A FEDERAL FORAY INTO TEACHER CERTIFICATION: ASSESSING THE "HIGHLY QUALIFIED TEACHER" PROVISION OF NCLB

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The *No Child Left Behind Act of 2001* required all students to be taught by "highly qualified" teachers by 2006. States had substantial flexibility in defining teacher standards and yet no State reached the goal of 100 percent highly qualified teachers (HQT) by the end of the 2005-2006 school year. Even before the first deadline past, the Federal government established a new deadline—the end of the 2006-07 school year.

Questions remain as to why the original well-publicized deadline was missed, whether the new deadline will be met, and whether the requirement itself is worthwhile. This paper examines the possibilities. It starts by briefly describing the teacher workforce in the United States at the time NCLB was enacted; in order to forecast where we are going, it helps to first understand where we have been. It then reviews the original intent of the law, examining how flexibility and local control were emphasized to give States power over implementation. The third section traces the evolution of States' implementation efforts and the oversight activities of the U.S. Department of Education (hereafter referred to as the Department). It discusses how the Department's oversight shifted from reactive to proactive as evidence mounted that States were abusing the flexibility of the law. As the Department became more active in overseeing implementation efforts, it increasingly relied on a variety of accountability measures authorized by the law. The fourth section reviews these accountability measures and States' reactions. Having looked back at the last five years, we turn our attention to the road ahead and to indicators of how the new requirements have affected and will continue to affect the teacher workforce.

Overall, evidence from the past five years suggests that it is possible to *reduce* teacher quality gaps across schools. The importance of this should not be understated. However, while many States are on the road to having a substantial majority of HQTs in all schools, it will take

several more years until States arrive at that road's terminus, and then, only if the Federal government continues to actively oversee implementation efforts. A handful of States may meet the new deadline, but most will need at least until the end of the 2007-08 or 2008-09 school years. More importantly while States are making progress in meeting the HQT requirements, actually improving teaching quality and eliminating differences across schools will require more than NCLB's HQT provision. It will require substantial structural changes so that traditionally difficult-to-staff schools are more attractive to teachers and less hindered by institutional constraints on the hiring, transfer and firing of teachers.

I. The Teacher Workforce at the Turn of the Millennium

Understanding the challenges facing the implementation of the NCLB HQT provision, requires understanding who teaches, where they teach, and why. The labor market for teachers is huge; more than three and a half million college graduates teach kindergarten through 12th grade in the U.S, and this number is growing because of because of both population growth and decreases in the number of students per teacher.[1] Three out of four teachers are women, though almost half of secondary school teachers are male. Because of improving opportunities for women college graduates, the relative attractiveness of teaching has diminished. One study found that the percent of new women teachers who were in the top 10 percent of their high school class fell from 20 percent in 1964 to less than four percent in 1992, though the average achievement of new female teacher fell only slightly during this time.[2] As expected in such a large labor market, the academic achievement of teachers has a large range. There are some very high scoring teachers and many who score below the average for college graduates. Almost all teachers have bachelor's degrees, more than half have at least master's degrees, and almost all high school

teachers have a major or minor in the main subject area in which they teach. In addition, almost all teachers hold a teaching certificate (94.4 percent in 1999-2000).[3]

Using teachers' years of experience, test scores, or even certification, as measures of qualifications, teachers in high-poverty, low-performing schools are dramatically less qualified, on average. As an example, in 2000, 28 percent of New York City teachers in the quartile of schools with the highest concentration of student-poverty were in their first two years of teaching, compared with 15 percent of teachers in the lowest-poverty group. Similarly, 26 percent of non-white students had teachers who failed had their general knowledge certification exam, compared to 16 percent of white students.[4] There also significant differences across large metropolitan areas; for example, in 1993-94 there were substantially more emergency certified teachers in Los Angeles (28 percent) than in other large metropolitan areas.[5]

The sorting on qualifications described above does not necessarily imply that schools with poor or low-achieving students receive worse instruction. Researchers have not found a strong relationship between teacher effectiveness and the typically-measured characteristics of teachers. In the years preceding the enactment of NCLB, new administrative data became available in many districts and in a number of states. The data followed students over time and allowed researchers to link student learning gains to teachers. By adjusting for student characteristics, these researchers created measures of teachers' "value-added" to student learning and used these to try to identify the effects of teacher characteristics on student achievement.[6] These studies tended to find that teachers have large effects on achievement growth. Differences across teachers explain a substantial portion of the variation in achievement growth across students, and these effects persist for several years.[7] However, like the largely cross-sectional research that preceded it, the value-added literature has not been very successful in identifying

the key characteristics of teachers that matter. For example, teachers with masters' degrees do not appear to add more to student learning, on average, than do other teachers, though there is some evidence that masters degrees specifically in mathematics improves high school math teaching.[8]

The effect of certification on teacher effectiveness is more controversial. Some studies find positive effects, while others do not. Two recent studies in Florida and North Carolina suggest that, on average, certified teachers add more to student learning than uncertified teachers, on average, but there is still plenty of room for debate about the extent to which certification reflects quality.[9] In theory, certification can improve teaching quality by keeping individuals who would have been the worst teachers out of the classroom. To do this, the certification has to be effective at distinguishing poor teachers from other teachers. It can, for example, differentiate teachers by requiring coursework that improves teaching or by exams that weed out individuals without tested knowledge. Certification may also have deleterious effects if eliminates better teachers (for example by eliminating teachers that don't score well on exams but are able to motivate students) or if it increases the effort, time or money individuals have to invest in order to enter the occupation and thus makes other occupations more appealing.

We know very little about the effects of different aspects of certification requirements. For example, here is little convincing research on the causal effects of coursework requirements for teachers on their students' learning. These requirements may be important for teachers, but we simply do not know because there have been no good studies in this area. Almost all States require teachers to pass certification exams. Teachers' own test scores are correlated with their students' learning gains, especially when comparing very low scoring teachers to other teachers, but these differences explain only a little of the difference in effectiveness across teachers.[10]

Finally, certification usually requires student teaching, though the extent of this requirement varies substantially across States. While few studies estimate the effects of these requirements on student outcomes, experience in a classroom as a teacher may proxy for such student teaching. Experience, especially the comparison of first year teachers to other teachers, is the one measured characteristic of teachers that does consistently predict student learning. First year teachers, on average, are not as effective as more experienced teachers, though again, there is more variation in teacher effectiveness among first year teachers than between first year teachers and more those with more experience.[11]

In addition to lacking of a research base for assessing the importance of various teacher characteristics, we similarly do not know the extent to which schools with different student populations provide different quality of instruction. In order to estimate this well, the researcher would need to be able to separate the average effect of teachers who serve a given population from the average learning that that population of students would experience with different teachers. This is a difficult counterfactual to convincingly establish. Researchers are able to compare the learning of similar students, but it is difficult to compare the learning of dissimilar students because it is not clear how much to attribute to teachers and how much to attribute to the dissimilarity of the students themselves. However, while we don't know for sure that differences in qualifications reflect differences in teaching quality, the evident sorting of teachers across schools does suggest that some schools have a more difficult time attracting and retaining teachers. That difficulty alone may have implications for teaching quality.

Why does this sorting occur? Less qualified teachers sort into low-performing schools with high concentrations of non-white students in their first teaching job, though decisions to transfer to another school or quit teaching exacerbate these differences as, for example, teachers

that score higher on certification exams differentially leave schools with lower-achieving students.[12] Teachers choose where to teach based on wages as well as non-wage job characteristics.

There is a large literature documenting that teachers respond to wages and are more likely to choose to teach when starting teacher wages are high relative to wages in other occupations. Even with regional variation, lawyers, doctors, scientists, and engineers earn substantially more than teachers, as do manager and sales and financial service workers.[13] Within districts, base salaries tend to vary only by the experience and education level of the teacher, though most districts pay more for additional work such as coaching and some districts pay bonuses for teachers in certain fields.[14] Between districts, the variation can be much greater. For example, in 2000-01, starting salaries for teachers with a bachelor's degree in San Jose, CA; Oakland, CA; Yonkers, NY; and Fort Worth, TX were at least $35,000, compared with under $25,000 in Tucson, AZ; Little Rock, AR; Newport News, VA; and Jackson, MS.[15] Much of this variation can be explained by the wages available in other occupations in the region. Areas in which non-teaching college graduates earn more tend to have higher teacher salaries.[16]

Salaries are not the only criterion that affects individuals' decisions about whether and where to teach. Non-wage job characteristics – such as attributes of students, class size, school culture, facilities, leadership and safety – also play a role. Many studies find that teachers prefer to teach in schools with higher-achieving students.[17] When teachers switch schools, they are more likely to move to schools with higher-achieving and higher socioeconomic-status students. Teachers may also choose schools with high-achieving and wealthy students because these schools offer other characteristics that teachers prefer, such as better facilities or more preparation time. Working conditions are likely to be even more important than salaries in

determining the current distribution of teachers across schools given first the great variation in working conditions across schools; second, the lack of variation in salary schedules within districts; and third, that much of the variation across districts is due to differences between and not within local labor markets. Certainly there are noteworthy wage differences between some neighboring districts that influence teachers' decisions of where to teach but this more the exception than the rule.

The location of the school also factors into teachers' decisions about where to teach. Teachers, on average, prefer to teach close to where they grew up or in schools similar to the ones they attended as students. Sixty one percent of teachers who entered public school teaching in New York State between 1999 and 2002, for example, started teaching in a school district located within 15 miles of the district where they graduated from high school.[18] Because large districts with high numbers students living in poverty tend to produce fewer college graduates, they often have a smaller pool from which to draw teachers. The same difficulty holds true for some rural areas. In rural areas, local amenities such as entertainment, shopping and access to airports may also affect the supply of teachers.[19]

Wages, working conditions and location all affect the supply of teachers but the actual distribution of teachers is influenced not only by supply but also by the preferences and actions of hiring authorities. Districts with effective hiring practices will be more able to recruit highly qualified teachers. Recent studies suggest that many large urban districts are not hiring the best teachers available to them.[20] Bureaucratic structures in large districts may help these districts oversee many schools, but they appear to hinder the speed by which these districts can make decisions about teachers.[21] Provisions in teacher contracts as well as tenure and due-process rights established at the State level also restrict hiring practices even when administrators do

their best to hire the most effective teachers available. A recent survey of principals in California found that even in this relatively low spending state, principals perceived that greater freedom to fire teachers would be more helpful to them in improving student outcomes than additional dollars or additional teachers.[22] Thus, a combination of factors affecting both teachers' preferences and hiring authorities' flexibility hinder the equitable distribution of teachers across schools and result in stark and systematic differences in teachers.

II. Intent of the "Highly Qualified Teacher" Provision

It is indisputable that effective policies to raise student achievement rely on the skills of teachers. Teachers are the link between policy and students. The intent of the "Highly Qualified Teacher" Provision was to ensure that all students had good teachers and to encourage equity in teacher quality, while giving states flexibility in determining how to implement the provision.

