



where teachers are central to improving schools

No Child Left Behind and the ‘Highly Qualified’ Teacher: The Promise and the Possibilities¹

*Barnett Berry and Linda Darling-Hammond
with
Eric Hirsch, Sharon Robinson, and Arthur Wise*

We are researchers and reformers, dedicated to ensuring that every student in every public school classroom has a caring, qualified, well-supported, and effective teacher. We believe strongly in the teaching profession and prospects for closing the student achievement gap by closing the teaching quality gap. We value both the promise and possibilities of the No Child Left Behind Act (NCLB), with its mandate that states ensure a "highly qualified" teacher for every child in every core academic class.

No doubt NCLB has sent a very strong signal to practitioners and the public regarding the importance of new approaches to teacher recruitment and retention. More importantly, this first-of-a-kind federal teaching quality intervention was crafted to remedy one of the most egregious injustices in our public school system: Poor students and those of color are most likely to be taught by inexperienced and underqualified teachers.

Reports by the [Education Trust](#), the [Center for Education Policy](#), and the [Center for Teaching Quality](#) have revealed how the "highly qualified" teacher mandates have sparked new efforts to attract teachers into the profession and support them after they enter. However, each of these organizations have revealed serious shortcomings with both the federal definition of what it means to be a "highly qualified" teacher as well as the resources and technical "know-how" available to school districts in their efforts to close the teaching quality gaps. Bess Keller, in a hard-hitting *Education Week* article, recently noted while "federal officials are optimistic; others are far more dubious."¹ We believe that for the NCLB "highly qualified" teacher, mandates to fulfill both its promise and potential five major issues must be addressed.

¹ Several recommendations, described herein, were initially outlined in Darling-Hammond, L. and Sykes, G. (2003). Wanted: A national teacher supply policy for education. *Educational Policy Analysis Archives*, 11 (33). Available: <http://epaa.asu.edu/epaa/v11n33/>.

(1) *A sleight of hand on teacher qualifications.* Current federal rules allow states to immediately label teachers “highly qualified” if they have just enrolled in, not finished their preparation. Under federal guidelines “practice teaching” means practicing on children without any supervision. Clearly, this is not what parents have in mind when the school tells them that their child’s teacher is “highly qualified.” In addition, the U.S. Department of Education has encouraged states to redefine certification in ways that eliminate teacher education coursework, student teaching, and “other bureaucratic hurdles.”² This approach flies in the face of research showing that teachers who undergo traditional preparation and certification produce higher student achievement gains.³ As a result of the Department’s position, states like Georgia and Texas can now identify teachers as “highly qualified” if they simply pass a test and earn a college major in a field “closely related” to the subjects they want to teach. States — lacking effective data systems — cannot assemble the accurate information needed to track improvements.

(2) *Limitations of current teacher testing.* The measures currently used to qualify teachers are largely multiple-choice tests focused on basic skills or subject-matter knowledge. Almost none evaluates actual teaching skills or performances necessary to teach diverse students effectively. Granted, the Interstate New Teacher Assessment and Support Consortium (INTASC), sponsored by the Council of Chief State School Officers, has brought together more than 30 states to create licensing standards for beginning teachers, which has helped to create a much needed assessment framework. However, at this point states have not had the resources or political will necessary to transform how teachers are assessed before they begin to teach. Another round of efforts is needed to unify the current medieval system of teacher testing that has resulted in 50 separate “fiefdoms” across the country. A new system should include a national teacher performance assessment, modeled after that of the National Board for Professional Teaching Standards® and similar to those used in Connecticut, Wisconsin, and California, that systematically evaluate whether teachers can actually teach effectively through an authentic assessment of practice. New assessments could provide a better basis for understanding what mid-career switchers know or do not know about teaching diverse students, offering teacher education providers much needed data to craft more adaptive alternative route programs.

