
America's Challenge: Effective Teachers for At-Risk Schools and Students

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Introduction

Carol A. Dwyer, Ph.D., ETS

The National Comprehensive Center for Teacher Quality (NCCTQ) was launched in 2005 as part of a comprehensive system of content-based technical assistance to support states in implementing the priorities of the No Child Left Behind (NCLB) Act. NCCTQ's mission is to support Regional Comprehensive Centers (RCCs), states, and other education stakeholders, such as institutions of higher education that prepare teachers, in strengthening the quality of teaching—especially in high-poverty, low-performing, and hard-to-staff schools. NCCTQ also provides guidance in addressing issues related to highly qualified teachers (HQTs) effectively serving students with special needs. This report provides the opportunity to update and report on what is currently known about successful teaching in at-risk schools—especially as it relates to the availability, recruitment, and retention of HQTs, as well as the opportunity to report on areas in which more research or changes in policy or practices remain to be accomplished. The main body of this report consists of six chapters related to the main streams of activity engaged in by NCCTQ during the past two years:

- A research analysis of the links between good teaching and student learning. What do we know about the strength of these links? How can we harness this knowledge for the benefit of all students?
 - An action-oriented review and analysis of gaps in the preparation of effective teachers for at-risk students, including those with disabilities. Why is effective preparation critical for both general education and special education teachers?
 - An analysis of the complexity of the issues involved in improving teaching for special education students and a demonstration that this knowledge is put to use in classrooms and that it ultimately turns out to be effective for students.
- A review of state policies and strategies that currently address the challenge of equitable distribution of effective teachers. Two distinctive state approaches are highlighted.
 - Promising new and emerging teacher recruitment and retention strategies and practices that states and districts are using to improve teacher quality in at-risk and hard-to-staff subject areas. A selective review.
 - Results from a nationally representative survey of first-year teachers. A look at the issues that most relate to their willingness, preparation, and ability to work in high-needs schools.

The report also contains an additional chapter, which describes the nature of NCCTQ's mission to improve the equitable distribution of teachers through a collaborative, systemic approach.

The Issues

It is clear that there is much room for improvement in American education in terms of reducing the achievement gaps that characterize high-risk schools and that recruiting and retaining motivated, caring, and effective teachers is key to addressing these large and long-standing gaps. NCLB was created to address gaps such as those illustrated by the following facts:

- According to the National Assessment of Educational Progress (NAEP), white 12th-grade students are more than twice as likely as Hispanic students, and almost three times as likely as black students, to demonstrate proficient or advanced reading skills. In mathematics, the disparities are even more disturbing—only 6 percent of black 12th-grade students and 8 percent of Hispanic 12th-grade students score at or above the proficient level, compared with 29 percent of white students (Grigg, Donahue, & Dion, 2007).

- Among high school graduates, black and Hispanic students have lower grade point averages than white or Asian-American students and are less likely to have completed a rigorous high school curriculum (Shettle et al., 2007).
 - The high schools attended by white or Asian-American students are more likely to offer high-level mathematics courses, such as trigonometry or calculus, than are high schools with students who are of low socioeconomic status or who are black or Hispanic (Adelman, 2006). Intensity of high school coursework is, in turn, the factor most closely associated with completion of a bachelor's degree.
 - Although state accountability assessments show shrinking achievement gaps and increased achievement levels for all, stagnant NAEP scores suggest that state-administered test scores are inflated, especially for poor, black, and Hispanic students (Lee, 2006).
 - Students who do not have the advantage of effective teachers will not only remain behind others academically, but the gaps between them and other students will continue to widen. Most vulnerable are the students in schools plagued by chronic low achievement. Not only do these schools often lack adequate physical facilities and instructional materials, they also are often served by teachers who do not have levels of experience or qualifications comparable to teachers in higher performing schools.
- teachers in the highest poverty quartile high schools were more likely than teachers in the lowest poverty quartile high schools to be inexperienced (17.3 percent vs. 14.6 percent); less likely to have attended a selective undergraduate institution (27.4 percent vs. 14.2 percent); and less likely to hold a full, regular teaching license (20.5 percent vs. 13.3 percent).
- High-poverty urban and rural schools were 4.4 percent to 6.5 percent more likely to have difficulty hiring special education teachers and 4.5 percent to 9.6 percent more likely to have difficulty hiring mathematics teachers (Strizek, Pittsonberger, Riordan, Lyter, & Orlofsky, 2006).
 - Teachers in high-poverty schools are 7 percent more likely to move to another school or leave the teaching profession than those in low-poverty schools, concentrating the adverse impact of teacher turnover in these at-risk schools (Ingersoll, 2003).
- Even when teachers in these schools have the experience, credentials, and content expertise comparable to that of their counterparts in more successful schools, they often have not had the preparation or the ongoing support that is needed to handle the enormous instructional challenges and learning environments presented by at-risk schools. These challenges directly affect states' and districts' abilities to recruit and retain teachers to staff the nation's neediest schools and students.

