



Research You Can Use

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Closing Achievement Gaps: What does it take? Part I

Introduction

With the enactment of the No Child Left Behind Act of 2001, House Joint Resolution 01-1014, and the publication of numerous articles and research studies, the words “Closing the Achievement Gap” have become part of the standard educational nomenclature. Federal and state policy makers as well as researchers and practitioners continually grapple with this very complex concept.

One researcher, Barton (2003), states “The gaps in school achievement among racial and ethnic groups and between students from poor and non-poor families are well documented. They are large and have been persistent; this is well known and widely accepted.” Through an examination of extensive research, several questions emerge: What are achievement gaps? Why do the gaps exist? What can be done about them? This issue of Research You Can Use addresses these questions.

The public policy context: federal and state legislation

Gitomer (2003) stated that “While there is vigorous debate about the appropriateness of specific measures, and their intended consequences, the passage of the No Child Left Behind Act demonstrates a consensus commitment to the reduction, if not the elimination, of the achievement gap.” Ferguson (2004) said that “For the first time in the nation’s history, raising achievement levels among racial and ethnic minorities and closing racial achievement gaps are explicit goals of federal policy.”

In fact, the largest federal program, Title I Part A, has as one of its primary purposes: “closing the achievement gap between high and low performing children, especially the achievement gaps between minority and non-minority students, and between disadvantaged children and their more advantaged peers.” The NCLB requirement for states and districts to disaggregate data for specific groups of children heightens attention to the issue.

Colorado’s House Joint Resolution 01-1014, passed in 2001, resolved that “closing the learning gap is an important goal of Colorado’s education reform program: and that the State Board of Education and the Department of Education are urged to take all appropriate steps to make closing the learning gap a central element of educational accountability in Colorado.”

This legislation led to the creation of the Closing the Achievement Gap Coalition which serves as an advisory committee to the State Board of Education. The Coalition brings together non-traditional alliances, of business people, heads of statewide organizations, clergy, local school board members, and political and community leaders.

The Center for At Risk Education (CARE) is the Colorado Department of Education's lead on initiatives to close the achievement gap.

Federal and state legislation established a context for change. Yet, we must ask ourselves why despite ongoing public policy debates, a national, state, and local focus, achievement gaps persist. Before we can address the problem, we must know what problem we are addressing.

What are achievement gaps?

One of the clearest definitions of the achievement gap appears in an article by Susan Ansell, Education Week (March, 2004). She says that "The achievement gap in education refers to the disparity in academic performance between groups of students. It is "most often used to describe the troubling performance gaps between many African-American and Hispanic students, at the lower end of the performance scale, and their non-Hispanic white peers."

This discrepancy in performance manifests itself in many areas and it has led researchers to conclude that there are many achievement gaps. The fall 2001 issue of the North Central Educational Laboratory's (NCREL) Learning Point quoted one of NCREL's Senior Researchers, Arie van der Ploeg as saying "There are many achievement gaps, not just one. In many instances, gaps exist among diverse groups of students in their achievement in various content areas, in their curricular experiences, and of course, in their access to resources."

Reynolds (2003) confirms this. She comments that: "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."

Joseph F. Johnson, (2003) former director of compensatory education at the U.S. Department of Education, stipulated that gaps in achievement exist across the nation. According to him, gaps can be found based on:

- Race/ethnicity
- Income levels
- Language background
- Disability status
- Gender

He also noted that gaps are evidenced in a variety of data including:

- Proficiency results
- Graduation rates
- College participation/success rates
- Enrollment in advanced classes
- Enrollment in special education

What do patterns of disparity in school achievement show?

Education Trust, a Washington DC based non-profit organization, has for years focused on providing services to states, districts, and other groups regarding the disparities in academic achievement. Their data show the following:

The performance of African American and Latino youngsters improved dramatically during the 1970s and 1980s but between 1988-90, progress came to halt and the gaps began to widen once again. Specifically,

- Nationally, too few Latinos read or do math at proficient levels. 14% of Latino 4th graders reach proficient or advanced levels, while 57% do not perform at the basic level.
- On NAEP, only 9% of Latino 8th graders reach proficient level, 67% perform below basic.
- By the end of high school, Latino students have math and reading skills equivalent to white middle schoolers.
- For African American students, the data are similar: for 4th graders only 12% of them reach proficient or advanced; while 61% have not attained the basic level.
- The data for mathematics are worse with 61 % of 8th graders in mathematics fall below the basic achievement level compared to 7% who reach the proficient level or above on NAEP.
- By the end of high school, the achievement of African American students is equivalent to that of 8th grade white students.

