



The Southeast Center for Teaching Quality improves student learning by shaping policies through developing teacher leadership, building coalitions, and conducting practical research. To accomplish this mission, SECTQ strives to shape policies that ensure:

- Students, no matter what their background or where they go to school, are ready to learn; with
- Teachers who are caring, qualified, and competent with vast content knowledge and the ability, through quality preparation and ongoing development and support, to ensure that all children can learn; in
- Classrooms that have adequate resources and provide environments conducive to student learning; in
- Schools that are designed to provide teachers with sufficient time to learn and work together in collaboration with a principal who respects and understands teaching; in
- Districts that have policies and programs that support the recruitment, retention and development of high quality teachers in every school; in
- States that have well-funded systems that include rigorous preparation and licensing with evaluation tools that ensure performance based standards are met; in a
- Region that works collaboratively, using common teaching quality definitions, sharing data, and working across state lines to recruit, retain and support high quality teachers; in a
- Nation that views teaching as a true profession and values teachers as one of its most important resources.

SECTQ is a regional organization with a national agenda to ensure that all students have access to high quality teaching. SECTQ was established in 1999 and is located in Chapel Hill, North Carolina. To learn more about SECTQ's work, and to access a more concise version of this report, please visit www.teachingquality.org.

Unfulfilled Promise: Ensuring High Quality Teachers for Our Nation's Students

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A Message from the Southeast Center for Teaching Quality

Why We Conducted This Study

Since the reauthorization of the Elementary and Secondary Education Act or the No Child Left Behind Act (NCLB) of 2001, much has been said and written about the law by a variety of education observers, practitioners, and policymakers from both sides of the political aisle. Some have welcomed NCLB as a needed intervention for mandating more stringent accountability systems, disaggregating test data to reveal achievement gaps, pushing districts toward hiring more "highly qualified" teachers, providing more flexibility in using federal funds, identifying failing schools and promoting greater school choice. Skeptics say the law promotes a single test-based accountability system that narrows the curriculum and encourages a one-size-fits-all teaching schema that does not rely on highly skilled teachers. The skeptics also report that the federal mandates are grossly under funded, especially in terms of testing requirements, and the cost of recruiting and retaining highly qualified teachers.

While most public attention remains focused on the accountability provisions of NCLB, the law has positioned the federal government to exert considerably more influence in setting standards for teachers. The law requires that all teachers in core academic subjects be "highly qualified" by the 2005-2006 school year. Despite the significance of this development, the teaching quality provisions remain consistently misunderstood and overlooked in discussions regarding the law.

Several education policy groups have spoken to the implementation of the highly qualified teacher provisions, but prior to this report, little research has considered how high-need schools and districts are responding to the teacher quality mandates and opportunities. With this in mind, the Southeast Center for Teaching Quality (SECTQ) conducted site visits in four states, 12 districts and 24 schools (especially those in rural and urban areas facing longstanding teacher recruitment and retention challenges).

With support from the Ford, Rockefeller, and Z. Smith Reynolds foundations, SECTQ completed this research study to present fine-grained data and compelling stories about the capacity of states and high-need districts and schools to respond to the challenges and opportunities inherent in the NCLB teaching quality mandates. The results of the study allow SECTQ to bring the valuable perspective of school practitioners to the debate regarding NCLB's effect on an undeniably critical element of school reform—teaching quality.

Potential and Challenges of the Law

Our research has revealed that NCLB has the potential to be a welcomed impetus for creating teacher recruitment and retention strategies that address long-neglected barriers to higher lev-

Prior to this report, little research has considered how high-need schools and districts are responding to the teacher quality mandates and opportunities.

els of student achievement. NCLB's highly qualified teacher requirements correctly target schools serving the most disadvantaged students first. And if the implementation of highly qualified teacher standards could be aligned with the best practices, research and policies for shaping the ways that teachers are recruited, prepared, rewarded and retained, NCLB could help high need schools realize higher levels of achievement by placing students of greatest need with the most accomplished and best prepared teaching force.

Unfortunately, our investigation has led us to conclude that the laudable intent and considerable potential of the law's provisions for ensuring highly qualified teachers have been severely compromised. Throughout this report we offer evidence of the potential of the law and its current shortcomings in design and implementation, as described by those most familiar with its effects—classroom teachers, school principals and district administrators. While the complex nature of the law and its application in schools lead our research team to a host of relevant findings important for consideration, we recognize three primary findings most essential to address if the law is to help ensure a quality teacher for all of our nation's students.

We offer evidence of the potential of the law and its current shortcomings in design and implementation, as described by those most familiar with its effects—classroom teachers, school principals and district administrators.

- "Highly Qualified" Does Not Ensure High Quality: The current definition focuses predominantly on content knowledge, ignoring critical knowledge and skills that teachers must possess to improve student learning.
- Hard-to-Staff Solutions are Hard to Find: Current funding models fail to account for the magnitude of the challenges facing hard-to-staff schools and districts.
- Same Approaches Will Lead to the Same Results: Sufficient resources, clearer and more
 consistent guidance, customized technical assistance, and widely distributed examples of
 what works must be made accessible to all educators.

Much needs to be done from the classroom to the Capitol to ensure that NCLB helps all students get the knowledgeable teachers they need and deserve. NCLB represents an unprecedented role for the federal government in educating the nation's children. This new role requires clear and consistent guidance and assistance to states, as well as sufficient funding to ensure districts can meet the requirements. States also play a critical role in ensuring teaching quality, setting standards for the profession, and developing licensing requirements. State policies and NCLB requirements must work with each other rather than against each other. Finally, the success of NCLB's efforts to place a highly qualified teacher in every classroom falls squarely on the shoulders of local districts that control virtually all of the federal teaching quality funds. Districts must address teacher recruitment and retention with an emphasis on quality, not solely on meeting the mandates of NCLB. If districts focus on teaching quality—recruiting or developing well-prepared teachers and investing in their continued professional growth—the highly qualified requirements will be met.

This report is written for anyone with an interest and stake in providing high quality teachers for students across the country. We look forward to receiving feedback on this report from readers and hope to collaborate with any individual or group interested in continuing to improve laws related to ensuring quality teachers and teaching.

Barnett Berry, President Southeast Center for Teaching Quality www.teachingquality.org

Introduction

During the last decade, policy and business leaders have come to know what parents have always known—teachers make more difference in student achievement than any other single school factor. Thanks to new statistical and analytical methods used by a wide range of researchers, evidence continues to mount demonstrating that teacher quality can account for the majority of variance in student test scores.¹ While consensus is growing among school reformers that teachers are the strongest determinant of student achievement, there is only cursory agreement on what "teaching quality" really means or what steps must be taken to assure that every student has access to quality teachers.²

This existing debate regarding "highly qualified" teachers intensified when No Child Left Behind (NCLB) required all teachers in core academic subjects to be highly qualified by the 2005-2006 school year. This federal statute requires highly qualified teachers to 1) hold at least a bachelor's degree, 2) have full state certification as a teacher or have passed the state licensure exam and hold a license to teach, and 3) demonstrate competence in each academic subject in which they teach.³

The law pushes states to ensure that poor and minority children are not taught by unqualified or out-of-field teachers at higher rates than other children. The law requires annual state report cards to include percentages of teachers teaching with emergency credentials and the percentage of classes not taught by highly qualified teachers, both in the aggregate and disaggregated by school poverty level. The law also calls for higher standards for paraprofessionals and requires states to ensure that all teachers are participating in "high quality" professional development.

Furthermore, a stringent parental "right-to-know" process theoretically requires districts to inform parents in Title I schools that they may request information about the professional qualifications of their children's teachers. Districts and schools receiving Title I funds must also notify parents any time a student is taught for more than four consecutive weeks by a teacher who is not highly qualified.

All of this is good news. 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. We have found that the law has helped local school administrators focus on teacher standards to an unprecedented degree, and its core provisions could eventually become the tools needed to build a more uniform and consistently enforced teacher licensure and assessment system.

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Unfortunately, our research indicates that the promise of NCLB to drive new state and local activity to promote teaching quality, prompt universities to prepare teachers differently and ultimately provide well-qualified teachers for the nation's most disadvantaged students remains unfulfilled. The promise of the law and its current shortcomings are summarized within our report around three primary findings:

Finding 1—"Highly Qualified" Does Not Ensure High Quality: The current definition focuses predominantly on content knowledge, ignoring critical knowledge and skills that teachers must possess to improve student learning.

Finding 2—Hard-to-Staff Solutions are Hard to Find: Current funding models fail to account for the magnitude of the challenges facing hard-to-staff schools and districts.

Finding 3—Same Approaches Will Lead to the Same Results: Sufficient resources, clearer and more consistent guidance, customized technical assistance, and widely distributed examples of what works must be made accessible to all educators.

The significance of NCLB's teaching quality requirements and these findings are magnified by chronic teacher shortages facing many of the nation's schools.

