

“Highly Qualified” Teachers and the Teaching Profession: Policy Lessons from the Field

**Barnett Berry, Mandy Hoke, and Eric Hirsch
Southeast Center for Teaching Quality, Inc.
Chapel Hill, North Carolina**

Introduction

Over the last decade, it has become increasingly evident to policy makers and practitioners that the success of standards-based reform hinges on the quality of teachers and teaching, as well as that of the system through which states develop and sustain a capable teacher force (Darling-Hammond and Sykes, 1999). It now seems that policy and business leaders have come to know what parents have always known — teachers make the most difference in student achievement. This emphasis has emerged in part from recent evidence mounted by different researchers demonstrating that the lion’s share of variance in student test scores is accounted for by teacher quality (Ferguson, 1991; Goldhaber & Brewer, 1996; Hanushek, 1996; Rivkin, Hanushek, & Kain, 1998; Sanders & Rivers, 1996). In particular, Hanushek (1992) found that a student with a “high quality” teacher” will achieve a full year’s learning growth more than a student with a “low-quality” teacher.

At the same time, America’s approach to school improvement still emphasizes the primacy of curriculum mandates and high-stakes testing and accountability. Along with high drop out rates, poor performance on standardized tests and the unacceptable disparity in achievement among different student groups dominate the media accounts of the quality of public education. While our nation’s current focus and reliance on tests has roots in the launch of Sputnik in the late 1950s, the movement toward a growing reliance on high stakes testing as means to drive school improvement has been growing steadily ever since (Amrein and Berliner, 2002). Indeed, high stakes accountability systems — that set clear and high learning standards for teaching and learning, measure the results with standardized achievement tests, grade schools based on their test performance, while rewarding high performance and sanctioning low performance — have swept the nation (Henry and Opfer, 2004).

No Child Left Behind and Teacher Quality. Now, the pressure to close the achievement gap has been intensely compounded by the reauthorization of the Elementary and Secondary Education Act of 2001 or No Child Left Behind (NCLB). Indeed, with only 30 percent of the nation’s 4th grade students meeting reading “proficiency” on the 2002 National Assessment of Education Progress, NCLB poses new opportunities and challenges for educators and policy makers alike. Under NCLB, all children must learn to read by the third grade, all students must reach proficiency in core academic areas by 2014, and states must rate their schools based on whether they are making "adequate yearly progress" (AYP) in terms of a number of student subgroups, including those who are minority, of a lower socioeconomic class, and in special education programs. For the 2002-03 school year, states have identified at least 23,812 schools as not making AYP and at least 5,200 as “in need of improvement,” i.e., missing the AYP mark for two or more consecutive years (Olsen, 2003). To be sure, NCLB mandates a more strident approach to school-level accountability, with rewards for those that improve and consequences

for those that do not, parental empowerment through regular reports of student performance data and school choice if their children's schools do not improve quickly on standardized tests.

Therefore, it is no surprise that No Child Left Behind not only requires students to make adequate yearly progress toward state standards, but also mandates a "highly qualified" teacher for students in core academic subjects by the end of the 2005-2006 school year. According to federal requirements, a "highly qualified" teacher: (1) has a 4-year college degree; (2) has a full state teaching license; and (3) demonstrates knowledge of the subject he/she is teaching, either by majoring in that subject in college or by passing a rigorous subject matter test or other state-mandated evaluation.

In addition, the NCLB legislation calls for the examination and elimination of out-of-field and emergency credentialing, mandating that states ensure that poor and minority children, in particular, are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers. Over last several years, evidence has been mounting that poor children and those of color are far more likely not to have qualified teachers (SRI, 2001, Darling-Hammond, 2000; Haycock, 1998). Darling-Hammond and Sykes (2003) have noted that while our nation's education schools actually produce sufficient new teachers, serious shortages in specific teaching fields exist and that the hiring of "unqualified teachers" is a consequence of "distributional inequities," as opposed to the general shortages of qualified individuals (p. 3).

NCLB requires also that all teachers have access to effective professional development, and the law calls for local needs assessments to "take into account" the knowledge and skills teachers and principals need to help students meet academic standards. To ensure the law is followed, states must now begin reporting on the extent to which teachers have access to high quality, scientifically-based professional development.

With its high stakes testing and accountability provisions, NCLB has been described as a dramatic new direction in federal law, providing some precedent for the nation's government to take a heavier hand in setting a higher bar for teachers. In 2003, Title II of NCLB provided states and districts with almost \$3 billion to improve educator quality, along with over \$50 million in special appropriations to help members of the military and mid-career professionals become teachers and new college graduates to become educators in high-need schools. The federal focus on "highly qualified" teachers has the potential to drive new state and local actions, prompting universities to prepare teachers more effectively, school districts to create more effective professional development programs, local administrators to implement new recruitment and retention strategies, and teachers to think and act differently with regards to their own profession.

While the sanctions for not meeting the highly qualified teacher requirements are much less punitive than those for not making progress toward student achievement goals, they can be very public in nature. Districts must send letters home to parents of students in Title I schools not taught by highly qualified teachers, and, under the parental right to know provisions, districts must provide parents with information about teacher qualifications in an accessible, user-friendly format upon request. Most importantly, the law requires specific reporting on HQT not only in the aggregate, but also for high-poverty schools.

In the hands of highly capable and visionary leaders, the federal mandate offers unprecedented opportunities to reshape teacher preparation in ways that will finally produce the gains in student achievement reformers have long sought. However, NCLB has specified that a highly qualified teacher must have full state certification *and/or* pass the state's licensing examination, suggesting that neither professional knowledge and skills nor completion of a teacher preparation program were necessary in and of themselves. In defining a "highly qualified" teacher, NCLB relies heavily on state teacher tests, assuming that they are sufficiently rigorous, aligned with what prospective teachers are taught in their college courses, and meaningful given the content they will teach in their classrooms.

In fact, the federal definition of a HQT, and therefore the state definitions on which they are based, are driven almost exclusively by content knowledge, virtually ignoring the need for teachers to develop and use pedagogical skills. In fact, the Secretary of Education Rod Paige, in his annual report on teacher quality, focuses solely on two teacher quality principles: raising academic standards for teachers and simultaneously lowering barriers to those trying to enter the profession. In fact, the Secretary's reports have been highly critical of teacher education, viewing teacher preparation and licensure requirements as a "broken system" and promoting the idea that education coursework and student teaching become "optional" (U.S. Department of Education, 2003, p. 19).

The Development of the Teaching Profession. After *A Nation at Risk* (1983) challenged many assumptions about the effectiveness of the public schools, states have been upgrading student standards, and a number of efforts have been made to upgrade the teaching profession. State legislatures and state boards of education, the governmental bodies most notably in charge of the rules governing the teaching profession, have been on a slow march to advance teacher standards by increasing admission requirements to preparation programs, demanding more content knowledge, and extending internships. Since the release of the 1996 report, *What Matters Most Teaching for America's Future*, considerable progress on the teacher professionalism front has been made.

For example, there has been increased attention paid to having all education programs meet the standards of the National Council for Accreditation of Teacher Education. Close to 700 of the 1200 universities preparing teachers now are approved by NCATE, and 47 states are in partnership using the NCATE teacher education standards in their own program approval process. While the previous NCATE system looked primarily at college curricula and other inputs, the new system now requires that colleges and universities produce hard evidence that their prospective teachers meet professional, state, and institutional standards. To graduate from an NCATE-accredited institution, teacher candidates are expected to show mastery of the content knowledge in their fields and demonstrate that they can teach it effectively. In addition, most states use the new teacher standards of the Interstate New Teacher Assessment and Support Consortium (INTASC) to outline their licensing framework. However, other than Connecticut, these states have not invested in the kinds of new teacher assessments that can capture the wide range of content and pedagogical knowledge and skills novices need in order to begin effective, beginning practices. Eighteen states have now established professional standards boards, which have teachers themselves charged with the responsibility of setting and enforcing rigorous new

standards for teacher licensure — although most do not have full governing and financial control over setting and enforcing professional standards (Berry, et. al, 2001).

