDs. It examines the achievement gap and discusses in- and out-of-school factors that contribute to the gap, noting strategies for closing the gap at various educational levels. "Programs with Promise," describes efforts in five schools or counties to close the achievement gap. "NCREL Tools and Resources for Closing Achievement Gaps" includes an annotated listing of school improvement Web sites that allow schools and districts to view disaggregated achievement patterns for minority, limited English speaking, and low income students and to take steps to compare student performance to performance in similar districts or schools. Two accompanying audio CDs contain interviews with leaders in the education field, including Claire Smrekar, John Diamond, Pedro Noriega, Edmund Gordon, among many others, that offer perspectives on the issue of closing the achievement gap. (Contains 36 references.) (SM)



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Bridging the Great Divide:

Broadening Perspectives on Closing the Achievement Gaps

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Bridging the Great Divide: Broadening Perspectives on Closing the Achievement Gaps

Introduction

Viewpoints is a series of multimedia resources intended to provide relevant information on the important topics facing education leaders today. Volume 9, "Bridging the Great Divide: Broadening Perspectives on Closing the Achievement Gaps," focuses on closing the gaps that separate white, Asian, and economically advantaged students from their African American, Latino/a, Native American, and economically disadvantaged peers.

This booklet presents information about the achievement gaps along with examples of programs targeted toward closing them. These examples occur at three levels: higher education, district, and school. The booklet also provides an overview of available resources and tools to help all schools meet their goals of closing achievement gaps.

The accompanying audio CDs provide you with the voices of various leaders in the education field who have worked closely with issues relating to the achievement gaps. Their voices represent the many perspectives and opinions that surround these issues and provide a general overview of the movement.

THE ISSUE

As the education community continues to implement the No Child Left Behind Act of 2001, education stakeholders are paying more attention than ever to the achievement gaps in standardized test scores between students who are white, Asian, and from economically advantaged backgrounds, and their contemporaries who are African American, Latino/a, Native American, and from low-income backgrounds, as well as special education students and students with limited English proficiency. In this age of education accountability and high-stakes testing, the disparities in achievement are becoming particularly evident.

The No Child Left Behind legislation mandates that standardized test scores be disaggregated to monitor the progress of these groups, and there are serious consequences for schools and districts if lower-performing groups do not show real improvement. (For specific information, refer to the No Child Left Behind Act of 2001, Title I, Part A, Section 1111[b][2][C][i-vii].) This legislation brings to the forefront an issue with which educators have been



struggling for decades. The phrase *achievement gap* is becoming increasingly mainstream, in part due to No Child Left Behind, and this should help focus attention on and create a sense of urgency for addressing the disparity between the academic performances of different groups of students.

THE BOOKLET: A GUIDE TO CONTENTS

The essay "Identifying and Eliminating the Achievement Gaps: A Research-Based Approach" serves as a companion to the CDs. This essay presents an overview of the achievement gaps and discusses in-school and out-of-school factors that contribute to the gaps. It also outlines strategies for closing the achievement gaps at various levels of education. At the higher education level, the University of Maryland's Institute for Minority Achievement and Urban Education has made great strides. At the district level, the Minority Student Achievement Network is working closely with 15 school districts across the nation to narrow achievement gaps. At the school level, Sageland Elementary School in El Paso, Texas, has implemented some promising practices.

In addition to the success stories of these organizations, this booklet provides information about tools and resources intended to help meet the challenges of closing achievement gaps. There are resources to identify achievement gaps in schools; tools to identify factors that lead to achievement gaps in schools; and resources to identify solutions, interventions, and strategies to close achievement gaps. (It may be helpful to read the booklet as an introduction to the topic before listening to the interviews presented on the CDs.)



Identifying and Eliminating the Achievement Gaps: A Research-Based Approach

By Ginger M. Reynolds, Ph.D.

What Are the Achievement Gaps?

The term *achievement gap* is used to denote differences in the academic achievement of particular groups of students. Actually, it is more accurate to say that there are achievement *gaps* rather than merely one achievement gap. The issue is not as simple as a difference between blacks and whites or rich and poor. There are many gaps, and the gaps themselves have changed over time.

During the 1970s and part of the 1980s, some achievement gaps between poor minority students and their affluent white peers lessened. But since the late 1980s and early 1990s, some achievement gaps have stagnated, and many have widened. Specifically, average reading achievement for 17-year-old African-American and Latino/a students rose through the 1970s and 1980s, but achievement gaps between these students and their white counterparts increased in the 1990s. Similarly, the gap between whites and African Americans in mathematics was the narrowest in 1990, and the gap between Latino/a and white students was the narrowest in 1992. Both gaps have widened steadily since (Haycock, 2001a). Other research demonstrates that the gaps between high- and low-achieving students' scores in reading and math are increasing at a rapid pace (Sadowski, 2001).