The significance of NCLB's teaching quality requirements and these findings are magnified by chronic teacher shortages facing many of the nation's schools. We know these shortages have far more to do with the distributional inequities and the problems of retention than overall supply shortages. While well-funded school systems often have many more teacher applicants than vacancies, urban and rural schools serving poor children cannot find the teachers they need. Many of these schools simply cannot provide the salaries and offer the working conditions necessary for them to compete in the teacher labor market. High turnover rates among new teachers (up to 50 percent within the first five years) leave students in hard-to-staff-schools facing a revolving door of untried novices who do not have the skills to help them reach higher academic standards.⁴

Collecting Research Data—Participating States, Districts and Schools

We conducted our investigation in four southeastern states—Alabama, Georgia, North Carolina and Tennessee. Many contextual factors make the region a noteworthy selection for this research investigation, including: a) a growth in jobs and population; b) a two-decade focus on standards-based education reform; c) a chronic student achievement gap; and d) significant and pervasive teacher shortages in public schools.

We also selected these four states because of the differences in their teacher policies and the extent to which they have addressed teaching standards. Further, a number of compelling teacher developments makes these states unique, including the growth of National Board Certified Teachers in North Carolina, a highly touted literacy initiative in Alabama, the use of value-added teaching assessment data in Tennessee; and highly visible alternative certification programs in North Carolina and Georgia.

Key education stakeholder groups in each state helped identify districts based on several criteria, including high poverty and/or high minority student populations, below average performance on state achievement assessments and other indicators, high teacher turnover and difficulty recruiting teachers, and geographic diversity. We selected 12 districts: four large urban

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districts, one mid-sized urban district, two rural districts very near major metropolitan areas, and five remote rural districts. We intentionally sought districts with a reputation for making some progress toward improving teacher quality. The size of the districts ranged from about 1,500 students and 100 teachers to upward of 100,000 students and 7,000 teachers. Included in the case study sample are 11 elementary schools, eight middle schools and five high schools. Most are Title I school-wide programs, and of those that are not, most are excluded only because they are high schools, which Title I has traditionally not been intended to support.

Table 1. Case Study State and District Demographics

State	Number of Schools	Number of Teachers	Number of Students	Percent Black	Percent White	Percent FRL	Percent with IEPs
Alabama	1,529	47,317	731,483	36	60	60	13
Georgia	2,032	103,350	1,496,012	38	52	45	12
North Carolina	2,251	85,557	1,303,777	31	59	45	14
Tennessee	1,659	57,654	973,170	25	72	44	16

District*	Number of Schools	Number of Teachers	Number of Students	Percent Black	Percent White	Percent FRL	Percent with IEPs
1	5	100	1,600	85	10	90	10
2	5	200	2,900	45	50	55	15
3	10	200	2,500	95	0	95	10
4	10	300	4,700	45	50	70	15
5	15	700	11,800	25	70	45	15
6	20	400	6,000	85	5	80	15
7	20	400	7,800	40	55	60	10
8	50	1,500	24,700	70	25	60	10
9	100	2,700	40,500	30	60	40	15
10	100	4,000	64,000	50	45	65	15
11	100	7,000	106,300	40	45	35	10
12	200	7,000	116,000	85	10	65	10

^{*} All data is an approximation to protect the anonymity of the districts.

SECTQ surveyed all core subject teachers in the 24 selected schools in Fall 2003. Between October 2003 and March 2004, SECTQ conducted three-day site visits in these schools and districts. During each visit, SECTQ researchers conducted focus groups with a representative sample of teachers and interviewed principals, superintendents, and district-level administrators (primarily those in charge of human resources, Title I, and professional development programs). In total we spoke with more than 160 individual teachers and school and district

administrators. SECTQ also surveyed hundreds of teachers, asking them a set of questions about their background, credentials, highly qualified teacher status, and access to a variety of induction and professional development supports. In addition, we supplemented these core data with state teacher quality reports, relevant newspaper articles, extant survey data (e.g., the School and Staffing survey), and a range of federal documents and directives. The findings and recommendations which follow draw from all of these data sources.

FINDING 1 "HIGHLY QUALIFIED" DOES NOT ENSURE HIGH QUALITY

Content Knowledge is Necessary, Not Sufficient

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

—human resource administrator, rural district

While the letter of the law promotes the idea that teachers need both subject matter and pedagogical knowledge in order to be "highly qualified," the current leadership of the U.S. Department of Education has chosen to emphasize the content knowledge and gives little attention to teaching skills. In July 2003, Secretary of Education Rod Paige released his *Second Annual Report on Teacher Quality*—intended to document state progress in meeting the challenges of NCLB's highly qualified teacher provisions.¹

The report focuses solely on two principles: requiring teachers to pass standardized tests of content knowledge and lowering barriers for those entering the profession by providing licensure through an alternative certification program, regardless of the scope and quality of preservice training.

There was a striking and consistent difference between the narrow federal focus on content knowledge and the experiences and beliefs expressed by the administrators and classroom teachers interviewed regarding what teachers need to teach students effectively. Many of the teachers interviewed were working with special needs (and in some cases second language) learners, requiring very specific pedagogical knowledge. In one urban school, 85 percent of the teachers surveyed reported that they had taught limited English proficient students within the last year, but only 16 percent reported having any professional development in the last three years in how to teach such students. The teachers in this school, as well as in many of the others, also spoke to the importance of "highly qualified" teachers understanding the developmental stages of student learning, using multiple types of student assessment data, and having the teaching skills to revise instruction on a daily basis.

Administrators and teachers generated extensive lists of the complex skills, above and beyond content knowledge, that teachers must possess to be successful in a classroom setting. Topping

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the list was the ability to communicate content related concepts to a classroom full of diverse learners. One teacher summed 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 they have no clue how to get that across to their kids in the classroom.

Because of this stark difference between the federal definition of a highly qualified teacher and practitioners' own understanding of quality teaching, we heard many cases of "false positives" and "false negatives" in assigning highly qualified status. One district HR administrator told us, "I've checked over 500 transcripts, and I can assure you that some that have met the definition are not some of our best and brightest." A principal at an inner city elementary school gave an illustrative example of a false positive:

We have a "highly qualified" first year teacher who is bombing. He is falling flat on his face; he can't get it together and is overwhelmed... He has a teacher helping him who is excellent but who herself isn't highly qualified...We've regrouped to try and save him; we will work the whole year with him and aren't sure of the results.

To be successful, teachers say that they must know what they are teaching, but that they also with their children's schooling.

need to know a great deal about the communities in which they are working and specific skills for working with hard-to-reach students and their families. Some of the schools we visited had as many as 98 percent of their students qualifying for free or reduced-price lunch. Most of the schools were either urban and concentrated in inner city neighborhoods, or very rural and in remote isolated areas. In either case, poverty often prevents children from coming to school prepared to learn. Teachers told us of many cases where children came to school hungry, inappropriately dressed for the weather, or exhausted from being up all night caring for younger siblings while their parents worked. Some of the rural districts were so remote that some parents must commute up to two hours each way to work, leaving little time to become involved

Some teachers use these stark examples and daunting circumstances as excuses for their students not meeting academic standards. However, these teachers were the exception, not the norm. When students came to school ill-prepared to learn, teachers desired more preparation, support, and time in order to work with them effectively. No excuses were offered by these teachers, merely a description of the challenges they constantly face.

For both teachers and administrators, "highly qualified" means something very different in these kinds of communities where economic and social issues complicate the relationships among students, teachers, schools and parents. One teacher in a large urban district remarked that, "It takes more than a bachelor's degree in your content to understand how to teach, to get through to these kids. It's not a sufficient definition. It's nice to have the paperwork to prove that you have the knowledge to do it, but it doesn't make you highly qualified."

Many of the teachers and administrators we interviewed said that while content knowledge is a necessary piece of the puzzle, it is entirely insufficient for a teacher to merit the label of "highly qualified." In fact, many of our interviewees suggested that teachers who meet only the federal definition should be called "minimally qualified" instead of "highly qualified."

To be successful, teachers say that they must know what they are teaching, but that they also need to know a great deal about the communities in which they are working and specific skills for working with hardto-reach students and their families.

In order for the highly qualified mandates to result in higher quality teaching, states need to look to the federal content knowledge requirement as a mere first step. Rather than fulfilling the minimal standard allowed under the law, SECTQ urges states to align licensing and NCLB requirements in a way that requires teachers to not only have content knowledge but also to demonstrate an understanding of how to teach this content to diverse learners.

Teacher Preparation and Experience Matter

Alternative Certification Must Still Ensure Quality

Nine out of 10 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.

—human resource administrator, rural district

NCLB considers participants from a variety of alternative certification programs "highly qualified" despite the lack of preparation these teachers receive prior to entering a classroom. The consensus among those we interviewed was that the minimal preparation provided to most alternative route teachers leaves them totally unprepared for the classroom, and far from "highly qualified." An urban middle school principal described the school's difficulty with alternatively prepared teachers:

We have to hire so many [teachers] that are not education majors, and they come in with no background in classroom management and how to communicate and deal with parents and community. And, in our school, once you get here, we don't have time to take you aside and really help you learn to teach. Once you get here, you have a schedule. You have a mentor, but there are still a lot of things you are going to have to do yourself... Can you imagine anyone who hasn't been in education being dumped in this kind of situation?