In addition, the creation of the National Board for Professional Teaching Standards may have been the most notable development in the creation of a true teaching profession in America. The Board's mission to codify a body knowledge for effective teaching and identify and reward accomplished practitioners is similar to what has already been developed in more established professions like medicine, engineering, and architecture. The National Board identifies accomplished teachers through a year-long assessment process, using portfolio, video-taped lessons, and essay-type tests of content and pedagogy. With certificates available in 27 different content- and student-age specific fields, as of late Fall 2003, the National Board has identified over 32,000 "board certified teachers." These relatively expensive teaching assessments, which cost \$2300 per teacher, push teachers to show that they know their content and how to teach it to diverse learners¹ and, in doing so, expands the role of teacher education and professional development and extends thinking about how teachers ought to be rewarded and utilized as leaders in school improvement.

Importantly, while the teaching profession has yet to create a uniform way to assess the knowledge and skill of the over 3 million teachers nationwide, the National Board tests are designed to assess the skills of experienced, accomplished practitioners, and, as a result, the Board's efforts have created the technological know-how and basic infrastructure to move the profession forward. NCLB, and its teacher assessment provisions, and potential federal funding, could be driving force to create a more comprehensive set of teacher assessments that measure more precisely what teachers know and how they teach it.

Central to recent federal efforts to improve teacher quality has been the direct challenge to the usefulness of teacher education programs themselves. Through both rhetoric and programs emphasizing short-cut, alternative routes into teaching, the Secretary and the U.S. Department of Education have been diminishing the importance of pre-service preparation. The Department of Education is now encouraging states to adopt a subject matter paper-and-pencil test in order to quickly get teachers "highly qualified" without any preparation in learning to teach. In particular, the Department is supporting, with a recent \$35 million grant, the development of a new teacher test being created by the American Board for Certification of Teacher Excellence (ABCTE). Although the focus of the ABCTE assessment is primarily on content knowledge, it may count as the sole requirement for licensure (ABCTE, 2003). At the end of 2003, two states—Pennsylvania and Idaho—had already passed policies that granted those passing the ABCTE test a provisional license.

¹ The National Board for Professional Teaching Standards is built upon five core propositions, including (1) Teachers are committed to students and their learning; (2) Teachers know the subjects they teach and how to teach those subjects to students; (3) Teachers are responsible for managing and monitoring student learning; (4) Teachers think systematically about their practice and learn from experience; (5) Teachers are members of learning communities.

In part, the development of ABCTE and its primary (if not sole) focus on content, stands in contrast to the National Board. Critics of the National Board have spoken to its assessments that bypass the judgments of principals and focus on teachers' use of professional knowledge and how to teach different children at the expense of knowing content. Much has been made of the National Board not having data that directly links teachers who are certified by then with gains in student achievement (Podgursky, 2001). However, all of this has changed of late — with the release of study, utilizing a sophisticated value-added model, showing that NBCTs (1) are more effective at raising student achievement than teachers who pursue, but fail to obtain, NBPTS certification; (2) are more effective at raising student achievement- outside of the year in which they apply- than teachers who do not pursue NBPTS certification; (3) have a greater impact with younger students; and (4) have a greater impact with low-income students (Goldhaber and Anthony, 2004).

Despite this recent report on the effects of NBCTs (certification in general) on student achievement, the federal focus on alternative routes into teaching has shined a spotlight on programs like Teach for America as a preferred way to “prepare” teachers and fill classrooms. The assumption is that teacher education just does not matter much in improving student learning, and therefore there is little reason to invest in it. To be sure, alternative programs range from graduate level teacher education programs to shorter term alternative certification programs that reduce the requirements for a state license to traditional emergency hiring practices— sometimes euphemistically called “alternatives”—that fill vacancies in any way possible. In these truncated programs, teacher candidates tend to get 4 to 6 weeks of basic training in classroom management, instruction on how to develop lessons plans, and a general introduction to the complex world of teaching. These are the programs Secretary Paige focuses on his reports and calls for action (U.S. Department of Education, 2003).

In the Fall of 2003, the U.S. Department of Education approved the creation of the Teacher Education Accrediting Council or TEAC — an alternative to NCATE and an organization through which colleges of education seek approval for their professional training. Unlike NCATE, whose results-oriented approval processes hinge on a common set of professional standards, TEAC only requires universities to develop what is called an "inquiry brief," which is described as a scholarly work that lays out the evidence supporting why a college deserves accreditation and, in doing so, “allow(ing) colleges to set their own professional standards” (Galley, 2003).

Interestingly, the NCLB professional development provisions focus on ensuring that teachers and administrators gain the both the content knowledge and the teaching skills to help students meet content and achievement standards. The law's provisions actually mirror the kinds of changes being advanced by the NCATE, NBPTS, and INTASC and its vision for a more fully developed teaching professionalism. For example, NCLB professional development provisions focus on ensuring that teachers have understandings of effective instructional strategies, use data and assessments to inform and instruct classroom practice, and know how to teach students with special needs and those who are second language learners. However, these teaching skills appear to be totally ignored by the federal definition of teacher qualification, the recent push to offer multiple forms of professional accreditation, and the kinds of alternative route programs being promoted by the federal government.

While NCLB is promoting a much needed, nationwide focus on teacher quality and equity, teachers and administrators (and eventually the public) may end up receiving mixed messages as to what needs to be done to improve teaching, and the capacity of schools to recruit and retain the teachers may be limited. This is why we undertook an in-depth investigation into the impact of the law's teacher quality provisions, focusing on schools that were most likely to face AYP sanctions and in the most need of recruiting and retaining "highly qualified" teachers.

In this chapter we will present initial findings on how specific states are defining "highly qualified" teachers as well as the key issues state and local officials are facing in implementing the NCLB "highly qualified" teacher mandates. Between October 2003 and February 2004, the Southeast Center undertook three-day site visits in 24 high needs schools (in 12 districts) in Alabama, Georgia, North Carolina, and Tennessee, where we interviewed a representative sample of teachers, principals, superintendents, and district-level administrators (focused on those in charge of human resources, Title I, and professional development programs). A group of stakeholders in each state helped us select sites that were on either on the federal "needs improvement" AYP list or had some lower performing rating from their respective state. We also wanted to study schools that had higher than state average teacher turnover rates. Because of the purpose of our policy research, and the nature of our design, most of the sites we visited were located in isolated rural areas. We also selected several urban school districts with serious teacher shortages, but also demonstrated will to recruit and retain teachers differently.

While we supplement our case study data with a range of other source materials (e.g., state and local documents, state-level teacher survey data, etc.), *our focus is on bringing a "ground-level" view of what it takes to ensure a "highly qualified" teacher for each student and what the law portends for the future of teaching in America.* We begin by summarizing how the four states are initially meeting the "highly qualified" teacher mandates and then how current alternative routes into teaching play into efforts to recruit and retain the teachers they need. We intend that these initial *lessons from the field* can be used to support the kinds of changes needed in America's teaching profession.

How States Are Meeting the HQT Mandates

The initial investigation in the four states found overstressed officials in understaffed state departments of education making hurried decisions about the definition of a "highly qualified" teacher. The new requirements went into effect for all new hires in Title I schools as of the beginning of the 2002-2003 school year, giving states a mere seven months after the passage of the law to establish and implement a working definition of a "highly qualified" teacher. State officials repeatedly noted the lack of guidance from the US Department of Education. In fact, very few states were able to meet the initial deadline: most states did not publish even their draft models for the highly qualified definition until the spring of 2003.

