



A Highly Qualified Teacher in Every Classroom: Implementation of the No Child Left Behind Act

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Summary

One of the major goals of the No Child Left Behind Act of 2001 (NCLB) is to raise the achievement of students who currently fail to meet grade-level proficiency standards. Since student achievement is believed by many to depend in large part on effective teaching, the law also contains provisions designed to improve teacher quality. These provisions establish minimum teacher quality requirements and charge states and school districts with developing plans to meet them. These plans are to ensure that all schools have a *highly qualified teacher* in every classroom by the end of the 2005-2006 school year.

To be deemed *highly qualified*, NCLB requires that teachers possess a baccalaureate degree and a state teaching certificate, and that teachers also demonstrate subject-matter knowledge for their teaching level. Elementary school teachers must show knowledge of basic elementary school curricular areas. Middle and secondary school teachers must demonstrate a high level of competency in all subject areas taught. Demonstration of subject-matter knowledge and competency may be shown by passing a state certification exam or licensing test in the relevant subject(s).

This report examines implementation of NCLB requirement and estimates the extent to which schools will achieve the goal of placing a highly qualified teacher in every classroom. After describing the highly qualified teacher requirement in detail, the report analyzes data from a national survey of schools that provide information on teacher qualifications and subjects taught. These data suggest that more than four out of five teachers would have met NCLB definition of a highly qualified teacher prior to the date of enactment.

The analysis also reveals differences between highly qualified and underqualified teachers—both in terms of the teachers' characteristics and the characteristics of the schools in which they teach. The findings have important implications for future policy-making in the area of teacher quality. The report concludes with a discussion of issues that may be considered as the Elementary and Secondary Education Act reauthorization process unfolds.

These provisions, along with the rest of the Elementary and Secondary Education Act, will likely be considered for reauthorization by the 110th Congress. This report will be updated as significant legislative developments occur.

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Introduction

It is widely believed that good teachers are critical to student learning. A large body of academic research has produced strong evidence that teacher quality is positively related to student performance. However, the strength of this research finding depends on the measure used to indicate “quality.” Studies that use credentials such as degree attainment or teacher certification show weaker impacts on student performance than studies that use direct measures of teachers’ pedagogical and subject-matter knowledge.¹ Nevertheless, credentials are more readily available to local school administrators that hire teachers and more easily incorporated into state and federal policy. In recent years, education policy governing the attainment of teaching credentials has evolved to incorporate pedagogy and subject expertise. General state certification exams have been replaced or enhanced with testing for knowledge of subject matter. Some states have developed multi-tiered, knowledge-based certification systems. Teacher preparation programs in some states have begun requiring that candidates obtain a major or minor in a subject as a prerequisite for or in conjunction with an education degree.²

Teaching credential reforms that incorporate subject-matter knowledge have also been enacted in federal education policy. Most recently, the Elementary and Secondary Education Act of 1965 (ESEA), as amended by the No Child Left Behind Act of 2001 (NCLB) (P.L. 107-110), requires that all public school teachers, in states participating in the ESEA Title I-A program for Education of the Disadvantaged, be *highly qualified* by demonstrating subject knowledge for their teaching level. Elementary school teachers must show knowledge of basic elementary school curricular areas. Middle and secondary school teachers must demonstrate a high level of competency in all subject areas taught. Subject-matter knowledge and competency may be demonstrated by passing a state certification exam or licensing test in the relevant subject(s).³

One of the major goals of NCLB is to raise the achievement of students who currently fail to meet grade-level proficiency standards. Since student achievement has been shown to be dependent in large part on teacher quality, the law seeks to improve achievement by setting higher minimum teacher quality requirements. In complying with the law, schools are prevented from hiring substandard teachers, such as those with emergency or provisional certification, those without a baccalaureate degree, or those with limited subject knowledge.

For some time, it was thought that schools hired substandard teachers because a shortage existed in the overall supply of qualified teachers. That idea has been challenged in recent years by

¹ Michael B. Allen, *Eight Questions on Teacher Preparation: What Does the Research Say?*, Education Commission of the States, July 2003; Linda Darling-Hammond and Gary Sykes, “Wanted: A National Teacher Supply Policy for Education,” *Education Policy Analysis Archives*, vol. 11, no. 33 (September 2003); Dan Goldhaber and Emily Anthony, “Can Teacher Quality Be Effectively Assessed?,” The Urban Institute, Research Paper no. 410958, April 27, 2004; Leslie G. Vandervoort and David C. Berliner, “National Board Certified Teachers and Their Students’ Achievement,” *Education Policy Analysis Archives*, vol. 12, no. 46, (September 2004); Eric A. Hanushek, et al., “The Market for Teacher Quality,” National Bureau of Economic Research, Working Paper no. 11154, February 2005.

² The College of Education at the University of Kentucky provides a compilation of teacher certification requirements for all 50 states. The compilation is available online at <http://www.uky.edu/Education/TEP/usacert.html>. The National Association of State Directors of Teacher Education and Certification annually publishes a similar compilation, *The NASDTEC Manual on the Preparation & Certification of Educational Personnel*, that is available at <http://www.nasdtec.org>.