NCLB defines a highly qualified teacher as a fully State-certified teacher, who holds a bachelor's degree and demonstrates competency in the core academic subject or subjects he or she teaches.[23] In order to be fully State-certified, according to the standards set by NCLB, the teacher must obtain a certificate appropriate to his or her level of experience and must not be in a position where certification or licensure requirements are waived on an emergency, temporary, or provisional basis.[24]

The law provides multiple options for teachers to demonstrate subject-matter competency. As Table 1 shows, these options vary across four groups of teachers: new elementary teachers, veteran elementary teachers, new middle and secondary teachers, and veteran middle and secondary teachers.[25] All teachers have the option of passing a State exam. Middle and secondary teachers also may demonstrate competency by completing an

undergraduate or graduate degree in their field or through obtaining an advanced certification or credential such as that offered by the National Board for Professional Teaching Standards.[26]

TABLE 1. Options by which Teachers Can Demonstrate Subject-matter Competency under NCLB

Type of Teacher	Options Available
New Elementary Teachers	1. Pass a rigorous State test of subject knowledge and teaching skills in reading, writing, mathematics, and other areas of basic elementary school curriculum
Veteran Elementary Teachers	1. Pass a rigorous State test of subject knowledge and teaching skills in reading, writing, mathematics, and other areas of basic elementary school curriculum 2. Demonstrates competence in the academic subjects in which the teacher teaches based on a high objective uniform State standard of evaluation (HOUSSE)
New Middle and Secondary Teachers	1. Pass a rigorous State academic subject test in each of the academic subjects in which the teacher teaches 2. Successful completion, in each of the academic subjects in which the teacher teaches, of an academic major, a graduate degree, coursework equivalent to an undergraduate academic major, or advanced certification or credentialing
Veteran Middle and Secondary Teachers	1. Pass a rigorous State academic subject test in each of the academic subjects in which the teacher teaches 2. Successful completion, in each of the academic subjects in which the teacher teaches, of an academic major, a graduate degree, coursework equivalent to an undergraduate academic major, or advanced certification or credentialing 3. Demonstrates competence in the academic subjects in which the teacher teaches based on a high objective uniform State standard of evaluation (HOUSSE)

SOURCE: PL 107-110 §9101(23)

All veteran teachers also have the option of completing a High Objective Uniform State Standard of Evaluation (HOUSSE) in order to fulfill the subject matter competency requirement. The legislation provided States with the following guidance regarding acceptable HOUSSE design.[27] It must be:

1. Set by the State for both grade appropriate academic subject-matter knowledge and teaching skills;

2. Aligned with challenging State academic content and student academic achievement standards and developed in consultation with core content specialists, teachers, principals, and school administrators;

3. Able to provide objective, coherent information about the teacher's attainment of core content knowledge in the academic subjects in which a teacher teaches;

4. 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. Made available to the public upon request; and

7. Involving multiple, objective measures of teacher competency.

The HOUSSE option was intended to give States flexibility in deeming their veteran teachers as highly qualified. As we demonstrate later, States took full advantage of that flexibility (and some abused it) in designing their HOUSSE procedures. The Department has required many States to revise their HOUSSE procedures to bring them into compliance with the law.

As noted above, there is little evidence about the extent to which the specific components of the HQT requirements - college degree, State certification, and subject knowledge - are important for student learning. It is difficult, if not completely unnecessary to test for differences in teacher quality of those with or without a bachelor's degree, because almost all teachers have at least a bachelor's. Moreover, while there is a large literature testing the relationship between certification and teacher quality, certification means something different in each state plus these studies vary widely in both their methodological rigor and analytical conclusions. Similarly, while a group of studies has shown that high school students perform at higher levels in mathematics when taught by teachers with majors in that subject, but we don't know the importance of content knowledge in other areas.[28]

While they are not recommended by the scientific literature, these three measures of 'highly qualified' can be justified from a pragmatic point of view, especially if they were selected through a combination of common sense and professional consensus. In addition, each of these teacher characteristics can be manipulated through carefully designed and appropriately implemented policies. Yet, as we will show in the next section, there have been several

implementation missteps with implications for the potential effects of the highly qualified teacher provision.

Part of the intention of the provision was to leave much of the responsibility for implementation to individual States. Universal primary and secondary education developed in this country as a State-level issue. This interest in State's rights was one driving force in giving States such flexibility. Many of the provision's key aspects required further detailing and defining by the States. For example, each State had to decide what types of State licensure and certification qualify as "full State certification" and which subject-matter tests to require and what cut score to establish. States even had to determine how much coursework is equivalent to an academic major and what elements should and should not be included in a HOUSSE procedure as evidence of subject-matter competency.

This emphasis on giving States flexibility makes sense from a practical as well as philosophical standpoint. States are closer to having the infrastructure to carry out such a requirement. The Federal government did not have the infrastructure, and, on top of this, State systems differ substantially in their teacher policies.[29] Therefore, even if officials at the federal level wanted to establish a concrete national approach to teacher quality, the political and structural reality necessitated that the individual States provide much of the implementation detail and bare responsibility for most of the effort.

III. State Implementation Efforts and the Department's Oversight

Delegating the detail to the individual States resulted in 51 unique approaches guided by 51 different interpretations of the law's intent and requirements. In order to facilitate States implementation of the HQT provision, NCLB included two key deadlines. Beginning with the first day of the 2002-03 school year, all school districts receiving Title I funds were required to

"ensure that all teachers hired after such day and teaching in a program supported with funds under [Title I] are highly qualified."[30] States were also required to establish a plan that would "ensure that all teachers teaching in core academic subjects within the State are highly qualified not later than the end of the 2005-06 school year."[31] Each State plan was required to detail the State activities that would result in an annual increase in the percentage of highly qualified teachers at each local educational agency and school. They also had to show how they would produce an annual increase in the percentage of teachers receiving high-quality professional development to enable them to become highly qualified.[32]

At the signing of NCLB, there were significant differences across the States in their testing and coursework requirements for teacher licensure. Only 22 States required teachers to pass an exam of both subject knowledge and subject-specific pedagogy prior to receiving a beginning teacher license. Another ten States required candidates to pass a subject knowledge exam but not a test of subject-specific pedagogy. Only 26 States required high school teacher candidates to hold a major in the subject taught. Only five States required the same of middle school teacher candidates. [33] It was clear from the beginning that the Department's oversight would be pivotal in determining the extent to which States would achieve the goal of highly qualified teachers. Yet, it wasn't until mid-2004 that the Department began to actively oversee State compliance.

Reactive Oversight. The Department explicitly downplayed its oversight role in its Title II non-regulatory guidance issued on December 19, 2002. For example, the law states that new elementary teachers can only demonstrate subject-matter competency by passing a rigorous test of content knowledge and teaching skills. However, the Department informed States that they would not be required to submit these tests for review and approval by the Department. "While

the Department is always willing to respond to inquiries from States, it is the responsibility of the SEA to identify and approve such tests."[34] Nearly identical language was provided regarding subject knowledge tests for middle and secondary teachers and State HOUSSE procedures. Review and approval would not be required. Essentially, the Department took a hands-off approach to the NCLB-required State highly qualified teacher plans.

This approach to oversight stands in stark contrast to the Department's actions regarding NCLB's student achievement goal. In order to ensure that States were complying with the law, each State was required to submit an Accountability Plan to the Department for approval as a prerequisite for receiving funding under the law. The plans were to detail how the State would guarantee that 100 percent of students would meet State performance standards by 2014. To assist the States in their efforts, the Department provided a template that laid out the ten principles and their associated critical elements which each plan was required to address. As a result, every State submitted an initial plan by the January 31, 2003 deadline. The Department's press release declared, "Another important milestone reached in the implementation of historic law."[35] Based on documents available on the Department's website, it appears that they carefully reviewed each plan paying close attention to the validity of baseline achievement data as well as how graduation rates were calculated and which students were excluded from the accountability system.[36] Secretary Paige approved the last group of State accountability plans on June 10, 2003; however, the Department's reviews continued as they requested additional information from States. Furthermore, every State has amended their plan multiple times since receiving initial Department approval.

While the Plans for increasing student achievement are noteworthy for the details they did include, the plans did not include strategies for ensuring highly qualified teachers. Section

1119(a)(2) clearly states that the highly qualified teacher plans were to be part of these accountability plans:

> As part of the plan described in section 1111 [i.e., the accountability plans], each State educational agency receiving assistance under this part shall develop a plan to ensure that all teachers teaching in core academic subjects within the State are highly qualified not later than the end of the 2005-2006 school year.

Yet, none of the ten principles or their associated critical elements included in the Department's template for plans addressing student achievement directly asks States about the details of their HQT plans.

Only a few months after President Bush signed NCLB into law, one of the law's key sponsors, Senator Edward Kennedy (D-MA), along with Senator Jeff Bingaman (D-NM), submitted a request to the General Accounting Office (GAO) for information on what States were doing to ensure all teachers were highly qualified.[37] The GAO report (GAO-03-631) was released on July 17, 2003 (18 months after NCLB was signed into law) and highlights the States' trepidation at revamping their certification and data collection systems in order to align them with NCLB without clearer and more detailed guidance from the Department. States were well-aware of the 2005-06 deadline, yet wanted to avoid the situation in which after completing a costly and energy-intensive system revamping the Department informs them that those changes were either unnecessary or that their systems continue to be non-NCLB compliant. GAO recommended that the Department provide more information to States especially regarding methods of evaluating teachers' subject-matter competency.

The Department's response to the GAO report summarizes its early oversight efforts regarding teacher quality. Under Secretary Eugene W. Hickok points out the following aspect of NCLB:

> The law sets forth basic requirements for teachers, but provides States considerable flexibility in such areas as determining what constitutes full State certification and what is a "high objective uniform State standard of evaluation" of teacher competence. We recognize it is important to provide timely and informative guidance, while respecting each State's ability to develop its own systems for implementing the law.

A criticism of the law from the beginning was that NCLB forced a single national system upon the States. However, President Bush emphasized flexibility was one of the law's four principles in his speech the day he signed the law. Accountability, parental involvement, and greater funding were the other three principles.[38] The Department had decided to use their lack of oversight of State progress on teacher quality as a means to emphasize the flexibility given to States and local education agencies under the law.

At the same time the Department was praising the flexibility given to States and many States had more flexibility than they knew what to do with, the grumblings of discontent and demands for still greater flexibility from educators and politicians in rural America were growing louder. They argued that key, unique characteristics of rural schools were overlooked when the HQT provision was crafted. For example, rural schools tend to be smaller than their urban counterparts and thus the rural teachers are more likely to be expected to teach multiple subjects to multiple grades.[39] In an October 2003 letter to the U.S. Secretary of Education asking for more flexibility for rural schools under NCLB, the governors of two rural states explained:

> A rural school with fewer than 100 students lacks similarity to Los Angeles Unified School District. NCLB attempts to treat them the same; they are not. As a result, many rural states and their schools feel as though they have not been considered in NCLB.[40]

By the end of 2003, the initial balance the Department sought to strike between oversight to ensure NCLB-compliance and State flexibility was shown to be ineffective. It was clear that rural schools needed additional flexibility (which they received in March 2004); yet, a review of

initial State HQT data highlighting mass non-compliance issues stressed the need for greater oversight.

Abuses of State Flexibility. When the first State data on the highly qualified status of teachers were due to the Department in September 2003, it became clear that States were not moving towards compliance.[41] The Education Trust released analysis in December 2003 that identified only a handful of States whose data might be considered an accurate description of teacher quality. Instead, most States reported data that did not comply with the federal definition. Some States claimed teachers were highly qualified on account of being certified even though certification is just one component of the federal definition. About a dozen States submitted data that were not based on the HQT definitions that they had developed. Perhaps the most troubling findings of the analysis were the abuses of the HOUSSE provision for veteran teachers to demonstrate subject-matter competency.

These abuses were given even more scrutiny in reports released the following year by the National Center for Teacher Quality (NCTQ). These two reports highlighted abuses of the law's flexibility – particularly in the non-test, non-academic degree options for veteran teachers to demonstrate subject-matter competency – and emphasized the need for improved Department oversight.[42] They found that seven States had equated subject-matter competency with only a successful performance evaluation and 11 States considered their certification system as a sufficient indicator of content knowledge. Two states (Colorado and Oregon) had developed no HOUSSE procedure. While 30 States had developed a point system whereby teachers needed to amass a minimum amount of points to be deemed subject-matter competent, these systems were filled with loop-holes. For example, Maine teachers earned points for sponsoring an extracurricular club and Alaska awarded five points to teachers (not just foreign language

teachers) who were fluent in another language.[43] Both reports recommend that the HOUSSE provision be discarded.[44]

Our own recent analysis of the States' definitions of highly qualified teacher retrieved from State websites in the summer of 2005 also revealed abuses of the flexibility that the Department provided States.[45] For example, many States were not in compliance with the NCLB definition with regard to equating advanced certification to subject-matter competency. Subject-specific advanced certification and credentialing is permitted by NCLB as a means for middle and secondary teachers to demonstrate subject knowledge. Elementary teachers are not provided this option. However, 20 States equate a National Board Certificate (NBC) to subject-matter competency for elementary teachers.[46] Additionally, four States out of the 20 accepted a generalist NBC as proof of subject knowledge, also in violation of the law.[47]

The Department's Switch to Proactive Oversight. With evidence of non-compliance mounting, the Department stepped up its oversight activities in mid-2004 by sending monitoring teams to each State to review their progress. This marked the Department's first commitment to reviewing and approving each State's highly qualified teacher definitions and plans for meeting the 2005-06 goal. While the monitoring reports provide useful information on the progress States were making and the difficulties they were encountering, the timing of the visits and the formats of the reports make across-State comparisons more difficult.