Under tight deadlines, officials have had to fit their often idiosyncratic and complex teacher licensing systems into the narrow HQT framework established by the U.S. Department of Education, without much opportunity to reflect on the effects of these decisions upon a decade of policies aimed at raising standards for new teachers. In our interviews we found consistently

across the four states that the HQT time frame had offered little opportunity for education leaders to consider how they might use the momentum of NCLB as a catalyst to build a standards-based teacher development system. For the most part, the four states we are investigating (as well as many other states, according to their web sites) have stuck closely to the minimum requirements of the federal government’s “highly qualified” guidelines.

In the initial reporting of the "highly qualified" numbers, each of the states reported wide variations of in percentage of those labeled as a HQT and the percentage of classes taught by them in high poverty schools (see Table 1). For example, Georgia claimed that 94 percent of its teachers were "highly qualified," while in Alabama and Tennessee, the percentages were 35 and 34 respectively. These variations were due in large part to the different states’ capabilities to track this kind of data and to provide different options for subject matter competency. For example, Tennessee’s numbers are based only on the state level testing records; districts there had only just begun to gather more detailed information on their teachers when the baseline numbers were required. In Alabama, the numbers reflect the fact that neither a subject matter test nor a HOUSSE standard were available to teachers at the time state reports were required).

Table 1: Highly Qualified Teacher Data as of December 2003

	Percent of classes taught by "highly qualified" teachers statewide	Percent of classes taught by "highly qualified" teachers in high-poverty schools
Alabama*	35	29
Georgia*	94	95
North Carolina**	83	78
Tennessee***	34	35

*Source: Education Week, 2003b

** Source: North Carolina Department of Public Instruction, 2003

***Source: Personal communication, Debbie Gilliam, 12/19/03

However, these "highly qualified" numbers are even more suspect given the varied issues we uncovered in our study. For example, we found states and districts struggling with matters related to data gathering and reporting as well as using teacher tests, coursework, and teacher evaluation systems to measure subject matter knowledge.

Data Gathering and Reporting. In our four states, documenting the status of teachers and assembling the data for the federally mandated report card has been difficult. For these states, most with antiquated data-collection systems, identifying and reporting on highly qualified teachers has been no simple task. For example, in Alabama, state and district officials have been hand counting "highly qualified" teachers. Local officials complete a checklist for identifying HQTs, and then state department employees (six of them) verify the checklists for the state’s 48,000 teachers. On one day in May 2003, a single department staffer had 1,500 teacher checklists waiting to be reviewed in addition to other responsibilities including processing certificates and renewals.

North Carolina is using its state-level database to match each teacher's tested area with his or her assigned area, then sending the names of all teachers who cannot be verified as highly qualified to district personnel, asking them to find a means of documenting highly qualified status for those teachers. Relying on districts—that have to send letters home to parents and face some sanctions based on the status of their teaching corps—to provide this kind of information, with little or no guidance, is likely to produce unreliable data across and within states. Although Tennessee has yet to decide upon a process to document HQT status, it will most likely be in a similar situation as North Carolina, relying on districts to provide information about teachers' qualifications. Georgia is perhaps the farthest along in this regard, using a new database that matches teachers' certification areas with the areas to which they are assigned, then notifying LEAs when teachers have possible deficiencies. Yet, teachers in Georgia reported that data inaccuracies and timing caused some panic among veteran teachers who were told prematurely that they might not be highly qualified.

As part of NCLB, states are also required to report on the percent of teachers receiving high quality professional development. At the time of writing, *none* of the four states studied by the Center had developed any concrete plans to accomplish this task. Professional development delivery and evaluation have always been issues left largely in the hands of districts, and while states can set standards for professional development, most currently have no methods to evaluate and monitor district-level activity or compliance. In many of the districts, building level principals were not even aware that high quality professional development is a requirement of the law. Several principals interviewed were confident that their teachers consistently participate in such professional development but had no idea how their districts were identifying which activities met the requirements or documenting which teachers were participating. District level administrators were only slightly more aware of this requirement, and, in most cases, districts were simply planning to use data from their current systems for documenting professional development for certification renewal, and had few plans yet to implement any greater degree of quality control.

Using Tests to Measure Content Knowledge. North Carolina, Georgia, and Tennessee all use the PRAXIS teacher tests, designed by the Education Testing Service, to measure the content knowledge of its teachers. However, Tennessee previously had no requirement that middle school teachers pass subject area tests for licensure and had to quickly adopt them. The tests are now offered but are optional and for highly qualified status only. Georgia and North Carolina have required subject tests (Praxis II) for licensure for several years now, thus new teachers will be automatically considered highly qualified (if they are teaching in field). Alabama, due to serious teacher testing problems and ensuing litigation, has not had a state-mandated test.²

In early 2003, only 34 states required teaching candidates to pass a test in at least one academic content area prior to licensure (Olsen, 2003). Across the nation, current teacher testing for licensure purposes is a patchwork of efforts, with over 600 exams in use. In Table 2 below, the variation in tests used in Georgia, North Carolina, and Tennessee and their respective required passing scores are shown. As a variation of a few points has significant effects on the

² While an agreement was finally reached with ETS to begin administering the Praxis II in January 2004, the state has asked for a waiver on the parental notification requirement related to "highly qualified" teachers (Meyer, 2003).

proportion of teachers passing, and therefore highly qualified status, the consistency of what it means to be highly qualified across states is compromised.

Table 2: Required Praxis Tests and Passing Scores by State (sample math and special education)

	Elementary Content		Math Content		Special Education	
	Test	Pass Score	Test	Pass Score	Test	Pass Score
GA	EE: Content Exercise	137	Mathematics: Content Knowledge	136	Special Education: Knowledge-Based Core Principles	152
	EE: Curriculum, Instruction and Assessment	154	Mathematics: Proofs, Models, and Problems, Part 1	159		
NC	EE: Content Exercise	Combined score of 313	Mathematics: Content Knowledge	Combined score of 281	Special Education: Knowledge-Based Core Principles	143
	EE: Curriculum, Instruction and Assessment		Mathematics Pedagogy			
TN	EE: Content Knowledge	140	Mathematics: Content Knowledge	136	Education of Exceptional Students: Core Content Knowledge	Test required, no passing score set
	EE: Curriculum, Instruction and Assessment	159	Mathematics Pedagogy	125		
AL	None required		None required		None required	

Source: Educational Testing Service, 2003 <http://www.ets.org/praxis/prxstate.html>

All of the current teacher tests being used to measure "highly qualified" teachers are relatively inexpensive to take. For example, the current PRAXIS II costs about \$70-80, which is far below the expense of taking a licensure exam in other professions, like in engineering where a series of initial licensure tests will cost well over \$1000 (National Council of Examiners for Engineering and Surveying, 2004). According to a recent National Academy of Sciences (NAS) report, even more well-developed tests are not designed to test all of the competencies relevant to beginning practice (Mitchell, Robinson, Plake, & Knowles, 2001). Furthermore, states use a variety of unclear methods to set their passing scores on the teacher tests, most of which are below the 25th percentile of national test-takers. Because these tests are designed only to assess the minimal knowledge needed to teach (as other professional licensure exams are designed), none can distinguish minimally qualified from highly qualified teachers.

However, it is important to note that North Carolina — a state that has been implementing more rigorous teacher standards of late — has taken steps to lower standards around teachers' content knowledge. For example, the State Board of Education recently made a “change in certification policy (that will supposedly) align North Carolina teacher certification requirements with the requirements of NCLB and will allow middle school and high school teachers to be designated ‘highly qualified’ *without* having to take (the PRAXIS II) test” (NC DPI, 2004).