³ Teachers may also demonstrate knowledge by having majored in the relevant subject(s), and experienced teachers may do so through the HOUSSE method explained later in this report.

research that revealed the shortage is in fact a distribution problem. Some so-called “hard-to-staff” schools find it difficult to maintain a staff of qualified teachers, while other schools have an adequate supply (and in some cases an oversupply) of quality teachers.⁴

The reasons for the uneven distribution in the teacher supply are still a matter of debate. Some argue that rules providing priority in reassignment options to teachers with seniority and the late decision deadline given to resigning teachers relegates the least-qualified teachers to less desirable schools. Others point to working conditions and other factors that make these schools less desirable to quality teachers in the first place. Whatever the reasons for the uneven distribution of quality teachers, the persistence of hard-to-staff schools may undermine the impact of NCLB teacher quality standards in reducing the student achievement gap.

This report examines implementation of NCLB requirement of a highly qualified teacher in every public school classroom. The first section of the report describes the HQT requirement and how it has been specified through regulation, guidance, and policy statements issued by the Education Department (ED). In the second section, the report analyzes data from a national survey of schools to assess the extent to which they are meeting the NCLB challenge. Finally, the report discusses issues regarding these requirements that may be considered as the ESEA reauthorization process unfolds during the 110th Congress.

The Highly Qualified Teacher Requirement

NCLB requires that each state educational agency (SEA) receiving ESEA Title I, Part A funding (compensatory education of disadvantaged students) must have a plan to ensure that, by no later than the end of the 2005-2006 school year, all public school teachers teaching in core academic subjects within the state will meet the definition of a *highly qualified teacher* (HQT).

Definition of a Highly Qualified Teacher

According to ESEA, Section 9101(23), the definition of an HQT has two basic components. First, to be deemed highly qualified, a teacher must possess full state teaching certification (i.e., must not have had any certification requirements waived on an emergency, temporary, or provisional basis) as well as a baccalaureate degree. The second component of the definition is that an HQT must demonstrate subject-matter knowledge in the areas that she or he teaches. The manner in which teachers satisfy the second component depends on the extent of their teaching experience and the level at which they teach. These subject knowledge requirements are as follows:

- **New elementary school teachers** must pass a rigorous state test demonstrating subject knowledge and teaching skills in reading, writing, math, and other basic elementary school curricular areas.

⁴ Richard M. Ingersol, *Teacher Turnover, Teacher Shortages, and the Organization of Schools*, Center for the Study of Teaching and Policy, Research Report, January 2001; Patrick J. Murphy and Michael M. DeArmond, *From the Headlines to the Frontlines: The Teacher Shortage and Its Implications for Recruitment Policy*, Center on Reinventing Public Education, Research Paper, July 2003; the American Association for Employment in Education, *Educator Supply and Demand in the United States 2001*, Research Report, 2002; Recruiting New Teachers, Inc., *The Urban Teacher Challenge*, Research Report, January 2000.

- **New middle or secondary school teachers** must demonstrate a high level of competency in all subjects taught by (1) passing rigorous state academic tests in those subjects, **or** (2) completing an academic major (or equivalent course work), graduate degree, or advanced certification in each subject taught.
- **Experienced school teachers** must meet (1) the requirements described above for new teachers (depending upon his or her level of instruction), or (2) demonstrate competency in all subjects taught using a “high objective uniform state standard of evaluation” (HOUSSE).

These provisions indicate that the tests used to demonstrate subject-matter knowledge may include state certification or licensing exams. Section 9101(23) states that a demonstration of subject-matter knowledge by an elementary school teacher “may consist of passing a State-required certification or licensing test or tests in reading, writing, mathematics, and other areas of the basic elementary school curriculum.” For a middle or secondary school teacher, Section 9101(23) states that a demonstration of subject-matter knowledge “may consist of a passing level of performance on a State-required certification or licensing test or tests in each of the academic subjects in which the teacher teaches.”

Implementing the Definition

Since passage of NCLB, ED has further specified the HQT definition through regulation, non-regulatory guidance, and other means. In general, these policy statements address concerns about the scope and application of the HQT requirements. Among a wide variety of implementation issues, ED has sought to clarify what constitutes “core” subject matter, how states should develop and apply a HOUSSE, how the HQT requirements may be differentially applied to different types of teachers and in different types of educational settings, and when various aspects of the requirement must be completed.

Subject Matter

Early in the implementation of these provisions, some asked whether they apply to *all* teachers, including vocational education teachers, special education teachers, or others not teaching core academic subjects. According to ESEA Section 9101(11), “The term ‘core academic subjects’ means English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography.” Final regulations for the Title I program published on December 2, 2002, in the *Federal Register* apply these requirements only to core academic subject teachers. ED noted that these requirements would apply to a *vocational education* teacher or a *special education* teacher providing instruction in a core academic subject.⁵

ED addressed other subject matter issues in subsequent guidance and policy letters. A March 2004 policy announcement modified earlier non-regulatory guidance (issued in January 2004), which stated that *science* teachers teaching more than one field of science (e.g., biology and

⁵ The application of HQT requirements to special education teachers was subsequently modified under the Individuals with Disabilities Education Act. For more information, see CRS Report RL32913, *The Individuals with Disabilities Education Act (IDEA): Interactions with Selected Provisions of the No Child Left Behind Act (NCLB)*, by Richard N. Apling and Nancy Lee Jones.

chemistry) would have to be highly qualified in each of the fields taught. Under the new flexibility, states determine whether science teachers need to be highly qualified in each science field they teach or highly qualified in science in general, based on how the state currently certifies teachers in these subject areas.