(3) *Inflexibility for multiple-subject teachers.* By requiring that teachers demonstrate subject-matter competence through the equivalent of a major or a test in each subject they teach, NCLB appropriately recognizes the importance of subject-matter knowledge. In effect, however, this provision labels many highly accomplished teachers as unqualified. For example, in rural schools, middle schools, and reform-oriented high schools, teachers often must handle multiple subjects. In such settings they often plan and teach in interdisciplinary teams, an arrangement that supports their ability to teach effectively across fields even though they lack a major in each one. And science teachers, who often need to teach biology, chemistry, and physics or earth science, cannot hold a major in all

of these subjects. After pressure from local superintendents and their Congressional representatives, the U.S. Secretary of Education has given rural schools additional time for teachers who teach multiple subjects and are highly qualified in one subject to become highly qualified in the additional subjects. In the long run, however, this concession will not solve the problem. New thinking about preparing, supporting, and assessing teachers who teach multiple subjects is much needed.

(4) Insufficient resources for recruitment and preparation. Despite a modest infusion of new dollars to improve teacher quality through Title I and II, many states and districts continue to struggle in their efforts to recruit and retain well-prepared and effective teachers for the neediest students. Few districts, especially poor urban and rural ones, can offer sufficient financial incentives for teachers to move to high-need schools. Professional Development Schools — education’s equivalent of a teaching hospital — have yet to be seriously funded and used as a potentially powerful tool for educating new teachers for and in our nation’s most challenging schools.

Further, the systemic issues that affect the teacher labor market—such as unequal funding and compensation across districts--cannot be solved at the local level. In a recent CTQ report, over 70 percent of the survey respondents from rural school district’s new hires for 2005-2006 entered through the state’s alternative certification program that allows individuals to begin teaching with little or no preparation. Few of the recruits were pleased with the preparation they received. The survey revealed that these lateral entry teachers were five times more likely than traditional teacher education graduates to report that they “are not sufficiently prepared to be effective in (their) school.”⁴ Alternative routes that attract non-traditional recruits are critical to enhancing teacher supply. However, mid-career switchers need to fully meet state standards before they begin teaching.

(5) Woeful disregard for teacher working conditions. An unfinished task in American education is to create conditions for better support of new teachers, including protected initial assignments, mentoring, and improved evaluation to help novices grow. About 30 percent of new teachers leave within 5 years, and the rates are much higher for teachers who enter with less preparation and those who do not receive mentoring. A recent study estimated the costs of replacing new teachers who leave at between \$8,000 and \$48,000 each, depending on whether student learning costs are considered.⁵ Even the low end estimate sums to billions of dollars nationally each year. To be sure, teachers need to be paid more — especially in our high need schools. However, it is not enough to just pay teachers more; the conditions have to be in place to give them a chance to succeed. Research from the Center for Teaching Quality shows how certain working conditions, like school leadership, time for high quality professional development, and teacher empowerment have a powerful effect on both increasing student achievement and improving teacher retention.⁶

The Need for a National Teacher Quality and Supply Policy

More than anything else, our nation needs an aggressive national teacher quality and supply policy, on the order of the post-World War II Marshall Plan. Federal strategies for enhancing the supply of teachers have precedents in the field of medicine as well as teaching. Since 1944, Washington has subsidized medical training to meet the needs of underserved populations, to fill shortages in particular fields and to increase diversity in the medical profession. The federal government also collects data to monitor and plan for medical manpower needs. This consistent commitment, on which we spend hundreds of millions of dollars annually, has contributed significantly to America's world-renowned system of medical training and care. Intelligent, targeted subsidies for teacher preparation coupled with stronger supports at entry and incentives for equalization of salaries and working conditions would go a long way toward ensuring that all students have access to teachers who are indeed highly qualified.

Increasing Quality and Supply. We need targeted incentives to attract qualified teachers to schools and areas that historically have been undersupplied. One set needs to focus on attracting qualified and prepared teachers to high need schools while the other needs to cultivate talent from within the community.

First, the federal government should launch a substantial, sustained program of service scholarships and forgivable loans that are allocated on the basis of academic merit and indicators of potential success in teaching, such as perseverance, capacity, and commitment. These funds should be targeted to areas of teaching shortage as defined nationally and by individual states, which should allocate a portion of the funding, and should be awarded in exchange for teaching in priority schools, defined on the basis of poverty rates and educational needs (e.g. language minority status).