Using Coursework to Measure Content Knowledge. Another option for teachers at the middle/secondary level to be considered highly qualified is to complete an academic major, advanced degree, or equivalent coursework in each subject area they teach. The states involved in the study, however, have had no statewide standard for what counts as an academic major, leaving the determination to institutions of higher education and making it difficult to create a common statewide standard. This is not an insignificant matter, and the federal guidance on this issue is unclear, opening the door to wide interpretations and further problems with using the data to understand the extent of a state's teacher quality problems or progress.

Alabama's solution is to use the average of the required number of hours at each of its 29 bachelor's degree-granting institutions as the standard. For middle/secondary teachers, this equivalent is 32 total hours with at least 19 of them in upper division courses. Alabama's highly qualified teacher model also allows elementary teachers to demonstrate subject matter competency through the equivalent of an academic major (which is supposed to be prohibited under NCLB), defined as 12 hours each of reading, math, science and social studies (Alabama State Board of Education, 2003b). North Carolina and Tennessee have both set the equivalent for an academic major at 24 hours, while Georgia's is 21 hours of upper division courses (North Carolina State Board of Education, 2003; Tennessee State Board of Education, 2003).

To complicate matters further, states are redefining their licensing and endorsements within the core subjects specified in NCLB, in some cases moving from specific subfields such as chemistry, physics, etc. to broad fields like science to ensure a greater number of highly qualified teachers. In Tennessee, for example, a major in one subfield, with at least nine hours in another of the fields, allows a teacher to be considered highly qualified for both. Therefore, a history major (24 hours) with only nine hours in geography can be considered highly qualified in both subjects (Tennessee State Board of Education, 2003). The situation is similar in Alabama, where a teacher certified in general social science who holds an academic major or the equivalent in political science and has earned just one credit in history will be deemed highly qualified in both. The same holds true for a teacher with a general science degree, where one course in biology may allow one to be deemed highly qualified to teach that subject. These state responses to the HQT mandates, apparently approved by the federal government, may end up countermanding efforts to eliminate out of field teaching.

A similar problem emerges with upper level elementary and sixth grade teachers. Federal guidance on this issue has been unclear. In one state studied, an eighth grade science teacher in a 6-8 middle school could have to demonstrate science competency, while an eighth grade science teacher in a K-8 elementary school (as designated by the state), must pass a test in the basic

elementary curriculum. What this means more than anything is that a "highly qualified" teacher in one school may not be a "highly qualified" one in another one — even within the same state.

Fortunately, we have found some states that seem to be attempting to comply with the spirit of the law here, erring on the side of caution and requiring more, not less, content knowledge in the upper elementary grades and middle school. Georgia is perhaps the best example of this positive outcome of the law. In Georgia, teachers with early childhood certification (P-5) teaching in a departmentalized setting in grades 4-5 must have an endorsement in the subjects they teach in order to be considered highly qualified (Georgia Professional Standards Commission, 2003). Furthermore, Georgia set in place requirements that all middle school teachers, many of whom formerly had a “generalist” certificate, to earn an endorsement in each subject they teach in order to be highly qualified, and the certification process is changing because of this. We heard several local administrators and teachers tell us that one of the benefits of this legislation is that it requires principals to look more closely at who is being hired and where they are placed and is helping to close some of the loopholes, like out-of-field teaching, that have plagued schools in the past.

However, facing new teacher shortages of late, the Georgia Professional Standards Commission voted 11-2 in February 2004 to adopt new certification rules that will soon allow candidates to get teaching certificates on the basis of solely passing the state’s teachers tests and earning a college major in a field “closely related” to the subjects they want to teach. (Under the new rules, candidates must pass Praxis basic skills, subject matter, and principles of teaching and learning tests. They must also already have a job offer from a district. Once in the classroom on a full five-year, nonrenewable license, the district must provide the teacher with a mentor. After five years, the teachers with this new certification will need a district recommendation for a renewable license.) In essence, the state’s standards board has lowered the bar for entering the profession — a bar that had set higher in the previous year.

Using Teacher Evaluation to Measure Content Knowledge. The states have considerable discretion in developing and using a High Objective Uniform State System of Evaluation (HOUSSE) to determine a veteran teacher’s content competency and highly qualified status. The HOUSSE standard must meet six criteria specified by the U.S. Department of Education in its non-regulatory guidance and can take into account, but not be based solely on, years of teaching experience. As such, the four states are in the process of employing some type of evaluation based on demonstration of competence through a combination of years of experience, college coursework, professional development, services to the profession, awards and publications, etc. In late Fall 2003, state officials approved this type of model, where veteran teachers get a certain number of points for different types of professional activities. However, there is some significant variation in the ways that states are implementing these HOUSSE systems. For example, Georgia and Tennessee both allow for a maze of professional development and leadership activities in the content area to count toward the 100-point requirement in their HOUSSE systems. Georgia has a 7-year limit on activities that can count, while Tennessee has a 10-year limit. Alabama has no such limit.

The states give different weight to different professional activities as well. Whereas teachers in Tennessee can earn five points for each year of teaching in the content area, for a

maximum of 40 points, Alabama teachers can only earn two for a maximum of 40. Thus a Tennessee teacher can have only eight years' experience to earn 40 points, while an Alabama teacher must have 20 years. Tennessee is also planning to add a content-specific piece to its teacher assessment system, the Framework for Evaluation and Professional Growth. The state will also allow teachers to volunteer their teacher effectiveness scores from the Tennessee Value Added Assessment System to prove their competence. During school visits in Tennessee, researchers found an example of a 7th grade math teacher, whose students' value-added assessments indicate that she is consistently generating two-plus years worth of academic growth. Yet, because she does not have a content major, she is not "highly qualified." Although the test scores are now part of the HOUSSSE standard, the system was yet to be put in place. Hypothetically, the principal should have sent a letter home to parents letting them know that this accomplished teacher was not "highly qualified."

Two of the states studied—North Carolina and Georgia—have done a great deal over the last several years to forge new joint teacher education-arts and sciences curriculum development. These states have attempted to redefine the content that teachers need to meet the K-12 standards, what the entire university, not just the education school, needs to do. However, the states' "highly qualified" teacher designations seem to ignore those efforts to create a new way of conceiving and measuring content knowledge.

At the same time, while each of these states has developed standardized teacher evaluation systems, the actual outcomes of these systems depend on technical design issues (e.g., methods, instrumentation, and sources of evidence, training and expertise of evaluators), as well as organizational ones (e.g., time, resources, leadership). In our discussions, we heard few teachers and administrators mention the utility of their respective teacher evaluation systems, especially around measuring content knowledge. Thus, it should not be surprising that in a July 2003 report to Congress, the Government Accounting Office (GAO) recommended that "the Secretary of Education provide more information to states in order to evaluate subject area knowledge of current teachers" (United States General Accounting Office, 2003). Yet, even these district and state systems were preferred by school personnel to something developed at the federal level and applied uniformly to all schools across the country.

Indeed, initial findings from our case studies yielded a consistent message from the administrators and teachers we interviewed: the definition of and the current means to identify "highly qualified" teachers do not meet their needs. In particular, we heard that the federal government approach to alternative routes into teaching will not begin to address their demand for truly effective teachers. We address this issue more fully next.

Alternative Routes and the Capacity to Recruit and Retain "Highly Qualified" Teachers

As previously noted, non-regulatory guidance promulgated by the U.S. Department of Education allows individuals participating in an alternate route program, with just a few weeks of training, to be deemed highly qualified as long as these "teachers" are making satisfactory progress toward full certification as prescribed by the state. The initial federal guidance does state that teachers in alternate routes must receive "high-quality professional development that is sustained, intensive and classroom focused," participate in a "program of intensive supervision

that consists of structured guidance and regular ongoing support for teachers or a teacher mentoring program,” and be the teacher of record for no longer than three years” (US DOE, 2002, p. 12).