This new flexibility, along with other changes, was incorporated into the latest revised non-regulatory guidance issued on August 3, 2005.⁶ The guidance clarifies that *social studies* is not considered a core subject and that certification in social studies or possession of a “composite social studies degree” does not necessarily indicate that a teacher is highly qualified to teach related subjects (e.g., economics and history). States are to determine whether a social science teacher is qualified to teach the specific subject he or she is assigned to teach.

High Objective Uniform State Standard of Evaluation (HOUSSE)

According to NCLB, a teacher who is not new to the teaching profession may demonstrate subject matter knowledge through the states’ HOUSSE method. In defining its HOUSSE, the SEA must set standards for both grade appropriate academic subject knowledge and teaching skills that are aligned with challenging state academic and student achievement standards. The HOUSSE must provide objective information about teachers’ content knowledge in all subjects taught and be applied uniformly statewide to all teachers in the same subjects and grade levels. Finally, the statute states that the HOUSSE may use multiple measures of teacher competency and may consider, but not be based primarily on, time teaching the relevant subjects.

Non-regulatory guidance, published on September 12, 2003, included suggestions on the development of HOUSSE procedures. According to the guidance, states should consider several factors when developing their HOUSSE procedures, including whether the proposed HOUSSE measures provide an “objective” way of determining whether a teacher has adequate subject-matter knowledge. The latest (August 2005) guidance defines *new* teachers as those with less than one year of teaching experience and teachers who are *not new* as those with more than one year of experience. However, the guidance indicates that states have the authority to determine who is new to the profession and who is not. States may also design their HOUSSE procedures to allow a teacher to go through the process a single time to demonstrate competency in multiple subjects.

Different Teachers

NCLB states that full certification includes “certification obtained through alternative routes to certification.” The December 2002 final regulations indicated that teachers who were participating in an alternative certification program will be considered highly qualified on a provisional basis. Such teachers have a maximum of three years in which to become fully certified without being in violation of the highly qualified requirements regarding certification. This allowance is made only for a teacher in an alternative certification program who is receiving high-quality professional development, intensive supervision, and is making satisfactory progress toward full certification.

⁶ The most recently revised ESEA Title II non-regulatory guidance is available online at <http://www.ed.gov/programs/teacherqual/guidance.doc>.

Concerns had been raised that the HQT requirements would limit participation in *international* teacher exchange programs. In a policy letter issued on March 24, 2003, the Secretary addressed these concerns by indicating how teachers from other countries could be considered highly qualified in the state in which they teach. The Secretary pointed out that each state has the full authority to define and enforce its own requirements for certification and licensure and make accommodations for foreign teachers. Accommodations could also be made in developing tests and other ways of demonstrating subject-matter expertise. In making this point, the Secretary clarified that one such demonstration provided in the law is coursework equivalent to an academic major.

These changes were included in the September 2003 updated guidance, along with clarification on the issue of *middle school* teachers. When determining whether teachers of core academic subjects in grades 6 through 8 should meet competency requirements for elementary or middle school teachers, the guidance advises states to “examine 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.” In addition, states may choose to consider teachers with middle school certification to be “highly qualified,” and states may approve tests that are specifically developed for middle school teachers if the tests are “rigorous content-area assessments that are developed specifically for middle school teachers and aligned with middle school content and academic standards.”

Different Settings

In a March 31, 2004 policy letter, the Secretary announced that additional flexibility could be applied in the implementation of the HQT requirements with regard to teachers in small rural school districts.⁷ In small rural districts, ED provided that teachers teaching core academic subjects who meet the highly qualified requirements in at least one of the subject areas they teach may have an additional three years to meet these requirements in the other subjects they might teach. For current teachers, this three-year grace period began with the 2004-2005 school year, meaning that rather than facing a deadline of the end of the 2005-2006 school year to be highly qualified in all core subjects taught, current rural teachers may have until the end of the 2006-2007 school year. For newly hired teachers, a full three-year grace period can be provided from the date of hiring. But those newly hired teachers will have to be highly qualified in one of their core subject areas when hired. States decide whether to offer this flexibility to eligible rural districts.

Section 9101(23) states that charter school teachers must meet “the requirements set forth in the State’s public charter school law.” ED’s guidance clarifies that this only refers to the requirements for certification and indicates that such teachers must meet all other HQT requirements. The guidance also states that teachers in juvenile and correctional institutions or “other alternative settings” must meet HQT standards only if such settings are considered LEAs under state law.

⁷ Rural school teachers are defined as those teaching in schools eligible for the Small Rural School Achievement (SRSA) Program (ESEA Title VI-B). The policy letter announcing this flexibility is available at <http://www.ed.gov/policy/elsec/guid/secletter/040331.html>.

Deadlines for Implementation

Each SEA was to submit its plan to meet the HQT deadline along with its Consolidated State Application for State Grants on July 12, 2002.⁸ The plan must establish annual measurable objectives for each local educational agency (LEA) and school that, at a minimum, include annual increases in the percentage of HQTs at each LEA and school to ensure that the 2005-2006 deadline is met. In turn, each LEA must also have a plan to meet this deadline. In addition, beginning with the first day of the 2002-2003 school year, any LEA receiving ESEA Title I funding must ensure that all teachers hired after that date who are teaching in Title I-supported programs are highly qualified. States and LEAs must also submit annual reports to ED describing progress on the state-set annual objectives.