The federal government's decision to advocate for fully licensing teachers with no training or support ignores a harsh reality—the alternative certification teachers and others with less preparation are often placed in the most challenging schools serving students who need teachers with a great deal of teaching expertise. The director of curriculum and instruction in a large urban district expressed concern about the lack of specific teaching skills to address the needs of students in certain settings:

You see a predominance of these [alternative route teachers] in our nation in at-risk and urban schools, where students need the most sophisticated teachers, who understand both content *and* the pedagogy. A lot of these [alternative certification] teachers I have observed think that they would go to the textbook, cover the material, review the material, test the children, and give them a numerical grade. I didn't say 'teach' in any of that, and that's the hard part.

Due to significant teacher shortages in hard-to-staff districts, many administrators were desperate for teachers and were thankful for programs like Georgia's Teacher Alternative Preparation Program (TAPP), which placed over 1,400 teachers during the 2001-2002 and 2002-2003 school years.² With thorough preparation, alternative route programs like TAPP can be helpful, but as one elementary school principal told us, the program does not really address the root issue of preparing and retaining quality teachers:

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TAPP can be a good thing. My biggest concern about placement of teachers is that too often we are placing those TAPP teachers in schools that are the most difficult, so we set them up for failure from the beginning... That is why the rate of TAPP teachers leaving is so high. They went in to help somebody and they are not receiving the help they need.

In some hard-to-staff districts, we did hear administrators speak positively about alternative route teachers, but these opinions were usually directed toward teachers who already had some experience in classroom settings as paraprofessionals or substitutes. If teachers were sufficiently prepared, alternative certification programs could be beneficial, but this is seldom the case. A teacher who participated in TAPP told us that the brief training she received did not fully prepare her to enter the classroom and that she wouldn't consider herself "highly qualified."

To make up for this lack of preparation, NCLB requires that alternatively certified teachers receive high-quality, sustained, classroom-focused professional development and participate in an intensive induction or mentoring program.³ Unfortunately, we found most schools and districts vastly unprepared to offer meaningful induction and mentoring support for any novice teacher, including those who are alternatively certified.

If teachers were sufficiently prepared, alternative certification programs could be beneficial, but this is seldom the case.

State officials informed us that they rely on districts to provide mentoring support for new teachers, including those entering now through alternative certification routes and have no means to monitor the quality of district efforts. In one rural middle school we visited in North Carolina, 61 percent of the school's faculty reported entering the classroom on a "lateral entry" license. This means the school has few experienced, prepared teachers who are needed to serve as mentors for the revolving door of new teachers who enter the school annually. A Title I director in another North Carolina district commented on this distribution problem:

The state's [mentoring] program doesn't make a bit of difference; that's when you have your mentor teaching full time. It works in a school with stability and one new teacher; it doesn't work at all with some schools that have 32 new teachers, and no mentors to deal with that, no really experienced teachers. That system is broken. It only works at affluent schools.

As Table 2 reveals, the states we studied have yet to ensure that novice teachers have consistent access to induction and mentoring programs. The data also reveals that new teachers are even less likely to report actually benefiting from current mentoring efforts. No more than 49 percent of new teachers in any of our four states reported that their mentor helped them to a great extent.

North Carolina has recently implemented a new requirement that districts provide all lateral entry teachers with ten days of orientation and professional development prior to the first day of school. While some district officials and teachers we spoke with feel this is a step in the right direction, the state has not provided any additional funding for this requirement, and most district administrators still believe their capacity to provide appropriate support is quite limited. Other state programs in our study have no mentoring requirements whatsoever. For example, the Alternative Type E license in Tennessee allows individuals to switch to a teaching career as long as they have a subject matter degree or pass the appropriate Praxis II exam. There is no requirement for these candidates to participate in an intensive professional development or mentoring program.

Table 2. New Teachers and Mentors: Access, Subject Specific, Helpful?

State	Participation in any kind of induction	Worked closely with mentor	Mentor in same subject	Mentor helped to a great extent
Alabama	44%	44%	84%	44%
Georgia	55%	55%	76%	55%
North Carolina	75%	75%	64%	75%
Tennessee	48%	48%	73%	48%
National	60%	60%	75%	60%

(New teachers with 5 years experience or less reporting, and only those who had participated in an induction program) **Source:** Schools and Staffing Survey, 1999-2000.

Without substantial investments in induction and mentoring infrastructure, there is no way that schools and districts can begin to address the "quality" standard posed by the Department in their press for more alternative certification programs. Until appropriate investments are made toward induction models proven as effective, novice teachers (both alternatively and traditionally certified) will continue to rely on weak and scattershot induction and mentoring efforts.

Traditional Teacher Preparation Must Do More to Ensure Quality

Administrators reported that the current NCLB framework seems to have "opened the flood-gates" to less prepared alternative route teachers. But these alternative route programs are necessary, in part, because traditional education schools are not adequately preparing enough teachers for the challenges of urban and rural schools.

A human resource director in a large urban district said that many traditional teacher education programs use a formulaic approach that fails to prepare teachers for urban schools:

They (universities) are cranking out all these people and giving them licenses without asking us if this is really what we want. They have a cookie cutter approach, and we need teachers fashioned to an urban setting, which is very different from a suburban setting.

Another district administrator pointed squarely in the direction of teacher preparation programs when considering the reasons why her schools don't get the right kinds of teachers:

Until universities really look differently at it, and they align their definitions of what a highly qualified teacher should be with the skills and competency they should have, and align that with the authentic picture of a good teacher in a classroom, nothing is going to change... As far as having a real effect on how these folks perform in the classroom, I don't think that will happen. It's a misalignment between what we need and what we get.

Too often teacher education prepares teachers for the average K-12 student, in the average school. Few of the schools and districts we studied had the benefit of being served by high quality pre-service teacher education or alternative certification programs. The question is how teacher education needs to be changed so that all prospective teachers—whether they are tradi-

tional, college-aged candidates or mid-career switchers—are well prepared to teach in challenging urban and rural schools. The administrators and teachers we interviewed called for a new kind of teacher education—one where candidates have much more time working under the tutelage of expert teachers in a substantial internship. One teacher in a rural elementary school who works with extremely poor children noted:

Before I began teaching I needed more in-field experience and less textbook theories. I needed them to put me in the classroom with a group of tough kids and show me what to do. What little I learned was more about a textbook fairy-tale classroom...I was shocked when I started teaching.

In fact, most teachers called for preparation that was more like what was provided for doctors. In one focus group interview, a teacher asserted:

Why can't teachers be like doctors and have a year of internship? If I had been prepared by a 25-year veteran teacher for a year, I would have been more prepared...Doctors get to be residents for four years... We get six months, and many get nothing!

The law currently requires Title I schools to hire only highly qualified teachers. However, as long as the law includes unprepared and ill-equipped teachers in that category, and as long as these teachers are disproportionately assigned to the poorest schools, students in these schools will continue to experience constant teacher turnover and will never reap the benefits of having truly excellent teachers in their classrooms. States need to consider ways to create high quality alternative routes to teaching that include substantial induction and mentoring programs, which are necessary to ensure that these minimally qualified individuals learn how to be high quality teachers. Similarly, states need to create systems that encourage traditional education schools to better prepare teachers for the challenges of urban and rural schools.

It's Hard to Know Whether Someone Knows Their Content

... teaching and learning are not going to be changed. All you have added is a layer of administration and teaching and learning are not affected... When I read through it, I thought "smoke and mirrors." That's what they should have called it... here's a checklist of things you can do to get around it, but you never observe the teacher teaching.

—professional development coordinator, major urban district, on the implementation of HOUSSE

NCLB allows teachers to prove subject matter competency in several ways. They can pass a subject matter test (PRAXIS II), possess or earn an academic major in the subjects they teach, or meet the standards of a more comprehensive evaluation system specifically designed by respective states for the NCLB teacher quality framework—High Objective Uniform State System of Evaluation (HOUSSE).

Each of these approaches to proving subject matter competency presents enormous problems in ensuring the consistency and relevancy of teachers' content knowledge, and none of these methods appears to address the underlying issues behind identifying highly qualified teachers.

First, teachers can pass the PRAXIS II series (developed by the Educational Testing Service) which is used in three of our four states. (Alabama, due to serious teacher testing problems and

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ensuing litigation, has not used a state-mandated subject matter test since the 1980s.⁴) State policy leaders have significant latitude to determine which tests to use, what the cut off scores will be, and how they assemble and report information. Table 3 below shows the variation in tests used in three of our project states, Georgia, North Carolina, and Tennessee, and their respective required passing scores. Since variation of only a few points has significant effects on the proportion of teachers earning highly qualified status, the consistency of what it means to be highly qualified across states is compromised.

Table 3. Required Praxis Tests and Passing Scores by State (for three sample subjects)

Elementary Education (EE)		Math		Special Education		
State	Test	Pass Score	Test	Pass Score	Test	Pass Score
Coorgia	FF 0 1 1	407	N4-41	127	Consist Education	150
Georgia	EE: Content	137	Mathematics:	136	Special Education:	152
	Exercises		Content		Knowledge-Based	
	EE: Curriculum,	154	Knowledge		Core Principles	
	Instruction and		Mathematics:	159		
	Assessment		Proofs, Models,			
			and Problems,			
			Part I			
North Carolina	EE: Content	Combined	Mathematics:	Combined	Special Education:	143
	Exercises	score	Content	score	Knowledge-Based	
	EE: Curriculum,	of 313	Knowledge	of 281	Core Principles	
	Instruction and		Mathematics		·	
	Assessment		Pedagogy			
Tennessee	EE: Content	140	Mathematics:	136	Education of	Test required.
	Knowledge		Content		Exceptional	no passing
	EE: Curriculum,	159	Knowledge		Students: Core	score set
	Instruction		Mathematics	125	Content Knowledge	
	and Assessment		Pedagogy			
Alabama	None required		None required		None required	

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

According to a recent National Academy of Sciences (NAS) report, the current teacher tests being used to measure highly qualified teachers are not designed to test all of the competencies relevant to beginning practice.⁵ Because these tests are designed only to assess the minimal content knowledge needed to teach (just like other professional licensure/entrance exams), none can fully distinguish "minimally qualified" from "highly qualified" teachers.

