

# Report for Congress

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## **K-12 Teacher Quality: Issues and Legislative Action**

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# K-12 Teacher Quality: Issues and Legislative Action

## Summary

The quality of elementary and secondary school teachers is increasingly recognized as a critical element in improving education. Policymakers seeking to address teacher quality face many serious challenges. Among these challenges are the lack of consensus on what makes a teacher effective, the vast size and decentralized organization of K-12 education, and problems with teacher supply and demand.

The federal government is not responsible for the preparation, hiring, and work life of teachers; these responsibilities rest with states and localities. Nevertheless, the federal government, primarily through the U.S. Department of Education, directs substantial resources to K-12 teachers.

Recently, the focus of federal support has expanded beyond in-service training to include teacher preparation, recruitment, and hiring. Further, the federal government is attempting to strengthen accountability for teacher quality. Interest in providing broad, flexible assistance coupled with accountability for outcomes is expected to remain keen in the 108<sup>th</sup> Congress.

The No Child Left Behind Act of 2001 (P.L. 107-110) reauthorized the Elementary and Secondary Education Act (ESEA), replacing the Eisenhower Professional Development program and the Class Size Reduction program with a single formula grant program supporting an array of activities to improve the elementary and secondary teaching force. In addition, among other provisions, the reauthorized ESEA includes a separate program of math and science partnerships to improve teaching in those fields and continues a program for preparing prospective teachers to use technology. In other action, the Job Creation and Worker Assistance Act of 2002 (P.L. 107-147) created an above-the-line deduction for up to \$250 a year for classroom expenses incurred by teachers and others in schools. Further, the National Science Foundation Authorization Act of 2002 (P.L. 107-368) authorized the National Science Foundation (NSF) to administer various teacher-related programs and activities to improve math and science instruction, including math and science partnerships.

This report will track major legislative action as it occurs.

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# K-12 Teacher Quality: Issues and Legislative Action

Since the early 1980s, educators and policymakers at all levels have sought to improve the quality of public K-12 education. Despite these efforts, many remain concerned about the performance of today's schools and students. Throughout this process, a recurrent objective has been improvement of the public K-12 teaching force. The attention being paid to teacher quality has risen dramatically in recent years. This was particularly true as the Congress reauthorized the Elementary and Secondary Education Act (ESEA) in 2002. It remains true as the 108<sup>th</sup> Congress considers the Higher Education Act (HEA) for reauthorization.<sup>1</sup> The HEA authorizes programs to improve K-12 teacher preparation and recruitment.

This report provides a brief overview of some of the most salient issues regarding the K-12 teaching force, describes the current federal role in this area, describes major federal programs, and tracks major legislative action by the Congress. It will be updated as major action occurs.

## Recent Legislative Action

Major action related to K-12 teachers by the 108<sup>th</sup> Congress will be described here as it occurs. Relevant legislation enacted by the 107<sup>th</sup> Congress included the No Child Left Behind Act of 2001 (P.L. 107-110) that, among several teacher-related programs and provisions, established a formula grant program supporting a wide array of activities to improve the elementary and secondary teaching force and a program of math and science partnerships. FY2003 appropriations legislation for the U.S. Department of Education (ED) enacted in the 108<sup>th</sup> Congress provides \$2.93 billion for the broad-based teacher program and \$100.3 million for math and science partnerships (both figures reflect ED estimates of the impact of the across-the-board reduction required by the FY2003 appropriations legislation).<sup>2</sup> The teacher-related provisions of this legislation are described in more detail later in this report. The Job Creation and Worker Assistance Act of 2002 (P.L. 107-147) created an above-the-line deduction for up to \$250 a year for classroom expenses (including those for books, supplies, computer equipment, other equipment, and supplementary materials used in the classroom) incurred by teachers and others in schools. The National Science Foundation Authorization Act of 2002 (P.L. 107-368) included several programs to improve K-12 math and science teaching. FY2003 appropriations legislation provides \$127.5 million for a program administered by the National

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<sup>1</sup> CRS Issue Brief IB10097, *The Higher Education Act: Reauthorization Status and Issues*, by James B. Stedman.

<sup>2</sup> Unless noted, all FY2003 appropriations levels cited in this report reflect the estimated impact of the across-the-board reduction.

Science Foundation (NSF) supporting math and science partnerships (impact of reduction in FY2003 appropriations legislation to be determined).

## Teachers at the Center

Many education reformers have long recognized the importance of improving the K-12 teaching force while, concurrently, marshaling teachers' support for the process of reform. The increasing focus on teacher quality has been fueled by several recent analyses concluding that, among all school-based factors, teacher quality is the most important; that some teachers are much more effective than others with similar students; and that teacher quality may specially affect the achievement of disadvantaged students.

## Challenges

Policymakers face many serious challenges in their efforts to improve teacher quality. Some of these challenges are considered briefly below.

**Identifying What Makes a Teacher Effective.** Although some research has found certain teacher attributes positively related to student achievement, such as verbal ability, subject matter knowledge, pedagogical knowledge, years of experience, and certification status, there is no consensus on what makes a teacher effective. Nevertheless, policymakers are focusing on improving certain of these attributes, particularly subject matter knowledge and certification status, in an effort to increase the likelihood that teachers will be effective with their students.

