

CLOSING THE ACHIEVEMENT GAP

POLICY IMPLICATIONS FOR TEACHER QUALITY, CURRICULUM AND TEACHER EXPECTATIONS



*Funding provided by the
Claude Worthington Benedum Foundation*

Spring 2004

CLOSING THE ACHIEVEMENT GAP

POLICY IMPLICATIONS FOR TEACHER QUALITY, CURRICULUM AND TEACHER EXPECTATIONS

A day rarely passes without media exposure to some aspect of what is generally referred to as the “achievement gap,” a loosely-used term referring to differences in achievement among different racial, ethnic and socioeconomic student subgroups. The passage of the No Child Left Behind (NCLB) legislation and the rise to prominence of the standards-based reform movement, with their inherent accountability and testing requirements, have raised the public discussion and concern about achievement gap issues to a new high. In reality, concern for the achievement gap has a long history. Today, policy leaders have access to more than 30 years of data that can be used to educate and inform themselves, as well as education’s stakeholders, about the issue.

A National Perspective

The racial/ethnic achievement gap is clearly a serious national, state and local issue. As a whole, U. S. students are performing better on key tests than they did 30 years ago, but this important fact is sometimes lost in the discussion. This overall increase has occurred even as the number of test-taking students from subgroups that traditionally have performed at lower than average levels has increased.

The achievement gap for African American and Hispanic students narrowed during the 1970s and 1980s, while the achievement of white students changed little during this period. Progress in closing the achievement gap has stalled since the late 80s. The racial and ethnic achievement gap has stayed about the same for some subjects and ages and widened for others since 1988. Despite gains in some subjects by black and Hispanic students, the achievement gaps have not narrowed as these gains did not exceed those made by other subgroups (Kober, 2001).

The Achievement Gap in West Virginia

Using the 2002-03 NCLB student test data available from the West Virginia Department of Education, The Education Alliance has reviewed the status of the achievement gap in West Virginia. Overall more than 90% of white students were above or at the standard for 2002-03, while 51.4% of the African American students were below standard. The percentage of African American students not meeting the standard at the middle and high school levels increased to 53.9% and 83.3%, respectively. For white students, 13.4% were below standard at the middle school level and 18.7% failed to meet the standard at the high school level. <http://www.educationalliance.org>

Overall, The Education Alliance found that 63.5% of low SES students were above or at the standard. The percentage of low SES students who were above or at standard decreased from 81.0% at the elementary level, to 55.8% at the middle school level, and to 34.4% at the high school level. Less than one quarter (24.2%) of the Special Education students were above or at standard, while all Asian and Limited English Proficiency students were above or at standard. No data were available on the performance of Native American and Hispanic students. <http://www.educationalliance.org>

A February 2004 report produced by the Governor's Minority Students' Strategies Council provides additional documentation of the achievement gap for the minority student population in West Virginia. The report concludes that West Virginia's African American high school students are less likely to enroll in Advanced Placement courses and enroll in less rigorous courses than their white peers. West Virginia's black high school students are also more likely to become high school dropouts. The report did not examine socio-economic status as a variable in the achievement gap (Kusimo, Petty-Wilson & Body, 2004).

NCLB and the Achievement Gap

The passage of NCLB has significantly increased attention on addressing the achievement gap. NCLB addresses the achievement gap in its "Statement of Purpose" for Title I. That statement notes that Title I's purpose "is to ensure that all children have a fair, equal, and significant opportunity to gain a high-quality education and reach, at minimum, proficiency on state academic achievement standards and assessments." It goes on to state that this purpose can be accomplished by closing the achievement gap between high- and low-performing children, especially the achievement gaps between minority and nonminority students, and between disadvantaged children and their more advantaged peers. The act further asserts that states must make "adequate yearly progress" toward having all children perform at a proficient level, with "separate, measurable, annual objectives for continuous and substantial improvement" of elementary and secondary students and that states must break out scores for "students from major racial and ethnic groups." The act forces schools to look beyond questions about differences between white students and students of color to look at how a number of groups are performing in school (No Child Left Behind Act, 2001).

In practice, NCLB translates into state testing of students at the end of every school year in order to ensure that schools are teaching necessary skills to all children. States will be held accountable for the achievement levels and progress of all of their students on average, as well as for the achievement levels and progress of racial and ethnic minorities. Information on the relative performance of ethnic minorities in all states will be readily available and will be part of the federal government's determination of funding (Stearns, 2002).