Service scholarships should be available for training through both traditional and alternative routes that meet quality standards and should be structured so that recipients pay them off by remaining in teaching for at least 3-5 years. (After three years, candidates are much more likely to remain in the profession and make a difference for student achievement.) The scholarships and training programs need to be designed uniquely for both traditional-aged and mid-career recruits, reflecting the needs of a 21-year college student from UCLA or a 48-year old IBM engineer transitioning to teaching. An effort to bring in 40,000 talented recruits by offering them up to \$20,000 each in service scholarships to support their preparation would fill nearly all of the vacancies currently filled with emergency teachers and would cost as little as \$800 million a year.

Second, a federal program should be launched to help develop "grow your own" programs in urban and rural areas. Since many young teachers have a strong preference to teach close to where they grew up or went to school,⁷ hard-

to-staff schools need to enhance the pool of local college graduates prepared to teach in their communities. This suggests the importance of a recruitment strategy that would build the capacity of teacher preparation programs within cities and isolated rural communities where the problems are most severe. These programs would need to meet three criteria: ensuring a high-quality teacher preparation experience, attracting local residents (including teachers' aides), and ensuring a pipeline from preparation to hiring. They should include state-of-the-art preparation strategies, such as professional development schools that allow candidates to apply what they are learning to practice in sites that are designed to support high-quality learning both for high-need students and for teachers. To operate these institution-building grants in 100 key locations, at \$1 million per program for each of five years, the annual cost would be only \$100 million.

Improving Teacher Retention. We need several approaches to improving unacceptable rates of new teacher attrition, including robust forms of new teacher induction and mentoring, and a new focus on improving teacher compensation and working conditions. First, a national teacher supply program should help to ensure that teachers receive appropriate preparation and mentoring in their early years. This could be accomplished through a targeted, matching grant program aimed at supporting effective state and local induction practices, including new teacher access to qualified mentors who have expertise in the relevant teaching field and time to coach beginners. A number of states and districts have developed new teacher support programs, but most are only modestly conceptualized and funded. New teacher support programs must provide for mentor training as well as time for accomplished teachers in relevant teaching fields to work with appropriately paired novices.

States and selected districts would receive federal grants to develop or expand model induction programs that could be institutionalized over time, concentrating first on support for new teachers in hard-to-staff schools. Given the unique new teacher needs in both urban and rural districts, current Title II funding is insufficient. If individual state grants averaged \$1 million annually for three years running and were phased in 10 states at a time, the total direct cost would be \$150 million, allocated over seven years. The grants to hard-to-staff districts (or district consortia) might allocate an average of \$500,000 a year for three years. If 100 district grants were awarded annually, this would total \$50 million a year.

The federal government also could help reconstitute high need schools as PDSs, where additional resources could fuel research into what is working well (or not) as well as support the preparation of both traditional and alternative route candidates. An additional \$500,000 a year per district (for an additional \$50 million) could offer opportunities for each district to identify a critical mass of highly accomplished teachers to also serve as teacher educators and stipends to support the internships of the new recruits. The PDS program should be tightly coupled with the proposed service scholarships and forgivable loans described above. If the Education Department took on the role of evaluating and

disseminating knowledge from these programs, the nation would benefit considerably from new policies and practices that receive hardy tests under a variety of conditions.

Second, while new teacher support is necessary, so is better pay and working conditions. However, because of difficult living and working conditions as well as noncompetitive salaries, too many urban and rural districts are doubly disadvantaged in the competition for teaching talent. States that have successfully raised and equalized salaries have improved the access of urban schoolchildren to well-qualified teachers. The federal government could encourage more states to address these issues by sponsoring research within and across states on the success of various strategies in different contexts. These might include systemic state strategies like Connecticut's⁸ and local experiments with comprehensive compensation plans, like those now ongoing in Denver and Minneapolis. Other strategies to examine are policies like California's effort to provide \$20,000 bonuses for National Board Certified Teachers® who teach in high-need schools,⁹ and legislation that has sent resources to high-need schools to recruit and retain fully certified teachers through improving working conditions, adding mentors, reducing class sizes and providing hiring and retention bonuses. These comprehensive professional compensation plans reflect the overwhelming research evidence and public sentiment that just rewarding teachers more for the production of higher test scores will not have a salubrious effect on the teacher labor market.¹⁰