As shown in Table 2, the Department took almost two full years to complete visits to all 50 States, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs. This meant that States were visited between 30 and 52 months after President Bush signed NCLB into law. Observed variation in implementation progress is confounded with some States having more time to make progress prior to the monitoring team's visit than others.

TABLE 2. Timeline of the U.S. Department of Education Monitoring Teams Visits to States, June 2004-April 2006

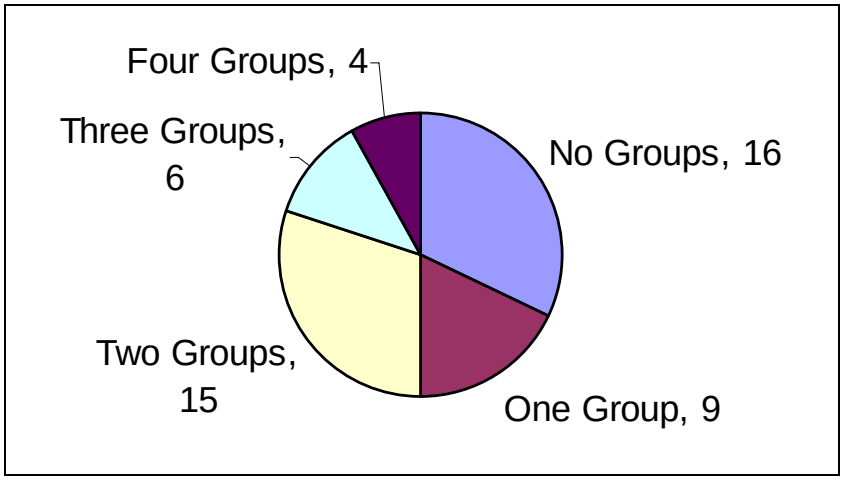
Quarter	Months Since NCLB Signed	Frequency	States (in order of visit during quarter)
June 2004	30	1	NV
July 2004-September 2004	31-33	2	VT, DE
October 2004-December 2004	34-36	7	HI, NM, SD, UT, ND, NC, MT
January 2005-March 2005	37-39	9	IA, NE, AR, LA, ME, IL, MS, DC, OH
April 2005-June 2005	40-42	10	NJ, AZ, GA, WY, TN, WA, NH, AK, CA, SC
July 2005-September 2005	43-45	3	OR, MI, ID
October 2005-December 2005	46-48	8	MO, FL, MN, NY, AL, PA, KS, MD
January 2006-March 2006	49-51	9	CT, CO, IN, TX, KY, VA, OK, WV, RI
April 2006	52	2	WI, MA

SOURCE: U.S. Department of Education, *Highly Qualified Teachers and Improving Teacher Quality State Grants (ESEA Title II, Part A): Monitoring Reports*, available at www.ed.gov/programs/teacherqual/hqt.html

Additionally, States were not all evaluated using the same monitoring protocol. During the course of the visits, the structure of the reports issued to the States went through three revisions. Nevada was the first State visited (June 22-24, 2004), and its report is all text and lists no critical elements on which the State's progress was assessed. The reports for Vermont through Arkansas rated the States on 23 critical elements grouped into four areas: highly qualified teacher systems and procedures; administration of ESEA Title II, Part A; State activities; and activities of the State agency responsible for higher education. In the third version of the report (used for Louisiana through California), the critical elements for the first area were completely changed and substantial changes were made to the second area. The final revision was much less dramatic. The only change was the addition of two new critical elements to the second area.

Reports for all States (except Nevada) indicate whether or not the State had NCLB-compliant definitions for the subject matter competency of the four groups of teachers identified in the law—new and veteran elementary teachers and new and veteran middle and secondary teachers (see Figure 1). Only four States—Kentucky, Louisiana, New Mexico, and Utah—had acceptable definitions for all four groups. Sixteen States had yet to implement a NCLB-compliant definition for any group.

FIGURE 1: Number of States with Compliant Definitions of Subject Matter Competency for Different Groups of Teachers



NOTE: Groups refer to the following: (1) new elementary teachers, (2) new middle and secondary teachers, (3) veteran elementary teachers, and (4) veteran middle and secondary teachers. Data available for Nevada were not comparable to other states and were excluded from analysis.
SOURCE: U.S. Department of Education, *Highly Qualified Teachers and Improving Teacher Quality State Grants (ESEA Title II, Part A): Monitoring Reports*, available at www.ed.gov/programs/teacherqual/hqt.html; Also see Tables A3, A4 and A5 in the appendix.

With respect to new teachers, 29 States had compliant definitions for elementary teachers but only 12 States could say the same for middle and secondary teachers. State definitions for veteran teachers met with no more success. Only 19 States had compliant definitions for veteran elementary teachers while 14 had acceptable definitions for middle and secondary teachers. An appropriate definition is just a first step in ensuring that teachers are subject-matter competent, so these numbers show major problems in implementation of the reform.[48]

Determining the highly qualified status of middle and secondary social studies teachers proved particularly problematic for most States. The confusion can be traced to the fact that social studies does not appear as one of the core academic subjects identified in NCLB. Rather, the law specifies four components of what most schools refer to as social studies—civics and government, economics, history, and geography. As a result, social studies teacher were deemed highly qualified without demonstrating subject-matter competency in each of the sub-disciplines they taught. Therefore, a fully State certified middle school social studies teacher who holds an

undergraduate major in history is highly qualified to teach history. But since the middle school social studies curriculum likely includes geography content, the teacher according to NCLB should complete a HOUSSE procedure to be highly qualified in the subjects he or she teaches. However, typically they do not. Information specific to social studies teachers was not included in the Department's Title II non-regulatory guidance until the August 2005 version.

Determining subject matter competency for special education teachers also was troublesome for States. Again, special education is not one of the core academic subjects mentioned in the law. However, some special education teachers provide direct instruction to students in the core academic subjects and thus must be highly qualified in each of those subjects. Of the States which failed to correctly include special education teachers in their definitions, most (like North Carolina and North Dakota) excluded them all together. Those which did include special education teachers (like Florida) often had tests for special education teachers that were not rigorous assessments of content knowledge in the core academic subjects they taught. The Department did offer guidance on the highly qualified status of special education teachers in an appendix to the Title I regulations released on December 2, 2002. However, this guidance was not included in the Title II non-regulatory guidance released just 17 days later, so it was difficult to locate. It was not until September 2003 that it was included in its most logical location, the Title II non-regulatory guidance. The authors of the GAO report raised this concern in July 2003, but it was not until GAO submitted its draft report to the Department for comments that they learned the guidance on special education teachers had in fact already been issued.

While the confusion among the States with regard to social studies and special education teachers can be partially attributed to inaccurate interpretations of the law's language, the same

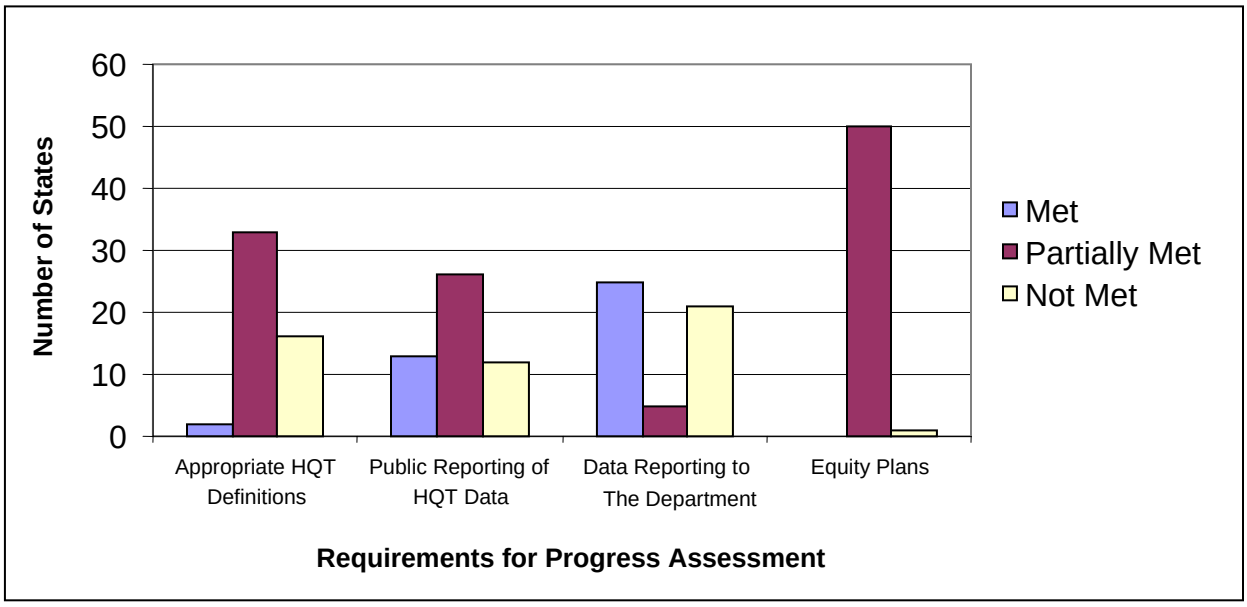
can not be said for how new and veteran elementary teachers were allowed to demonstrate subject-matter competency. NCLB clearly states that new elementary teachers must pass a rigorous test; however, ten States still had no testing requirement for new teachers at the time of their evaluation. Four States (Delaware, North Dakota, South Dakota, and Washington) had adopted a test but were not yet requiring it. Wyoming required a test, but because they had not yet established a cut-score they were considering all teachers highly qualified on the basis of having taken, rather than passing, the test. The remaining five States had not yet adopted a test, but three (Iowa, Montana, and New Hampshire) were either in the process of piloting or validating a test for possible adoption.

Similarly, the law clearly states that veteran elementary teachers must either pass a rigorous test or complete a HOUSSE procedure. Despite this, 14 States deemed them highly qualified if they had an undergraduate major (i.e., elementary education), coursework equivalent to a major, a graduate degree, or an advanced certification or credentialing. Another eight States were not requiring teachers who were certified prior to the State's testing requirements to complete a HOUSSE procedure. Connecticut, Colorado, and Hawaii deemed them highly qualified on the basis of holding an elementary education degree. Pennsylvania only required that they be certified in elementary education while Indiana also required them to hold a Masters degree.[49]

Moving forward, the May 2006 Progress Report. The Department required States that failed to implement sufficient HQT processes to submit plans detailing the corrective actions they would undertake to address the monitoring teams' findings. While no due date was established, all plans and documentation that were submitted and all subsequent communication between the State and the Department were taken into account in the next stage of the

Department's oversight process. In May 2006, the Department released progress reports for each State entitled *Assessing State Progress in Meeting the Highly Qualified Teacher (HQT) Goals*. These reports marked the first time that all States were assessed using the same rubric over a reasonably short period of time. The Department compiled these reports after the 2004-05 Consolidated State Progress Reports which showed that no State was likely to achieve 100 percent HQT by the end of the 2005-06 school year. The data provided by the States also showed persistent gaps in teacher quality between high and low poverty schools.[50]

FIGURE 2: Summary of *Assessing State Progress* Reports, May 2006



SOURCE: U.S. Department of Education, *Revising Revised State Plans: Meeting the Highly Qualified Teacher (HQT) Goal*, available at www.ed.gov/programs/teacherqual/hqt.html; Also see Table A6 in the appendix.

The 2006 reports assessed each State on four requirements. Figure 2 contains a summary of the findings of each State for each requirement. The first requirement was that the State had developed *and* implemented appropriate HQT definitions. Despite more than four years of implementation efforts, 16 States still had not developed even partially NCLB-compliant definitions. However, states had made significant progress since the previous assessment, when

only four States were found to have appropriate definitions of subject matter competency for all teachers. Similarly, of the ten States that had not developed a test for all new elementary teachers of subject knowledge and teaching skills at the time of the monitoring visits, only three (Iowa, Montana, and Nebraska) had yet to adopt such a test. Of the eight States that inappropriately deemed as highly qualified those veteran elementary teachers certified prior to the State's testing requirements, only four States (Connecticut, Indiana, Missouri, and Pennsylvania) had yet to act on the Department's previous findings. Idaho continued to grant highly qualified status to veteran elementary teachers on the basis of holding an elementary education degree. Special education teachers continued to be inappropriately included in/excluded from the definitions in six States (Idaho, Maryland, Missouri, Nebraska, Oklahoma, and Virginia). The subject-matter competency of social studies teachers continued to be inappropriately assessed in five States (Maryland, Massachusetts, Rhode Island, Virginia, and West Virginia).