Contributing Factors

Many factors have been identified as contributing to the achievement gap. The temptation is to oversimplify the reasons for the gap. The reality is that the achievement gap is a product of complex and multidimensional interactions among many in-school and out-of-school variables. Further confounding the issue is that significant, long-term research has not been done to examine the interaction among and impact of many of these factors.

It is also important to identify factors which are not contributors to the achievement gap. For example, the achievement gap is not a product of differences in innate ability. Likewise, it is not a product of bias in test questions. Neither is it an in-school problem only, as several studies have documented the presence of the achievement gap before children start to school.

A 2002 Policy Brief produced by Duke University's Center for Child and Family Policy provides a historical perspective on the reasons for the achievement gap. Traditionally, the more conservative explanations of the gap center on the concept of a culture of poverty as the

underlying reason for a number of social pathologies among inner-city families, particularly poor families, among whom racial minorities are disproportionately represented. This culture of poverty devalues academic achievement. Others argue that a disproportionate decline of two-parent families explains why African Americans consistently score below whites on standardized achievement tests (Stearns, 2002). Stearns goes on to suggest that those with a more liberal view tend to argue that the achievement gap is the result of a difference in socioeconomic status (SES) between white and minority families or differences in resources between schools attended by white and minority students. Research indicates, however, that income inequality between the two populations explains a bit of the gap, but not all of it. Furthermore, having equal per-pupil spending rates in school districts does not necessarily guarantee that funds are efficiently directed toward effective programs that meet the targeted needs of specific student populations, or that the schools attended by minority or white students are equally well funded.

An April 2001 study by the Center on Education Policy Development (Kober, 2001) identified several of the factors contributing to the achievement gap. Differences in teacher qualifications and experience, parenting styles, teacher expectations and access to challenging curriculum and rigorous instruction were noted. Schools with fewer resources and higher rates of disruption/mobility, and neighborhoods and homes with limited access to learning resources were also cited.

A 2002 study sponsored by the Economic Policy Institute investigated the achievement gap for children from impoverished families. The study looked specifically at the factors influencing the achievement gap prior to starting formal schooling. Factors addressed included family income, parental education and occupation, non-English speaking households, number of children in the home, participation in learning activities, time spent watching television, and parental involvement in play and learning activities. Some of the findings were that the average achievement scores for children in the highest SES group were 60% higher than those in the lowest group; children attending center-based child care prior to kindergarten showed higher achievement; low-SES and minority children were more likely than high-SES and non-minority children to experience larger class sizes, less outreach to smooth the transition to school, and fewer prepared and experienced teachers; and 14% of low-SES kindergarteners lived in non-English speaking households, compared to only 5% for upper-SES students (Lee and Barkam, 2002).

Paul Barton, author of the 2003 ETS Report, *Parsing the Achievement Gap*, took a somewhat unique approach to looking at factors influencing the achievement gap. First, he identified 14 home and school conditions that, to a reasonable extent, the research community associates with school achievement. Secondly, for each of these 14 correlates of student achievement, he summarized what is known about the differences in experience, on the average, among subgroups of the populations, by race/ethnicity and some measure of income.

The school-based correlates of achievement identified by Barton included the rigor of the curriculum, teacher preparation, teacher experience and attendance, class size, the availability of appropriate technology-assisted instruction and school safety. The before and after school correlates identified included parent participation, student mobility, birth weight, lead poisoning, hunger and nutrition, reading to young children, television watching and parent availability.

Barton concluded there are achievement gaps between the minority and majority student populations for all 14 correlates of achievement. In the 12 (excluding rigor of the curriculum

and birth weight) cases where data were available, 11 (excluding class size) of the correlates showed achievement gaps between students from low-income families and higher income families.

Debra Viadero, writing in the March 22, 2002, edition of *Education Week*, provides a comprehensive summary of factors influencing the achievement gap. Viadero does note that the explanation is complicated and involves a host of overlapping factors. Factors cited by Viadero include poverty, access to challenging academic courses, peer pressure, student mobility, teacher quality, parenting styles, access to preschool, stereotype threat, the summer effect, teacher expectations, television watching and test bias.

In summary, identifying a single or even limited list of factors contributing to the achievement gap is not possible. There is no simple explanation for the achievement gap. It is, in reality, the product of a complex set of interactions among a combination of school, home and community factors.