Second, teachers at the middle and secondary level can demonstrate subject matter competency by completing an academic major, advanced degree, or equivalent coursework in each subject area they teach. In general, states have historically maintained no statewide standard for what constitutes an academic major, leaving the determination to their respective colleges and universities that prepare teachers. Federal guidance on this issue is unclear, opening the door to wide interpretations and further problems with using the data to understand the qualifications of teachers. Table 4 compares the academic major requirements for the four states.

Table 4.	What	Counts as	an Aca	demic	Major
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State	Hours Equivalent to a Major ⁶
Alabama	32 hours (19 upper division) 12 x 4 for elementary teachers*
Tennessee	24 hours (can include up to 6 in content related methodology)
North Carolina	24 hours
Georgia	21 hours upper division courses Middle School = 15 hours each concentration

^{*}Allowing elementary teachers to use the major option to demonstrate content knowledge appears to be prohibited by NCLB. Elementary teachers are supposed to use only a test or the HOUSSE. However, state officials in Alabama confirmed that the U.S. Department of Education had reviewed their model several times and approved it.

In order to ensure a greater number of highly qualified teachers, states are grouping teachers' certification areas to accommodate the core subjects specified in NCLB, in some cases moving from specific subfields such as history and geography to broad fields like social studies. In Tennessee, a major in one subfield, with at least nine hours in another of the related 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. Similarly, in Alabama, a teacher certified in general social science who holds the equivalent of an academic major in political science, and has earned just one credit in history, will be deemed highly qualified in both. The same holds true for teachers with general science degrees, where one course in biology may allow one to be deemed highly qualified to teach that subject. These state responses to the highly qualified mandates, which have not been questioned by the federal government, may prove antithetical to the current efforts to eliminate out-of-field teaching.

A similar problem with lack of consistent measures for proving subject matter competency emerges with upper level elementary and middle grades teachers. In one of our states, an eighth grade science teacher in a 6-8 middle school must 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. State department officials determine the "the degree of rigor and technicality" of the subject matter that a teacher needs to know. This means that a "highly qualified" teacher in one school may not be designated as "highly qualified" when teaching the same grade level in another school within the same state. Federal guidance on this issue remains unclear.

To make matters more complex, a number of teachers and administrators spoke to the problems associated with taking content courses that count toward an academic major in their field. Many of these traditional, university-based arts and sciences courses have no applicability to "how teachers need to teach content," which many teachers said they needed. We found very little attention being paid to the quality or relevancy of content courses, and the capacity of arts and sciences professors to actually teach them in ways that helped K-12 practitioners. One teacher told us about the single math course she had to take to complete the requirements for a major in order to be considered highly qualified:

The math class I had to take did not make a bit of difference in my qualifications. I am the same exact teacher that I was before I took that math class.

In one Alabama school district, we found sound content-specific professional development in math. Teachers said they valued this professional development and it greatly influenced their teaching practices. Both teachers and administrators attributed increases in student achievement scores to this professional development. However, based on the state and local interpretation of federal rules, this kind of professional development did not count toward the teachers' academic major, and instead, the teachers had to return to college at night to take courses that many considered "irrelevant." As one teacher told us:

Many college professors are so far removed from a K-12 classroom they have little to offer a current classroom teacher...that is why our professional development is so good...because we draw upon teachers, not just professors, to teach us to teach differently.

Finally, teachers can meet the standards of a High Objective Uniform State System of Evaluation (HOUSSE) in order to demonstrate their content competency. ¹⁰ Each of the four states are employing some type of HOUSSE evaluation based on various criteria to demonstrate competence through a combination of experience, college coursework, professional development, services to the profession, awards and publications. However, there is significant variation in the ways that states are implementing these HOUSSE systems. For example, Alabama, Georgia, and Tennessee allow for a wide variety of professional development and leadership activities in teachers' respective content areas to count toward the 100-point requirement in their HOUSSE systems. North Carolina's HOUSSE standard is based on content indicators applicable to each specific subject, and teachers can use an equally large number of professional activities as evidence that they have met the requirements for each indicator. 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.

Although each of the four states has some type of system by which teachers can use professional activities to demonstrate subject knowledge, the states give very different weights to different professional activities. Whereas teachers in Tennessee can earn five points for each year of teaching in their respective content areas, for a maximum of 40 points, Alabama teachers can only earn two per year (up to 10 years and one point per year for each year over 10 years) for a maximum of 30. Consequently, a Tennessee teacher can have only eight years' experience to earn 40 points, while an Alabama teacher must have 20 years to only earn 30 points. Georgia teachers can earn 10 points per year, for a maximum of 50, meaning they can earn half the points necessary to reach highly qualified status after teaching for only five years.

Furthermore, as pointed out in a recent report by the National Council on Teacher Quality, some of the professional activities one might expect to demonstrate the most subject expertise count the least, and vice versa. For example, the same Georgia teacher who can earn 50 points for only five years of experience can earn a mere ten points for a doctoral degree in the subject area.

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State	Experience	College Courses	Scholarship/ Honors	Professional Activities
Tennessee	52	40	20	30
Alabama	30	75	4	20
Georgia	50	70	30	30 (local) 30 (state/national)
North Carolina*	N/A	N/A	N/A	N/A

Table 5. HOUSSE Maximum Points on 100-point Scale

A professional development director in a major urban district lamented the federal government's decision to use HOUSSE—which she described as a teacher quality loophole large enough "to run a truck through." She commented:

When you take HOUSSE, you see that the rhetoric says one thing and then when you get down to substance, it's not there. A standard is given, then you are given avenues around it. As such, teaching and learning are not going to be changed. All you have added is a layer of administration and teaching and learning are not affected... When I read through it, I thought "smoke and mirrors." That's what they should have called it... So we have the standard, and we slip as many as possible under it.

The current federal implementation strategy for setting content knowledge standards 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. 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. Today, this means knowing how to manage classrooms, develop standards-based lessons, assess student work (and grade papers and tests fairly and appropriately), work with special needs and second-language learners, and use technology to bring curriculum to life for the many under-motivated students they teach.

The federal government's position on highly qualified teachers largely ignores many of the skills and much of the knowledge that matters to administrators and teachers working in high-challenge schools. The result is a maze of confusing and conflicting requirements, demanding more paperwork and perhaps, less accountability. The rules in place are actually lowering standards for teachers in some cases, and confusion and inconsistency in applying the highly qualified mandate almost begs educators to game the system.

^{*} North Carolina's HOUSSE system does not use a point system. Teachers must meet all content standards of the NC HOUSSE and receive a satisfactory rating on the district's validated performance evaluation. To meet a content standard, the teacher must be judged to have met 80 percent of the content indicators (with an indication of evidence(s) used for making judgments). Only trained evaluators who are "Highly Qualified" in the license area assessed can administer the NC HOUSSE.

FINDING 2 HARD-TO-STAFF SOLUTIONS ARE HARD TO FIND

Recruiting Quality Teachers Hinges on "Survival of the Fittest": Hard-to-Staff Urban and Rural Schools Cannot Compete

Mathematically it is very difficult to find 800 highly qualified teachers. Our main competitor is the [nearby] county schools. Predominately we have kids of color who are poor. They have white, middle to upper class kids. If we offer the same pay, you will take the job with them because it is an easier job. It's human nature; we can't blame them for that.

—human resource administrator, urban district

In one elementary school we visited, only 29 percent of the teachers are fully licensed, only eight percent have an advanced degree, none are National Board Certified, and only 15 percent indicated that they had eight hours or more of content-based professional development in the last year. The school's annual turnover rate hovers around 30 percent. More than 85 percent of the teachers grew up in the town or in a nearby community. The school has struggled to maintain student achievement growth, scoring well below district and state averages.

This school is typical of isolated rural communities that struggle mightily to recruit quality teachers. Even with additional Title II highly qualified teacher funds, this school cannot effectively compete in the teacher labor market. Many administrators said they were forced to draw from Title II teacher quality funds to compensate for recent budget cuts, and thus had no real dollars to fund innovative recruitment strategies.

Consequently, many rural school districts we visited struggled to compete with neighboring districts to attract and retain teachers because they offered lower teacher salaries. One rural superintendent told us he was "ashamed" that his district only offered a three percent salary supplement above the state schedule.

We found some districts offering relatively small signing bonuses (\$1,000–\$2,000), but these incentives often proved insufficient in attracting highly qualified teachers. One rural district in Alabama offered a \$5,000 signing bonus for any person willing to work there, including principals, teachers and administrative staff. However, this larger amount is still not sufficient. Central office staff told us that the *only* way to get teachers to accept the bonus was to require

Many rural school districts we visited struggled to compete with neighboring districts to attract and retain teachers because they offered lower teacher salaries.

them to stay only a short period of time—in this case, only two years. Most teachers take the bonus, serve their two years, and leave.