The achievement gaps encompass some startling statistics. The National Assessment of Educational Progress (NAEP) indicates that students from low socioeconomic backgrounds, along with African-American and Latino/a students, are already two years behind other students by the fourth grade; by the 12th grade, poor and minority students are nearly four years behind (Robelen, 2002). The National Center for Education Statistics (cited in Haycock, 2001a) reported that in 1999, only one in 100 African-American students at the end of high school could read and comprehend specialized text, such as a newspaper's science section, and only one in 50 Latinos/as could do so. Yet, about one in 12 whites could complete the task successfully. More than half of whites near the end of high school could read a complicated but less specialized text, but fewer than 25 percent of Latinos/as and 20 percent of African Americans could do so. The patterns are equally as unbalanced for students of this age in mathematics. Approximately one in 10 whites but only one in 30 Latinos/as and one in 100 African Americans could easily solve an elementary algebra problem. Statistics show that by the end of high school, African-American and Latino/a students



have reading and mathematics skills roughly equal to those of white students in the eighth grade (Haycock, 2001a).

Haycock (2001a) also notes that only 63 percent of Latinos/as and 81 percent of African Americans in the 18-to-24 age group have completed high school or earned a General Educational Development (GED) diploma, while about 90 percent of whites and 94 percent of Asians have done so. The imbalance continues past high school. About 76 percent of white and 86 percent of Asian high school graduates proceed directly to college, compared with only 71 percent of African-American and Latino/a high school graduates. By the age of 29, African Americans are roughly half as likely as whites to earn a bachelor's degree, and Latinos/as are only one-third as likely (Haycock, 2001a).

Why Are There Achievement Gaps?

There are plenty of theories about why the achievement gaps persist. Often, the theories focus on the disparate backgrounds with which students enter school, and the continued family and cultural obstacles that poor and minority students encounter through their school tenure. However, research has shown that there are significant factors in schools that perpetuate inequity of opportunity.

IN-SCHOOL FACTORS THAT LEAD TO ACHIEVEMENT GAPS

Investigations by the Education Trust and other groups reveal that minority students often attend under-funded urban schools, and receive poorer-quality instruction than their white or suburban peers (Johnston & Viadero, 2000). Minority students "take fewer Advanced Placement [AP] and honors courses, have less qualified teachers, get fewer resources, and face harsher discipline when they violate school rules," note Johnston and Viadero (2000). For example, although 23 percent of students in Providence, Rhode Island, are African American, these students make up only 9 percent of the district's gifted and AP classes. This imbalance can be found in the makeup of advanced classes in many districts—including Austin, Texas; Durham, North Carolina; Boston; and San Francisco.

In addition, while research has proven that a quality teacher is one of the most important factors in student success (Darling-Hammond, 1997; National Commission on Teaching and America's Future, 1996), those students most in need of quality teachers are generally the least likely to get them. Indeed, there is a "gap" in the background and experience of teachers who teach in high-minority, high-poverty schools and those who teach in more affluent, more white schools. On average, teachers at high-poverty schools have less experience, come from less selective colleges, and fail certification tests more frequently than those who teach at schools with low-poverty and low-minority enrollments (Robelen, 2002). More specifically, according to Johnston and



Viadero (2000), almost half of New York City's teachers in the 1997-98 school year had failed certification tests in math; by contrast, in the suburbs adjacent to New York City, only one fifth of teachers had failed a math certification test, and fewer than one quarter of the teachers throughout the rest of the state had failed. In Chicago, notes Robelen (2002), nearly 20 percent of teachers in the Chicago Public Schools failed certification tests, compared with 5.4 percent of teachers in suburban schools.

Urban school children, who often start school with differentiated educational preparation, continue to lose throughout their school careers. There are significant differences between dollars spent per pupil in high-poverty districts and dollars spent in low-poverty districts. For example, in Illinois this difference is more than \$1,900, and in Michigan the difference is more than \$1,200 (Robelen, 2002). Such annual differences add up to severe disparity throughout a child's school career. By the end of high school, a student in New York state outside of New York City will have had, on average, \$25,975 more spent on his or her education than a student within New York City (Johnston & Viadero, 2000). The Elementary and Secondary Education Act and its reauthorization, No Child Left Behind, alleviate some of the discrepancy, but many high-poverty students need more and different resources than those to which their advantaged peers have access.

These measurable resource inequities are contributors to the achievement gaps, but there are more complicated factors as well. Several studies have pointed to less quantifiable, but as least as influential, hurdles that poor and minority students face in schools. Research suggests that these students experience a different environment in school and are treated differently than their white and affluent counterparts. Grading standards can be lower in high-poverty schools, and often less is expected of students in terms of quantity and quality of work (see Gamoran, 2000; Knapp, 1995).

Kati Haycock (2001a), director of the Education Trust, describes the damaging effects of low expectations for students:

For the past six years, our staff at the Education Trust has worked with teachers who are trying to improve the achievement levels of their students. But while we've been observing these high-poverty classrooms, we've also looked carefully at what happens there—what kinds of assignments teachers give, for example—compared to what happens in other classrooms.