In fairness to at least some of these States, it should be noted that the monitoring team visits for some States had occurred only months before the *Assessing Progress* reports were released. This could explain why the some of the definitions remained out of compliance as the States had not yet been able to complete the required corrective actions. However, it had been more than a year since the monitoring team visits to Iowa, Montana, and Nebraska.

The *Assessing State Progress* reports also marked the first time that all States were assessed with regard to their equity plans. State equity plans are supposed to detail the activities a State will undertake to ensure that poor and non-white children are not taught at higher rates than other children by inexperienced, unqualified, and/or out-of-field teachers. This component of NCLB had been given little attention by the Department in the early years.[51] The first evidence of the Department's intention to ensure compliance with this component of the law was

the inclusion of a critical element in the monitoring reports for the final 38 States visited (i.e., starting February 2005). At that time, the Department was content if the States had policies and programs in place to address teacher quality equity, and 23 States met this requirement. By May 2006, the Department required States to have *detailed written* equity plans in order to demonstrate a coherent approach to ensuring an equitable distribution of teacher quality. Only three States (Florida, Illinois, and Oregon) were said to have written plans, but all of them lacked sufficient detail in the Department's judgment.

An Extension and New State Plans: Following the Department's review as summarized in Figure 2, Federal government officials acknowledged that no State was likely to achieve 100 percent HQT by the end of the 2005-06 school year. As a result, the Department established a new deadline—the end of the 2006-07 school year—and required every State to submit a revised teacher quality plan. These plans were to specify the "new innovative actions," which States and LEAs would undertake to meet the new deadline.[52] The States were provided a copy of the protocol which would be used to assess the revised plans. All revised plans were due to the Department no later than July 7, 2006.

In late July, the Department convened a group of state-level practitioners and teacher quality experts to review each plan with respect to six requirements:

1. Plan Must Have Detailed Analysis of Core Academic Sugject Classes Not Taught by an HQT
2. Plan Must Track LEA Progress and the Steps to be Taken to Help Teachers Attain HQT Status
3. Plan Must Detail State Activities to Help LEAs Complete Their HQT Plans
4. Plan Must Detail How State Will Work with LEAs who Do Not Meet 2006-07 HQT Goal
5. Plan Must Detail How State will Complete HOUSSE Process for Veteran Teachers

6. Plan Must Include State's Written "Equity Plan"

Only nine State plans were deemed acceptable.[53] All other States were required to submit yet another plan most by September 29, 2006 with a few given until December 29, 2006. Four States deserve special attention. Utah failed to submit a plan, stating their intent to submit a revised plan by October 2006. The plans submitted by Hawaii, Missouri, and Wisconsin failed to address the requirements directly.

As part of their revised plans, States were required to submit their written equity plans. However, only 28 States did this, and only seven met all the requirements. Specifically, the written plans were required to identify where the inequities existed, to delineate specific strategies for addressing the identified inequities, to provide evidence of the probable success of those strategies, and to indicate how the State would monitor LEAs with respect to the inequities. The most common criticism the reviewers expressed was the lack of data contained in the plans. Many States failed to present data that clearly showed where the inequities in teacher assignments existed between schools with high minority and low-income populations and those with low minority and high-income populations. Kentucky and New Hampshire acknowledged the insufficiency of their data to determine the equity of the distribution of teachers. A lack of data also prevented States from providing evidence of the possible success of their proposed strategies.

A review of the State equity plans released by the Education Trust one month after the Department's reviews recommended that States collect school-level data on the following four areas: (1) whether low-income students are more likely than other students to be assigned to unqualified or out-of-field teachers in core academic courses; (2) whether minority students are more likely than other students to be assigned to unqualified or out-of-field teachers in core

academic courses; (3) whether low-income students are more likely than other students to be assigned to inexperienced teachers; and, (4) whether minority students are more likely than other students to be assigned to inexperienced teachers.[54] However, only three States (Ohio, Nevada and Tennessee) provided data on all four areas. New York's plan came close but the available data on student minority status were available only at the district level. Eighteen States failed to report data in any area. Most States only reported data for the first area. In addition to the four States already mentioned, only seven others managed to report any data regarding inequities in teacher assignment between schools with high and low percentages of minority students.

In addition to addressing equity by poverty and race, several elements of the protocol required States to provide details on how they would ensure that students in schools failing to make average yearly progress (AYP) are as likely as other students to be taught by highly qualified teachers. The protocol included the following elements regarding the staffing and professional development needs of schools not making AYP:

- ◊ Does the data analysis included in the plan address the staffing needs of schools not making AYP?
- ◊ In working with LEAs to meet the 2006-07 HQT goal, will schools not making AYP be given priority in terms of State activities and funds?
- ◊ With respect to schools failing to meet the 2006-07 HQT goal, has the State identified forms of technical assistance it will direct at schools also failing to meet AYP?
- ◊ Has the Stated identified assistance or corrective actions that will be applied to schools that both fail to meet the 2006-07 HQT goal and AYP?

The reviews' findings indicate that while some States are taking this issue seriously, others are not. For example, nine states provided no evidence on any of these protocol elements even though they were given the protocol when asked to revise their plans.[55] Only 30 States showed

how they would target their technical assistance to schools not meeting AYP. Even fewer States (27) identified the technical assistance or corrective actions they would direct at failing schools.

This discussion of the States' implementation efforts and the evolution of the nature of the Department's oversight activities from reactive to proactive demonstrate that without some form of accountability, compliance with the intent of NCLB was unlikely. Monitoring and reporting on non-compliance issues is an important accountability mechanism but not the only one available.

IV. Holding States Accountable for Teacher Quality

Accountability is one of the hallmarks of NCLB, and also its most controversial element. The requirements that States annually test students in grades 3 through 8 and that parents be allowed to transfer their children out of persistently failing public schools created a great deal of controversy. In contrast, the mechanisms written into the law to hold States and LEAs accountable for teacher quality have proven less nettlesome though not necessary warmly embraced.

In addition to the accountability provided by the oversight activities described above, there are five accountability mechanisms authorized by NCLB that target the law's teacher quality goals. Four involve public reporting—to the Federal government, the public at large, and parents. Thus far these mechanisms have met with very little success due to widespread problems with data quality and availability. NCLB also empowers the Department to withhold the States' administrative funds should they fail to meet the law's requirements.[56]

The first four accountability mechanisms require that appropriate data be available and correct.

- ◊ *Consolidated State Performance Reports (CSPR):* States are required to submit data to the Department on "the quality of teachers and the percentage of classes being taught by highly qualified teachers in the State, local educational agency, and school."[57]

- ◊ *State Report Cards:* Each year States are required to prepare and disseminate a State report card that among other things provides information on (1) the professional qualifications of teachers in the State, (2) the percentage of such teachers teaching with emergency or provisional credentials, and (3) the percentage of classes in the State not taught by highly qualified teachers at both the aggregate and disaggregated by high- and low-poverty schools.[58]

- ◊ *Local Educational Agency Report Cards:* School districts must prepare and disseminate reports cards for both the district and for each of its member schools that contain the same information on teacher quality as included in the State Report Card.[59]

- ◊ *Parental Notification:* At the beginning of each school year, each school must notify parents of their right to request and to receive information the professional qualifications of their child's teacher. Schools are also required to inform parents in a timely manner when their "child has been assigned, or has been taught for four or more consecutive weeks by, a teacher who is not highly qualified."[60]

All these public reporting mechanisms were required to be in place no later than the 2002-03 school year. Unfortunately, the delay in States adopting appropriate HQT definitions and in establishing the needed data collection procedures has severely undermined implementation. As of the 2004-05 CSPR almost half the States still had not reported accurate and complete data to the Department.[61] According to the Department's review, only Oregon and Texas had met the requirement of submitting accurate and complete data (i.e., based on NCLB-compliant HQT definitions and accurate data) since the 2002-03 school year. Another nine States have reported complete and accurate data since 2003-04. This means that State year-to-year progress toward meeting the HQT goal can only be assessed in these 11 States using the legislatively mandated CSPR data. Our own review of the oversight information contained in the other official Department documents makes the situation look even worse. Only one State—Kentucky—not 11 as the Department claims has submitted valid data for more than one school year.[62]

Most States are also failing to publish the required teacher quality data in their State and LEA report cards. About two-thirds of the States do not have the required information on their Report Cards or on the LEA report cards. Although all States have annual reports for the State as a whole and for each LEA, inappropriate HQT definitions invalidate the included teacher quality data for the purpose of NCLB (assuming any are included). Other shortcomings are failure to include data on teacher qualifications (i.e., educational attainment and experience) and failure to disaggregate the data by poverty level. The *Assessing State Progress* reports found most States complying with the law's parental notification requirements. However, given widespread problems with data availability and accuracy, the extent to which this reporting places pressure on States and schools to ensure a highly qualified teacher for every class is unclear.

When NCLB became law, much was made of the potential for funds to be withheld should States fail to meet the law's requirements. Thus far, the Department has shown only the slightest hint that non-compliance with the HQT provision will result in the withholding of funds for States' administrative activities. Conditions were placed on the funding for 12 States as a result of the *Assessing State Progress* reports. These conditions specified actions the States needed to carry out by a certain date. It appears from the Departmental communication available on its website that each of these States was contacted to discuss the actions the States would need to undertake to have the condition removed. Because the required actions vary across States with the same reasons for the conditions, the required actions were determined individually for each State as a result of these discussions.

As an example, the lack of complete and accurate HQT data was the reason for the conditions in nine States. The Department has required these States to submit HQT data (some preliminary, others complete and accurate) for either the 2005-06 or 2006-07 school years. Each

State was given a different deadline. Four of these states (Arkansas, Delaware, Minnesota, and North Carolina) have since submitted preliminary HQT data for the 2005-06 school year and had the conditions removed within a few months of receiving the Department's notification. The other States were instructed to undertake the following actions: Washington needed to submit complete and accurate data for the 2005-06 school year by September 30, 2006, and Missouri had to do the same by November 1, 2006. The District of Columbia needed to submit preliminary data for the 2006-07 school year by December 29, 2006, but Idaho needed to submit complete and accurate 2006-07 data by January 1, 2007. Virginia needed to both fix persistent problems with its HQT definitions and submit complete and accurate data by December 29, 2006. The final two States (Montana and Nebraska) must fully implement a rigorous subject-matter test for new elementary teachers in order for the Department to remove the condition.

V. The Effects to Date and a View Ahead

The Department's increased oversight of the States' implementation efforts combined with increased attention to the law's accountability mechanisms has yielded results. Almost all States now have HQT definitions that are compliant with NCLB and have produced at least one round of complete and accurate data on teacher quality. However, even with all States complying with the federal definitions, there is still a great deal of variation in what it means to be highly qualified.

As an example, one source of this variation across States is in the amount of coursework required for a major. Middle and secondary school teachers can demonstrate subject-matter competency with either an undergraduate major or coursework equivalent to a major. We found substantial variation across States in this regard in our previous work with requirements ranging

from only 12 credit hours in South Dakota to 46 semester hours for composite majors, like elementary education, in Utah.[63] This difference represents almost 12 three-credit-hour classes.

States' HOUSSE procedures also induce a great deal of variation in what it means to be highly qualified. NCLB permits States to include teaching experience as an element in their procedures. However, States differ in the maximum weight teaching experience carries in determining subject-matter competency from 24 percent in Ohio to 60 percent in Illinois.[64] The majority of States allow veteran teachers to amass up to 50 percent of the necessary points through experience.