The federal emphasis on teacher learning after one begins teaching begs the question of the status of new teacher induction programs. Administrators, in the districts we studied, lamented the lack of qualified teachers available, the limited production of new teacher education graduates, and how of late they have been relying more and more on alternative route teachers. However, what we found was a striking lack of capacity to prepare and support teachers who had been entering the profession through alternative routes. We heard from administrators and teachers about the specific skills these teachers did not possess (e.g. classroom management, basic grading practices, knowledge of how to use student assessment data) as well as their own inability to induct them effectively. Indeed, this latter finding turned our attention to the extent to which the four states had established new teacher induction programs.

Drawing upon the 1999-00 School and Staffing Survey data, there was a wide range—between 43 to 75 percent—of new teachers, who reported that they had actually participated in some kind of new teacher induction program in the four states studied (see Table 3).

Table 3: New Teacher* Participation in Induction Programs

State	Participation in induction program
Alabama	43.7%
Georgia	55.0
North Carolina	74.6
Tennessee	48.4
National	59.9

Source: Southeast Center for Teaching Quality, 2003

*Teachers with 5 years or less experience reporting

While these data are from 1999-00, our tracking of induction policies in the region suggests that these trends have not changed much. Tennessee has a state board policy that requires an induction program for its beginning teachers and a long-standing requirement that beginning teachers will receive mentor support from *two* mentors, at least one of whom must be of a similar teaching assignment. However, since this mandate has never been funded, district compliance has varied greatly throughout the state. There is no statewide teacher induction program in Georgia, but the Professional Teaching Standards Commission is developing standards for induction programs and mentor certification in Georgia. The State Department of Education has developed a mentor teacher program for new teachers and has launched a mentor certification program (Teacher Support Specialist Certificate) with standardized training offered by the regional education service associations across the state, districts, and universities. Alabama does not have a formal induction program, either, but the University of Alabama Birmingham has developed for district use an induction and mentoring manual, which offers guidance on the mentoring relationship, curriculum, and management and organization issues, as well as how to improve instruction and assessment through cognitive coaching. Also, the state's

Title II Teacher Quality Enhancement grant funded a series of induction pilots in which beginning teachers participated in training modules tied to the state’s teacher evaluation instrument. The state, however, has no funds to further develop the pilots. North Carolina’s performance-based licensure program requires that all Initially Licensed Teachers (ILTs) be assigned a trained mentor for the first two years. Selection of these mentors is a local decision, but mentors are required to have career status, be successful teachers, have a commitment to mentoring, and agree to twenty-four hours of mentor training, using one of the many training programs available in the state. The state also requires each local district to provide an orientation for new teachers and pay for three days of release time.

The federal guidance on alternative route programs suggests that new teachers can learn on the job with support from mentors. However, as Table 4 reveals, our states have yet to uniformly figure out how to ensure that novices actually have access to their mentors and that mentors teach in the same subject as their novices. These data also suggest that current mentoring may not be all that helpful.

Table 4: New Teachers and Mentors: Access, Subject-Specific, Helpful?

State	Worked closely with mentor	Mentor in same subject	Mentor helped to a great extent
Alabama	60%	84%	49%
Georgia	58	76	36
North Carolina	84	64	48
Tennessee	51	73	45
National	63	75	36

Source: Southeast Center for Teaching Quality, 2002

(New teachers of 5 years or less reporting, and only those who had participated in an induction program)

While North Carolina seems to fare better in terms of access and Alabama helpfulness, one must remember that only 44% of Alabama’s new teachers report that they participated in an induction program. No more than 49 percent of new teachers in our four states reported that their mentor helped them to a great extent. Without a mentoring structure in place, there is no way that schools and districts can begin to address the “quality” standard posed by USDOE in their press for more alternative certification programs whereby the sole training new teachers receive will be in the context of the induction and mentoring programs. The loose state structures and inadequate or non-existent new teacher induction funding have severely limited local administrators from creating the kinds of programs they need.

In fact, our school visits in several states revealed clearly that the mentoring function is virtually non-existent for the teachers participating in alternative certification programs as part of their designation as "highly qualified." Some of the programs examined in the Center’s initial analysis have no professional development or mentoring requirements at all. For example, the Alternative Type E license in Tennessee, which allows individuals to switch to a teaching career as long as they have either a subject major or a passing score on the appropriate Praxis II exam, but does not require that these candidates participate either in intensive professional development or in a mentoring program. None of the alternative routes in Alabama detail any type of pre-

service professional development requirement or mentoring. State officials informed us that they rely on districts to provide mentoring support for new teachers, including those entering now through the alternative certification route, and have little means to monitor the quality of the district efforts. In one rural middle school we visited, 61 percent of the school's faculty reported entering the classroom on a "lateral entry" license, meaning that they had no preparation for teaching. This means the school has few experienced, prepared teachers needed to serve as mentors for the revolving door of new teachers who enter the school annually. Indeed, these "lateral entry" and other alternative route teachers are not seen as being "highly qualified" in minds of administrators and teachers.

Uniformly across the hundreds of educators we interviewed in the course of our case studies, teachers, principals, and superintendents repeatedly lamented the focus of the NCLB "highly qualified" teacher definition — with its over-emphasis on content knowledge and its virtual neglect of the major elements in the equation for "highly qualified" teachers and effective teaching. We heard repeatedly and loudly that for teachers to be successful in the schools we visited — all under-performing in some ways — they needed to possess more than just content knowledge. As one HR director from an Alabama school district noted:

I've been in this business for 38 years, and to be honest I have never seen a teacher get into difficulty because they didn't have the content. It has always been they didn't have the mastery of teaching strategies, management and those kinds of skills that you hopefully learn in a teacher education program.

Our interviewees generated extensive lists of the complex skills that teachers must possess to be successful in a real classroom setting. We consistently heard that teachers need knowledge of how to *communicate content-related concepts to a classroom full of diverse learners and that this was not easy to learn on the job*. One teacher sized it up this way:

I know people that are brilliant when it comes to being able to perform certain math equations that I'll never be able to perform. But ask me if they know how to get that across to their kids in the classroom and they have not a clue.

We heard repeatedly that a truly highly qualified teacher is one who can reach students where they are, regardless of their level, and move them forward. Other "highly qualified" teacher criteria mentioned by both administrators and teachers included knowledge of child development and how to use student assessment data to analyze, reflect upon, and revise instruction on a daily basis. Administrators informed us that new teacher education graduates are being better prepared than ever before, and, in fact, states like North Carolina and Georgia have taken a number of steps over the last decade to improve their teacher education programs. However, in a number of schools we visited, especially in the most isolated, rural areas, these new graduates are insufficient in numbers or are unwilling to entertain offers from them.

While administrator opinions were mixed about the effectiveness of the alternatively prepared teachers in the schools we visited, the general conclusion was that the minimal preparation provided to most alternate route teachers leaves them totally unprepared for the classroom and demands they face from the students, much less "highly qualified." A district

administrator in Alabama declared, “9 out of 10 of people we have hired on alternative BAs are dismal failures. We hired one person with a great science background, but he had not ever had the first education class. He had no clue. That was disastrous for those students, not to mention the wear and tear on all of us.” A special education teacher who went through the Georgia Teacher Alternative Preparation Program told us:

I wouldn't consider myself highly qualified. On my first day, I really felt like I didn't know what I was doing. We went through a two-week training and were put in a classroom. Two weeks is not enough to prepare you. And thank God I did inclusion and wasn't thrown into a setting completely by myself, but some teachers were and I'm glad I wasn't one of them.