We have come away stunned. Stunned, first, by how little is expected of students in high-poverty schools—how few assignments they get in a given school week or month. Stunned, second, by the low level of the few assignments that they do get. In high-poverty urban middle



Maryland Institute for Minority Achievement and Urban Education: A Successful Higher-Education Program for Closing Achievement Gaps

The College of Education of the University of Maryland has partnered with the Maryland State Department of Education to develop and support a collaborative, research-based approach to working with individual schools in closing achievement gaps. Called the Maryland Institute for Minority Achievement and Urban Affairs, the project provides an administrative structure for faculty research and outreach to Maryland school districts, particularly in Prince George's County and Baltimore City.

University faculty work with local administrators and teachers to develop comprehensive initiatives to improve the quality of teaching and learning for minority students. Their work with school districts involves focusing research to develop strategies for increasing achievement and providing professional development to foster teacher and administrator knowledge and skill. The institute also provides a structure for involving faculty from other colleges, including historically black institutions, to pursue large-scale research programs and research-based K-12 outreach. It plans to disseminate researchproven best practices across the nation. With an external advisory council, the institute also works with local communities, other organizations, and business leaders to foster and support efforts to close achievement gaps.

There are projects in progress at the University of Maryland, College of Education that relate to the institute's purpose and have been brought under its umbrella. One project is the Bladensburg Project, which is a partnership with three of the lowest-

performing schools in Prince George's County. The goal of this project is to help support the schools' reform efforts to prevent a state or private school takeover. The institute is providing support through faculty consultations with the teachers at Prince George's County schools on research-based best practices. Professional development is ongoing to help improve teaching and accelerate student acquisition of reading and math skills. There is continuing leadership development as well. Safety-net programs that provide individualized assistance to students along with other student-support initiatives also are ongoing. Initial results are positive, including a 17-point increase in SAT scores at Bladensburg High School and increases in all major categories of the Comprehensive Test of Basic Skills at William Wirt Middle School (Maryland Institute for Minority Achievement and Urban Education, 2002).

A second project is the Mathematics Application and Reasoning Skills (MARS) program. This partnership between the Baltimore City Public Schools, the University of Maryland, the Baltimore Urban Systemic Initiative, and Morgan State University is a dual effort to reform the mathematics curriculum and to enhance teachers' knowledge of mathematics content and teaching methods. Currently, 108 of the system's 122 elementary schools have implemented the curriculum developed through the MARS program, and achievement gains already are apparent. Across Grades 1 through 5, scores have risen 6 to 12 percentile points on the state Comprehensive Test of Basic Skills.

-Ginger M. Reynolds, Ph.D.

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schools, for example, we see a lot of coloring assignments, rather than writing or mathematics assignments. Even at the high school level, we found coloring assignments. "Read *To Kill a Mockingbird*," says the 11th grade English teacher, "and when you're finished, color a poster about it." Indeed, national data make it clear that we expect so little of students in high-poverty schools that we give them A's for work that would earn a C or D anywhere else.

There is evidence of institutional bias as well. Disciplinary action is one of the areas in which there is an overrepresentation of minorities. For example, Johnston and Viadero (2000) note that "in San Francisco, African-American students are suspended from school in numbers more than three times their proportion of the school population." Some researchers believe that simply to function in an urban, high-poverty school, teachers become more authoritarian and thereby stifle their students' creativity and desire to reach their full potential (Haberman, 1991). Other researchers refer to the low expectations that teachers have of poor and minority students; such low expectations affect teachers' determination to help students and also affect students' determination to succeed (Ferguson, 1998b; National Task Force on Minority High Achievement, 1999; Steele & Aronson, 1998). Related to this issue, there is a strong body of research about the overrepresentation of minorities in special education classes (Losen & Orfield, 2002; National Center for Learning Disabilities, n.d.). Inequities in determining a student's need for special education, as well as inequities in services once a student is in special education, also contribute to achievement gaps.

OUT-OF-SCHOOL FACTORS THAT LEAD TO ACHIEVEMENT GAPS

Educators are obligated to recognize and address factors in schools that contribute to achievement gaps, because these are the factors over which schools have more (though far from complete) control. However, to ignore the aspects of students' lives outside the school walls that contribute to achievement gaps would be irresponsible and ineffectual if the goal is to understand the problem fully and strive to ameliorate it. Indeed, social problems play a part in the development and perpetuation of achievement gaps. But neither in-school nor out-of-school factors can be tackled in isolation. They are cumulative and interactive.

Dr. Allan Alson, superintendent of Evanston Township High School District 202 in Evanston, Illinois, uses the following example to illustrate the interplay of in-school and out-of-school factors affecting school achievement:

Students who have received less early childhood literacy support, for example, arrive at school already behind other students. If a child



comes to school not as well prepared as fellow students, he or she simply may not be as ready for school. But unfortunately, teachers may base their expectations for school success on how achievement is displayed (A. Alson, personal communication, December 6, 2002).