The Consolidated State Performance Reports (CSPR), for the 2003-2004 school year due in January of 2005, were to contain the first data on the status of meeting the HQT requirement. However, ED reported widespread problems in state data systems and offered a series of regional data workshops to support states in collecting data.⁹ This includes the additional data on teachers who are not highly qualified that was required to be submitted in the January 2006 CSPR. ED announced these workshops in a policy letter to chief state school officers dated October 21, 2005.

The letter also announced additional flexibility in meeting the HQT deadline. The Secretary stated that the letter's purpose was "to assure you that States that do not quite reach the 100% goal by the end of the 2005-2006 school year will not lose federal funds if they are implementing the law and making a good-faith effort to reach the HQT goal in NCLB as soon as possible."¹⁰ Instead, states that "meet the law's requirements and the Department's expectations in these areas but fall short of having highly qualified teachers in every classroom" would be given an *additional year* to reach the 100% goal.

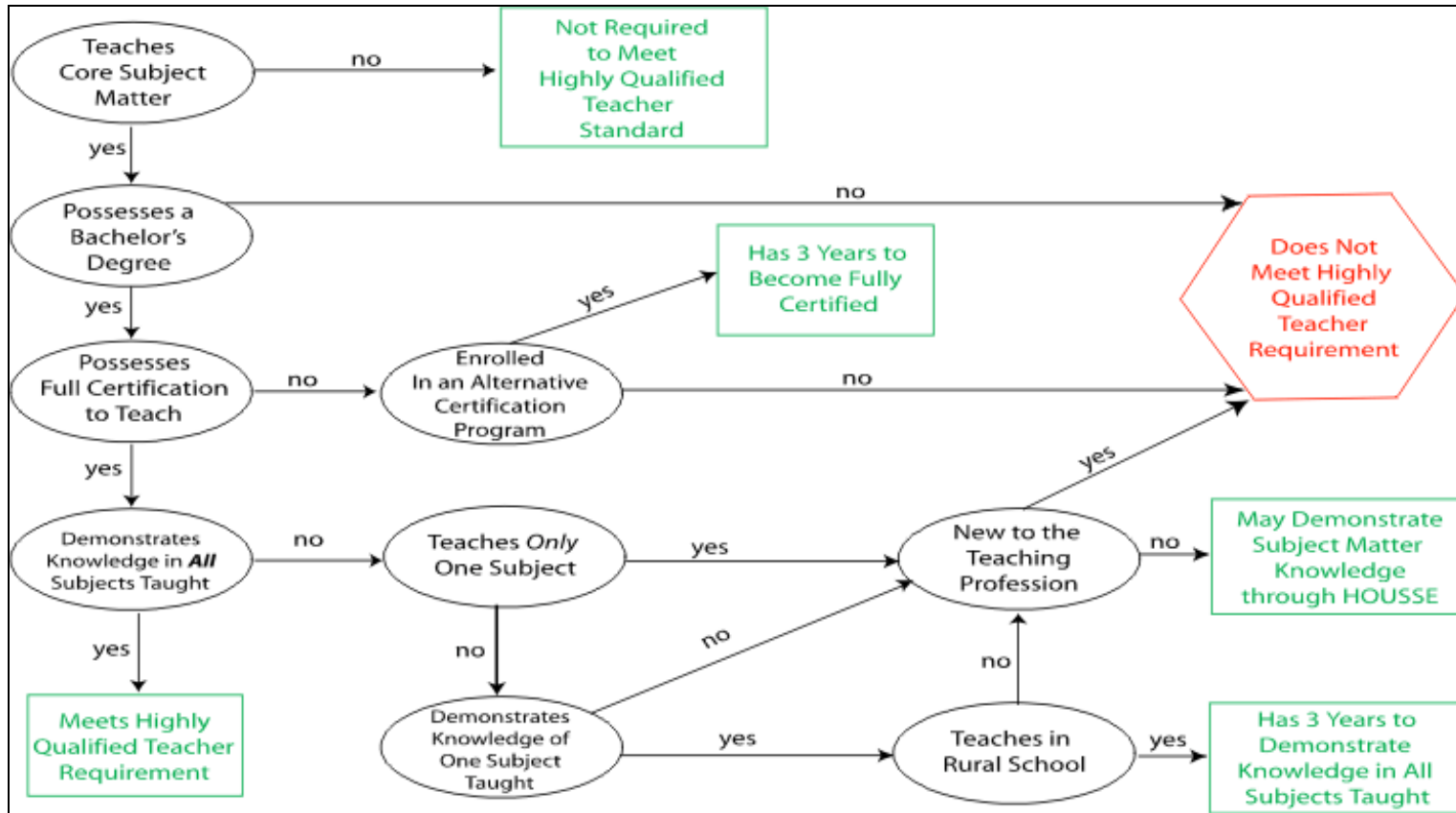
Figure 1 provides a graphic diagram of the major HQT requirements as defined in NCLB and further specified in ED regulation and guidance.

⁸ Although some states have made their plans available to the public, the Secretary has yet to release the plans of any state.

⁹ A GAO report dated July 2003 anticipated these data systems problems: U.S. Government Accountability Office, *No Child Left Behind Act: More Information Would Help States Determine Which Teachers Are Highly Qualified*, GAO-03-631.

¹⁰ The Secretary's letter is available at <http://www.ed.gov/policy/elsec/guid/secletter/051021.html>.