Other data indicate that:

- Disparities are evident in course taking, graduation rate, and college success.
- Students in high-minority schools have less access to highly qualified teachers than students in low-poverty schools (Ansell, Education Week, March 2004).
- Secondary students in high poverty schools are twice as likely as those in low poverty schools to have a teacher who is not certified in the subject that he or she teaches (Ansell, Education Week, March 2004).
- Average African American or Latino high-schoolers achieve at about the same level as the average white student in the lowest quartile. African American or Latino students are much more likely to fall behind in school and drop out and less likely to graduate from high school, acquire a college or advanced degree, or earn a middle class living (Education Commission of the States).

A recently released study by Orfield, Losen, Wald, and Swanson (2004) provides a state by state analysis of gaps in graduation rates. They note: “According to the calculations used in this report, in 2001, only 50% of all black students, 51% of Native American students, and 53% of all Hispanic students graduated from high school.” In their study, the authors also note that according to data reported by the U. S. Department of Education’s Office of Special Education, graduation rates for students with disabilities are just over 32%.

What are the causes of achievement gaps?

Researchers have shown that achievement gaps are due both to **in- school factors** and **out of school factors**. Barton (2003), listed **14 correlates** of achievement, the presence or absence of which could lead to achievement gaps. He based his report on the analyses and syntheses of reports done by other researchers.

School factors:

- Rigor of the curriculum
- Teacher preparation
- Teacher experience

- Attendance
- Class size
- Availability of appropriate technology-assisted instruction

Before and Beyond School:

Developmental factors (Barton defines these as the early experiences and conditions of life and living).

- low birth weight
- hunger and nutrition

The home learning connection (These relate to the support for learning in the home).

- Amount of TV watching
- Parent availability
- Whether parents read to young children

The community (The extent to which the community and its essential institutions support or hinder the efforts of families and schools)

- Student mobility (how frequently children change schools)

The home school connection (how parents support school efforts and how schools reach out to inform, and encourage parental efforts)

- Parent participation (parents' efforts to get students to attend school regularly and do their homework)

Barton asked two questions regarding the correlates of school achievement and gaps: (1) Are there gaps between minority and majority student populations? (2) Are there gaps between students from low income families and higher income families? His report indicates that: "In all 14 correlates of achievement, there were gaps between the minority and majority student populations." This was true of both the school and the before and beyond school factors.

Furthermore, he says: "In the 12 cases where data were available, 11 of those showed clear gaps between students from low-income families and higher income families." Data were not available for rigor of the curriculum and student mobility. He did not find differences between students from low income families and higher income families on the class size correlate.

Research studies and other analyses support Barton's findings. Lee and Burkam, (2002) analyzed U. S. Department of Education data on 16, 000 kindergarteners. Their report shows that inequalities in children's cognitive ability are substantial right from "the starting gate." These inequalities stem from a lack of resources and educational opportunities. The authors concluded that there was a link between achievement gaps and socioeconomic status. The Advocacy Center for Children's Educational Success with Standards (Access) summarized some of their findings as follows:

"Compared to their peers from the highest fifth of socioeconomic status, five-year-old children in poverty owned far fewer books, were much less likely to have a home computer or have been taken to a museum or public library, spent more hours per week watching television, and were far more likely to have moved around. These socioeconomic factors, along with disparities in parents' education and occupation, ensure that all children do not start schools as equals: new

kindergarteners from the lowest income group score 60% lower in math and 56% lower in reading than five-year olds from the highest group. ”

One interesting perspective that is not often reflected in discussions about achievement gaps is that of the student. Ferguson did an interesting study with 30,000 black, white, Hispanic, and mixed race, high school students from 15 districts and 10 states. He used surveys to gather those data about the quality of instruction, enjoyment of studies, achievement motivations, course taking patterns, effort, comprehension, grade point averages and more. He found that:

- “Compared to whites and Asians, black and Hispanic students in those districts had lower average test scores and grade-point averages. They lag behind as well in self reported measures of knowledge, and skill.
- These students also report less understanding of their teachers’ lessons and less comprehension of the material that they read for school.
- Blacks, Hispanics, and mixed- race students report lower rates of home-work completion than whites for any given amount of time spent studying.”