Dr. Alson also mentions poverty as a barrier: "Neighborhood influences are barriers when you have a concentrated neighborhood of people who do not have high degrees of educational attainment. In other words, there are no role models for high achievement" (A. Alson, personal communication, December 6, 2002). In fact, some studies have found that socioeconomic status explains a larger percentage of the variance in academic achievement than ethnicity (Abbott & Joireman, 2001).

Some researchers maintain that parental influences are especially salient. For example, Johnston and Viadero (2000) write that some African-American, Hispanic, or poor parents may not be as insistent that their children succeed in school or enroll in advanced classes. Some minority parents also may not participate in school activities as actively as wealthier white parents, and some may not help with student homework or projects as much. More affluent and white parents may interact with their children in ways that help them to be successful in school, such as asking children to justify their requests. However, there is not enough research on these factors to link them decisively to student achievement. Out-of-school factors also may include the spirit-crushing effects of poverty, destructive messages from media, and the scarceness of parental time spent with children (Haycock, 2001b).

Research On In-School Solutions and Strategies

There is a budding research agenda that points to some promising strategies for tackling achievement gaps. One common theme among them is the need for clear and public standards to guide teachers, students, administrators, and parents on what is expected from students at various benchmarks. Implicit in standards-based reform is that the standards apply to all students, precluding the notion that differing levels of success should be expected from different kinds of students. Many researchers believe that part of the reason some students do not excel academically is that schools do not ask them to, and do not expect them to (Haycock, 2001b).

But the issue is more involved than simply creating standards for what students should know and then asking them to learn (Kober, 2001). Assessments need to be aligned with the standards, and curriculum should be aligned as well (Gameron, 2000). It is unreasonable to ask students to meet rigorous standards if they have not been taught corresponding curriculum in



The Minority Student Achievement Network: A Successful District-Level Program for Closing Achievement Gaps

The Minority Student Achievement Network (MSAN)
-is an organization dedicated to helping school
districts ensure high academic achievement for
minority students.

Launched in February 1999, the network comprises 15 similarly situated school districts that are committed to implementing strategies to close achievement gaps. The districts use the following activities: involvement in research and program development with higher education, educational organizations, and foundation partners; sharing of individual staff and district successes and failures through regular communications, visitation, and job-alike focus groups; professional staff-development opportunities for network districts; and serving as a national clearinghouse for, and disseminating information about, best practices that raise the achievement of minority students (Minority Student Achievement Network, 2002).

In its effort to close the achievement gaps, MSAN engages in three key activities: collaborative communication, research, and professional development. Among the most notable approaches of MSAN is its commitment to a collaborative approach. Through sharing procedures for gathering and reporting data, engaging in collaborative research, sharing successes and failures, and having open discussions about issues of race and ethnicity, network members hope to maximize the potential of their students as well as their own potential. MSAN conducts a variety of information-sharing activities throughout the year, including an annual meeting for district teams, governance board meetings for district superintendents; periodic job-alike meetings, student meetings, and teacher meetings. The network recently launched a Web site at www.msanetwork.org to foster communication among those involved in MSAN work.

Research as a means of shaping practices, interventions, policies, and instruction is another key activity of MSAN. The network currently is conducting a study, focused on teachers and parents, to identify the math concepts and skills that African-American and Latino/a students have the most difficulty mastering. Instructional strategies that enhance student capacity for mathematical success are being developed.

Currently receiving a great deal of national attention is a study conducted by Harvard University researcher Ronald Ferguson and titled What Doesn't Meet The Eye: Understanding and Addressing Racial Disparities in High-Achieving Suburban Schools (Ferguson, 2002). The study explores teacher-student relationships, students' understanding of classroom material, homework, and peer pressure. The prominent finding of the study is that the academic aspirations of African-American, Hispanic, Asian, and white students differ only slightly. MSAN hopes that the results will dispel the myth that minority students have an "anti-school" orientation.

Professional development for district teachers and administrators is a third MSAN effort to improve minority student achievement. Professional development through the network primarily occurs in two ways: teacher conferences and the Tripod Project, a new initiative of MSAN. In May 2002, the network held its first national teacher conference in Madison, Wisconsin. The objectives of the conference were to engage teachers more fully in discussions about their role in addressing the achievement gaps, provide opportunities for teachers to create networks of support, and solicit teachers' to help with the network's research activities. Topics of focus included early and adolescent literacy, math achievement, and teacherstudent relationships. A second conference for 2003 is being planned.

The Tripod Project, created by Ronald Ferguson, uses a five-tiered approach to enhancing teacher-student relationships. The project's overarching goal is "to extend conversations among teachers about teaching" (Lewis, 2002). It links teacher content knowledge, pedagogy, and relationships with students with five tasks of social and intellectual engagement in classrooms.