When we heard positive comments about alternative route teachers, we found that, for the most part, these teachers already had significant experience in classroom settings as paraprofessionals or substitutes.

Indeed, in spite of the “new” Title I and II dollars for states and districts to improve teacher quality, we found that the under-performing schools we visited uniformly did not have the capacity to recruit and retain teachers in high shortage areas. One rural superintendent told us:

There is an extreme shortage of math and science teachers. I'll use math as an example, this year we hired two math teachers, but they had just been released by another school system. I think they were both “highly qualified” (according to the letter of the law.) In both cases they were virtually the only candidates. We hire and keep them for 2 to 3 years and then don't renew them. So we are passing around teachers who are not very competent.

To be sure, very few teachers or principals were aware that their districts had “new” federal money that could be used for teacher quality, and very few district personnel knew that their states had funds to support a larger set of strategies. However, what we found was that extreme state budget cuts from the last several years (e.g., in 2003, the budget shortfalls were \$2 billion in North Carolina and \$1.3 billion in Georgia) had virtually forced states to use their teacher quality dollars to supplement basic funding. Indeed, a recent report to Congress by the General Accounting Office revealed that most states are planning to use Title II funds to continue already existing programs and activities (United States General Accounting Office, 2003) and not implement more innovative ones that could include lower class sizes and student loads for teachers in hard-to-staff schools and the utilization of National Board Certified Teachers in leading school improvement efforts and the like.

In our initial visits, we found that the technical assistance states are providing to districts varies widely both in quality and quantity, and, again, fiscal constraints make it difficult for many states to provide the necessary guidance to help districts think differently about the use of federal monies. Most state officials have been so focused on the AYP mandates and requirements that very little guidance has been offered to local officials. In fact, we found many principals and teachers in our case site schools who had heard very little of both the mandates

and opportunities afforded by the NCLB "highly qualified" provisions. If they did, they saw little hope that these provisions would create more capacity to recruit and retain the teachers they need. While the law has potential to build improve teacher quality, groups like the Education Trust (2003) have already noted that certain actions and inactions the federal government are limiting the search for truly "highly qualified" teachers. We would argue that these actions and inactions also have grave implications for the progress that has been made in the creation of a true teaching profession in America.

The Search for "Highly Qualified" Teachers and the Teaching Profession

While consensus is growing that teachers are the strongest determinant of student achievement, there is still not much more than ephemeral agreement on what teaching quality is and how every student might access a quality teacher. In large measure, much of the debate is ideological in nature and centers on whether or not teaching is a straightforward task that most reasonably smart individuals can do or a more sophisticated, complex one, requiring greater degrees of preparation, support, and professionalization (Cochran-Smith and Fries, 2001). Indeed, over the last several years the political debate between those who are advocating deregulation of teaching (Fordham Foundation, 1999) and those who are pushing for greater teacher professionalism (Darling-Hammond, 1997) has escalated (Archer, 2002). As we have already noted, the rhetoric and actions of the U.S. Department of Education have clearly favored the former and not the latter.

To be sure, teaching has long been noted as a *semi-profession* due to its ill-defined body of knowledge, truncated training and unenforced standards, and limited teacher autonomy (Etzioni, 1969), and many improvements in preparation, assessment, and compensation still need to be made in order for teaching to more fully professionalized. While teaching is developing a body of knowledge, in part through the recent creation of the National Board for Professional Teaching Standards, this knowledge base is still too limited and the means for spreading it are ill-defined and ephemeral. Although the federal government has positioned itself to make a visible commitment to improving teacher quality, we have surfaced several issues that need to be addressed if NCLB will actually improve the profession.

First, in our case studies, we found that the current federal implementation strategy leaves school administrators scrambling to have teachers pass multiple-choice content tests that do little to probe a teacher's ability to teach the content to a diverse student population. Similarly, many teachers are having to take additional university-based content courses that may not address teaching strategies that have been shown to improve learning in schools with diverse student populations.

Despite the rhetoric from the U.S. Department of Education, the research literature—taken as a whole—sends strong signals to policymakers and practitioners that teachers need to know their content *and* how to teach. The demands of today's public schools clearly require all teachers to know a great deal about how humans learn and how to manage the complexity of the learning process (Bransford, et.al. 1999). Today, this means knowing how to manage classrooms, develop standards-based lessons, assess student work (and grade papers and tests fairly and

appropriately), and work with growing numbers of special needs and second-language learners (McDonnell and Hill, 1993; McLaughlin, 1995; Yasin, 2000).

For example, in the four states, we found educators that need more knowledge of and support in working with increasingly diverse (especially second language) learners. In North Carolina, over 46 percent of the state’s teachers are estimated to be teaching students whose primary language is not English, but only 6 percent of the teachers have had a modest 8 hours or more in “learning to teach” second language learners (See Table 5).

Table 5: Percent of teachers who taught Limited English Proficient students and percent with training, 1999-00

State	Taught	Trained*
Alabama	19.8%	2.4%
Georgia	35.2	6.2
North Carolina	46.6	5.5
Tennessee	22.3	1.4
U.S.	41.2	12.5

Source: Southeast Center for Teaching Quality, 2003

*Teachers teaching LEP students who had 8 or more hours of training in the last 3 years on how to teach LEP students

The federal government’s focus on using limited paper-and-pencil tests to measure teacher knowledge will do little to spread the kind of knowledge needed to teach second language learners as well as address other critical teacher knowledge areas such as literacy (American Federation of Teachers, 1999; National Reading Council, 1998). The federal government is investing in the ABCTE examination, which, if adopted by states, promises to create a more unified approach to teacher testing across states. However, the focus of the ABCTE exam, much like the current tests in use, will again be on content knowledge and could actually limit the spread of the growing teacher knowledge base on how to work with our nation’s most disadvantaged learners — who are supposed to be focus of the law’s intent.

Currently, only seven states nationwide assess teaching performance of any kind, and only four require a portfolio or other authentic measure of performance (Education Week, 2003a). Performance assessments, like the more expensive one used in Connecticut, can test for how well teachers apply knowledge and make appropriate decisions as well as work with diverse learners in more authentic ways. North Carolina launched a similar new teacher assessment model in the late 1990s, but, due to its poor implementation (lack of training and mentors to support novices), it was quickly abandoned (Berry, Hopkins, and Hoke, 2002). None of the other three states we studied had any plans to expand its teacher assessments; they were struggling financially and technically on how to just meet the letter of the NCLB law.

Second, the federal approach to calling a teacher "highly qualified" if he/she passes one of these rather singularly-minded exams or completes an alternative preparation program while already teaching students is worthy of George Orwell’s concept of “doublespeak” in 1984 where *highly qualified* actually means, at best, *minimally qualified*. We have already seen from state to state widely reported percentages of teachers who are "highly qualified." These numbers are

surfaced in newspapers and used in policy deliberation and public conversations about the quality of schools and teachers. We are concerned that educators and the range of stakeholders that need to know the “real facts” will not get them.

The lack of guidance from the federal government, and its bias against ensuring that teachers have sufficient teaching knowledge before they begin teaching, has allowed states to find all kinds of ways to game the system of identifying "highly qualified" teachers. In some cases, states are able to get away with not requiring a tests of content (and content-specific pedagogy as measured by the PRAXIS), like in North Carolina. In other cases, like in Georgia, states are able to bypass any form of preparation whatsoever.

The heart of a profession is not just what a practitioner knows and how that knowledge is applied, but also in how the public can come to trust that the profession is actually enforcing the standards that it sets for itself. With varied definitions of what constitutes a "highly qualified" teacher, and loose use of the label itself, the policy makers, practitioners, and the public are bound to be confused. Indeed, we have already found administrators baffled over how to explain to parents that a 20-year award-winning, National Board Certified teacher who leads the a school's reading program, is not labeled "highly qualified," but a 22-year old Teach for America novice with no pedagogical knowledge at all is.