Figure 1. Diagram of Highly Qualified Teacher Requirement



Meeting the Highly Qualified Teacher Challenge

Given the aforementioned problems with state HQT data systems, the only source of reliable information on teacher quality comes from survey data. The Schools and Staffing Survey (SASS) conducted by ED's National Center for Education Statistics collects data on teacher, school, and district characteristics from a very large, representative sample of schools throughout the country.¹¹ This analysis uses SASS data collected during the 1999-2000 school year.¹² The survey asked teachers who taught during that school year a series of questions about their teaching experience, assignments, education, and certification.

The SASS survey estimates that just under 3 million teachers were employed during the 1999-2000 school year.¹³ That was the first year of teaching for roughly 173,000 (5.8%) of the 3 million teachers. Virtually all teachers (99.3%) held a baccalaureate degree at the time of the survey; the large majority (95.9%) also held some form of state teaching certification. Most teachers (91.4%) were employed full-time in 1999-2000; of the remainder, 3.0% worked part-time, 3.5% split time between more than one school, and 2.2% were "non-regular" teachers consisting mostly of administrators and librarians who also taught a class that year (the latter group are omitted from the analysis in this report).¹⁴

Some teachers teach more than one grade level, and school districts vary in how they combine grade levels; however, ED has developed a scheme to uniformly classify teachers across the country as either *elementary*, *middle*, or *secondary*.¹⁵ In 1999-2000, 43% of teachers were classified as elementary, 26% as middle, 30% as secondary, and 1% as "other." Nearly one-third of all teachers (29.7%) did not teach a "core" academic subject during the 1999-2000 school year.¹⁶ These non-core teachers are not subject to the HQT requirement and are omitted from this analysis.¹⁷

¹¹ The sample is drawn from ED's Common Core of Data, which contains virtually every school in the country.

¹² Data from the 2003-2004 survey are currently being analyzed and will be incorporated in a forthcoming update of this report.

¹³ This figure does not include those employed as teacher aides (or *paraprofessionals*). Although NCLB does contain a separate series of requirements for paraprofessional quality, individuals employed to assist teachers were not included in the SASS sample.

¹⁴ Since the use of long-term substitutes has received some attention, it is worth noting that 0.43% (or 12,826) of all 3 million teachers were employed as long-term substitutes. ED guidance recommends that substitutes meet HQT requirements; however, states need only notify parents if their child has been taught by a non-HQT substitute for more than four consecutive months.

¹⁵ Teachers were assigned by SASS programmers in a manner consistent with the assignment of schools to elementary, middle, and secondary levels developed by the NCES in U.S. Department of Education, National Center for Education Statistics, *In the Middle: Characteristics of Public Schools with a Focus on Middle Schools*, NCES 2000-312, by Martha Naomi Alt and Susan P. Choy, MPR Associates, Inc., and Charles H. Hammer, Project Officer, Washington, D.C. July 2000 <http://nces.ed.gov/pubs2000/2000312.pdf>.

¹⁶ The areas defined as "core subjects" in this analysis are "Kindergarten/Elementary," "Art," "Mathematics," "Social studies," "English or language arts," "Foreign languages," and "Science." Although social studies is not contained in the statutory language, it is used in this analysis because it encompasses subjects that are in the statute; namely, economics, history, and geography.

¹⁷ Special education teachers who teach a core subject are required to be HQT; however, most were omitted from this analysis due to the SASS instrument design. One in ten (11.4%) of all teachers reported "special education" as one of their subjects taught, but only 1.1% of all teachers reported teaching "special education" in addition to a core subject. (continued...)

Core Subject Teachers

Of the 2.1 million teachers who taught at least one core subject in 1999-2000, 1.73 million (83.6%) taught a single subject and 339,000 (16.4%) taught two subjects.¹⁸ Nine in ten single-subject teachers (91.4%) reported that they held full state certification in the subject they taught.¹⁹ Half of all two-subject teachers (49.9%) reported that they held full state certification in both of their subjects. Taken together, 84.5% of all single and two-subject teachers held a baccalaureate degree and reported being certified in the subject(s) they teach. Since NCLB considers state certification in all fields taught adequate demonstration of subject-matter knowledge, these data suggest that *prior to the passage of NCLB, more than eight out of ten teachers met the HQT requirement.* **Table 1** presents the qualifications of core subject teachers for the 1999-2000 school year.

An additional 3.1% of all teachers were participating in an alternative certification program at the time of the survey. Such teachers have three years to complete their program and become fully certified. Another 6.1% of all teachers taught two subjects but only held certification in one. About one in 10 of these teachers were located in LEAs eligible for participation in the Small Rural School Achievement (SRSA) program (ESEA Title VI-B).²⁰ According to the guidance discussed above, these teachers have additional time to demonstrate subject-matter knowledge in the field in which they are not highly qualified—one year in the case of veteran teachers and three years for new teachers. Thus, a total of 3.5% of all 1999-2000 teachers would have been temporarily deemed highly qualified teachers (combining those in alternative certification programs and those in SRSA schools who were uncertified in one of their two subjects).

Table 1. Qualifications of Core Subject Teachers, 1999-2000

	Number	Percent
Core Subject Teachers	2,068,306	100%
Certified in all Subjects Taught	1,747,343	84.5
In Alternative Certification Program	64,009	3.1
Certified in 1 of 2 Subjects & SRSA	9,246	0.4
Total of Highly Qualified Teachers	1,820,598	88.0

(...continued)

Thus, only the latter group was included in this analysis.