Now in its third year, MSAN is preparing to evaluate the effectiveness of its work. The organization will seek to determine the "value added" by its offerings by determining what changes its members have seen since they became involved with MSAN. The North Central Regional Educational Laboratory is proud to be a funding source for the Minority Student Achievement Network.

-Rebecca Phillips



the classroom. But assuming that all students can handle rigorous coursework is often where the reform breaks down. As mentioned earlier, researchers have found that poor and minority students often encounter a weaker curriculum and an unconstructive environment (Haycock, 2001b). Some students may need more or different resources to achieve success than others, and it is essential to provide these resources before holding students, and teachers and administrators, accountable. Some states and districts are beginning to provide resources such as extended instructional time before school, after school, during weekends and summer, and even during the school day (Haycock, 2001b).

Researchers caution that high-stakes testing—using a single standardized test to determine a student's academic fate, or the fate of a school or district—is unwise, because so many uncontrollable and extraneous factors contribute to the results (Kober, 2001). Testing experts also emphasize that tests should not be used to drive decisions that the tests were not designed to support. In the wake of the standards-based reform movement and the No Child Left Behind legislation's mandates for accountability, some educators are employing tests produced for limited purposes, with validity and reliability tied to those limits, to high-stakes situations. Not observing the technical constraints of standardized tests invalidates their worth and may hinder efforts to close achievement gaps. Further, this practice may aggravate already imbalanced resource allocation for poor and minority students (National Association for the Advancement of Colored People, 2001).

Another strategy for closing achievement gaps is to ensure that traditionally underserved populations have access to high-quality teaching (Ferguson, 1998a). Because of commonly lower salaries, fewer resources, and more challenging environments, teachers often are less willing to teach in schools with high-poverty, high-minority populations. If they do teach in such schools, they often leave after a few years for more lucrative salaries and more supportive situations (North Central Regional Educational Laboratory, 2002b). As a result, the most talented, sought-after teachers often are not teaching the students who most need their assistance. Programs to attract high-quality teachers to high-poverty, high-minority schools can help to close the gap in teaching quality. In addition to getting these teachers where they are needed most, it is important to provide them with high-quality professional development so that they can continue to support the achievement of their students.

Reducing class size is another tactic also used to address achievement gaps. Although researchers do not unanimously agree that there is compelling evidence to suggest that smaller class sizes are more effective, many states are implementing class-size reduction programs specifically aimed at



poor and minority students. Much of the research suggests that smaller classes may be most useful in the earlier grades. Other early childhood reforms are gaining prominence as well. Preschool programs have demonstrated some success in preparing children to enter public school more equipped to achieve (Editorial Projects in Education, 2002).

Parental involvement in children's education also has proven to be an important element in students' academic success (Henderson & Berla, 1994). School reform initiatives often focus on changing a school's culture by improving the relationships among parents, educators, and students. Such initiatives also seek to engage the broader community to improve schools and out-of-school factors that impact education. There are several frameworks for partnerships among schools, parents, and the community that can help improve student success (Epstein, 1997; Giles, 1998; and Yates, 1993). Epstein (1997) outlines six types of cooperation: parenting to develop healthy and equipped children and schools that support this effort; communication among parents, the community, and schools; volunteering of parents and community members in the schools; students learning at home with parental and school assistance; decision-making opportunities for parents and community members; and collaboration of schools with the community to utilize other support services.

Among the important characteristics of schools that are successful in dealing with achievement gaps are strong leadership and personal commitments from staff (Robelen, 2002). However none of the individual strategies listed here will close the achievement gaps unless they are applied in concert, systemically. Dr. Allan Alson comments:

There hasn't been a lot of research on either how all of the factors interact and become cumulative for students, or how the factors serve to increase the gap. Part of the research agenda has to be the question: So how does all of this work together? (A. Alson, personal communication, December 6, 2002)

All of these factors—alignment of standards, assessment, and curriculum; teacher quality; class size; parental involvement; and leadership; among others—weigh heavily on the potential for learning by minority and poor students. But the achievement gaps are not impenetrable. The myth that disadvantaged students cannot attain the same successes as their more advantaged peers is no longer a viable one. Research has shown that it is possible to ease the achievement gaps (Haycock, 2001b). But just as the causes of achievement gaps are interrelated, so must be the attempts to close them.



Sageland Elementary School: A Successful School-Level Program for Closing Achievement Gaps

Sageland Elementary School in El Paso, Texas, is a National Blue Ribbon School. It is nationally known for its success in raising student achievement scores from the bottom quartile in all academic areas to the 88th, 93rd, and 96th percentiles.

Located in the Ysleta Independent School District, Sageland Elementary is one of many schools in El Paso challenged with a large population of poor and minority students. El Paso is the fifth poorest congressional district in the United States and has a 70 percent Hispanic population. More than 50 percent of households in the El Paso congressional district report their home language of preference as Spanish (Navarro & Natalicio, 1999). A large majority of Sageland students qualify for free or reduced-price lunch (American Youth Policy Forum, 1999).