Money is important, but it is not the only factor in recruiting teachers.

Many rural districts cannot compete when it comes to working conditions.

Money is important, but it is not the only factor in recruiting teachers. Many rural districts cannot compete when it comes to working conditions. Teachers are looking for mentors, lower class sizes and high quality professional development, as well as decent salaries. Rural districts also lack community features that attract candidates, including access to cultural and other activities, and jobs for spouses. As one rural superintendent put it, "There is no mall in our county, folks!"

Qualified teacher candidates can be selective in choosing where to work; however, most administrators we spoke with did not know how to recruit highly qualified candidates in this competitive marketplace. A principal in a rural county just outside a metropolitan area told us:

Last year, I had to hire seven new teachers. When I called them, they interviewed me! They asked, 'How many subjects would I be teaching? When will my prep be? Do I have to sponsor any clubs?' You have to sell your school. Schools that are new... and that have money... have huge advantages over us. What am I to do?

Facing such a steep struggle in recruiting teachers, many rural districts eventually resign themselves to filling classrooms with less than ideal candidates. A rural superintendent described the disappointing outcome of the district's current recruitment strategies to find highly qualified teachers:

We really worked to find teachers this past year, but the two math teachers we could find and agree to come here had just been released by another school system. They were virtually the only candidates. So, we hire and keep them for two to three years and then don't renew them. So we [rural districts] are passing around teachers who are not very competent.

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Urban districts must confront their own set of unique challenges. Much of the challenge here is not just working conditions, but finding teachers who are prepared for the task at hand. A human resource director told us about the challenge he faces having 800 vacancies to fill annually:

Mathematically it is very difficult to find 800 highly qualified teachers. Our main competitor is the county schools. Predominately we have kids of color who are poor. They have white, middle to upper class kids. If we offer the same pay, you will take the job with them because it is an easier job. It's human nature; we can't blame them for that.

With few exceptions, principals and teachers in these very challenging schools felt that NCLB is making too little impact on either the quality of the teacher pool as a whole or on district assignment policies to make a real difference for them. A middle school principal told us that despite the intent of NCLB, teacher placement priorities there were not changing much:

... If the district would direct more teachers that are qualified into schools like mine it would be better, but a lot of times, when teachers look at demographics of openings... they choose the schools that are not low performing, and that leaves us having to choose from teachers who are leftovers, who are not qualified. That's what we end up with.

A teacher in another high-need school echoed this principal's frustration, saying:

Lowly qualified teachers hide out in schools like this because they know that the parents aren't knowledgeable and aren't going to question you. For years, I've seen teachers who weren't the best, teach their classes... and nobody knows anything, and they get away with not being a good teacher.

We heard a similar story in another district, where the principal of a Title I elementary school told us that as of March, seven months into the school year, her classrooms were still not fully staffed, and the quality of the applicants sent to her by the district to interview remained mediocre.

Our case studies revealed that one of the central goals of NCLB, ensuring that poor students and students of color have equal access to effective teachers as their peers, remains largely out of reach for many schools. A lack of resources and technical know-how severely limits the capacity of states and districts to create new and innovative strategies in order to comply with the law and provide their most at-risk students with high quality teachers.

One of the central goals of NCLB—ensuring that poor students and students of color have equal access to effective teachers as their peers—remains largely out of reach for many schools.

FINDING 3 SAME APPROACHES WILL LEAD TO THE SAME RESULTS

Schools and Districts Need More Customized Guidance, Technical Assistance, and Resources

I can remember [our personnel administrators] going to a meeting and it seems like the next day we received something from the state and it was different from what they heard the day before at this meeting that the state department had presented. It is all changing so quickly.

—superintendent, large urban district

Lack of Guidance and Technical Assistance

Implementing the NCLB highly qualified teacher mandates requires considerable commitment and resources from states and districts to prove teachers' content knowledge, track the status of highly qualified teachers and communicate this information to the public, and recruit teachers with the requisite knowledge and skills to be considered highly qualified. The administrators we interviewed believed that the federal government could reduce this burden on states and districts by providing more clear and consistent guidance on what it means to be "highly qualified" and better technical assistance in order to implement innovative approaches.

Nearly two years after passage of the law, the principals and administrators we spoke with still had many questions regarding "gray areas" of the highly qualified provisions, including deciding which higher education courses should count toward academic requirements; understanding highly qualified requirements for teaching core subject areas to special education students; communicating with parents regarding the highly qualified status of teachers; and understanding the potential punitive elements of the law for failing to meet the mandate.

As noted in a recent *Education Trust* report, the Department has paid little attention to the state plans required to demonstrate how the inequitable distribution of quality teachers would be addressed. Our case study work substantiated this claim: When asked how they were targeting resources to high-need schools, most of the district officials we interviewed had few concrete answers for us. Only one district had a tangible plan to increase the percentage of qualified teachers in its poorest schools, and this plan actually predated NCLB.

Many district officials told us that these changing messages from their states about the highly qualified teacher definition made it difficult for them to know when and what to tell principals

Implementing the NCLB highly qualified teacher mandates requires considerable commitment and resources from states and districts.

and teachers about their roles in meeting the mandate. Several district administrators reported receiving only one day of training from the state about the highly qualified issue and said that this was not enough to understand all the details involved in the definition itself and the reporting requirements, let alone how they were supposed to find enough teachers to staff their classrooms with highly qualified teachers. Many feared telling teachers one thing, only to have them begin a class or take a test, and have the requirements change soon after. One superintendent told us:

I can remember [our personnel administrators] going to a meeting and it seems like the next day we received something from the state and it was different from what they heard the day before at this meeting that the state department had presented. It is all changing so quickly.

In one state, a district official said that they often read about changes in highly qualified teacher requirements in the newspaper before they got any information from their states. One potential exception to this finding was in Georgia, where the state Professional Standards Commission has used Title II-A funds to hire regional consultants to work with districts specifically on the highly qualified teacher mandates. While several Georgia district officials reported that their respective consultant was a valuable resource to them, they still reported the same concerns as district officials in other states about rapidly changing messages from the state about the highly qualified definition and districts' responsibilities. Nevertheless, the Georgia approach was one of the most effective state responses discovered during the course of our study.

In part to address criticisms about a lack of guidance and assistance from the federal government, the Department launched its Teacher Assistance Corps (TAC) to help states work through the law's intricacies and provide a clearinghouse of effective teacher quality strategies. Despite the federal government's attempt to provide guidance for states, some district HR representatives in our four states have suggested that TAC strategies are irrelevant to real district problems. In one case, local administrators lamented that TAC was more focused on pushing states to identify unqualified teachers than helping them find and keep qualified ones. At the November 2003 TAC meeting in North Carolina, district HR representatives requested specific examples of effective strategies that other districts were using to meet the highly qualified teacher mandates, but they were unable to get the ideas, solutions, and opportunities they were seeking. Helping districts meet the teacher quality mandate will require more customized guidance, driven by on-the-ground technical assistance to fit the specific needs of districts.

Similarly, guidance is lacking around compliance with the professional development reporting requirements of the law. While some worthy professional development programs are mentioned, like the Alabama Reading Initiative (ARI), there is no discussion of how districts and states should identify high quality professional development, or monitor and document teachers' participation in it, which is the crux of the law's requirement. This lack of attention to collecting and analyzing professional development data was one of the most blatant missed opportunities of the federal government's approach to improving teacher quality. Unfortunately, the strategies included on the TAC website do not address how poor rural school districts can access high quality professional development, how state policies can drive them, and what kind of local, state, and federal money can be drawn upon to fund them.

In one state, a district official said that they often read about changes in highly qualified teacher requirements in the newspaper before they got any information from their states.

Lack of Resources

In addition to the lack of technical assistance from the federal government, fiscal constraints make it difficult for many states to provide the necessary guidance to help districts think differently about the use of federal monies. Much has been said and written over the past two years about the "unfunded" or "under funded" mandate of NCLB. A report from the Center on Education Policy in January 2004, based on a national survey of state and district officials, revealed that many administrators believe federal dollars are inadequate to address the significant challenges created by the law. Thirty of 40 responding states reported that hiring freezes and budget cuts in their respective departments of education were impeding their ability to carry out the law. Thirty-eight states (of 48 responding) also claim they do not have sufficient staff to carry out the requirements of the act.²

As state professional development money has dried up due to budget woes, federal professional development money is often all that remains. Budget deficits loom large in many states, including those reviewed in this study. Alabama and Georgia face budget deficits in fiscal year 2005 of more than \$500 million. These fiscal realities necessitated significant cuts during the past several years, including many in education. In 2003, North Carolina cut programs for at-risk students by \$1 million and local school districts were forced to make a collective \$44 million in budget cuts. In Georgia, all agency heads were asked to make 2.5 percent cuts in their budgets, amounting to a loss of approximately \$127 million for Georgia school districts. Proposed cuts up to five percent next year could result in Georgia schools losing up to \$275 million. After the failure in Alabama of a constitutional amendment that would have changed the state's tax structure and provided hundreds of millions of dollars for education, the state was forced to zero out all funding to local districts for professional development, technology and libraries. Alabama is also considering laying-off up to 3400 teachers. Tennessee has faced serious deficits the past several years (\$500 million in FY 2004) but managed to protect K-12 education from cuts in 2004 at the expense of higher education and by borrowing to make ends meet.