¹⁸ Additional analysis of SASS data reveal that only a small fraction (less than 2%) of these teachers taught more than two subjects in 1999-2000. Therefore, the analysis in this report only considers teachers' first two teaching assignments.

¹⁹ It is important to note that the SASS data are self-reported. The responding teachers were simply asked whether they were certified in the subject(s) they taught. At the time of the survey, a handful of states did not include subject-matter testing as part of their certification exams and several other states only recently instituted subject-matter testing. Thus, it is difficult to determine how many of these teachers have demonstrated subject-matter knowledge through testing. The proportion meeting the HQT requirement may be lower than the SASS data predict; however, a review of preliminary HQT data made available on states' report cards suggest that the SASS over-estimation will not be substantial. This assessment was also corroborated by anecdotal evidence from ED monitoring visits, according to a February 27, 2006 phone conversation with an ED official.

²⁰ As mentioned earlier, multiple-subject teachers in SRSA schools who are HQT in one subject have up to three years to become highly qualified in the other subjects they teach.

	Number	Percent
Certified in 1 of 2 Subjects & non-SRSA	117,536	5.7
Certified in Other Subject or Other State	19,093	0.9
Not Certified	75,924	3.7
Temporary or Emergency Certification	31,662	1.5
No Baccalaureate Degree	3,547	0.2
Total of Underqualified Teachers	247,708	12.0

Source: CRS analysis of the U.S. Department of Education, National Center for Education Statistics' 1999-2000 Schools and Staffing Survey.

Underqualified Teachers

The data presented in the previous two paragraphs indicate that—with 84.5% HQTs and 3.5% temporarily HQTs—*just over one in ten teachers (12.0%) were not highly qualified during the 1999-2000 school year.* These *underqualified teachers (UQTs)* can be divided up as follows: (1) non-SRSA teachers who taught two subjects but only held certification in one (5.7% of all teachers), (2) teachers who were not certified in the subject(s) they taught but held certification in another field or state (0.9% of all teachers), (3) those who held no certification at all (3.7% of all teachers), (4) teachers who held temporary or emergency certification (1.5% of all teachers), and (5) those who did not have a baccalaureate degree (0.2% of all teachers).

As identified by the SASS survey, UQTs differ from HQTs in many respects. Demographic characteristics for each group are compared in **Table 2**. HQTs were more likely to teach elementary school than middle or secondary school. Of all elementary school teachers, 94.0% were highly qualified (HQ), compared to 76.8% of middle school teachers and 85.3% of secondary school teachers. Female teachers were slightly more likely to be HQ than male teachers (89.0%, compared to 84.4%). White teachers were more likely to be HQ than non-white teachers. Among white teachers, 89.4% were HQ, compared to 84.2% of Asian teachers, 80.4% of black teachers, and 78.4% of Hispanic teachers. Of all the core subjects, science teachers were the least likely to be HQ (77.3%), followed by English teachers (81.8%) and math teachers (82.6%). Teachers with less than five years of teaching experience at the time of the survey were less likely to be HQ than those with five or more years of experience (77.9%, compared to 90.7%).

Table 2. Demographic Characteristics by Teacher Qualifications

Characteristic	Highly Qualified Teachers	Underqualified Teachers
All Core Subject Teachers	88.0%	12.0%
Teaching Level		
Elementary	94.0	6.0
Middle	76.8	23.2
Secondary	85.3	14.7
Sex		
Female	89.0	11.0

Characteristic	Highly Qualified Teachers	Underqualified Teachers
Male	84.4	15.6
Race/Ethnicity		
White, Non-Hispanic	89.4	10.6
Black, Non-Hispanic	80.4	19.6
Asian, Non-Hispanic	84.2	15.8
Hispanic	78.4	21.6
Main Assignment		
Kindergarten-Elem.	95.1	4.9
Art	90.4	9.6
Math	82.6	17.4
Social studies	84.6	15.4
English	81.8	18.2
Foreign languages	85.6	14.4
Science	77.3	22.7
Other	49.4	50.6
Teaching Experience		
Less than Five Years	77.9	22.1
Five Years or More	90.7	9.3

Source: CRS analysis of the U.S. Department of Education, National Center for Education Statistics' 1999-2000 Schools and Staffing Survey.

The characteristics of schools at which HQTs and UQTs taught during the 1999-2000 school year also differ. School characteristics for each group are presented in **Table 3**. HQTs were less likely to teach at schools in the SRSA program and more likely to teach in urban schools. Among schools in the SRSA program, 95.3% were HQT, compared to 87.7% in non-SRSA schools. However, using ED's "urbanicity" designation of schools, "small town" schools, and "urban fringe" schools were equally likely to employ HQTs (88.9% and 88.5%, respectively), whereas schools in the "central city" category were less likely to employ HQTs (86.4%). HQTs were more likely to teach at medium-sized schools than at large or small schools. Among schools with enrollment below 100 students or above 999 students, 86.1% and 84.3%, respectively, were HQT; compared to 89.2% at schools with enrollment between 100 and 999. HQTs were more likely to teach at schools with low minority and limited English proficient (LEP) enrollment. Schools with less than 20% minority enrollment employed 91.0% HQT, compared to 85.5% at those with 20% or greater minority enrollment. Schools with less than 20% LEP enrollment employed 88.6% HQT, compared to 82.6% at those with 20% or greater LEP enrollment. Finally, HQTs were more likely to teach at schools with fewer minority teachers. Schools with less than 20% minority teachers employed 89.4% HQT, compared to 83.0% at schools with 20% or greater minority teachers.