What does it take to close the achievement gaps?

Given the complexity of factors that cause achievement gaps, one should not expect easy or simple solutions. Yet, it can be done through concerted effort, viable partnerships, and rethinking the use of school resources. Researchers and organizations have offered suggestions for closing the achievement gap.

Ferguson (2002) says that closing the achievement gap among students requires attention to teachers’ content knowledge, pedagogical skill, and relational skills. He maintains that policy makers should support professional development programs that emphasize content, pedagogy, and relationships. Further, he suggests that schools should seek to provide black and Hispanic students with more educational resources outside the home after school identify and respond to skill or knowledge deficits that underlie comprehension problems, and should encourage teachers to routinely incorporate effective forms of encouragement into their classroom practices.

Another researcher, Clark (2002), found that the types and amounts of constructive in-school and out-of-school learning activities contribute to a success oriented life style. He noted that when these factors: (1) teachers’ actions in the classroom; (2) students’ weekly participation in high-yield, in-school and out-of school activities; (3) quality of students participation in out-of-school activities; (4) parental beliefs and expectations; and (5) parent-teacher communication; are present, student ethnicity and parent socioeconomic status are nearly eliminated as impacts on student achievement.

Haycock, (2002) offers four recommendations for closing achievement gaps. Her recommendations are in the areas of standards, curriculum, and instruction: (1) have uniform standards; (2) make the curriculum challenging; (3) help students catch up; (4) provide good teachers.

The Education Commission of the States suggested:

- Extend high-quality, academically focused early childhood education to all children at risk of failure.
- Ensure well prepared and experienced teachers teach black children.
- Reduce class size in the early grades.
- Adopt sound and equitable grouping practice in elementary schools.
- Ensure black students are equitably represented across curriculum tracks in high schools.

- Bridge home and school cultures by adapting teaching and discipline practices to suit students' backgrounds.
- Find reasons to expect each student to succeed.
- Demand success by holding both schools and students accountable.
- Support students with individual tutoring, more comprehensive reforms, summer programs and follow-up assistance.
- Desegregate schools and programs within schools.

Schwartz (2000) compiled a list of practices that research has shown to be effective in closing achievement gaps. Her list provides strategies in: state and district roles, early childhood development, school climate, school organization, teaching and learning, school management, and family supports. For the sake of brevity, a few of the major topics are listed. For the full list, download her article cited in the reference section.

State and District Roles:

- Development and implementation of accountability standards to ensure high quality and good performance of all administrators and educators
- Dissemination of existing research-based instructional programs with demonstrated success to individual schools and dissemination of information about effective instructional strategies and exemplary practices that are effective in diverse class rooms

Early Childhood:

- Provision of high quality preschool programs that foster young children's development of social and school readiness skills, develop their interest in learning, and orient them toward academic achievement; and active recruitment of families to a local program
- Provision of family literacy programs

School Climate:

- Identification and development of every student's potential through individualized assessments, appropriate placements, and ongoing encouragement from school staff
- Maintenance of a safe and orderly school where staff and students demonstrate respect for each other and are free of fear; and where the code of conduct is well publicized, fair, and uniformly enforced

School Organization:

- Smaller classes, preferably with 18 or fewer students particularly in the earlier grades
- Equitable grouping of students that places students of color, in proportion to their numbers, in high ability classes in the early grades and in higher tracks and college prep

Teaching and Learning:

- Provision of increased instructional time in reading, mathematics, and other basic skills
- Provision of supplemental individualized education supports, including tutoring by professionals or trained adult volunteers and peers; after-school, weekend, and summer programs; and intensive in-school aid for retained students
- Provision of learning resources, such as reading specialists; computer technology and staff trained in its use; and books for a student library, advanced text books, consumable workbooks, and other high quality print materials

Conclusion

At first glance, the data that form the disparities in achievement appear paralyzing. Yet, there are places across the country where schools and districts are closing these gaps. The next issue of Research You Can Use will highlight school and district strategies for closing achievement gaps.