It is within this financial context that the districts we visited are struggling to meet the new federal teaching quality mandates. As state professional development money has dried up due to budget woes, federal professional development money is often all that remains, despite NCLB's requirement that federal funds supplement, not supplant, state and local dollars. One superintendent told us that the Title II money was "a godsend" because no other money was available to fill some major holes in professional development created by state cuts. These kinds of stopgap measures often leave districts with little or no funding for innovative recruitment and retention strategies. A rural superintendent in North Carolina described some of the challenges the district is facing with resources:

If we want high quality professional development with high quality presenters, you have to pay for it...We should be providing a stipend for teachers to participate in PD after-hours. We can't do that because of money... And that's just the professional development side of it. This doesn't even address the recruiting, support, mentoring new teachers... To do the things that we need to do to support and to retain the folks, it's going to take some creative and flexible opportunities for practicing teachers, because that's who needs to be doing this at the schools. We could do that if we had the money.

The challenges and costs for all states and districts to get highly qualified teachers in every classroom by 2005-2006 should not be understated. The state of Ohio released a report in December 2003, which details the costs of implementing NCLB, including specific costs asso-

ciated with meeting the highly qualified teacher standards, that ranged from a one-time cost of \$875,000 for the relatively simple solution of paying for Praxis examinations for all non-highly qualified teachers, up to \$59 million annually to cover the cost of paying salary increases if all of those teachers earn master's degrees to attain highly qualified status.³

Table 6 reveals the approximate amount of federal dollars available for teacher quality in several of our case study districts.

Table 6. Federal Title 11 Dollars Available for Selected Case Study Sites: 2003-04

District	Number of Teachers	Title IIA + Title I Set-Aside (03-04)	Total TQ \$ available per teacher
Remote rural	111	\$214,000	\$214,000
Rural near metro	442	\$605,000	\$605,000
Mid-sized urban	1,449	\$2,460,000	\$2,460,000
Large urban	4,000	\$6,400,000	\$6,400,000

These per-teacher figures may make it seem as though the flow-through formulas devised by Congress adequately account for increased poverty and other factors that make recruitment, retention and professional development more difficult in rural areas. However, a rural district's capacity to use these dollars is often far less than a larger, urban district. Geographic isolation, higher proportions of unqualified teachers, limited access to universities and consultants, and the unavailability of mentor teachers all contribute to rural districts' need for more money to fund the highly qualified mandates. Furthermore, the fixed costs involved in hiring consultants and paying for substitute teachers vary only slightly from large urban to small rural districts, meaning that small districts must use a much greater percentage of their federal funds for these purposes.

While we were not able to conduct a cost study in the context of our case studies, we did learn a great deal about the assorted financial challenges associated with NCLB. For example, we found schools and districts struggling to pay for the additional costs of "high quality professional development" for all teachers, support for paraprofessionals to become highly qualified, administrative costs associated with the parental notification requirements of the law, and upgrades to data and technical infrastructures used to document teachers' highly qualified status, in addition to the costs of effective recruitment and retention initiatives.

Same Results

States, districts, and schools have been charged with reforming teacher certification, improving professional development (including mentoring for new teachers), implementing effective alternative routes, improving teacher assessment, and using signing bonuses and merit-pay to compensate teachers differently. All of these activities were to be accomplished with the \$3 billion in Title II teacher quality money that accompanied the NCLB legislation.

Despite this push from the Department, most of the districts we studied were using Title II money much the same as always, with some districts using as much as 80 percent of their Title

II dollars for class-size reduction units. What we saw in our 12 districts is not unique. A GAO report on NCLB concluded that generally speaking, most states and districts were "continuing activities from previous years." In fact, districts reported that they were planning to spend 66 percent of their Title II funds on recruitment and retention, but 85 percent of those recruitment and retention expenditures were actually class-size reduction positions (a total of 56 percent of all Title II funds). Similarly, a policy brief from the Department itself reported that a different survey of sample districts showed that districts spent 58 percent of their Title II funds on teacher salaries to reduce class size in the 2002-2003 school year. Another 25 percent was spent on professional development and only 13 percent was spent on "other allowable activities." In other words, despite the new flexibility in these Title II funds, very little has changed from how districts spent this money in the past.

The districts we visited often told us they were using Title II money to pay for PRAXIS II preparation and testing for teachers who needed to prove content knowledge. Some were paying for coursework when teachers chose the academic major option to prove subject matter competency. Large portions of dollars went to professional development initiatives, which ranged from literacy workshops and reading endorsements to training in teacher leadership and understanding poverty. One district used Title II funds to create a special position to work on teacher recruitment and retention, focused specifically on student teacher placement to ensure appropriate matches between the needs of student teachers and those of the schools where they trained. Another district was paying for "marketing" packets to promote teaching in their district, along with a new teacher orientation. All of these activities could be considered a good thing, but they reflect a hodge-podge of policies and programs rather than a comprehensive plan for responding to the teaching quality mandates.

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While NCLB relies on states and districts to use their existing money in different ways, many states and districts do not know how to do this effectively and hard-to-staff districts will face even greater challenges in employing limited teaching quality resources. Districts need significantly more guidance and technical assistance on how to implement and fund the teaching quality mandates.

Counting "Highly Qualified" Teachers May Not Be as Easy as "1-2-3"

When I arrived no one could tell me how many teachers in the district met the [highly qualified] requirements. Our district did not begin building a database to track this information until January 2004.

—human resources director, urban district

Our case studies surfaced an enormous information gap that needs to be filled if policymakers, practitioners, and the public are going to have accurate data on who is "highly qualified." The federal government has placed very little emphasis on helping state and local agencies build or improve their teaching quality data infrastructures, although a major focus of the highly qualified teacher mandates are accountability measures that involve districts and states accurately collecting and reporting data. Implementing the law without the methods and systems that yield valid and reliable data needed to identify highly qualified teachers is currently proving, and barring dramatic changes will remain, difficult or impossible.

Current accountability measures call for states and districts to collect and report data, via an annual report card, on "the professional qualifications of teachers in the state, the percentage of such teachers teaching with emergency or provisional credentials, and the percentage of classes in the state not taught by highly qualified teachers, in the aggregate and disaggregated by high-poverty compared to low-poverty schools which, for the purpose of this clause, means schools in the top quartile of poverty and the bottom quartile of poverty in the state." We found that states and districts are currently unequipped to handle this monumental data collection and reporting task.

What we learned in our site visits has been corroborated by a recent General Accounting Office (GAO) report. GAO reported that "officials from 7 of 8 states visited said they did not have data systems that would allow them to track teacher qualifications according to the federal criteria for every subject taught." One state in the GAO sample reported that it would take two years just to build the kind of database it needed to document teachers' highly qualified status.

The first state reports on highly qualified teachers were due in August 2003. At that time, each of the states in our study reported wide variations in percentage of classes taught by highly qualified teachers, both in the aggregate and in high poverty schools (see Table 7). For example, Georgia claimed that 94 percent of their teachers were highly qualified, while Alabama and Tennessee reported 35 and 34 percent 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 at that time. 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 the first state reports were required.

Table 7. Highly Qualified Teacher Data as of Fall 2003

State	Percent of class taught by "highly qualified" teachers statewide	Percent of class 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

Because so few states have any kind of apparatus by which to track such information, many relied only on approximations. In Alabama, state and district officials have been hand counting highly qualified teachers. Local officials completed a checklist for different criteria to identify highly qualified teachers, and then state department employees (six of them) verified the checklists for the state's 48,000 teachers. On one day in May 2003, a single department staffer had

^{**} Source: North Carolina Department of Public Instruction, 2003, http://www.ncpublicschools.org/news/03-04/112503.html

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

1,500 teacher checklists waiting to be reviewed, in addition to other responsibilities including processing certificates and renewals.

North Carolina used its state-level database to match each teacher's tested area with his or her assigned area, then sent the names of all teachers who could not be verified as highly qualified to district personnel, asking them to find a means of documenting highly qualified status for those teachers. Tennessee has used a similar process. Georgia is perhaps the farthest along in this regard, and is using a new database that matches teachers' certification areas with the areas to which they are assigned, then notifying districts 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. There were also inaccuracies due to teachers having new certificates that are not yet reflected in the system, or because the subject areas where teachers are *shown* to teach do not accurately reflect the classes they are teaching. One district contact told us that something as small and simple as coding "science" as "social science" had thrown off teachers' highly qualified status in the state-level database. Human resource personnel in several districts across the four states had problems matching up course titles with the "core academic subjects," so it was difficult for them to report accurately on highly qualified status for some teachers.

Furthermore, relying on districts to provide this kind of information, with little or no guidance, is likely to produce unreliable data even within states. One district we visited in March 2004 had a new superintendent and human resource director. The HR director told us, "When I arrived no one could tell me how many teachers in the district met the highly qualified requirements. Our district did not begin building a database to track this information until January 2004."