Unequal Expectations

There is considerable evidence that poor and minority students are subject to a differing set of expectations at school. Gamoran (2000) suggests that there are profound differences in the academic content and classroom experiences that students in the same grade level experience in different schools, classrooms and instructional groups. He suggests that grading standards are sometimes lower in high poverty schools and that such schools often cover less curricular material. High-poverty high schools are also less likely to offer advanced courses and, if they do, poor and minority students enroll at a lesser rate.

Knapp (1995) suggests that in many high-poverty classrooms, little is expected of students and that they often come away with little understanding of the relationship of instruction to their lives. Knapp also suggests that teachers in high-poverty schools will often focus on a curriculum that is limited to the most basic elements of the content to be learned. The underlying assumption is that no more can be managed and that mastery of the basics is an important achievement.

Sadowski (2001) has summarized research findings relative to the role of social expectations in the achievement gap. He suggests that even though black and white students spend similar amounts of time on homework, black students tend to complete their work less often. Overall, he suggests that different social expectations often hinder black student achievement in the following ways.

1. Black students feel less connected to school than white students and have more negative relationships with their peers than do white students.
2. Stereotype anxiety may also discourage black students from completing and submitting homework.
3. Teacher expectations for black students are lower than those for white students resulting in lowering students' own expectations about their abilities.

Haberman (1991) has described the teaching practices in many high-poverty schools as the “pedagogy of poverty.” This approach is characterized by constant teacher direction and student compliance, thus prohibiting many students from developing to their full potential.

After reviewing the literature on the effect of teachers’ perceptions, expectations, and behaviors on minority students, Ferguson (1998) concludes that such factors probably do help sustain, and even expand, the black-white test gap. He suggests that the cumulative effect may be substantial if effects accumulate from kindergarten through high school.

A 2001 report from the Northwest Regional Educational Laboratory provides reinforcement for the critical role of teacher expectations in reducing the achievement gap. The report provides a summary of several factors that influence teacher expectations. Teachers may view students in special education programs or in the lower-academic track, where poor and minority students are more likely to be over represented, as being less intellectually capable. In general, girls are asked fewer questions and receive less precise feedback and criticism than males. Teachers often expect more from middle-class students than they do from poor or minority students. Finally, teachers may tend to reject students whom they perceive as overly active and distractive.

Academic Curriculum

The positive correlation between the rigor of the curriculum and academic achievement has been clearly documented in the literature. Terms such as offering a “challenging curriculum” and an “academic environment” are often used to convey the concept of rigor in the curriculum. The rigor of the curriculum as a factor in addressing the achievement gap is also related to the expectations held for students. Teacher expectations for student achievement may vary widely, even when students are exposed to the same content (Barton, 2003).

Determining the rigor of the curriculum can be a challenge. Nominally, at least, based on course titles, students are exposed to the same curriculum prior to high school. At the high school level, comparing courses is also difficult as courses with the same titles may have different content. Student motivation is also a factor as high school students have some choice in the courses they take. Some students are also simply denied access to rigorous courses because of inadequate prior preparation or the unavailability of such courses (Barton, 2003).

Nationally, all racial groups appear to be taking a more comprehensive curriculum, although the percentages for white and Asian American students still exceed those of black and Hispanic students. This expansion of the curriculum has not resulted in any substantive progress in closing the achievement gap, perhaps because many courses do not live up to their names or are taught by under prepared teachers. There have also been large increases in advanced placement testing and course taking by all racial groups, however, large differences remain for black and Hispanic students (Barton, 2003).

Nationally, fewer black and Hispanic students enroll in challenging academic courses. Viadero (2000) attributes this to rigid student “tracking,” lack of encouragement and challenge for many minority students, insufficient access to Advanced Placement and other academically rigorous courses, and the “dumbing down” of school curricula.

Teacher Quality

A quality teacher in the classroom is one of the best ways to close the achievement gap (Boeck, 2002; Darling – Hammond, 2000; Economic Policy Institute, 2002; Haycock, 1998; MASB, 2001). Placing a highly qualified, fully prepared, motivated teacher in the classrooms of the underachievers will have the greatest impact on the achievement differences between minority and non-minority children and low SES and average or above income level children. An improvement in teacher education programs has been touted as one strategy to mitigate the achievement gap (Kober, 2004; Haycock, 2002; Lee, 1998). It is well documented that under qualified teachers are disproportionately assigned to teach in low performing, at risk classrooms (Barton, 2003; Boeck, 2002; Hirsch, 2001). Darling-Hammond (2000) reported that teacher quality characteristics such as certification status and degree in the field to be taught are significantly and positively correlated with student outcomes. The current literature suggests that teacher quality issues can be divided into three distinct categories: 1) recruitment of quality teacher education candidates, 2) monitoring and support of teacher preparation programs and 3) the provision of high quality staff development for in-service teachers.