Part of the problem is definitional, but the fact is that the states, districts, and schools we are studying have very little capacity to collect and report on the kind of teacher quality data the policy makers, practitioners, and the public need and deserve. In some states like Alabama, teacher quality numbers are derived from the examination of individual academic transcripts — which still cannot surface what teachers really need to know and do in order to truly be "highly qualified." We found understaffed state agencies and school systems struggling to deal with the "highly qualified" teacher mandates, often hindered by limited technological capacity to generate relevant numbers in timely way. None of the states had collected any useful data on high quality professional development — a major component of the law — primarily because states do not have the time, the money, or the knowledge of how to do so. The federal government has placed very little, if any, emphasis on helping state and local agencies build their teacher quality data infrastructures that in turn could yield valid and reliable data needed to identify "highly qualified" teachers and develop a stronger teacher profession.

The other part of the problem is political will. Too many stakeholders are not willing to argue for changes in teacher education and teacher testing that may require new dollars or a reallocation of the ones already in play. Politicians, looking for a short-term fix, are apt to go for the solutions that can fill a classroom with at least a warm body, and use the right rhetoric to sell the public that the teachers who are in the classroom are "highly qualified" by any means necessary.

Finally, the hallmark of a profession also includes the provision that practitioners have developed a body of specialized knowledge and have accumulated and transmitted it through professional education, most importantly through *clinical and mentored practice*. Indeed, NCLB places a premium on teachers learning through the support of induction programs and mentoring that novices receive from expert veterans. At the same time, “a distinguishing characteristic of a

profession is that it clearly distinguishes between novices, who must be supervised, and full members of the profession” (Wise, Darling-Hammond, Berry, and Klein, 1987, p. 16.)

A recent analysis by Smith and Ingersoll (2003) revealed that if new teachers had “helpful mentors,” the chance of their leaving teaching after their first year was greatly diminished. Common planning time and collaboration with other teachers were also strong predictors of novices staying in the school and profession. New teachers need a great deal of support in understanding how to implement curriculum, teach and assess standards-based lessons, address specific student needs, and learn from expert peers who are teaching in their subject areas (Feiman-Nemser, 2003). However, in our school visits, we found very few new teachers who had access to such “high-end” learning opportunities (common planning time, access to helpful mentors, etc.) in their induction programs. In fact, we found little focus on this important dimension of implementing the law and building a profession. Local administrators who we interviewed again did not have the technical know-how or the resources to put together the kinds of programs they needed. Some of the sites we visited were in isolated rural areas, and thus had no nearby universities that could assist them in building stronger partnerships. Further, we found no funding mechanism or governing structure that could facilitate such school-university partnerships in building more robust new teacher induction and mentoring programs.

However, sound induction programs that raise retention rates will provide novices: (1) opportunities to observe and analyze good teaching in real situations; (2) guidance and assessment by highly trained, content-specific mentors; (3) reduced workloads to provide more learning time; and (4) assistance in meeting licensure standards through performance-based assessments. High quality induction programs range from \$2000-\$7000 per teacher per year, depending how well state and district funding and other professional development programs are aligned (Berry, Hopkins-Thompson, and Hoke, 2002).³

A recent study found that, within the first three years of teaching, the attrition rate for new teachers who had participated in an induction program was only 15 percent, compared with 26 percent for teachers who had not received any induction support. The difference in the two figures represents thousands of teachers and millions of (wasted) dollars invested in teacher recruitment and preparation. A Texas study found that the state’s annual 15.5 percent teacher turnover rate (40 percent for new teachers within their first three years) costs the state a minimum of \$330 million per year (Berry, Hopkins-Thompson, and Hoke, 2002). Data like these should get the attention of policymakers, and the NCLB “highly qualified” teacher provisions could be a catalyst for action. However, based upon our initial work in these four states, we found little, if any, evidence to suggest that the limited kind of teacher quality data

³ Connecticut’s Beginning Educator Support and Training (BEST) program comes closest to fitting this bill. BEST has made the most progress in the nation in connecting assessment and support components through a well-institutionalized, performance-based licensing (PBL) system. There, the traditional “teaching observation” process has been supplemented with an ambitious subject-specific portfolio system framed by an elaborate support structure that includes content-specific seminars and highly trained mentors. These new teacher induction structures not only provide a means to better prepare new teachers on-the-job, but also a means to more precisely identify them as “qualified” teachers. We found no such mechanisms in our four states, and no evidence that any of the available Title I and II funding could or would be used for such purposes. The lack of such support programs for novices was clearly one of several Achilles heels of the states’ and districts’ efforts use alternative routes as a means to attracting and placing “highly qualified” teachers.

being generated for NCLB will propel much positive political action to create and sustain high quality induction programs.

In closing, we would suggest that under the present conditions, NCLB will not be the impetus needed to improve the teaching profession. While the profession-building work of NCATE and NBPTS has been substantial of late, the law's provisions and the Department's implementation strategy appear to be undermining those efforts, and the result will not be the kinds of teachers needed in our hard-to-staff schools. In the four states of Alabama, Georgia, North Carolina, and Tennessee, recent state policies in the area of teacher recruitment, education, induction appears to be having a limited effect on the needs of schools who have the most difficult time recruiting and retaining teachers. From the perspective of educators we interviewed, the search for "highly qualified" teachers extends well beyond the federal definition and the means to find them appear to be outside their grasp. The rhetoric surrounding the teacher quality debates virtually falls on the deaf ears of teachers and administrators who struggle to meet the letter the law — without adequate information, resources, and the tools to ensure a caring, competent, and qualified teacher for each child.

References

- Alabama State Board of Education. (2003, June 26). *The Alabama Model For Identifying Highly Qualified Teachers*. Retrieved August 14, 2003, from ftp://ftp.alsde.edu/documents/66/SBE_Alabama_Model_for_Highly_Qualified_Teachers.pdf
- American Board for Certification of Teacher Excellence. (2003). *Passport to Teaching Certification*. Retrieved August 06, 2003, from <http://www.abcte.org/passport.html>
- American Federation of Teachers (1999). *Teaching Reading Is Rocket Science: What Expert Teachers of Reading Should Know and Be Able To Do*. Author: Washington, DC.
- Archer, J. (2002). Research: Focusing in on Teachers. *Education Week*, pp. 36-39.
- Amrein, A.L. & Berliner, D.C. (2002, March 28). High-stakes testing, uncertainty, and student learning *Education Policy Analysis Archives*, 10(18). Retrieved [date] from <http://epaa.asu.edu/epaa/v10n18/>.
- Berry, B., Hopkins-Thompson, P., & Hoke, M. (2002, December). *Assessing and supporting new teachers: Lessons from the Southeast*. Chapel Hill, NC: Southeast Center for Teaching Quality.
- Berry, B., Buxton, J.B., Darling-Hammond, L., & Hirsch E. (2001). *Cross-state analysis of NCTAF partner state Status of Teaching Reports 1997-1999*. Chapel Hill, NC: Southeast Center for Teaching Quality.