Other districts told us stories of numerous hours spent poring over paper files, searching for copies of transcripts, certificates, test scores, and the like, and often found they did not have copies of everything and had to ask teachers to search for documentation that might be 20 years old.

If the highly qualified teacher mandate is to achieve its objectives related to collecting and reporting data, states must implement dramatically different methods and systems that will yield valid and reliable data to identify highly qualified teachers.

Professional Development Is Improving; NCLB Influence Is Positive but Limited

The good news is that our case studies found that professional development is improving, in some part, fueled by NCLB and its focus on "significantly elevating the quality of instruction by providing staff in participating schools with substantial opportunities for professional development." The law calls for local needs assessments of the knowledge and skills teachers and principals need to help students meet academic standards, and it appears that more administrators are taking teachers' professional development more seriously.

Perhaps the most promising element of the professional development standards promoted in the law is the focus on ensuring that teachers and administrators gain the knowledge and skills to help all types of diverse learners meet content and achievement standards. The standards for

If the highly qualified teacher mandate is to achieve its objectives related to collecting and reporting data, states must implement dramatically different methods and systems that will yield valid and reliable data to identify highly qualified teachers.

professional development stand in stark contrast to the content-driven standards set in the highly qualified teacher definition described previously.

NCLB provides an opportunity for states and districts to begin thinking more systematically about teacher learning. Some district administrators said that the law, both the student accountability and the professional development pieces, has pushed them to focus on specific needs within their systems and target resources in those areas. One district professional development director, from an urban community with better resources than most districts we visited, asserted:

In past years, teachers sometimes selected professional development that did not support the greatest needs of students as demonstrated by data and subsequently diluted the pool of professional development dollars; this is no longer the case. This is the first time we have really used data to determine professional development focus, and I think that is due to the NCLB requirement.

Another district administrator agreed:

With professional development in the past, we've had a lot of flavor of month, one hour per month doing this and that. When it comes to long term knowledge and application, we've been fast food. I really like the change here.

There is no question that in some well-resourced districts, the NCLB professional development requirements were at least initiating a different kind of conversation about the types of inservice training and support needed.

Despite the considerable promise represented by the professional development provisions of the law, they are among the least discussed elements of NCLB. Districts have been understandably more focused on how they will meet the adequate yearly progress (AYP) and highly qualified teacher requirement of the law. Consequently, there was very little knowledge of the high quality professional development provisions among teachers, principals and district administrators. When asked what information they had received about these requirements, the answer was most often "None" or "Very little." Even district professional development coordinators often had to ask us what the law said about this issue.

Given the lack of understanding regarding the professional development requirements themselves, it is not at all surprising that we found virtually no understanding of the federal requirement of documenting and assessing the extent to which teachers receive high quality professional development. For example, when asked how their district is documenting teachers' participation in high quality professional development, district officials often responded that either they did not know or did not yet have a plan. Many administrators told us that they were compiling the usual professional development activities and implied that they may be counting "CPR" or other non-academic workshops as "high quality" professional development. Very few of the district administrators had given any thought yet as to what it might mean to "certify" certain professional development providers and opportunities as "high-quality." No district administrator informed us that they had the technological infrastructure to develop a cost-effective, accurate system to track and monitor teacher participation in high quality professional development.

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In addition, we heard serious concerns from administrators about the federal government's push for scientifically-based professional development, which they equated with "one-size-fits-all" programs sold by a favored vendor or textbook company. One administrator noted, "The scientifically research based way of spending your money advocates you buying a canned program for staff development, and that's the poorest kind. Over all the years I have been in education, I might come up with only a few canned programs that are really effective."

A teacher worried that her district, in the name of only paying for scientifically-based professional development, will eliminate teacher leadership roles and will no longer support attendance at state and national conferences. She was concerned that there will be fewer opportunities for her colleagues to attend one-day or short-term training in order to help them understand the larger picture of standards, curriculum, and accountability.

The need for improving teaching quality through professional development is great, and we found many teachers who are ill-prepared to help the students they are teaching, and schools ill-prepared to design learning opportunities for them. Everyone recognizes that NCLB required disaggregated data to ensure that all subgroups, including second language learners, meet AYP standards. But our examination of available state-level data in our four states suggests that there is an alarming need for professional development to help teachers reach these students. The professional development gap is huge in North Carolina, where more than 46 percent of the state's teachers are estimated to be teaching students whose primary language is not English, but only six percent of the teachers have participated in a modest eight hours or more in "learning to teach" second language learners.

Table 8. Percent of Teachers Who Taught LEP Students and Percent with Training, 1999-00

State	Taught	Trained*
Alabama	20%	1%
Georgia	35%	6%
North Carolina	47%	6%
Tennessee	22%	1%
U.S.	41%	13%

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

Source: School and Staffing Survey, 1999-00

Based on our own survey, in one rural middle school we visited 63 percent of teachers reported having taught LEP children in the last school year, but not a single teacher reported receiving eight or more hours of training during the last three years in how to teach those students. In an urban elementary school, 79 percent of teachers taught LEP students, but only 11 percent reported participating in a small amount of training to work with special needs students.

Finally, we learned that all too often, the schools are not designed to provide the kind of time that teachers need to learn from one another, reflect on their own practice, or become betterversed in the kinds of research-based strategies promoted by NCLB. While the law's provisions

correctly call for professional development that is high quality, sustained, intensive, classroom-focused, long-term and directly related to helping students meet achievement standards, very few principals have either the flexibility or the expertise to create building schedules that could support this kind of teacher learning. One inner city elementary school principal told us that she would love to create a more flexible schedule to support professional development during the school day, but that she did not know how. She felt that professional development for principals in how to structure school days differently would be a great help.

Capacity to provide high quality professional development is also a major issue. Rural districts are often at a particular disadvantage due to their small size, limited human capital, remote location and limited access to available expertise, and inadequate funding. In one rural district, with only eight (professional and clerical) central office staff to serve the needs of 250 teachers, seven schools and 2500 students, administrators were hard pressed to organize the kind of professional development appropriate for their diverse learning needs. The district is at least 90 miles from the nearest university, limiting access to professional consultants, and their lack of technology restricts their access to distance learning opportunities.

In each of the states we studied, professional development has traditionally been a local control issue. Therefore, there is little precedent for states to create and enforce professional development standards. Many of the states' departments of education have been recently downsized, and there are few resources to serve these schools. As one rural superintendent in North Carolina noted:

Twenty-six years ago when I first became a principal, the state department of education provided a lot of on-site help to novice teachers and administrators. That does not exist anymore. They do not have the personnel anymore. They have given that responsibility up. Professional development for my folks is 100 percent my responsibility. I cannot do it all, but there is no one else to give it to them.

NCLB provides an important opportunity for state and district officials to begin thinking more systematically about professional development. But facing pressure to meet AYP standards and responding to the highly qualified mandates and paperwork, high quality professional development is still an afterthought for many administrators and teachers alike. SECTQ recommends that the federal government provide states and districts with more guidance and resources so that targeted and effective professional development can be realized by all schools.

Promising Teaching Quality Developments Require Leadership, Money and Community Support— NCLB Alone Is Not Nearly Enough

Despite many of the problems we have described related the teaching quality provisions of NCLB, we did discover some promising developments. We found several examples of extraordinary teaching quality efforts, but only in locations that benefit from leadership, money, and community support beyond the scope of what NCLB provides. For example, in a mid-sized urban district with about \$2 million in their Title II budget for 1,500 teachers, a number of coherent strategies have emerged. Sparked, in part, by the highly qualified teacher requirements, the district has created a system for every teacher to have an individual learning plan (ILP). These ILPs help ensure that all K-3 teachers participate in balanced literacy training,

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while teachers in grades 4-8 train in middle grades literacy, and high school teachers work on reading in the content areas. Workshops in understanding poverty and analyzing data are required for every teacher at every grade level.

Because the district now hires twice as many alternative route teachers as they did several years ago, the district emphasizes the development of teaching skills in their required professional development offerings. In order to assist middle school math and science teachers, who do not have content expertise in their teaching assignment, the district is paying for approved sets of four courses in each of the fields. The district is working with a nearby university to offer an urban teaching endorsement as well as a number of teacher leadership opportunities that support National Board Certification.

Also, the district is using Title VI class-size reduction funds to help ensure that specially trained veteran teachers are available to train lesser prepared teachers for six months to a year. The program, which was launched four years ago and predates NCLB, supports eight to 10 new participating teachers each year. The district has lost only one of these teachers thus far, giving them a retention rate of roughly 97 percent. The new teachers receive extensive support and assistance, and both mentor and mentee teachers receive a stipend for working together and doing extra professional development during the year.

We also visited one urban district that had developed a successful effort to recruit more effective and accomplished teachers into the area's low-performing schools. Largely funded by multimillion dollar grants from several local foundations, the district provided financial incentives for working with these schools. The incentives include free tuition toward a master's degree; a \$10,000 loan toward a down payment on a house near one of the schools, forgivable if the teacher remains in the school for a minimum of five years; \$2,000 for every teacher that boosted overall test scores by a significant degree; and a \$5,000 annual bonus. As a result of the initiative, staffing vacancies have decreased dramatically, the applicant pool is much stronger, and student achievement rates are improving. Most community leaders are now seeing the direct relationship between the comprehensive approaches to improving teaching quality and increases in student achievement. However, this district has very little support from the state, and in fact, has many of its efforts undermined by conflicting state policies.