The attraction of high quality students to teacher education schools is the first step in ensuring a steady stream of qualified teachers to America's classrooms. The development of a recruitment strategy for new teachers should be a priority. Hirsch (2001) found that many states provide incentives to outstanding high school seniors who seek teacher certification. The incentives include forgivable student loans or scholarships (27 states). South Carolina has implemented the Teacher Cadet Program with impressive results in recruiting high quality teacher education students. Likewise, the North Carolina Teaching Fellows and the Teach for Texas programs have been highly successful in attracting minority candidates to the teaching profession (SREB, 1999). Many researchers suggest that states can strengthen the quality of new teachers by carefully analyzing the supply and demand of teachers (content areas) and recruiting based on the data collected (Barton, 2003; Hirsch, 2001; Huang, Yi, & Haycock, 2002; SREB, 1999; The Education Trust, 2003).

Teacher education programs should strive for deep content knowledge from their candidates (Haycock, 1998). Education programs can help assure quality graduates by maintaining high entry standards and raising the bar for licensing examinations (Huang, Li, & Haycock, 2002). The cultivation of professional development schools in cooperating local districts has also proven to be a significant factor in increasing the quality of teacher education programs (Hirsch, 2001; SREB, 2002).

The No Child Left Behind Act requires school systems to provide sustained high quality professional development as a means of improving teaching quality (NCLB, 2001). Recent studies (Haycock, 1998; Kober, 2001) suggest that teacher professional development has a profound impact on student achievement when presented in a targeted, collaborative, and evaluated atmosphere. New curricular standards should be addressed during the ongoing staff development efforts of districts (Cohen & Hill, 1998). A clear and commanding difference is found between the professional development in high performing schools and that of low performing schools (SREB, 1999).

Policy Implications

As evidenced in this brief review of the literature, there are many factors contributing to the achievement gap. Obviously, these factors are not equal in terms of their impact. Two of the major contributors are **ACADEMIC EXPECTATIONS AND TEACHER QUALITY**. Several potential policy implications for these two areas are presented in the attached chart.

CONTRIBUTING FACTORS	POLICY IMPLICATIONS
<p>ACADEMIC CURRICULAR EXPECTATIONS</p>	<ul style="list-style-type: none"> • Ensure a rigorous curriculum for all students • Ensure a teaching and learning framework for supporting standards-based education • Ensure that all students have access to, and success in, challenging courses (AP, Honors, IB, etc.) • Ensure that program structure and staffing for English language learners is aligned with best practices • Ensure student access to technology and the integration of technology across the curriculum as a part of the teaching-learning framework at all grade levels • Ensure that the arts are integrated across the curriculum • Focus on instruction that is guided by the use of data at every level • Ensure flexibility and innovation in the use of common core learning time • Direct the resource of time to closing the achievement gap • Align extended time programs with the regular academic program • Develop and use collaborations among schools, parents, and communities to widen the pool of resources available to extended day programs • Facilitate “teaching for meaning” • Ensure that curriculum resources are culturally relevant to facilitate student engagement • Promote the development of school/agency networks/consortia • Provide a focus on district/school-wide reform • Ensure that discipline practices are equitable across racial, cultural and socio-economic lines

	<ul style="list-style-type: none"> • Provide a personalized learning environment in which every student has a mentor or an adult advocate • Provide professional development focused on understanding different cultures • Aggressively/publicly promote the expectation that all students can succeed
<p>TEACHER QUALITY</p>	<ul style="list-style-type: none"> • Offer incentives to attract quality candidates to teacher education programs • Project teacher shortage areas and recruit accordingly (content area shortages) • Maintain/implement rigorous entrance and exit standards from teacher education programs (increase requirements) • Emphasize cultural diversity implications (including SES issues) in teacher education programs • Ensure high quality student teaching experiences for all programs • Monitor teacher education graduates (placement & retention) in relation to distribution of new teachers • Enact hiring policies that require full certification at time of employment • Provide high quality mentors for all new teachers • Create Professional Development Schools to work with teacher education programs • Encourage National Board of Professional Teaching Standard certification • Limit the number of substandard licenses issued • Encourage non-traditional yet rigorous routes into teaching • Encourage advanced degrees for teaching force – continuing education