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- In North Carolina, students in the highest poverty quartile had teachers who were consistently less qualified than those of their better-off peers (Clotfelter, Ladd, Vigdor, & Wheeler, 2006). Specifically,

NCLB's mandate is clear: All students should have access to HQTs. For NCLB purposes, HQTs must possess the following paper qualifications: full state certification, bachelor's degree, and demonstrated subject matter competency in each of the academic subjects he or she teaches.

In addition, the law requires that states ensure an equitable distribution of HQTs. In the first two years of its operation, NCCTQ has focused on challenges related to ensuring that HQTs serve students with special needs—

students who are at risk of poor educational outcomes and students with disabilities. This means that there should not be a disproportionate number of students in high-poverty urban and rural school districts who are taught by teachers who are not highly qualified. These are the complex challenges addressed in this report.

Highly Qualified Teachers and Highly Effective Teachers

There are approximately 3 million K–12 teachers in the United States, and their salaries and benefits are by far the largest share of any school's budget. Given this investment of resources in teachers, it is critical to attend to the qualities, characteristics, and abilities teachers bring to the classroom. The standards by which teacher qualifications, or inputs, are measured, however, vary widely from state to state and from district to district and do not address the issue of whether teachers with the required qualifications actually improve students' academic achievement. Additional study is needed to identify teachers who are producing student-learning gains and determine how and under what conditions these gains occur.

Recruiting and retaining the highest quality teachers is important for many reasons. With a growing population of ethnic minority students and children living in poverty in the United States, helping all students achieve at high levels presents an immense challenge to our educational system. Although there is some evidence indicating that achievement gaps are narrowing, the increasing numbers of students in K–12 public schools who historically perform poorly on tests is grounds for renewed efforts to increase the academic achievement of this population of learners and thus further narrow achievement gaps.

Perhaps the most important means of facilitating high achievement is ensuring that all students have access to highly effective teaching. Research using value-added models and other means of assessing students'

academic growth has been useful in gathering substantive evidence on whether students have access to highly effective teaching. Research has clearly revealed that teacher effectiveness is not only key to student achievement, but its impact on student learning is cumulative. Having a teacher who produces student-learning gains (perhaps even more than one-year's growth) each year for several years in a row adds significantly to student achievement (Sanders & Rivers, 1996). Value-added measures can suggest that students in some teachers' classrooms learn more than students in other classrooms; however, they are not designed to explain the unique qualities of these teachers of high-scoring students.

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A substantial amount of research conducted during the past several years has examined various teacher characteristics and attributes believed to be related to student performance. These studies have been limited to a certain extent by the data available. In general, the teacher characteristics that have been examined have been those for which data could be readily obtained, such as experience; college degrees; subject majors; certifications; and sometimes, teachers' test scores on a variety of state and national teacher licensure tests. The same is true for students—standardized test scores have usually been used as the outcome measure for determining teachers' contribution to student learning. It has always been difficult, however, to obtain teacher characteristics data that are reliably linked to student test scores. With the advent of NCLB, states that previously did not have data systems for tracking individual students and teachers are putting such systems into place, which will make more analyses possible in the future.

Solutions and Promising Practices

Nothing will go as far toward improving the educational attainment of all students—and especially those in the most troubled schools—as ensuring that there is an HQT in every classroom in every state. Research has shown convincingly that students who lack effective teachers are destined to fall behind their peers (e.g., Jordan, Mendro, & Weerasinghe, 1997; Sanders & Rivers, 1996).