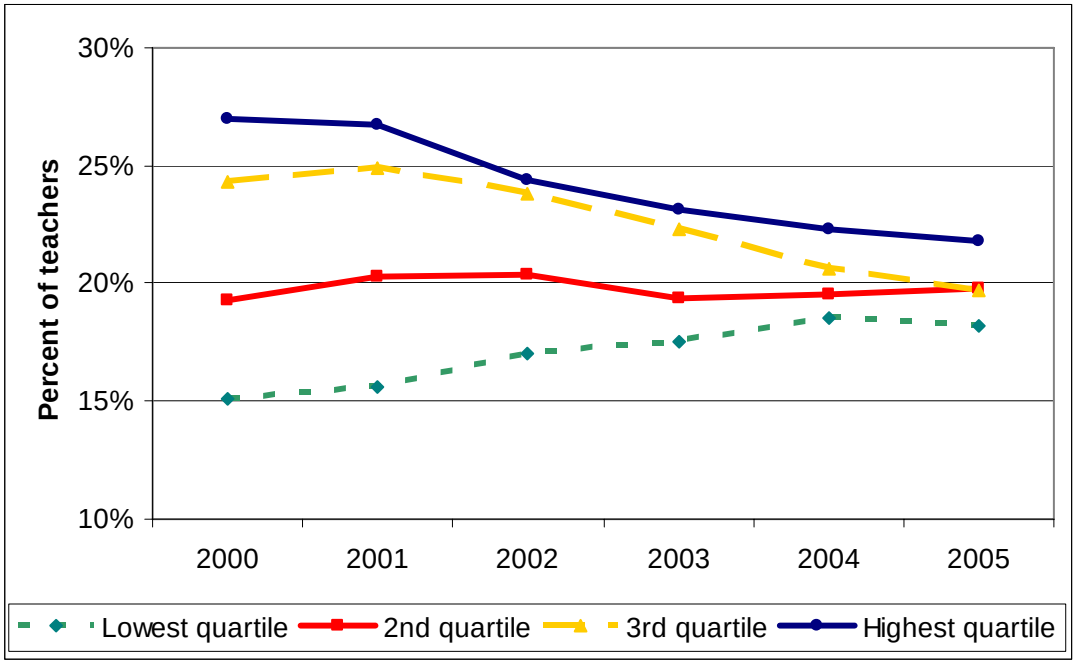
With all this variation in implementation, it is easy to wonder whether the requirements have had any effect on teachers or teaching. There is some evidence that it has. States and districts have shifted away from their reliance on emergency permits to alternative-route certifications. For example, California reduced the number of teachers not fully credentialed from over 42,000 in 2000-01 to around 20,000 in 2004-05 and eliminated emergency permits altogether in July 2006. The number of University Intern Credentials (one of several alternative-route certificates California issues) has increased 64 percent from roughly 3,700 in 2001-02 to about 6,200 in 2003-04.[65] While both alternative-routes and emergency credentials have less pre-service training than traditional certification routes, there is a difference. Emergency permits do not require holders to demonstrate subject-matter competency before entering the classroom, while alternative routes do. Evidence from New York City, for example, suggests that teachers entering through the new routes have dramatically stronger academic backgrounds than the temporary-license teachers they replaced. In 2003, only six percent of newly hired teachers from these new routes failed the LAST exam (a State teacher certification exam) on their first attempt,

compared to 16 percent of newly hired traditional-route teachers and 33 percent of temporarily licensed teachers.[66]

NCLB's focus on teacher quality is broader than ensuring that every core academic class is taught by a highly qualified teacher. It also requires States to guarantee that poor and minority students are not taught at higher rates by inexperience, unqualified, and out-of-field teachers. Our narrative tells how the Department was very late in monitoring State progress with respect to their equity plans. However, there is, at least some, indication of changes in the distribution of teachers across schools since the passage of NCLB. Looking at the distribution of teachers across schools in New York City, Boyd, et. al. (2006) found a conversion of teacher experience and test performance by student poverty concentration during the past five years. As shown in Figures 3 and 4, in 2000 there were substantially more new teachers and teachers who had failed their certification exam in schools serving the highest proportions of students in poverty than there were in other schools. By 2005, this difference, while still there, was dramatically lessened. The researchers found that both experience and passage of the certification exam predicted student achievement gains, so the convergence is likely to have directly affected student learning.

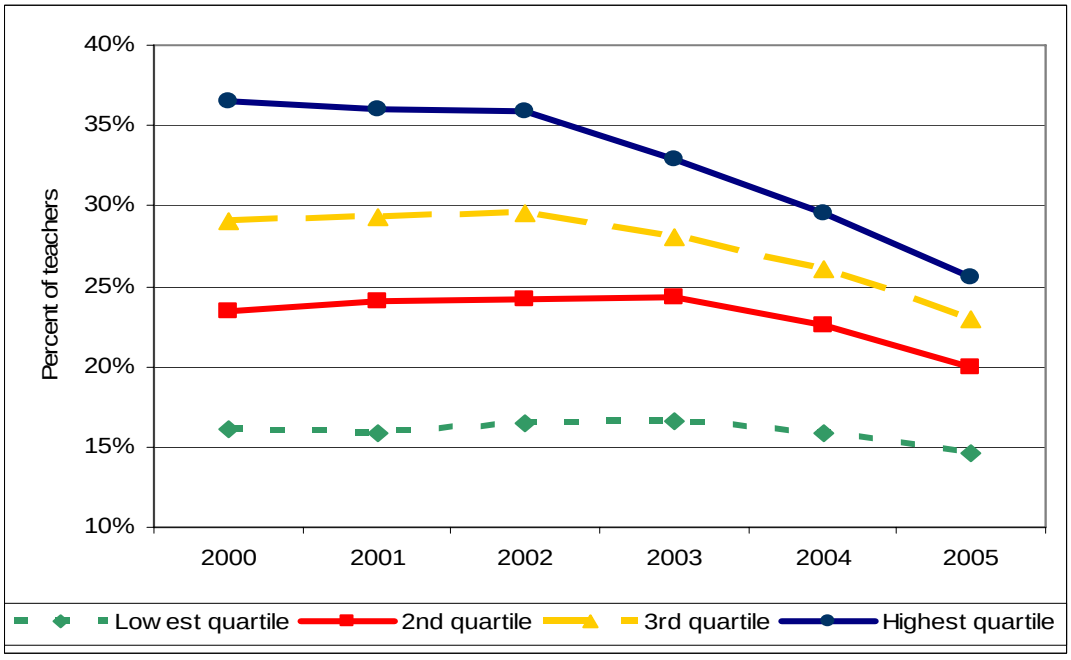
It is not easy to attribute the cause of these changes. NCLB did not develop in a vacuum. States were already implementing many of the ideas, if not the details, contained in the federal legislation. Because of this, we do not know whether the changes evident in New York City and elsewhere were the direct result of NCLB or a result of other forces, perhaps state-led forces, which produced both NCLB and the changes that occurred. They are clearly linked, even if the direction of cause is difficult to establish.

FIGURE 3: School Percent of Novice Teachers by Poverty Quartile of Students, 2000-2005



SOURCE: Boyd, Lankford, Loeb, Rockoff and Wyckoff (2006) Figure 1.

FIGURE 4: Percent of Teachers Who Failed the LAST Exam on First Taking by Poverty Quartile of Students, 2000-2005



SOURCE: Boyd, Lankford, Loeb, Rockoff and Wyckoff (2006) Figure 2

While we have seen substantial changes in the distribution of teachers across schools and in the workforce more generally, States are still a long way from correcting the current

inequitable distribution of teacher quality whereby students in low-income, high-minority, low-achieving schools are taught by less-qualified teachers than other students. We see some of these differences still evident in Figure 4. As noted above, the disparities across schools are likely driven both by teachers' preferences for certain working conditions and by state and district policies that restrict schools abilities to hire and retain the best teachers available to them.

Our previous review of State teacher policies found that almost all States have funded incentive plans to recruit and retain teachers.[67] These incentives include tuition and fee support, loan forgiveness, salary supplements, housing benefits, or retirement bonuses. Yet, there are two weaknesses in this common approach. First, most incentives are not targeted at difficult-to-staff schools such as high-poverty, low-achieving schools, though 27 States operate at least one program such targeted. Additional targeting ought to help achieve a more equitable distribution of teacher quality. We intentionally say "ought to help" rather than "will help." The second weakness of the incentives approach is the lack of evaluations of their effectiveness. There are only a handful of reports that claimed to evaluate specific States' policies. These available studies were more successful at highlighting the difficulties of evaluating the policies than the policies' effects. New data systems at the state and district level, if implemented well, may help with this analysis in the future, but the research base is not strong enough yet to identify key policy levers.

The changes during the past five years suggest that the Federal government can help to increase the proportion of highly qualified teachers and reduce the disparities across schools. The nation's experiences thus far stress the need for States to avoid the temptation to game the system and artificially inflate HQT numbers and for the Department to actively (not reactively) oversee States' implementations. These efforts appear to have helped already. In addition, the

new information required by the law on the characteristics of teachers in each school brings to light the problems that do exist and provides a background for reform efforts. That said, teaching quality is largely in the hands of states, districts and schools. More local efforts are need to reduce the disparities in working conditions across schools that lead to systematic teacher sorting, to implement effective professional development programs, and to improve hiring, transfer and firing systems so that schools are able to attract and retain the best available teachers.

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Appendix

TABLE A1. Timeline of the Implementation of the Highly Qualified Teacher Provision, 2002-2007

Date	Monitoring Activity
January 8, 2002	*No Child Left Behind Act* signed into law by President George W. Bush
June 6, 2002	Draft Title II non-regulatory guidance released
December 2, 2002	First guidance on the highly qualified requirements of special education teachers released as an appendix to the Title I regulations, but not included in the federal regulations
December 19, 2002	Revised Title II non-regulatory guidance released (excludes special education guidance)
September 1, 2003	Initial versions of the 2002-03 Consolidate State Performance Report (CSPR) containing data on the highly qualified status of the States' teachers for the 2002-03 school year due to the Department
September 12, 2003	2nd revision of Title II non-regulatory guidance released
December 22, 2003	2nd versions of the 2002-03 Consolidate State Performance Report (CSPR) containing data on the highly qualified status of the States' teachers for the 2002-03 school year due to the Department
March 2004	Small Rural School Achievement (SRSA) program announced
June 22-24, 2004	First Title II monitoring team visit conducted in Nevada
June 30, 2004	2003-04 CSPR containing data on the highly qualified status of States' teachers for the 2003-04 school year due to the Department
November 17, 2004	Reauthorization of the Individuals with Disabilities Education Act (IDEA) emphasize the requirement that special education teachers be highly qualified
May 26, 2005	Title II monitoring teams have visited half of the States
August 3, 2005	3rd revision of Title II non-regulatory guidance released
March 6, 2006	2004-05 CSPR containing data on the highly qualified status of States' teachers for the 2004-05 school year due to the Department
April 27, 2006	Final Title II monitoring team visit completed in Massachusetts
May 12, 2006	*Assessing State Progress* reports released
June 30, 2006	The 2005-06 school year ends with no State meeting the goal of 100 percent HQT
July 7, 2006	Revised State plans due to the Department detailing innovative strategies for meeting the new goal of 100% highly qualified teachers by 2006-07 due to the Department
August 15, 2006	Reviews of revised State plans released
November 1, 2006	Revisions (if required) of State plans originally submitted by July 7, 2006 due to the Department
December 29, 2006	States that had failed by July 2006 to submit to Education any complete and accurate data on the highly qualified status of the States' teachers must submit at least preliminary data on the highly qualified status of the States' teachers for the 2006-07 school year [a]
About March 2007	2005-06 CSPR containing data on the highly qualified status of States' teachers for the 2005-06 school year due to the Department

[a] States affected by this requirement are those that failed to provide complete and accurate data on the highly qualified status of the States' teachers for the 2004-05 school year as part of their 2004-05 CSPR and also failed to submit at least preliminary data for the 2005-06 school year by July 2006.

SOURCE: Information gleaned from the U.S. Department of Education's website www.ed.gov.