Table 3. School Characteristics by Teacher Qualifications

Characteristic	Highly Qualified Teachers	Underqualified Teachers
All Core Subject Teachers	88.0%	12.0%
SRSA Schools	95.3	4.7
Urbanicity		
Central City	86.4	13.6
Urban Fringe	88.5	11.5
Small Town	88.9	11.1
Size		
Less than 100 Students	86.1	13.9
100-999 Students	89.2	10.8
1,000 or More Students	84.3	15.7
Minority enrollment		
Less than 20%	91.0	9.0
20% or More	85.5	14.5
LEP enrollment		
Less than 20%	88.6	11.4
20% or More	82.6	17.4
Minority teachers		
Less than 20%	89.4	10.6
20% or More	83.0	17.0

Source: CRS analysis of the U.S. Department of Education, National Center for Education Statistics' 1999-2000 Schools and Staffing Survey.

Summary of Findings

This analysis indicates that a large majority of core subject-matter teachers would have met the HQT definition prior to enactment of NCLB. That is, they possessed a baccalaureate degree, regular certification, and subject-matter knowledge—demonstrating subject-matter knowledge by being certified to teach all subjects taught during the 1999-2000 school year. Those who did not meet the HQT standard fell into two main groups: (1) those who taught two subjects and only held certification in one, or (2) those who were insufficiently or improperly certified (i.e., they had no certification, held a temporary or emergency certification, or they were certified in a subject or state in which they do not teach).

This analysis reveals that UQTs were more likely to be male, non-white, and have fewer than five years of teaching experience. UQTs were less likely to report “Kindergarten/Elementary” and “Art” as their main teaching assignment. The subject areas most often reported by UQTs as their main assignment were “science,” “English,” and “math.” UQTs were more likely to be classified by ED as middle school teachers. UQTs are less likely to teach in schools designated as eligible for the SRSA program. Instead, UQTs are more likely to teach in a “central city” location at either a very small or very large school. UQTs also are more likely to teach in schools with high minority and LEP enrollments, as well as in schools with a large proportion of minority teachers.

As stated above, half of UQTs (5.7% of all teachers) taught two subjects but were only certified in one. Another small portion of UQTs (0.9% of all teachers) held certification in a subject or state in which they were not teaching. Nine in 10 of these teachers were “veteran” teachers (i.e., had more than one year of teaching experience at the time of the survey) and, therefore, could obtain HQT status through the HOSSE method.

State HOSSE Plans

All 50 states have submitted their HOSSE plans for evaluating experienced teachers who do not meet the HQT requirements laid out above. ED has responded to these plans and provided feedback in areas where it feels they do not meet the HQT standard. ED has also conducted monitoring and site visits to most SEAs and several LEAs to collect information and provide advice on HOSSE implementation. ED has not made HOSSE plans available to the public; however, a few organizations are tracking each state’s development of these systems.²¹ A review of the available information reveals that state HOSSE plans employ a few common strategies for evaluating veteran teachers. Most plans involve the use of a points system for rating teachers on a scale of teacher quality. Many states assess their teachers using existing performance evaluation systems. The professional activities common across all HOSSE plans include coursework, teaching experience, and professional development.

Points System

The National Council on Teacher Quality (NCTQ) reported that 30 state HOSSE plans include a point system (see the December 2004 report cited in footnote 21). In this method, teachers accumulate points for engaging in activities thought to improve teaching and subject-matter knowledge. Teachers are required to submit documentation of these activities, which is reviewed by a trained evaluator or administrator. Various activities are worth different point amounts and, generally, 100 points are required to be considered highly qualified (points can usually be earned retroactively). Some states require that teachers first accrue points for academic work in order to become eligible to accrue points for other activities. Most activities have a cap on the maximum number of points that can be awarded in a particular category. Some states have a short list of three or four activities, while other states have a long list of eligible activities in a few general categories.

Performance Evaluation

The NCTQ report indicates that seven states use annual teacher performance evaluations in their HOSSE plan, although some have modified traditional criteria to fit NCLB requirements. Teachers are observed and evaluated based on a series of teaching criteria that include content knowledge. Some states have included measures of student achievement as part of the evaluation.

²¹ Three such organizations are the National Council on Teacher Quality (NCTQ), the Southern Regional Education Board (SREB), and the Education Commission of the States (ECS). These organizations have released the following reports on state HOSSE plans—Kate Walsh and Emma Snyder, *Searching the Attic: How States Are Responding to the Nation’s Goal of Placing a Highly Qualified Teacher in Every Classroom*, NCTQ, Washington, D.C., Winter 2004; Lynn Cornett and Alice Anne Bailey, *Focus on “Highly Qualified” Teachers: SREB States Take Action*, SREB, Atlanta, Georgia, October 2003; Jennifer Azordegan, *Initial Findings and Major Questions About HOSSE*, ECS, Denver, Colorado, January 2004. ECS also maintains websites that compile the latest HOSSE information for each state.

Some states have one evaluation period per year conducted by a school administrator; others have regular peer evaluations in addition to an administrator's evaluation. Some states allow for consideration of past performance evaluations. Those receiving an acceptable level of performance are considered to meet the highly qualified requirement.