Under the leadership of former principal Triana Olivas, the school became a model for its application of best practices, disaggregation of student data, and success in the school change process. Olivas attributes a great deal of the accomplishments Sageland has realized to the involvement of parents and the

business community. The school developed strong ties in part through an initiative called the El Paso Collaborative for Academic Excellence, formed in 1991 with the help of the Education Trust. This collaborative joins superintendents, senior administrators from the University of Texas at El Paso, representatives from the business community and interfaith organizations, the El Paso mayor, and state education agency personnel. Its mission is to involve the entire community in reforming schools so that all children succeed and are prepared to enter college (American Youth Policy Forum, 1999). Sageland Elementary used the professional development opportunities provided by the collaborative to help its teachers adjust to the changes the school was making. It also increased the involvement of parents in the school, particularly as teacher aides and volunteers in its MicroSociety program (American Youth Policy Forum, 1999). This program implements "companies" in the school that involve teachers and students working together for one hour each day.

-Ginger M. Reynolds, Ph.D.



Programs With Promise

Organizations at the higher-education, district, and school levels are implementing programs to close achievement gaps in schools. (Refer to the sidebars on the Maryland Institute for Minority Achievement and Urban Education on page 6, the Minority Student Achievement Network on page 9, and Sageland Elementary School on page 12.)

In addition, some programs are making great strides in closing the achievement gaps. The following are highlighted:

- Montgomery County, Maryland, School District. School officials in Montgomery County, Maryland, implemented a program to improve reading skills. They reduced class sizes, provided professional development for principals and teachers, and added a reading block to the daily schedule. In a matter of months, the district had reduced the gap between African-American and white reading levels by 7 percent (Johnston & Viadero, 2000).
- Nathan Hale High School in Seattle, Washington. Through team teaching, mentoring groups, integrated studies, schools within schools, and teacher groups to promote collaborative professional development, Nathan Hale High School has been able to help its minority students outperform students of the same race in the broader Seattle school district, notes Boss (2002). On the 2001 state assessments, 10 percent more African-American students met math standards, 22 percent more met reading standards, and 7 percent more met writing standards. Among Hispanic students, 36 percent more met math standards, 31 percent more met reading standards, and 27 percent more met writing standards. Among Native American students, 18 percent more met math standards, 34 percent more met reading standards, and 24 percent more met writing standards. In addition, between 1995 and 2001, student attendance was up, and disciplinary and dropout rates were down (Boss, 2002).
- Pablo Elementary School, Pablo, Montana. Native American students on the Flathead Indian Reservation in Pablo, Montana, also are closing achievement gaps. A school reform model that emphasizes cooperative learning strategies, a focus on reading, and several inspirational and tireless leaders have helped the school increase its percentage of fourth graders who met state standards by 30 percent between 1999 and 2001 (Sherman, 2002). Moreover, attendance is up and discipline referrals are down. The school, along with the rest of the Ronan-Pablo Public School District, faced the tensions between



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the white and Indian populations, and within the Indian population, to create a shared vision for the education of its children.

- Schools in Texas. Researchers who studied the most successful schools for educating Hispanics and African Americans in Texas say that the most important factor these schools had in common was that they implemented their curricular programs suitably and consistently. Indeed, the researchers found that this implementation was more important than the programs themselves (Johnston & Viadero, 2000).
 - A RAND study (Grissmer, Flanagan, Kawata, & Williamson, 2000) suggests that a link can be found between students in Texas who showed large gains in math scores in the 1990s and a series of reforms that aligned standards, assessments, and accountability. Further, when the study controlled for family characteristics, it found that lower pupil-teacher ratios, a larger percentage of children in public prekindergarten, and teachers who reported having the resources necessary to teach contributed to higher Texas scores.
- DoDEA Schools. In schools around the world operated by the U.S. Department of Defense Education Agency, achievement gaps are narrower. Low-income and highly mobile minority students achieve at higher rates than students with similar demographics in public schools in the United States, and their scores are much closer to their white classmates than in schools in the United States (Johnston & Viadero, 2000). ■



NCREL Tools and Resources for Closing Achievement Gaps

NCREL has developed a wide array of tools and resources that can be used to address various aspects of the achievement gaps. These tools and resources can be applied to school-, district-, and state-level priorities. They provide avenues to address multiple aspects of the achievement gaps.