As part of the reauthorization of the Higher Education Act (HEA), the federal government has established the Teacher Incentive Fund (TIF) to help states and school districts establish pay-for-performance systems to reward teachers and principals for improving student academic achievement and closing achievement gaps between students of different racial and ethnic groups. At \$100 million, TIF represents a good start for fueling ideas, but insufficient for generating the action needed. For example, Denver's ProComp plan, designed to pay its almost 5,000 teachers more and differently, required an annual infusion of \$25 million in revenue (generated through a public referendum). The federal TIF funding needs to have its own authorizing language with clearer guidelines, helping to ensure sustained sources of revenue and clearer expectations for going beyond standardized test scores to reward teachers. TIF's limited funds and scope are insufficient for encouraging states and districts to adopt and implement comprehensive professional compensations systems.

In addition, several states, with leadership from governors' offices, state departments of education, and teacher associations are now assembling web-based surveys of teacher working conditions, with a focus on school leadership, time, professional development, teacher empowerment, and facilities and resources. In 2006, large majorities of North Carolina, Kansas, Ohio, Arizona, and Nevada teachers responded to Center for Teaching Quality surveys, offering policymakers, practitioners, and the public considerable insight into how school environments affect whether teachers stay in teaching and are effective in helping

students achieve. North Carolina policymakers are already using these data to improve administrator preparation programs and create more planning time for elementary school teachers. The federal government, with supplemental funding of \$10 million (or \$200,000 per state), could require states to assemble similar data, and report to the public the extent to which teacher working conditions impact student learning. Research has demonstrated that about one-third of teachers leave the profession due to dissatisfaction, caused primarily by problems in leadership, autonomy, and time. Prescription without diagnosis is malpractice. Only with more robust working conditions data can policymakers gauge what matters most to teachers and their decisions to teach and their capacity to do so effectively.

Facilitating a National Labor Market for Teachers. The federal government must help create a national labor market for teachers, including the removal of unnecessary interstate barriers to teacher mobility. Because teacher supply and demand vary regionally, shortages can be solved only if teachers can get easily from states with surpluses to those with shortages. The federal government should work with states to accomplish three goals:

1. Develop more rigorous and common licensing examinations – including a national teacher performance assessment and the National Council for Accreditation of Teacher Education/Education Testing Service Benchmarking project – to forge interstate agreements about content and pedagogical coursework and performance as called for by NCLB. In addition, the federal government can promote a robust national teacher education accreditation, much like those found in other professions, as a means of fostering interstate mobility.
2. Create a system of pension portability across the states, on par with what is available to most university professors. Too many well-prepared teachers are not able to teach in high need schools because they cannot carry their retirement benefits with them to new jobs.
3. Support the development of better teaching quality data systems, enabling more comprehensive and accurate labor market data and analyses for federal, state and local planning.

In particular, the long-standing federal role of keeping statistics and managing research is well suited to the job of creating a database and analytic agenda for monitoring teacher supply and demand. Such a system, which would inform all other policies, could document and project shortage areas and fields, determine priorities for federal, state and local recruitment incentives, and support plans for institutional investments where they are needed. However, state teaching quality data systems are notoriously under-conceptualized and under-developed. Very few states can accurately match students to the teachers who actually teach them, and even when they can, few provide the in-depth data needed to link teaching to learning. In order to understand and manage the

teacher labor market, states need to be able to do much more than just link students and teachers for value-added statistical analysis. Louisiana and Virginia, two states working toward creating more comprehensive TQ data systems, are spending millions of dollars to enhance their capacity to understand the broader effects of teacher education, induction, and professional development on student learning. Much needs to be done to spread technical know-how among all 50 states, especially as teacher labor markets become less provincial and more national (and global). Given what we know about what Louisiana and Virginia have spent, the federal government needs to invest at least \$200 million (\$4 million per state on average) in upgrading state capacity to assemble and use comprehensive TQ data.