Professional Activities

Most state HOUSSE plans include three major categories of activities that count toward achieving HQT status: coursework, teaching experience, and professional development. In many states, college-level coursework in the area in which the teacher is assigned can be counted toward meeting all or part of the requirement. In states using a point system, points are often awarded in relation to the number of credit hours fulfilled. Possession of a baccalaureate major and the attainment of an advanced degree in the subject taught usually carries additional weight. Most states also give teachers credit toward meeting the HQT standard for their years of teaching experience. Some states require that performance evaluations accompany documentation of this experience and only give credit for years taught with positive evaluations. Points may be awarded for years, or groups of years, and are usually capped. Finally, states usually count professional development activities toward meeting their HOUSSE requirement. These activities may include participation in workshops on teaching content, work toward National Board Certification, and involvement in school/teacher leadership.

Reauthorization Issues

The current funding authority for the ESEA will expire after FY2007.²² Legislative action to reauthorize and amend the ESEA, along with the HQT requirements, will likely occur during the 110th Congress. Numerous proposals have already been forwarded that cover a number of important issues likely to be raised during the reauthorization process. Most of these proposals would amend the HQT definition or make exceptions for certain teachers or schools. Many of the proposals make changes similar to the waivers and increased flexibility already announced by ED.

Multiple Subject Teachers

Although the analysis in this report indicates that less than one in five teachers teaches more than one subject, those who did teach more than one subject were much less likely to be HQT. Among multiple subject teachers in this analysis, half did not meet the HQT standard. This small group—fewer than six percent of all teachers—may present a large problem for schools and states attempting to meet the 100% HQT requirement. Solutions have been proposed for certain kinds of schools (such as rural and hard-to-staff schools, discussed below); however, some proposals seek to address the problem for teachers in all schools generally. These amendments would allow teachers teaching multiple subjects to demonstrate knowledge in one subject area using the existing methods and provide a second method for other subject(s) taught. For example, multiple subject teachers who are HQT in one of their subjects could be given a certain amount of time to accumulate coursework equivalent to an academic minor in the subject(s) for which they lack sufficient knowledge.

²² A one-year automatic extension, through FY2008, is provided under the General Education Provisions Act.

Definition of Subject Matter

The issue of multiple subject teachers is in part created by the definition of subject matter in NCLB. Specifically, section 9101(11) of the statute states that, “The term ‘core academic subjects’ means, English, reading and language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography.” As mentioned earlier, ED addressed issues related to science and social studies teachers in its non-regulatory guidance. States were given the authority to determine whether teachers qualified to teach in one field of science or social studies were qualified in other fields in those areas. Some have proposed legislative solutions that would recognize “generalist” certificates in these and other areas as proof of subject-matter knowledge.

Middle School Teachers

Many of the teachers found not to meet the HQT standard in this analysis were teaching middle school students. The problem posed by this group of teachers is that some have duties similar to elementary teachers, while others are more like secondary school teachers. That is, some middle school teachers work in so-called “self-contained” classroom settings where they are responsible for teaching multiple subjects to the same group of students. Meanwhile, other middle school teachers work in “departmental” settings, in which they teach the same subject to different groups of students over the course of a single day. According to NCLB, middle school teachers are to be treated like secondary school teachers with regard to demonstration of subject-matter expertise. Thus, those teaching multiple subjects in self-contained classrooms must be certified to teach in several subjects—or prove subject knowledge in each area by the other permitted means. The proposals to recognize “generalist” certification mentioned above would remedy this problem. Other proposals include expanding the allowable types of experience and forms of evaluation permitted in state HOUSSE methods for veteran middle school teachers.

Rural, Urban, and Poor Schools

This analysis revealed that UQTs are less likely to work in SRSA schools. SRSA schools are largely defined as those located in areas classified as “rural” according to the U.S. Census Bureau locale codes. However, other evidence suggests that rural schools are among the so-called “hard-to-staff” schools, which will have an especially difficult time meeting the 100% HQT requirement.²³ Part of the explanation for the disparity between these two conclusions rests in the definition of rurality. Specifically, ED analysis has found the Census locale code classifications of rural areas to be at best crude and in some cases grossly inaccurate.²⁴ One proposal would give rural schools until the 2009-2010 school year to meet the HQT deadline; however, the proposal would provide this option only to SRSA schools. Another proposal would give the Secretary the authority to waive the HQT requirement for any rural school that could demonstrate that the requirement would impose an undue hardship on the school because of population and geographic constraints.

²³ Based on anecdotal evidence from ED monitoring visits provided during a February 27, 2006 phone conversation with an ED official.

²⁴ Douglas E. Geverdt, *Review of NCES School Locale Tabulation and Analysis*, U.S. Census Bureau, Technical Memorandum, December 22, 2005.

This analysis revealed that “central city” schools have the highest rates of UQTs. Additional analysis has shown that schools in poor neighborhoods also have higher rates of UQTs.²⁵ Although no legislative amendments have been proposed to address issues regarding urban or poor schools, some of the proposals presented here that concern “hard-to-staff” schools could be adopted to relieve the burden imposed by the HQT requirement. However, given the high turnover rates at these schools, short-term waivers and deadline extensions may not provide sufficient relief. At the same time, such flexibility might weaken NCLB’s emphasis on improving instructional quality—especially for disadvantaged pupils attending schools in high poverty areas.

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²⁵ Wuejin Lu, *Teacher Quality: A National Survey of Secondary Public School Teachers Using SASS 1999-2000*, unpublished manuscript.