- Bransford, J. D., A. L. Brown, and R. R. Cocking, eds. 1999. *How people learn: Brain, mind, experience and school*. Washington, D.C.: National Academy Press.
- Cochran-Smith, M. and Fries, M. K. (2001). Sticks, stones, and Ideology: The discourse of reform In teacher education. *Educational Researcher*, 30 (8), 3-15
- Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching*. New York, NY: National Commission on Teaching and America's Future.
- Darling-Hammond, L. and Sykes, G. (Eds.). (1999). *The Heart of the Matter: Teaching as a Learning Profession*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2000). Teacher Quality and Student Achievement: A Review of State Policy Evidence. *Educational Policy Analysis Archives*, 8(1).
- Darling-Hammond, L., & Youngs, P. (2002). Defining "Highly Qualified Teachers:" What does "Scientifically-Based Research" Tell Us? *Education Researcher*, 31(9), 13–25.
- Darling-Hammond, L. and Sykes., G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge? *Education Policy Analysis Archives*, 11(33).
- Education Week. (2003). *Quality Counts 2003: If I Can't Learn From You*. Washington, DC: Author.
- Education Week. (2003a, October 29). *Tracking Teacher Quality*. Retrieved December 22, 2003, from <http://www.edweek.org/ew/ewstory.cfm?slug=09Qualified-b1.h23>
- Educational Testing Service. (2003). *State Requirements*. Retrieved December 22, 2003, from <http://www.ets.org/praxis/prxstate.html>
- Education Trust (2003). In Need of Improvement. Ten Ways the U.S. Department of Education Has Failed to Live Up to Its Teacher Quality Commitments. Washington, DC: Author.
- Etzioni, A. (1969). *The Semi-Professions And Their Organization: Teachers, Nurses, Social Workers*. New York, London: The Free Press.
- Feiman-Nemser, S. (2003). What new teachers need to learn. *Educational Leadership*, 60(8), 25-29.
- Ferguson, R. F. (1991, Summer). Paying for public education: New evidence on how and why money matters. *Harvard Journal on Legislation*, 28(2), 465-498.

- Fordham Foundation (1999). *The Teachers we want and how to get more of them.: A Manifesto*. Washington, DC: Author.
- Galley, M. (2003). Alternative Accrediting Body Gets Recognition. *Education Week*. October 8.
- Georgia Professional Standards Commission. (2003, September). *Draft Georgia implementation guidelines: Criteria for highly qualified teachers*. Retrieved December 22, 2003, from <http://www.gapsc.com/nclb/Admin/Files/ImpPolicy.pdf>
- Goldhaber, D. D., & Brewer, D. (1996). Evaluating the Effect of Teacher Degree Level on Educational Performance. In W. J. Fowler (Ed.), *Developments in School Finance, 1996*. Washington, DC: The Thomas B. Fordham Foundation.
- Goldhaber, D., and Anthony, E. (2004). *Can Teacher Quality Be Effectively Assessed?* Seattle: Center for Reinventing Education.
http://www.crpe.org/workingpapers/pdf/NBPTSquality_report.pdf
- Goldrick, L. (2002). *Improving Teacher Evaluation to Improve Teaching Quality*. Washington, DC: National Governors Association, Center for Best Practices.
- Hanushek, E. A. 1992. "The trade-off between child quantity and quality." *Journal of Political Economy* 100(1): 84–117.
- Hanushek, E. A. (1996). *School resources and achievement in Maryland*. Baltimore, MD: Maryland State Department of Education.
- Haycock, K. (1998). Good Teaching Matters: How Well-Qualified Teachers can Close the Gap. *The Educationa Trust, Thinking K-16*, 3(2), 1-14.
- Henry, G.T. & Opfer, D. (2004). *Responses to High Stakes Accountability in the South: Final Report to the Spencer Foundation*. Atlanta: Andrew Young School of Policy Studies, Georgia State University.
- King Rice, J. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, D.C.: Economic Policy Institute.
- McDonnell, L.M., & Hill, P.T. (1993). *Newcomers in American schools: Meeting the educational needs of immigrant youth*. Santa Monica, Ca: RAND.
- McLaughlin, B. (1995). *Fostering Second Language Development In Young Children: Principles And Practices*. National Center For Research On Cultural Diversity and Second Language Learning.
- Mitchell, K. J., Robinson, D. Z., Plake, B. S., & Knowles, K. T. (Eds.). (2001). *Testing Teacher Candidates: The Role of Licensure Tests in Improving Teacher Quality*. Washington, DC: National Academy Press.

- National Council of Examiners for Engineering and Surveying (2004). **What are the fees and deadlines for examinations in South Carolina?** Retrieved March 9, 2004, from <http://www.ncees.org/exams/fundamentals/>
- National Research Council (1998). *Preventing Reading Difficulties in Young Children*. Author: Washington DC.
- North Carolina Department of Public Instruction. (2003, November 25). *Baseline Information on Federal Teacher Quality Measures Completed*. Retrieved December 22, 2003, from <http://www.ncpublicschools.org/news/03-04/112503.html>
- North Carolina State Board of Education. (2003, February 6). *Changes in Licensure Policies to Comply with NCLB*. Retrieved August 14, 2003, from http://www.ncpublicschools.org/SBE_meetings/0302/0302_QP.pdf
- North Carolina State Board of Education. (2004, January 6). *Report and Recommendations from the Special Committee on Teacher Reciprocity* Retrieved March 9, 2004, from http://www.ncpublicschools.org/SBE_meetings/0401/0401_QP.pdf.
- Olsen, L. (2003). In ESEA Wake, School Data Flowing Forth. *Education Week*, 23(15), 1,16-18.
- Podgursky, M. (2001). Should States Subsidize National Certification? *Education Week*, 20(30), 38,40-41
- Rivkin, S., Hanushek, E. A., & Kain, J. F. (1998). *Teachers, Schools, and Academic Achievement*. National Bureau of Economic Research.
- Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and Residual Effects of Teachers on Future Academic Achievement*. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.
- Smith, T.M. & Ingersoll, R.M. (2003). *Reducing teacher turnover: Do induction and mentoring programs help?* Paper presented at the annual meeting of the American Association of Educational Research. Chicago, IL, April 21-25.
- SRI International. (2001). *The Status of the Teaching Profession, 2000: An Update to the Teaching and California's Future Task Force*. Santa Cruz, CA: The Center for the Future of Teaching and Learning.
- Sykes, G., & Millman, J. (1995). The assessment of teaching based on evidence of student learning. In S. Bacharach and B. Mundell (Ed.), *Images of schools. Structures and roles in organizational behavior*. Thousand Oaks, CA: Corwin Press.

- Tennessee State Board of Education. (2003, August). *Tennessee Plan For Implementing The Teacher And Paraprofessional Quality Provisions Of The No Child Left Behind Act Of 2001*. Retrieved December 22, 2003, from <http://www.state.tn.us/education/fpnclbtchqltyimplplan.pdf>
- United States General Accounting Office. (2003). *No Child Left Behind Act: More Information Would Help States Determine Which Teachers Are Highly Qualified* (No. GAO-03-631). Washington, DC: Author.
- United States Department of Education. (2003). *Meeting the highly qualified teachers challenge: The secretary's second annual report on teacher quality*. Washington, DC: U.S. Department of Education, Office of Postsecondary Education.
- United States Department of Education. (2002). *Improving Teacher Quality State Grants: Title II, Part A Non-Regulatory Guidance*. Washington, DC.
- United States Department of Education. (2003a). *Improving Teacher Quality State Grants: Title II, Part A Non-Regulatory Guidance, Revised Draft*. Washington, DC.
- Wilson. S., Floden, B. and Ferrini-Mundy, J. (2001). *Teacher Preparation Research: Current Knowledge, Gaps, and Recommendations*. Seattle: Center for Teaching Policy, University of Washington.
- Wise, A.E., Darling-Hammond, L., Berry B., and Klein, S. (1987). *Licensing Teachers: Design for a Teaching Profession*. Santa Monica: RAND Corporation.
- Yasin, S. (2000). More attention to language diversity needed in teacher preparation. Washington, DC: *American Association of Colleges for Teacher Education briefs*, 21 (11), 1