In evaluating our nation's investment strategies, it is important to realize that these initiatives could be undertaken for approximately 1% of the \$350 billion tax cut enacted in May 2003, and, in a matter of only a few years, they would build a strong teaching force that could last decades. In the long run, these proposals would save far more than they would cost. The savings would include the several billion dollars now wasted because of high teacher turnover as well as the costs of grade retention, summer schools, remedial programs, lost wages and prison costs associated with high rates of dropouts – all of which result in part because too many children are poorly taught. This is to say nothing of the broken lives and broader societal burdens that could be avoided with strong teachers in the schools that most need them.

In the competition for educational investment, the evidence strongly points to the centrality of teacher quality to educational improvement. As the National Commission on Teaching and America's Future argued a decade ago,¹¹ creating a coherent system of teacher development that provides caring, competent, and qualified teachers for every child every year is what will ultimately matter most for student achievement. *We believe a Marshall Plan for teacher supply and quality should be a centerpiece of the United States' education agenda. Intelligent, targeted subsidies for teacher preparation coupled with stronger supports at entry and incentives for equalization of salaries and working conditions would go a long way toward ensuring that all students have access to teachers who are highly qualified as well as well supported.*

##

Barnett Berry is Founder and President of the Center for Teaching Quality, Inc., Hillsborough, North Carolina; bberry@teachingquality.org.

Linda Darling-Hammond is Charles E. Ducommun Professor of Teaching and Teacher Education, School of Education, Stanford University, Stanford, California; ldh@stanford.edu.

Eric Hirsch is the Executive Director of the Center for Teaching Quality, Inc., Hillsborough, North Carolina; ehirsch@teachingquality.org.

Sharon Robinson is President of the American Association of the Colleges of Teacher Education, Washington, DC; SRobinson@aacte.org

Arthur Wise is President of the National Council for the Accreditation of Teacher Education, Washington, DC; art@ncate.org

Darling-Hammond, Robinson, and Wise all serve on the Center for Teaching Quality Board of Directors.

-
- ¹ Keller, B. (2006). In Every Core Class, A Qualified Teacher. Education Week. August 30, 2006. Retrieved 8/30/06. <http://www.edweek.org/ew/articles/2006/08/30/01hqt.h26.html?display=yes>
- ² U.S. Department of Education. (2002, June). *Meeting the highly qualified teachers challenge: The secretary's annual report on teacher quality*. Washington, DC: U.S. Department of Education, Office of Postsecondary Education.
- ³ Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2006; Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005.
- ⁴ Center for Teaching Quality (2006). *Improving Teacher Recruitment and Retention in Rural School Districts*. Hillsborough, NC: Author.
- ⁵ Benner, A. D. (2000). *The cost of teacher turnover*. Austin, TX: Texas Center for Educational Research.
- ⁶ See website of Center for Teaching Quality [www.teachingquality](http://www.teachingquality.org) for latest studies and analyses of teacher working conditions.
- ⁷ Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). *The draw of home: How teacher preferences for proximity disadvantage urban schools*. *Journal of Policy Analysis and Management*, Vol. 24, No.1, 113-132. http://www.teacherpolicyresearch.org/portals/1/pdfs/The_Draw_of_Home_%28JPAM%29.pdf
- ⁸ Wilson, S., Darling-Hammond, L., & Berry B. (2000). *A case of successful teaching policy: Connecticut's long-term efforts to improve teaching and learning*. Seattle, WA: Center for the Study of Teaching and Policy, regarding Connecticut..
- ⁹ Humphrey, D., Koppich, J., and Hough, H. (2005). *Sharing the Wealth: National Board Certified Teachers and the Schools That Need Them Most*. Menlo Park, CA: SRI International.
- ¹⁰ Berry, B. (2004). Recruiting and retaining "highly qualified teachers" for hard-to-staff schools. *NASSP Bulletin*, 87(638), 5-27; The Teaching Commission (2005). *America's Commitment to Quality Teaching in Public Schools: Findings from A National Survey*. <http://www.theteachingcommission.org/press/pdfs/pollreport-final.pdf>; Public Agenda (2003). *What Teachers Really Think About Unions, Merit Pay, and Other Professional Matters* http://www.publicagenda.org/research/pdfs/stand_by_me.pdf
- ¹¹ National Commission on Teaching and America's Future (1996). *What matters most: Teachers for America's Future*. NY: NCTAF.