School Improvement Web Sites

These Web sites allow districts and schools to (1) look at disaggregated achievement patterns for minority, limited-English-proficient, and low-income students; and (2) take the first step in comparing student performance to districts or schools with similar student populations. Districts or schools can ask the question: What are other districts or schools doing to raise academic performance among minority, limited-English-proficient, and low-income students? In the NCREL region, the following school improvement Web sites are currently available:

- Illinois School Improvement (ILSI) Web site: ilsi.isbe.net
- Wisconsin's Information Network for Successful Schools (WINSS)
 Web site: www.dpi.state.wi.us/sig/
- Indiana's Accountability System for Academic Progress (ASAP)
 Web site: www.asap.state.in.us
- Minnesota's Connecting Learning and Accountability for Students and Schools (CLASS) Web site: cflapp.state.mn.us/CLASS/index.jsp

CLOSING THE ACHIEVEMENT GAPS WEB SITE www.ncrel.org/gap/

Recognizing that there are many achievement gaps in education today, NCREL is focusing work in research, policy, and practice arenas on the gaps in which student achievement can be predicted by characteristics such as race and income. This Web site provides information about the achievement gaps, strategies and tools, and NCREL's work in closing it.

SMART LIBRARY ON CLOSING THE ACHIEVEMENT GAP www.ncrel.gap.smartlibrary.info

The Smart Library on Closing the Achievement Gap is a collection of articles examining the causes, conditions, and explanations for achievement gaps. The articles answer three major questions: What are the achievement gaps? Why do the achievement gaps exist? Can the achievement gaps be overcome?



Users can locate information based on key questions, a specific topic, or a predesigned Smart Guide tour of the site. The expert-reviewed articles used to create the library are available in the bibliography.

enGauge™: A FRAMEWORK FOR EFFECTIVE TECHNOLOGY USE IN SCHOOLS www.ncrel.org/engauge/

The *enGauge*[™] Web site is an online framework that helps schools and districts plan and evaluate their systemwide use of educational technology. It presents a comprehensive view of critical factors—including equity—that strongly influence the effectiveness of educational technology for all students. The *enGauge* framework provides online assessments to help schools and districts gauge their progress with learning technology and develop an informed plan of action. It is geared for K-12 administrators, technology coordinators, K-12 teachers, educational policymakers, and educational researchers.

TECHNOLOGY CONNECTIONS FOR SCHOOL IMPROVEMENT: PLANNERS' HANDBOOK

www.ncrel.org/tplan/handbook.pdf and

TECHNOLOGY CONNECTIONS FOR SCHOOL IMPROVEMENT: TEACHER'S GUIDE

www.ncrel.org/tplan/guide.pdf

Technology Connections for School Improvement has two parts: a Planners' Handbook and a Teacher's Guide. The Planners' Handbook describes eight overarching dimensions of the technology planning and implementation process. These eight dimensions can help technology planners develop vision and policy, analyze technology needs, focus on student-centered learning, involve parents and community, support professional development, build a technology infrastructure, establish multiyear funding strategies, and evaluate process and outcomes.

The *Teacher's Guide* is designed to assist individual classroom teachers who are just beginning to integrate technology into their daily practices. It addresses issues that teachers face as they operate within the context of a schoolwide improvement effort using technology to meet technology literacy and standards-based learning goals.

CONNECTING WITH THE LEARNER: AN EQUITY TOOLKIT

www.ncrel.org/msc/products/connect.htm

Connecting With the Learner: An Equity Toolkit is now available on CD-ROM. This new product, based on a revision of the original 600-page toolkit, promotes equity in mathematics and science instruction. It was developed for professional developers with the intent that more equitable practice might



be integrated into teaching, learning, assessment, and professional development. The toolkit provides a series of activities that can be used on a stand-alone basis or as a framework around which a particular equity issue can be explored in depth from a systemic perspective.

CHILDREN LEARNING WITH TECHNOLOGY BEYOND THE SCHOOL BELL AND BUILDING: WHAT DO WE KNOW NOW?

www.ncrel.org/tech/child/child.pdf

Before- and after-school programs, summer school, community technology centers, and public libraries are increasing children's opportunities to learn outside the regular school day, school year, and school building. Through an extensive review of print and online sources, NCREL found that these programs also are increasing children's opportunities to learn with, and about, technology. Although relevant research and evaluation are increasing, there is still much to find out about children learning with technology beyond the regular school day and about the educational differences created by such learning.

UNDERSTANDING THE NO CHILD LEFT BEHIND ACT OF 2001: QUICK KEY SERIES

http://www.ncrel.org/policy/curve/resource.htm#qk

Since passage of the No Child Left Behind (NCLB) Act of 2001, NCREL has worked diligently to build the capacity of the region to respond to and comply with the legislation. NCREL presents the *Understanding the No Child Left Behind Act: Quick Key Series*, available online or in hard copy, to help educators and policymakers understand the basics of various components of the NCLB Act, including Reading, Opportunities for Schools in Need of Improvement, Technology Integration, and Mathematics and Science.

FAMILY OF LEARNERS CD-ROM

www.ncrel.org/msc/products/fol.htm

The Family of Learners CD-ROM is a compilation of information, research, landmark articles, and activities to be used by educators, parents, and community members as they work together to improve student learning. This ambitious compilation is based on the premise that children become educated, successful, and happy individuals through the combined efforts of parents, guardians, family members, teachers, administrators, and other members of the community who come together over time for children's benefit.