Efforts to address the disparities between the quality of teachers in high-poverty, low-performing schools and those in more affluent schools with high student achievement generally have been insufficiently focused and have lacked intensity. States or districts may tackle the general problem of teacher supply, for instance, and assume that increasing the overall number of teachers will benefit all schools, including those that are hardest to staff. The positive effects of such efforts, however, rarely trickle down to the most vulnerable schools. Furthermore, schools and districts typically attempt to devise piecemeal solutions that have minimal, short-term impact. Developing policies and practices capable of adequately addressing staffing problems in at-risk schools requires sustained work on both the state and district levels. This, in turn, requires the ongoing commitment of key stakeholders and adequate resources. It also requires a solid understanding of the issues and strategies to address them. An example of a specific solution contributed by NCCTQ is the work that the Vanderbilt University team has contributed to increasing the availability of highly qualified and effective teachers. This work has focused on establishing evidence-based practices that are especially important to producing improved achievement among students with disabilities and at-risk characteristics. Innovation configurations defining these practices and varying levels of implementation have been developed for RCCs and states to use to improve

teacher preparation, national association teacher preparation standards, and licensure procedures.

State and local policymakers, educators, and technical assistance providers face a variety of challenges and require assistance. Policymakers need help identifying proven academic programs and practices, using technology, gaining access to rigorous research and evaluations, and maintaining and analyzing data. Teachers and school leaders need access to professional development—including training, developing, and sharing strategies for effective teaching. We hope that this report will contribute to achieving these complex and challenging goals.

References

- Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college*. Washington, DC: U.S. Department of Education. Retrieved September 11, 2007, from <http://www.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf>
- Clotfelter, C., Ladd, H. F., Vigdor, J., & Wheeler, J. (2006). *High-poverty schools and the distribution of teachers and principals*. Washington, DC: National Center for the Analysis of Longitudinal Data in Education Research (CALDER). Retrieved September 11, 2007, from http://www.caldercenter.org/PDF/1001057_High_Poverty.pdf
- Grigg, W., Donahue, P., & Dion, G. (2007). *The nation's report card: 12th-grade reading and mathematics 2005* (NCES 2007.468). Washington, DC: National Center for Education Statistics.
- Ingersoll, R. (2003). *Is there really a teacher shortage?* (Document R-03-4). Philadelphia: Center for the Study of Teaching and Policy. Retrieved September 11, 2007, from <http://www.ecs.org/html/offsite.asp?document=http%3A%2F%2Fdepts%2Ewashington%2Eedu%2Fctpmail%2Fpdfs%2FShortage%2DRI%2D09%2D2003%2E.pdf>
- Jordan, H., Mendro, R., & Weerasinghe, D. (1997, July). *Teacher effects on longitudinal student achievement*. Paper presented at the CREATE annual meeting, Indianapolis, IN.
- Lee, J. (2006). *Tracking achievement gaps and assessing the impact of NCLB on the gaps: An in-depth look into national and state reading and math outcome trends*. Cambridge, MA: The Civil Rights Project at Harvard University. Retrieved September 11, 2007, from http://www.civilrightsproject.ucla.edu/research/esea/nclb_naep_lee.pdf
- Sanders, W., & Rivers, J. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. Knoxville: University of Tennessee, Value-Added Research and Assessment Center. Retrieved September 11, 2007, from <http://downloads.heartland.org/21803a.pdf>
- Shettle, C., Roey, S., Mordica, J., Perkins, R., Nord, C., Teodorovic, J., et al. (2007). *The nation's report card: America's high school graduates* (NCES 2007-467). Washington, DC: National Center for Education Statistics. Retrieved September 11, 2007, from <http://nces.ed.gov/nationsreportcard/pdf/studies/2007467.pdf>
- Strizek, G. A., Pittsonberger, J. L., Riordan, K. E., Lyter, D. M., & Orlofsky, G. F. (2006). *Characteristics of schools, districts, teachers, principals, and school libraries in the United States: 2003-04 schools and staffing survey* (NCES 2006-313). Washington, DC: National Center for Education Statistics. Retrieved September 11, 2007, from http://nces.ed.gov/pubs2006/2006313_1.pdf