References

- Barton, P. (2003). *Parsing the Achievement Gap: Baselines for Tracking Progress*. Educational Testing Service, Princeton, N.J.
- Boeck, D. (2002). *Closing the Achievement Gap: A Policy Action Guide for Washington State's School Directors*. Olympia: Washington.
- Cohen, D. & Hill, H. (1998). *State Policy and Classroom Performance*. CPRE Policy Briefs, January 1998.
- Darling-Hammond, L. (2000). *Teacher Quality and Student Achievement: A Review of State Policy Evidence*. Education Policy Analysis Archives, (8), 1.
- Ferguson, R. (1998). "Teachers' Perceptions and Expectations and the Black-white Test Score Gap." In C. Jencks and M. Phillips (Eds.). *The Black-white Test Score Gap*. Washington, D.C.: Brookings Institute.
- Gamoran, A. (2000). "High Standards: A Strategy for Equalizing Opportunities to Learn?" In R. D. Kahlenberg (Ed.) *A Notion at Risk: Preserving Public Education as an Engine for Social Mobility*. New York: Century Foundation.
- Economic Policy Institute. (2002, September). *Efforts to Close Achievement Gap Must Begin Much Earlier*. Washington, DC.
- Haberman, M. (1991). "The Pedagogy of Poverty Versus Good Teaching." *Phi Delta Kappan*, 73(4), 290-294.
- Haycock, K. (1998). "Good Teaching Matters: How Well Qualified Teachers Can Close the Gap." *Thinking K-16*, The Education Trust, 3, (2).
- Haycock, K. (2002). *It Takes More Than Testing: Closing the Achievement Gap*. Retrieved February 1, 2004 from <http://www.ctredpol.org>.
- Huang, S., Yi, Y., & Haycock, K. (2002). *Interpret with Caution: The First State Title II Reports on the Quality of Teacher Preparation*. The Education Trust.
- Hirsch, E. (2001). *Teacher Recruitment: Staffing Classrooms with Quality Teachers*. Retrieved February 2, 2004 from <http://www.sheeo.org>
- Knapp, M. (with Adelman, N. E., Marder, C., McCollum, H., Needels, M. C., Padilla, C., Shields, P. M., Turnbull, B. J., & Zucker, A. A.) (1995). *Teaching for Meaning in High-Poverty Classrooms*. New York: Teachers College Press.
- Kober, N. (2001, April). *It Takes More Than Testing: Closing the Achievement Gap*. Center on Education Policy, Washington, D.C.

- Kusimo, P, Petty-Wilson, P. & Body, T. (2004, February). *Governor's Minority Students Strategies Council: Minority Students' Achievement in West Virginia*. Office of the Secretary of Education and the Arts, Charleston, West Virginia.
- Lee, J. (1998). State Policy Correlates of the Achievement Gap Among Racial and Social Groups. *Studies in Educational Evaluation*, 24, 135-152.
- Lee, V. & Barkam, D. (2002). *Inequality at the Starting Gate*. Economic Policy Institute, Washington, D.C.
- MASB – Michigan Association of School Boards. (2001, Summer). *It Takes More Than Testing . . . Closing the Achievement Gap*. Retrieved February 10, 2004 from <http://www.masb.org>
- Northwest Regional Educational Laboratory (2001). *Closing the Achievement Gap Requires Multiple Solutions*. Portland, Oregon..
- Sadowski, M. (2001, November/December). "Closing the Gap One School at a Time." *Harvard Education Letter*. Cambridge, MA.
- SREB – Southern Regional Educational Board. (1999, December). *Getting Beyond Talk: State Leadership Needed to Improve Teacher Quality*. Atlanta, GA.
- SREB – Southern Regional Educational Board. (2002). *Reduce Your Losses: Help New Teachers Become Veteran Teachers*. Atlanta, GA.
- Stearns, E. (2002). *No Child Left Behind and the Education Achievement Gap*. Center for Child and Family Policy, Duke University, Durham, N.C., Vol. 2, No. 5.
- The Education Trust. (2003, August). *In Need of Improvement: Ten Ways the U.S. Department of Education Has Failed to Live Up to Its Teacher Quality Commitments*. Retrieved February 9, 2004 from <http://www.edtrust.org>.
- The No Child Left Behind Act of 2001, PL 107-110, sec. 1001 (available at <http://www.ed.gov/legislation/ESEA02/>).
- Viadero, D. (2001, April 25). "AP Programs Assume Larger Role." *Education Week*.
- Viadero, D. (2000, March 22). "Lags in Minority Defy Traditional Explanations." *Education Week*.