These schools and districts marshal resources, people, time, money, and partnerships; to do what many have said is impossible. Our challenge as educators is answer the question: Do we have the collective will and the skills to do whatever it takes to close the achievement gaps? If we do, we create a better future for the students in our schools and ultimately, for ourselves!

References

ACCESS (2002) Report says achievement gap begins before school. Available:

<http://www.accessednetwork.org/federal/KindergartenInequality10-1.htm>

Ansell, S. (2004) Achievement gap. Available:

<http://www.edweek.org/context/topics/issuespage.cfm?id=61>

Barton, P.E. (2003). Parsing the achievement gap: Baselines for tracking progress. Available:

<http://www.ets.org/research/pic/parsing.pdf>

Clark, R. (2002). Building student achievement: In-school and out-of-school factors. NCREL's policy issues. Available: <http://www.ncrel.org/policy/pubs/pdfs/pivol13.pdf>

Education Commission of the States, (2003) Lagging achievement of disadvantaged students remains a critical problem. Vol.4 No.1 Available: <http://www.ecs.org/clearinghouse/43/00/4300.pdf>

Education Trust (2003). African American Achievement in America. Available:

http://www2.edtrust.org/NR/rdonlyres/9AB4AC88-7301-43FF-81A3-EB94807B917F/0/AfAmer_Achievement.pdf

Education Trust (2003) Latino Achievement in America. Available:

<http://www2.edtrust.org/NR/rdonlyres/7DC36C7E-EBBE-43BB-8392-CDC618E1F762/0/LatAchievEnglish.pdf>

Ferguson, R. (2002). Addressing racial disparities in high-achieving suburban schools. NCREL's policy issues. Available: <http://www.ncrel.org/policy/pubs/pdfs/pivol13.pdf>

Ferguson, R. (2004) Quoted in S. Black Unfinished business: the persistence of racial inequality in the nation's classrooms. Available: <http://www.asbj.com/current/research.html>

Gitomer, D. (2003) Preface to Parsing the achievement gap: Baselines for tracking progress. Available:

<http://www.ets.org/research/pic/parsing.pdf>

Haycock, K., (2002). Schools matter: Four steps to closing the achievement gap once and for all.

Available: <http://www.ncrel.org/gap/library/text/schoolsmatter.htm>

Johnson, J.F., (2003). Coming together to close the achievement gap in Summit County. Powerpoint presentation to the Ohio Task Force on Closing the Achievement Gap

Lee, V.E., Burkam, D. T. (2002). Inequality at the starting gate. Executive summary available: http://www.epinet.org/content.cfm/books_starting_gate

Orfield, G., Losen, D., Wald, J., Swanson, C.B. (2004). Losing our future: How minority youth are being left behind by the graduation rate crisis. Available: <http://www.civilrightsproject.harvard.edu/research/dropouts/LosingOurFuture.pdf>

Reynolds, G. (2003). Identifying and eliminating the achievement gaps: a research-based approach, in "Bridging the great divide: broadening perspectives on closing the achievement gaps. Available: <http://www.ncrel.org/policy/pubs/pdfs/bridging.pdf>

Schwartz, W., (2000). Closing the achievement gap: Principles for improving the educational success of all students. Available: <http://www.ericfacility.net/ericdigests/ed460191.html>

Van der Ploeg, A. quote in J. Taylor. Under construction: Closing the achievement gaps: Bridging the great divide. Learning Point Fall 2001

Useful Websites for Information and Materials on Closing Achievement Gaps

Center for At Risk Education
www.cde.state.co.us/cdecare/index.htm

Education Commission of the States
www.ecs.org

Education Trust
www.edtrust.org

The Minority Student Achievement Network
www.msanetwork.org

National Urban League
<http://www.nul.org/pdf/sobaexec.pdf>

North Central Regional Education Laboratory:
Closing the Achievement Gaps Web Site
www.ncrel.org/gap/

Pathways to School Improvement
www.ncrel.org/pathways

Northwest Regional Education Laboratory
How Northwest Schools Are Closing the Achievement Gap
<http://www.nwrel.org/nwedu/2002f/rainbow.html>

Smart Library on Closing the Achievement Gap
www.ncrel.gap.smartlibrary.info