Finally, we studied a large urban district, with over 7,000 teachers and 100,000 students, and discovered an extraordinary attempt to draw upon National Board Certified Teachers to teach in high need schools serving the district's most challenging students. These expert teachers are expected to mentor new and/or struggling teachers, diagnose students' learning problems, and use their classrooms as models for other teachers to observe and learn how to teach differently. They can earn up to \$2,500 in additional salary per year to teach in these schools and additional pay if they meet performance goals. The district has arranged with local universities to offer specialized master's programs to teachers at these schools, and offers smaller classes and additional staff at these schools. Achievement gains have been mounting, and in schools where expert principals have been in place, the schools no longer suffer from high teacher turnover rates.

This effort was built from strong district-level leadership, buy-in and support from several local community and activist groups, and a ready supply of accomplished teachers who were willing to move across town to teach more challenging students. Our interviews revealed that the NBCTs and other accomplished teachers who moved to these schools did so because they

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trusted their principals and knew they would be supported in "tailoring" their teaching practices to meet the needs of their students and not have to teach to the state's standardized tests. This effort also pre-dates NCLB's highly qualified teacher mandates, and fortunately, savvy school leadership has allowed for the federal requirements and resources to be blended into their long-standing, but up-hill struggle to ensure that all students have access to caring, competent, and qualified teachers.

These examples demonstrate that some innovative responses to the teaching quality mandates are in place, but these are rarely evident in the rural school districts we visited. Meeting the NCLB requirements with the current level of funding made available by the federal government is insufficient to improve teaching quality. States and districts need to focus more on comprehensive, progressive efforts to recruit and retain quality teachers.

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RECOMMENDATIONS

Much needs to be done from the classroom to the Capitol to ensure that NCLB helps all students get the knowledgeable teachers they need and deserve.

This new federal role requires clear, consistent guidance and assistance to states and sufficient resources to ensure that the requirements can be met.

Federal Government

NCLB represents an unprecedented role for the federal government in educating the nation's children. This new role requires clear and consistent guidance and assistance to states, as well as sufficient funding to ensure districts can meet the requirements.

- NCLB must be amended to focus not only on teachers' content knowledge but also on their ability to teach it by requiring preparation and performance based assessment before a teacher is considered highly qualified.
- Title II allocations, like many state funding formulas, should include additional monies to
 ensure that small rural districts have sufficient funds to recruit and retain highly qualified
 teachers.
- The Medical Manpower Act of the 1950s and the Health Professions Education Assistance Act in 1963 demonstrated a significant investment in and comprehensive response to shortages in the medical field, creating preparation programs and incentives to work in hard-to-staff areas of the country. A similar commitment is necessary for teachers. Proposed legislation such as the Teacher Mentoring Act (H.R. 1611), Teaching Fellows Act (H.R. 1805), and aspects of the Ready to Teach Act (H.R. 2211) that create Centers of Excellence, if passed, could be a good start toward the long-term investment necessary to assist states and districts in finding high quality teachers.

State Government

States play a critical role in ensuring teaching quality, setting standards for the profession, and developing licensing requirements. State policies and NCLB requirements must work with each other rather than against each other.

• States should only use the minimal requirements of the federal highly qualified definition as a starting point for discussions on what teaching quality looks like, how to assess it, and how to prepare new candidates and support existing teachers to reach the highest standards. States should not offer reciprocity to "highly qualified" teachers from other states without a thorough analysis to ensure that those standards are of equal rigor.

Recommendations 33

 Districts need assistance in developing new policies and programs to improve teaching quality and implementing NCLB. State assistance to schools and districts should ensure that innovative and successful approaches are thoroughly detailed, best practices are systematically shared, and assistance in implementation is provided.

- States need to invest strategically in a combination of incentives to recruit and retain teachers for hard-to-staff and low performing schools. These programs should include building a critical mass of accomplished teachers in these schools, intensive induction programs, and better working conditions.
- States should collect more comprehensive data on a range of teacher recruitment, preparation, and professional development efforts, as well as teacher working conditions to assess progress on building a high quality teacher development system.

Local School Districts

Ultimately, the success of NCLB's efforts to place a highly qualified teacher in every classroom falls squarely on the shoulders of local districts that control virtually all of the federal educator quality funds.

- Districts must first understand how local, state, and federal dollars used to enhance teaching quality are being spent. They must then analyze current practices to determine what, if any, reforms are necessary.
- Districts need to focus on addressing recruitment and retention challenges with an emphasis on quality, not on meeting the mandates of NCLB. If districts focus on teaching quality—recruiting or developing well prepared teachers and investing in their continued professional growth—the highly qualified requirements will be met.
- Districts must place teaching quality at the center of school improvement strategies if they
 expect schools to meet AYP. Data on teacher supply, demand, and turnover will be essential
 to monitoring the success of these strategies.

In the end, it will take nothing less than a concerted and coordinated effort of the federal government, states, and districts to overhaul the way we recruit, license, induct, and support teachers to ensure that we have not only a highly qualified teacher but also high quality teaching in every classroom, every day.

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Notes

A Message from the SECTQ

1. For example, see 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, D.C.: Author; Center for Education Policy (2003). From the Capitol to the Classroom: State and Federal Efforts to Implement the No Child Left Behind Act. Washington, D.C.: Author.

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 - 2. Archer, J. (2002). "Research: Focusing In on Teachers." Education Week. 21(29), 36–39.
- 3. The No Child Left Behind Act also defines how this competence may be demonstrated, which differs for teachers of different grade levels and for veteran versus new teachers. Briefly, new secondary teachers must demonstrate subject matter competence by either passing a rigorous subject exam or possessing an academic major or equivalent coursework, graduate degree, or advanced certification or credentialing in the subject taught. New elementary school teachers must pass a rigorous test of subject matter and teaching skills in reading, writing, math, and other basic areas of the elementary curriculum. Veteran teachers may demonstrate subject competence through these same options or by meeting an objective, uniform standard set by the state to determine subject competency. See: U.S. Department of Education. (2002); No Child Left Behind Act of 2001 (H.R. 1), 107 Cong. 110 (2002) (enacted).
- 4. Richard M. Ingersoll. (2002). "Holes in the teacher supply bucket." *School Administrator* (pp. 42-43). Arlington, Va.: American Association of School Administrators. www.aasa.publications/sa/2002_03/colIngersoll.htm.

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Finding One: "Highly Qualified" Does Not Ensure High Quality

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- 2. Georgia Professional Standards Commission. Georgia TAPP Program Performance. http://www.gapsc.com/gatapp/download/gatappall.pdf
- 3. U.S. Department of Education. (2002). *Improving Teacher Quality State Grants: Title II, Part A Non-Regulatory Draft Guidance, Revised Draft: December 19, 2002.* Washington, D.C.: Author.
- 4. An agreement was finally reached with ETS to begin administering the Praxis II in January 2004. In the meantime, the state asked for and received a one-year waiver on the parental notification requirement related to "highly qualified" teachers (Meyer, 2003).
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- 6. Alabama State Board of Education. (June 26, 2003). 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; 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; Tennessee State Board of Education. (2003, May 2). Tennessee Plan For Implementing The Teacher And Paraprofessional Quality Provisions Of The No Child Left Behind Act Of 2001. Retrieved August 14, 2003, from http://www.state.tn.us/education/fpnclbtchqltyimplplan.pdf; Georgia Professional Standards Commission. (2003, Revised January 2004). Draft Georgia implementation guidelines: Criteria for highly qualified teachers. Retrieved April 28, 2004, from http://www.gapsc.com/nclb/Admin/Files/ImpPolicy.pdf
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- 8. Alabama State Board of Education. (June 26, 2003). *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
- 9. U.S. Department of Education. (2003). *Improving Teacher Quality State Grants: Title II, Part A Non-Regulatory Draft Guidance, Revised Draft: September 12, 2003.* Washington, D.C.
- 10. Each state's HOUSSE standard must 1) be set by the state for both grade-appropriate academic subject-matter knowledge and teaching skills; 2) be aligned with challenging state

academic standards and developed in consultation with core content specialists, teachers, principals and school administrators; 3) provide objective, coherent information about the teacher's attainment of core content knowledge in the academic subjects in which a teacher teaches; 4) be applied uniformly to all teachers in the same academic subject and the same grade level throughout the state; 5) take into consideration, but not be based primarily on, the time the teacher has been teaching in the academic subject; 6) be made available to the public upon request; and 7) may involve multiple objective measures of teacher competency.

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Finding Three: Same Approaches Will Lead to Same Results

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- 6. U.S. Department of Education. (2002); No Child Left Behind Act of 2001 (H.R. 1), 107 Cong. (enacted) See Title I, Section 1111(c)(h)(1)(c)(viii).
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- 8. See: U.S. Department of Education. (2002); No Child Left Behind Act of 2001 (H.R. 1) Sec. 1001 (10), 107 Cong. (enacted).



The Southeast Center for Teaching Quality
976 Airport Road, Suite 250
Chapel Hill, N.C. 27514
E-mail: contactus@teachingquality.org
Web: www.teachingquality.org