TABLE A2. States where National Board Certification Satisfies Subject-Matter Competency Requirement of the Highly Qualified Teacher Provision of NCLB, Summer 2005

Type of NBC	Frequency	States
Fully-Satisfies Requirement		
Middle and High School Teachers		
Core Academic Subject	33	AZ[a], AR, CA[a], CT, DE, HI[a], ID, IL[a], IN, KS[a], LA[a], ME, MD, MA, MS[a], MO, NE[a], NH, NM, NY, NC, ND, OH, OK, PA, RI, SC[a], SD, TN[a], UT, WA[a], WV, WI[b]
Core or Generalist	4	AK[a], KY[a], MI[a], VA[a]
Elementary School Teachers		
Core Academic Subject	11	AZ[a], DE, HI[a], IL[a], KS[a], NE[a], NM, OH, SC[a], WA[a], WV
Generalist	4	AK[a], KY[a], NY[a], OR[a]
Core or Generalist	5	LA[a], MD[a], MI[a], NH, VA[a]
Partially-Satisfies Requirement		
Middle and High School Teachers		
Core Academic Subject	2	IL[b], NV[a]
Core or Generalist	5	AL, DC[a], MN[a], PA[a], SD[a]
Elementary School Teachers		
Generalist	2	CA, IL[b]
Core or Generalist	6	AL, DC[a], MN[a], NV[a], PA[a], SD[a]

NOTE: (1) Options apply to both "new" and "not new" unless indicated as follows: [a] "Not new" teachers only; [b] "New" teachers only.
(2) National Board Certification is considered to partially satisfy the subject-matter competency requirement if the teacher must meet the provision and at least one other thing (excluding passing a content test).
SOURCE: Table 8 in Loeb and Miller (2006)

TABLE A3. Number of State Definitions of Subject-Matter Competency Deemed Acceptable by the U.S. Department of Education Monitoring Teams, June 2004-April 2006

Acceptable Definitions for…	Frequency	States
No Groups	16	AL, AK, AZ, FL, GA, IL, IN, MN, MO, NE, NH, ND, PA, VT, WA, WY
One Group	9	AR, CT, DC, HI, ID, MI, OK, VA, WV
Two Groups	15	CA, DE, ME, MD, MA, MT, NJ, NY, NC, OH, OR, RI, SC, TN, TX
Three Groups	6	CO, IA, KS, MS, SD, WI
Four Groups	4	KY, LA, NM, UT

NOTE: Groups refer to the following: (1) new elementary teachers, (2) new middle and secondary teachers, (3) veteran elementary teachers, and (4) veteran middle and secondary teachers. Data available for Nevada were not comparable to other states and were excluded from analysis.
SOURCE: U.S. Department of Education, *Highly Qualified Teachers and Improving Teacher Quality State Grants (ESEA Title II, Part A): Monitoring Reports*, available at www.ed.gov/programs/teacherqual/hqt.html

TABLE A4. State Progress on Implementing the Subject-Matter Competency Component of the HQT Provision for New Elementary and Middle and Secondary School Teachers, 2004-2006

Status of Implementation	Frequency	States
Elementary Teachers		
Met All Requirements	**29**	AR, CA, CO, CT, DC, HI, ID, KS, KY, LA, MD, MA, MI, MS, NJ, NM, NY, NC, OH, OK, OR, RI, SC, TN, TX, UT, VA, WV, WI
Failed to Meet All Requirements	**21**	AL, AK, AZ, DE, FL, GA, IL, IN, IA, ME, MN, MO, MT, NE, NH, ND, PA, SD, VT, WA, WY
Not Req'd to Pass Appropriate Test [a]	10	DE, IA, ME, MT, NE, NH, ND, SD, WA, WY
Special Education Teachers	9	AK, AZ, FL, GA, IL, MN, MO, PA, VT
Alternative-Route Programs [b]	3	AL, GA, IN
Other Reasons [c]	1	GA
Middle and Secondary Teachers		
Met All Requirements	**12**	CO, DE, IA, KS, KY, LA, NM, NC, SD, TN, UT, WI
Failed to Meet All Requirements	**38**	AL, AK, AZ, AR, CA, CT, DC, FL, GA, HI, ID, IL, IN, ME, MD, MA, MI, MN, MS, MO, MT, NE, NH, NJ, NY, ND, OH, OK, OR, PA, RI, SC, TX, VT, VA, WA, WV, WY
Special Education Teachers	14	AK, AZ, GA, IL, ME, MN, MO, MT, NE, ND, VT, VA, WA, WY
Social Studies Teachers	35	AL, AL, AZ, AR, CA, CT, DC, FL, GA, HI, ID, IN, ME, MD, MA, MI, MN, MS, MO, MT, NH, NJ, NY, ND, OH, OK, OR, PA, RI, SC, TX, VA, WA, WV, WY
Middle School Teachers [d]	6	ID, NE, ND, VT, WA, WY
Alternative-Route Programs [b]	1	GA
Other Reasons [c]	3	AK, GA, MT

[a] This category includes the following cases in which states deem teachers to be highly qualified: states that require some new, but not all new teachers to take and pass a test; states that require all new elementary teachers to take a test but that have no cutscore; and states that require all new elementary teachers to take a test but the test is not a sufficiently rigorous assessment of subject-matter competency.
[b] This category refers to states where teachers participating in alternative-route programs are deemed highly qualified even though they have not yet demonstrated subject-matter competency.
[c] This category includes the following cases: states HQT definitions for out-of-state teachers may deem these teachers subject-matter competent when they have not demonstrated competency in accordance with federal statute or states where a minor equates to subject-matter competency.
[d] This category refers to states that allow middle school teachers to demonstrate subject-matter competency with coursework less than a major (i.e., minor) or states that deem middle school teachers highly qualified who have demonstrated subject-matter competency at the elementary level even though they teach upper level courses (such as algebra).
NOTE: Monitoring Report for Nevada does not provide comparable information to facilitate inclusion in this table.
SOURCE: U.S. Department of Education, *Highly Qualified Teachers and Improving Teacher Quality State Grants (ESEA Title II, Part A): Monitoring Reports*, available at www.ed.gov/programs/teacherqual/hqt.html

TABLE A5. State Progress on Implementing the Subject-Matter Competency Component of the HQT Provision for Veteran Elementary and Middle and Secondary School Teachers, 2004-2006

Status of Implementation	Frequency	States
Elementary Teachers		
Met All Requirements	**19**	CA, IA, KY, LA, ME, MD, MA, MS, MT, NJ, NM, NY, OH, OR, RI, SC, SD, TX, UT
Failed to Meet All Requirements	**31**	AL, AK, AZ, AR, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, KS, MI, MN, MO, NE, NH, NC, ND, OK, PA, TN, VT, VA, WA, WV, WI, WY
Certified Prior to State Testing [a]	8	CO, CT, DC, HI, IN, MN, MO, PA
Special Education Teachers	11	AK, AZ, FL, GA, IL, KS, NE, NC, ND, VT, WY
HOUSSE Requirements	7	AK, AR, CT, IL, MO, PA, WV
Major, Coursework, Grad Degree, Advanced Certification [b]	14	AK, AZ, DE, ID, MI, NH, ND, OK, TN, VT, VA, WA, WI, WY
Other Reasons [c]	2	AL, CO
Middle and Secondary Teachers		
Met All Requirements	**14**	CO, DE, IA, KS, KY, ME, MS, MT, NM, SD, TN, UT, WI
Failed to Meet All Requirements	**36**	AL, AK, AZ, AR, CA, CT, DC, FL, GA, HI, ID, IL, IN, MD, MA, MI, MN, NE, NH, NJ, NY, NC, ND, OH, OK, OR, PA, RI, SC, TX, VT, VA, WA, WV, WY
Special Education Teachers	10	AK, AZ, GA, MD, MO, NE, NC, ND, VT, WA
Social Studies Teachers	31	AL, AK, AR, CA, CT, DC, FL, GA, HI, ID, IN, MD, MA, MI, MN, MO, NH, NJ, NY, ND, OH, OK, OR, PA, RI, SC, TX, VA, WA, WV, WY
Middle School Teachers [d]	5	ID, NE, ND, VT, WA
HOUSSE Requirements	6	AK, AR, CT, OK, PA, VA
Other Reasons [c]	4	AR, ID, IL, WV

[a] This refers to states that deem elementary teachers certified prior to the state's implementation of required subject-matter testing highly qualified without either passing a test or satisfying HOUSSE requirements.
[b] Veteran elementary school teachers are not statutorily permitted to use these options to demonstrate subject-matter competence.
[c] This category includes the following cases: teachers can demonstrate subject-matter competency with coursework less than a major (i.e., minor) and states in which participants in alternative-route certification programs to teach without first demonstrating subject-matter competency.
[d] This category refers to states that allow middle school teachers to demonstrate subject-matter competency with coursework less than a major (i.e., minor) or states that deem middle school teachers highly qualified who have demonstrated subject-matter competency at the elementary level even though they teach upper level courses (such as algebra).
NOTE: Monitoring Report for Nevada does not provide comparable information to facilitate inclusion in this table.
SOURCE: U.S. Department of Education, *Highly Qualified Teachers and Improving Teacher Quality State Grants (ESEA Title II, Part A): Monitoring Reports*, available at www.ed.gov/programs/teacherqual/hqt.html

TABLE A6. Summary of *Assessing State Progress* Reports, May 2006

Finding	Frequency	States
Requirement 1: Appropriate HQT Definitions		
A State must have a definition of a "highly qualified teacher" that is consistent with the law, and it must use this definition to determine the status of all teachers, including special education teachers, who teach core academic subjects.		
Met	2	LA, UT
Partially Met	33	AL, AK, AZ, AR, CA, DE, DC, FL, GA, HI, IL, KS, KY, ME, MI, MN, MS, NV, NH, NJ, NM, NY, NC, ND, OH, OR, SC, SD, TN, TX, VT, WA, WY
Not Met	16	CO, CT, ID, IN, IA, MD, MA, MO, MT, NE, OK, PA, RI, VA, WV, WI
Requirement 2: Public Reporting of HQT Data		
A State must provide parents and the public with accurate, complete report on the number and percentage of classes in core academic subjects taught by highly qualified teachers. States and districts must provide these data to parents through school, district, and State report cards. Parents of students in schools receiving Title I funds must be notified that they may request information regarding the professional qualifications of their children's teachers, and they must be notified if their children have been assigned to or taught for four or more consecutive weeks by a teacher who is not highly qualified.		
Met	13	CA, FL, HI, IL, MS, NV, NH, NY, OH, OR, SD, TX, WY
Partially Met	26	AL, AK, AZ, AR, CO, DC, GA, IN, KS, KY, LA, ME, MA, MI, MN, NJ, NM, ND, RI, SC, TN, UT, VT, VA, WA, WI
Not Met	12	CT, DE, ID, IA, MD, MO, MT, NE, NC, OK, PA, WV
Requirement 3: Data Reporting to ED		
States must submit complete and accurate data to the U.S. Secretary of Education on their implementation of the HQT requirements as part of their Consolidated State Performance Report (CSPR). In addition to reporting the number and percentage of core academic classes being taught by highly qualified teachers in all schools, States must report on the number and percentage of core academic classes being taught in "high-" and "low-poverty" schools. States must also provide addition information in the CSPR that describes, for classes taught by non-HQ teachers, the reasons why the teachers are not highly qualified.		
Met	25	AL, CA, FL, DC, HI, KS, KY, LA, ME, MS, NV, NH, NJ, NM, NY, NC, ND, OH, OR, SC, SD, TN, TX, UT, WY
Partially Met	5	AZ, AR, GA, IL, VT
Not Met	21	AK, CO, CT, DE, ID, IN, IA, MD, MA, MI, MN, MO, MT, NE, OK, PA, RI, VA, WA, WV, WI
Requirement 4: Equity Plans		
States must have a plan in place to ensure that poor or minority children are not taught by inexperienced, unqualified, or out-of-field teachers at higher rates than are other children.		
Met	0	
Partially Met	50	AL, AK, AZ, AR, CA, CO, CT, DE, DC, FL, GA, HI, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY
Not Met	1	ID

SOURCE: U.S. Department of Education, *Reviewing Revised State Plans: Meeting the Highly Qualified Teacher (HQT) Goal*, available at www.ed.gov/programs/teacherqual/hqt.html