PROFESSIONAL DEVELOPMENT: LEARNING FROM THE BEST www.ncrel.org/pd/toolkit.htm

This toolkit for schools and districts is based on Model Professional Development Award winners. It takes the best practices of 20 award-winning schools and organizes them into a step-by-step planner for designing



and implementing professional development. It also describes specifically the schools' strategies for getting teachers involved.

PATHWAYS TO SCHOOL IMPROVEMENT WEB SITE www.ncrel.org/pathways/

The *Pathways to School Improvement* Web site synthesizes research, policy, and best practices on issues critical to educators, parents, and community members involved in school improvement. The content is put together in a user-friendly format for teachers, administrators, and other practitioners. Topics include at-risk students, assessment, family and community, and technology in education, to name just a few.

CURRICULUM MAPPING WEB SITE

currmap.ncrel.org

NCREL's *Curriculum Mapping* Web site is an interactive site designed to assist districts in their efforts to map out new mathematics and science curricula. It provides comparisons of rich international mathematics and science curriculum maps from top-achieving nations.



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Audio CDs: A Guide to Contents

The CDs provide various perspectives on the issue of closing the achievement gaps.

CD 1 – INTERVIEWS (in order of appearance)

- 1. **Meredith Phillips, Ph.D.**, is coauthor of *The Black-White Achievement Gap.* She teaches public policy at the University of California-Los Angeles. Her work focuses on what is known, and more importantly, what is not known, about the causes of and the solutions to achievement gaps.
- 2. **Susan Sclafani, Ph.D.**, is counselor to U.S. Secretary of Education Rod Paige. She began teaching 30 years ago as one of the first white teachers in an innercity Houston school. She has seen the revolution in education in Texas and has gone to Washington, D.C. to promote a similar revolution.
- 3. **Joseph Johnson, Ph.D.**, is special assistant to the superintendent of public instruction, Ohio Department of Education. He has studied districts in Texas that have made exceptional progress in closing the gaps and today leads Ohio's effort to do the same.
- 4. Martin Johnson, Ed.D., is professor of mathematics education and associate dean for urban and minority education, School of Education, University of Maryland. He began his career teaching in a segregated school in South Carolina. Today he heads the Maryland Institute for Minority Achievement and Urban Education, an organization working to bring exceptional teaching to disadvantaged school districts in Maryland.
- 5. **Pedro Noguera, Ph.D.**, is professor, Graduate School of Education, Harvard University. He is interested in the cultural differences that make it difficult for schools to effectively work with children of color.
- 6. **C. J. Prentice** is an Ohio state senator and former teacher. She began her career teaching in one of Ohio's most advantaged school districts and now aims to give disadvantaged children the same effective resources.



CD 2 – INTERVIEWS (in order of appearance)

- Claire Smrekar, Ph.D., is associate professor of public policy and education, Vanderbilt University. She led an extensive study of the Department of Defense's school system, perhaps the most effective U.S. district in educating students of color. The achievement gaps in these schools are well below those found in other school districts.
- 2. **Michael Feinberg** is cofounder of KIPP (Knowledge Is Power Program) Academies, which are considered models of effective teaching and learning for disadvantaged students.
- 3. **Dennis Preston, Ph.D.**, is professor of linguistics, Michigan State University. As a sociolinguist, he is interested especially in dialects and in social attitudes toward nonstandard speech. He believes that the speech of the home and street is unnecessarily denigrated in the United States, making education more difficult for speakers of these nonstandard forms.
- 4. Arie van der Ploeg is senior program associate, North Central Regional Educational Laboratory (NCREL). He provides conceptual leadership in designing data tools for schools and building capacity for data-driven decision-making and school improvement. He designed a nationwide database on student assessment practices now maintained by the Council of Chief State School Officers, and has served as NCREL's lead analyst for work on the Third International Mathematics and Science Study (TIMSS).
- 5. **John Diamond, Ph.D.**, is research assistant professor, School of Education and Social Policy, Northwestern University, and researcher at the Minority Student Achievement Network. He studies student, teacher, and parent attitudes and data about minority achievement in some of the country's most advantaged schools.
- 6. **Edmund Gordon, Ed.D.**, is professor emeritus of psychology and education, Columbia University Teachers College. He is one of the leading experts on minority achievement. Currently, he is writing about the career development of black men, especially those who educated themselves outside of formal school settings.
- 7. **E. D. Hirsch, Jr., Ph.D.**, is the founder of the Core Knowledge Foundation, an organization that helps schools develop curricula that deliver the same knowledge to disadvantaged students as that given to advantaged students. As one of the country's most influential educational thinkers, he believes that education can and must help all children develop their minds.
- 8. **Donna Lynn Ross** is a teacher at Alcott Elementary School, an innercity school in Tulsa, Oklahoma. She works to expand the minds of her students and believes all of them can succeed. Through the Great Expectations Foundation, she has learned how to create a caring and challenging classroom.







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