TABLE A7. Summary of *Reviewing Plans* reports, August 2006

Finding	Frequency	States
Overall Rating		
Acceptable	9	KS, LA, MD, NV, NJ, NM, OH, SC, SD
Deficient	42	AL, AK, AZ, AR, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, IA, KY, ME, MA, MI, MN, MS, MO, MT, NE, NH, NY, NC, ND, OK, OR, PA, RI, TN, TX, UT, VT, VA, WA, WV, WI, WY
Requirement 1: Plan Must Have Detailed Analysis of Core Academic Subject Classes Not Taught by an HQT		
The revised plan must provide a detailed analysis of the core academic subject classes in the State that are currently *not* being taught by highly qualified teachers. The analysis must, in particular, address schools that are not making adequate yearly progress and whether or not these schools have more acute needs than do other schools in attracting highly qualified teachers. The analysis must also identify the districts and schools around the State where significant numbers of teachers do not meet HQT standards, and examine whether or not there are particular hard-to-staff courses frequently taught by non-highly qualified teachers. [a]		
Met	19	AL, AK, DC, GA, KS, LA, MD, MI, MT, NV, NJ, NM, NC, OH, PA, SC, SD, VA, WV
Partially Met	15	CO, CT, DE, IL, IN, IA, KY, ME, NH, NY, OK, RI, VT, WA, WY
Not Met	16	AZ, AR, CA, FL, HI, ID, MA, MN, MO, NE, ND, OR, TN, TX, UT, WI
Requirement 2: Plan Must Track LEA Progress and the Steps to Be Taken to Help Teachers Attain HQT Status		
The revised plan must provide information on HQT status in each LEA and the steps the SEA will take to ensure that each LEA has plans in place to assist teachers who are not highly qualified to attain HQT status as quickly as possible.		
Met	21	AL, DC, IN, KS, LA, ME, MD, MS, NE, NV, NJ, NM, NY, OH, PA, RI, SC, SD, VA, WA, WV
Partially Met	14	AK, AZ, CA, CT, DE, GA, IL, KY, MN, MT, NC, TX, VT, WY
Not Met	16	FL, HI, ID, IA, MA, MI, MO, NH, ND, OK, OR, TN, UT, WI
Requirement 3: Plan Must Detail State Activities to Help LEAs Complete Their HQT Plans		
The revised plan must include information on the technical assistance, programs, and services that the SEA will offer to assist LEAs in successfully completing their HQT plans, particularly where large groups of teachers are not highly qualified, and the resources the LEAs will use to meet their HQT goals.		
Met	20	AL, AZ, CO, CT, DC, KS, LA, MD, MS, MT, NE, NJ, NM, OH, PA, SC, SD, VA, WV, WY
Partially Met	18	AK, AR, GA, ID, IL, IN, KY, ME, MI, MN, NV, NH, NY, NC, ND, RI, TX, WA
Not Met	13	CA, DE, FL, HI, IA, MA, MO, OK, OR, TN, UT, VT, WI
Requirement 4: Plan Must Detail How State Will Work with LEAs who Do Not Meet 2006-07 HQT Goal		
The revised plan must describe how the SEA will work with LEAs that fail to reach the 100 percent HQT goal by the end of the 2006-07 school year.		
Met	19	AL, CO, DC, IL, IN, LA, ME, MD, MS, NE, NJ, NM, NY, OH, PA, SC, SD, VA, WV
Partially Met	17	AK, AR, CA, CT, GA, KS, KY, MT, NV, NC, ND, OK, RI, TX, WA, WY
Not Met	15	AZ, DE, FL, HI, ID, IA, MA, MI, MN, MO, NH, OR, TN, UT, WI
Requirement 5: Plan Must Detail How State Will Complete HOUSSE Process for Veteran Teachers		
The revised plan must explain how and when the SEA will complete the HOUSSE process for teachers not new to the profession who were hired prior to the end of the 2005-06 school year, and how the SEA will limit the use of HOUSSE procedures for teachers hired after the end of the 2005-06 school year to multi-subject secondary teachers in rural schools eligible for additional flexibility, and multi-subject special education who are highly qualified in language arts, mathematics, or science at the time of hire.		
Met	20	AL, AK, CO, CT, FL, LA, ME, MA, MI, MN, NV, NJ, NM, NC, ND, OH, OK, SC, SD, WY
Partially Met	16	CA, DE, DC, ID, IL, IA, KS, MD, MS, MT, NE, NY, OR, RI, TX, WV
Not Met	15	AZ, AR, GA, HI, IN, KY, MO, NH, PA, TN, UT, VT, VA, WA, WI
Requirement 6: Plan Must Include State's Written "Equity Plan"		
The revised plan must include a copy of the State's written "equity plan" for ensuring that poor or minority children are not taught by inexperienced, unqualified, or out-of-field teachers at higher rates than are other children.		
Met	7	IN, KS, NV, NJ, OH, SC, SD
Partially Met	14	AK, FL, IL, LA, MD, MS, NH, NM, NY, OK, RI, TN, VA, WV
Not Met	30	AL, AZ, AR, CA, CO, CT, DE, DC, GA, HI, ID, IA, KY, ME, MA, MI, MN, MO, MT, NE, NC, ND, OR, PA, TX, UT, VT, WA, WI, WY

[a] The Department requested additional information from Mississippi and therefore did not issue a finding with respect to the first requirement.

SOURCE: U.S. Department of Education, *Reviewing Revised State Plans: Meeting the Highly Qualified Teacher (HQT) Goal*, available at www.ed.gov/programs/teacherqual/hqt.html

TABLE A8. When Accurate and Complete Data on HQT Status of States' Teacher Labor Force First Reported to the U.S. Department of Education, 2003-2006

NCLB-Compliant	Frequency	States
2002-03	2	OR, TX
2003-04	9	CA, KY, ME, NM, NY, ND, OH, SC, TN
2004-05	16	AL, AZ, DC, FL[a], HI[a], IL, KS, LA, MS[a], NV, NH[a], NJ[a], SD, UT[a], VT, WY
2005-06 [b]	6	AK, AR, DE, MN, NC, OK
None as of yet [c]	18	CO, CT, GA, ID, IN[d], IA, MD, MA, MI[d], MO, MT, NE, PA, RI[d], VA, WA, WV, WI

[a] The *Assessing State Progress* report for these States indicate that data for previous years may be accurate however due to improvements in data collection procedures to improve data quality makes it difficult to assess the accuracy of previous data.
[b] The data for the 2005-06 school year these States (except Arkansas) are preliminary accurate and complete data that were submitted as a result of the Department placing a condition on the State's funding following the *Assessing State Progress* reports. Arkansas reported 2005-06 data in its 2004-05 CSPR. These are the only States who have been required to submitted data for 2005-06. Data from the other States are due around March 2007 as part of the 2005-06 CSPR.
[c] All these States have reported at least some data on the highly qualified status of teachers. However, the reported data are inaccurate because they are based on HQT definitions that are not NCLB-compliant.
[d] Other problems with State data include: (1) Indiana's data for the both the 2003-04 and 2004-05 were based on inappropriate HQT definitions. Also, the State failed to disaggregate the 2004-05 data by poverty level. (2) Michigan's data prior to 2004-05 was based on FTE status of teachers not the class. Also the State failed to disaggregate the secondary school data by poverty level. (3) Rhode Island's data for 2004-05 was based on good definitions; however the State was not confident in the accuracy of its data.
SOURCE: U.S. Department of Education, *Assessing State Progress in Meeting the Highly Qualified Teacher (HQT) Goals*, available at www.ed.gov/programs/teacherqual/hqt.html

TABLE A9. State Coursework Requirements for an Undergraduate Major as a Means to Demonstrate Subject-Matter Competency, 2005

Minimum Credits	Frequency	States
More than 32	5	DC, ID[a], NV[b], ND[c], UT[e]
30-32	25	AL, AK, CA, CT, DE, ID[a], IL, KS, MD, MI, MT, NE, NV[b], NH, NJ, NY, ND[c], OH, OR, RI, SC, UT[e], VT, WA, WY[f]
24	11	AZ, AR, CO, IN, IA, ME, NC, OK, TN, TX, WY[f]
Less than 24	5	GA, MS, ND[c], SD[d], WV
Varies across subject area	5	FL, MA, MO, NM, VA
Not defined/Unable to determine	5	HI, KY, MN, PA, WI

[a] Idaho defines a major equivalent as 44 semester hours for elementary teachers and 30 semester hours for secondary teachers. [b] Nevada defines a major equivalent as 36 semester hours for comprehensive majors and 30 semester hours for single-subject majors. [c] North Dakota defines a major equivalent as 42 semester hours for composite majors, 32 semester hours for single-subject majors, and 16 semester hours for middle school.
[d] South Dakota equates a minor to a major, and defines a minor as 12 credit hours. [e] Utah defines a major equivalent as 46 semester hours for a composite major and 30 semester hours for a single-subject major. [f] Wyoming defines a major equivalent as 24 semester hours for secondary teachers and 30 semester hours for elementary teachers.
NOTE: We equate the following terms that appear in state definitions: credits, semester hours, semester credits, and credit hours.
SOURCE: Table 7 in Loeb and Miller (2006)

TABLE A10. Maximum Weight States Give to Years of Experience in Determining if Subject-Matter Competency for Veteran Teachers, 2005

Weight	Frequency	States
52% to 60%	3	IL[a], TN[b], UT
50%	24	AL[c], AK, AZ, AR, CA, DC, FL, GA, IL[a], IN, ME, MD, MI, MN, MS, MO, NV, NY, OR, SD, TN[b], TX, VA, WY
40% to 49%	6	HI, ID, KS, KY, OK, PA
24% to 32%	7	AL[c], DE, NJ, NM, ND, OH, RI
No direct weight	14	CO, CT, IA, LA, MA, MT, NE, NH, NC, SC, VT, WA, WV, WI

[a] In Illinois, teaching experience carries a maximum weight of 50% if the teacher meets the minimum endorsement requirements for the core subjects taught and 60% in the HOUSSE rubric. [b] In Tennessee, teaching experience carries a maximum weight of 50% if the teacher's effect on student achievement identified through TVAAS is above the mean or not detectably different from the mean and 52% in the HOUSSE rubric. [c] In Alabama, teaching experience carries a maximum weight of 50% for teachers with the appropriate National Board Certification, and 30% in the HOUSSE rubric.

NOTE: Maximum weight was calculated from two sources. First, if the state's HQT definition deems a teacher subject-matter competent if she has a minimum amount of teaching experience, for example, and fulfills multiple other provisions, all carrying equal weight, the maximum weight assigned to teaching experience was calculated to be 1 divided the number of provisions. Second, the maximum weight was calculated using the HOUSSE rubrics where the maximum weight was equal to the maximum points awarded for either experience or content coursework less than a major divided by the total points needed.

SOURCE: Table 10 in Loeb and Miller (2006)

TABLE A11. AYP-related Elements on which State Revised HQT Plans were Assessed, July 2006

Finding	Frequency	States
Requirement 1: Plan Must Have Detailed Analysis of Core Academic Subject Classes Not Taught by an HQT		
Does the analysis focus on the staffing needs of schools that are not making AYP? Do these schools have high percentages of classes taught by teachers who are not highly qualified?		
Yes	28	AL, AK, CT, DC, GA, IL, IA, KS, LA, ME, MD, MI, MS, MT, NE, NV, NH, NJ, NM, NY, NC, OH, PA, SC, SD, VT, VA, WV, WY
No	23	AZ, AR, CA, CO, DE, FL, HI, ID, IN, KY, MA, MN, MO, ND, OK, OR, RI, TN, TX, UT, WA, WI
Requirement 3: Plan Must Detail State Activities to Help LEAs Complete Their HQT Plans		
Does the plan indicate that the staffing and professional development needs of schools that are not making AYP will be given high priority?		
Yes	33	AL, AK, AZ, AR, CO, CT, DE, DC, ID, IL, IN, KS, LA, ME, MD, MI, MN, MS, MT, NE, NV, NH, NJ, NM, NY, OH, PA, SC, SD, TN, VA, WV, WY
No	14	GA, HI, IA, KY, MA, MO, ND, OK, OR, TX, UT, VT, WA, WI
Undecided	4	CA, FL, NC, RI
Does the plan indicate that in the use of available funds priority will be given to the staffing and professional development needs of schools that are not making AYP		
Yes	25	AL, AZ, CO, CT, DC, ID, IL, KS, LA, ME, MD, MI, MS, MT, NE, NJ, NM, OH, PA, RI, SC, SD, VA, WV, WY
No	24	AK, AR, CA, DE, GA, HI, IN, IA, KY, MA, MN, MO, NV, NH, NY, ND, OK, OR, TN, TX, UT, VT, WA, WI
Undecided	2	FL, NC
Requirement 4: Plan Must Detail How State Will Work with LEAs who Do Not Meet 2006-07 HQT Goal		
Does the plan show how technical assistance from the SEA to help LEAs meet the 100 percent HQT goal will be targeted toward LEAs and schools that are not making AYP?		
Yes	30	AL, AR, CO, CT, DC, GA, IL, IN, LA, ME, MD, MI, MN, MS, MT, NE, NV, NJ, NM, NY, OH, OK, PA, RI, SC, SD, VA, WA, WV, WY
No	18	AK, AZ, DE, HI, ID, IA, KS, KY, MA, MO, NH, ND, OR, TN, TX, UT, VT, WI
Undecided	3	CA, FL, NC
Does the plan include technical assistance or corrective actions that the SEA will apply if LEAs fail to meet HQT and AYP goals?		
Yes	27	AL, AK, CO, CT, DC, IL, IN, KS, LA, ME, MD, MI, MS, MT, NE, NJ, NM, NY, OH, OK, PA, SC, SD, TN, VA, WA, WV
No	21	AZ, AR, DE, FL, HI, ID, IA, KY, MA, MN, MO, NV, NH, ND, OR, RI, TX, UT, VT, WI, WY

Undecided	3	CA, GA, NC

SOURCE: U.S. Department of Education, *Reviewing Revised State Plans: Meeting the Highly Qualified Teacher (HQT) Goal*, available at www.ed.gov/programs/teacherqual/hqt.html

TABLE A12. Adequacy of State Equity Plans, July 2006

NCLB-Compliant	Frequency	States
States with a written equity plan		
Meets Requirements	7	IN, KS, NV, NJ, OH, SC, SD
Partially Meets Requirements	12	AK, FL, IL, LA, MD, MS, NH, NY, OK, RI, VA, WV
Does Not Meet Requirements	7	CO, ID, KY, ME, NE, PA, WI
States without a written equity plan		
Partially Meets Requirements	2	NM, TN
Does Not Meet Requirements	23	AL, AZ, AR, CA, CT, DE, DC, GA, HI, IA, MA, MI, MN, MO, MT, NC, ND, OR, TX, UT, VT, WA, WY

SOURCE: U.S. Department of Education, *Reviewing Revised State Plans: Meeting the Highly Qualified Teacher (HQT) Goal*, available at www.ed.gov/programs/teacherqual/hqt.html

[1] Loeb and Reininger (2004).
[2] Corcoran, Evans and Schwab (2004).
[3] Loeb and Reininger (2004).
[4] Boyd, Lankford, Loeb, Rockoff, and Wyckoff (2006).
[5] Loeb and Page (2001).
[6] For example, see Sanders and Rivers, 1996; Wright, Horn, and Sanders, 1997; Mendro, et. al., 1998; Kain, 1998; Rivers, 1999; and Rivkin, Hanushek and Kain, 2000.
[7] See McCaffrey, et. al. (2003) for a thorough discussion of value-added modeling.
[8] Goldhaber and Brewer (2000), Monk and King (1994)
[9] Clotfelter, Ladd, and Vigdor (2006)
[10] Boyd, Lankdford, Loeb, Rockoff, and Wyckoff (2006).
[11] Rivkin, Hanushek, and Kain (2005).
[12] Boyd, Lankford, Loeb, and Wyckoff (November 2002).
[13] Loeb and Reininger (2004).
[14] Data collected by Katharine Strunk, Institute for Research on Education Policy and Practice, Stanford University, 2006.
[15] Nelson and Gould (October 2001).
[16] Loeb and Reininger (2004).
[17] Boyd, Lankford, Loeb, and Wyckoff (2005b); Hanushek, Kain and Rivkin (2004); Scafidi, Stinebrickner, and Sjoquist (2003).
[18] Boyd, Lankford, Loeb, and Wyckoff (2005)
[19] For example, see Kleinfield and McDiarmid (1986), Massey and Crosby (1983), Murphy and Angleski (1996/1997), and Schwartzbeck, Prince, et. al. (2003).
[20] Levin, Mulhern, and Schunck (2005)
[21] Jacob (forthcoming).
[22] Fuller, Loeb, Arshan, Chen, and Yi (2006)
[23] The law defines core academic subjects as the following: English, reading or language arts, mathematics, science, foreign language, civics and government, economics, arts, history, and geography (PL 107-110 §9101(11)). "Arts" as a subject was not further defined in the law. The Department's guidance directed each State to determine its own definition (U.S. Department of Education, Dec. 2002, p. 14).
[24] PL 107-110 §9101(23)(A)(ii)
[25] The law does not specify how new teachers are distinguished from veteran teachers (which the law refers to as "not new" teachers). The initial U.S. Department of Education guidance to States regarding the highly qualified provision (released 6 June 2002 and revised on 19 December 2002) also specifies no means of distinction. However, the September 2003 guidance indicates that a current (i.e., veteran or not new) teacher is one "who has already been

hired by, and is teaching in, the school district." (p. 13). The first real concrete guidance was provided in the August 2005 version. It indicates that States have authority to define the two groups; however the definitions must be "reasonable". It states that "the Department strongly believes that a teacher with less than one year of teaching experience is "new" to the profession and, therefore, must demonstrate subject-matter competency as a new teacher." (p.4)

[26] Initially, the Department authorized two sets of rules by which grade 6-8 teachers could demonstrate subject-matter competency. In their December 2002 guidance, the Department informed States a teacher teaching grade 6-8 in a K-8 schools labeled by the State as an elementary school were to follow the rules for elementary teachers. If the teacher taught grades 6-8 in a school labeled by the State as a middle or secondary school, the teacher was to follow the rules for middle and secondary teachers. The Department's stance changed by the release of the September 2003 guidance. States were now told States should apply the set of rules that match "the degree of rigor and technicality of the subject-matter that a teacher will need to know in relation to the State's content standards and academic achievement standards for the subjects in those grade levels." (p. 18) It added "It is up to the States to make this decision." This final comment was deleted in the August 2005 version.

[27] PL 107-110 §9101(23)(C)(ii)

[28] For example, see Brewer and Goldhaber, 2000; Monk, 1994; Monk and King, 1994; and Rowan, Chiang, and Miller, 1997.

[29] See Loeb and Miller, 2006.

[30] PL 107-110 §1119(a)(1)

[31] PL 107-110 §1119(a)(2)

[32] Appendix Table A1 provides a timeline of the evolution of State efforts and the Department's oversight activities.

[33] Education Week (2002, January 10). *Quality Counts 2002*, pp. 78-9.

[34] U.S. Department of Education (2002, December 19), p. 19.

[35] U.S. Department of Education (2003, February 3). *Paige Announces That All States Are on Track by Submitting No Child Left Behind Accountability Plans on Time.* Available at www.ed.gov/news/pressreleases/2003/02/02032003b.html

[36] Department communications with each State regarding their Accountability Plans are available online at www.ed.gov/admins/lead/account/letters/index.html.

[37] GAO was renamed the Government Accountability Office on July 7, 2004 to better reflect its institutional mission.

[38] The President in his speech that day never uttered the phrase "highly qualified" or mentioned the law's HQT goal. However, he did emphasize the law's "fundamental principle" is that "every child can learn", a reference to the law's goal that every student meet performance standards by 2014.

[39] Stern (1994).

[40] Excerpts from a letter authored by Gov. Judy Martz and Gov. Bill Richardson to the Secretary of Education Rod Paige dated 6 October 2003 printed in *Education Week*, 22 October 2003, Vol. 23, Issue 8.

[41] Seven States provided no teacher quality data.

[42] See Taylor and Walsh (Spring 2004) and Walsh and Snyder (December 2004).

[43] While Arizona awarded points in eight different categories and each category had subcategories, many of these options had very little connection to content knowledge. Additionally, the point system employed by many States gave a disproportionate number of points for activities which played a small role in building content knowledge. For example, Massachusetts' teachers received 45 points for one 3-credit-hour course and 30 points for serving on an accreditation team. This point system meant that a teacher would be deemed subject-matter competent by completing only three courses. That's less than the coursework required for a minor.

[44] Two of the problems identified by Walsh and Snyder speak to a perceived fundamental mismatch between the HOUSSE option and the other "more practical standards" for assessing subject knowledge. They take issue with a practice they refer to as "retroactively counting coursework" by which coursework that failed to qualify teachers as highly qualified under one option (academic major) can qualify the teacher under the HOUSSE option. Walsh and Snyder also object to the double counting of experience. Because the teacher has experience, the law allows them to avoid taking a test or completed a major. However, State HOUSSE procedures then award them points for that same experience (a practice they acknowledge is permitted by NCLB).

[45] Loeb and Miller (2006).

[46] Holding an NBC partially qualified elementary teachers in another eight States as subject-matter competent. For example, the NBC either earned them points toward the minimum required on a HOUSSE rubric. In some other states, the elementary teacher needed to have earned an NBC and completed at least one other element. For example,

in Illinois, elementary teachers were deemed subject-matter competent if they held a Type 3 (Type 4) certificate with an endorsement for self-contained general education and a National Board Middle (Early) Childhood Generalist Certificate.

[47] See Table A2 in the appendix

[48] See Tables A4 and A5 in the appendix for more information on the specific shortcomings of the State definitions.

[49] Missouri is an interesting case. In 1991, the State began requiring the Praxis II exam. Teachers certified prior to 1991 were required to pass the CBASE exam which the Department determined was not sufficiently rigorous. Consequently, these Missouri teachers had to either pass the Praxis II or complete a HOUSSE procedure. However, Missouri had neither required the test nor drafted a HOUSSE procedure.

[50] The statute defines high-poverty schools as those in the top quartile and low-poverty schools as those in the bottom quartile (PL 107-110 §1119(h)(1)(C)(viii)). States are allowed to select the poverty measure.

[51] Equity plans are required by §1111(b)(8)(C).

[52] Assistant Secretary Henry L. Johnson, letters dated May 12, 2006 to each Chief State School Officer.

[53] See Table A7 in the appendix for details on State performance with respect to each of these requirements.

[54] The report also highlights the error that many States made by reporting on average experience rather than inexperienced (i.e., teachers in their first two or three years of teaching). They stress that the two are not the same.

[55] Hawaii, Kentucky, Massachusetts, Missouri, North Dakota, Oregon, Texas, Utah, and Wisconsin. See Table A11 in the appendix for more detail on these elements regarding the staffing and professional development needs of schools not making AYP.

[56] PL 107-110 §1111(g)(2)

[57] PL 107-110 §1111(h)(4)(G)

[58] PL 107-110 §1111(h)(1)(C)

[59] PL 107-110 §1111(h)(2)(B)

[60] PL 107-110 §1111(h)(6)

[61] See Table A8 in the Appendix. It should be noted that the CSPR reporting requirements have asked for more detail each year. For the 2002-03 school year, States submitted only the percentage of core academic classes taught by HQTs in the State overall and in the States high-poverty schools. For the 2003-04 school year, States were required to submit the number and percentage of core academic classes taught by HQTs in the State overall, in all elementary schools, in all secondary schools, in high-poverty schools, and in low-poverty schools. For the 2004-05 school year, States were required to report the number and percentage of core academic classes taught by HQTs in State overall, in all elementary schools, in all secondary schools, and in high- and low-poverty schools by elementary and secondary school status.

[62] For example, these documents show that Oregon and Texas actually did not report valid data until the 2004-05 school year at the earliest. The monitoring teams found that both States had inappropriate HQT definitions for two of the four groups of teachers (i.e., new and veteran elementary teachers and new and veteran middle and secondary teachers). Oregon's visit was conducted between August 23-25, 2005 which was after the State should have submitted data for the 2002-03 and 2003-04 school years, thus invalidating these data. Similarly, Texas's visit occurred between February 14-16, 2006, well after the submission deadlines for the 2002-03 and 2003-04 school years. Furthermore, Texas's visit was less than a month before the 2004-05 data were to be submitted making it unlikely that they were able to correct the problems with their definitions prior to submitting the data.

[63] See Loeb and Miller (2006) and Table A9 in the appendix. Most States require between 30 and 32 semester credits. In 11 states, teachers can demonstrate subject-matter competency by completing 24 semester credits.

[64] See Table A10 in the appendix.

[65] Esch, et. al., 2005, p. 31

[66] Boyd, Grossman, Lankford, Loeb, and Wyckoff (2006).

[67] Loeb and Miller (2006).