**K-12 Organization and Size.** The organization and size of the public K-12 educational enterprise poses a significant challenge to teacher quality improvement. Over 2.8 million teachers are employed in more than 89,000 schools located in some 14,800 school districts. This is a decentralized system; states and localities have legal and administrative responsibility for K-12 education. The recruitment, hiring, compensation, and retention of teachers are matters typically controlled by districts and, in part, schools and states. Teacher preparation generally takes place in higher education institutions. Teacher assignments and evaluations are often the domain of schools. Teacher certification and tenure are the province of states.

**Teacher Supply and Demand.** It may be difficult in the coming decade to raise K-12 teacher quality when concerns about teacher quantity are growing. Warnings of a potential shortage of teachers abound, precipitated by projected increases in student enrollment and an anticipated surge in retirements. This has prompted states and localities to initiate many recruitment efforts.

Some analysts question whether a rising demand for teachers necessarily portends a shortage. They point out that teaching can draw from a large reserve pool (those who might be newly drawn into teaching and those who have taught but are no longer teaching), and that teacher preparation programs prepare more individuals for teaching than go into teaching. Also, many teachers leave the profession early in their careers. Efforts to stem this attrition may help address supply issues and raise teacher quality (reportedly leavers may be higher academic performers than stayers).

**Certification Standards.** State certification standards governing who can teach clearly contribute to the quality of the teaching force, as well as to the number of individuals available for teaching. Some critics of current certification practices call for a very substantial raising of standards, a call which some states have heeded. Other critics of current certification complain that raising the certification hurdles can impose unreasonable barriers to the entry of potentially high quality teachers, particularly mid-career changers, or may prompt districts to circumvent these requirements. Many observers assert that teacher quality *and* quantity may be served under well-designed alternatives to traditional certification, though some analysts warn that poorly designed alternative certification may create a “backdoor” into teaching for unprepared individuals.

**Out-of-Field Assignments.** Another major challenge for policymakers is reducing the extent to which teachers are currently teaching out-of-field, that is, teaching classes for which they have inadequate content knowledge. In 1999-2000, over a fifth of secondary school students took at least one class from a teacher who neither majored nor minored in that subject in college; over a third received instruction in at least one class from a teacher who was not certified in the subject taught *and* did not have a major in that subject.<sup>3</sup> Out-of-field teaching assignments are a function of many local, primarily school-based, factors. How to change these practices and policies is an open question, as is the impact of such action on the supply of qualified teachers.

**Teacher Preparation and Professional Development.** Efforts to address the quality of the teaching force often look to the preservice training process and to professional development (i.e., in-service training) for current teachers. There is concern that graduates of teacher education institutions are inadequately prepared to teach to high standards. Some states are holding these institutions accountable for the quality of their graduates; these institutions are taking steps to strengthen their programs.

Traditionally, professional development has been delivered to current teachers in a sporadic and uncoordinated fashion. Efforts to improve professional development are being undertaken with the goal of remedying the academic and pedagogic deficiencies of current teachers, a daunting task given the magnitude of the teaching force.

**Compensation.** Reform of teacher compensation is a frequent element in initiatives to improve K-12 teacher quality (see CRS Report RL30217, *Performance-Based Pay for Teachers*). It is argued that highly qualified individuals are dissuaded from entering or staying in teaching because current compensation is not competitive and does not reward quality. Past compensation reforms have generally been short-lived, partly because it has proven difficult to address concerns about whether different pay schedules, particularly merit based pay systems, can be implemented objectively, fairly, and consistently. Some compensation reform may be particularly expensive as well.

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<sup>3</sup> *Education Week*, Quality Counts 2003: Ensuring a Highly Qualified Teacher for Every Classroom, January 9, 2003.

**Tenure.** Some educators and policymakers see state tenure laws as a substantial challenge to teacher quality improvement. To its critics, tenure protects incompetent teachers, creating a dismissal process that is too costly and time consuming. To its defenders, tenure protects K-12 teachers from arbitrary, biased, and unfair dismissal, and may provide for a stable workforce. States have been reforming tenure by, for example, extending the period in which beginning teachers can be evaluated and dismissed, expanding the reasons for dismissal, and creating time limits for the dismissal process.

**Unionization.** The vast majority of teachers are members of teachers' unions. Critics have posited that the major teachers' unions have been substantially more interested in job protection and higher salaries than in improving the quality of the teaching force. Union proponents point to examples of cooperation with different reform efforts, including steps to assist underperforming teachers and to remove teachers who do not make necessary improvements. Nevertheless, as reform efforts increasingly focus on teacher quality, the challenges to union policies and practices are likely to increase.

## **Federal Role**

The federal government is not responsible for preparing, recruiting, certifying, compensating, testing, tenuring, and structuring the working conditions of K-12 teachers; these responsibilities rest with states and localities. Traditionally, these areas have been viewed as largely outside the reach of the federal government. Nevertheless, over the past several years, the federal government has become increasingly involved in issues of teacher quality and quantity.

The federal government funds many programs supporting K-12 teaching. Some of these are explicitly targeted to teachers; others with a broader focus nevertheless support such activities as teacher training. Over the past several years, the Congress has been redefining the federal role relative to targeted support of K-12 teachers.

**Funding.** Although federal aid in this area comes from multiple federal agencies, ED is the primary source. Over \$3.3 billion of the Department's FY2003 appropriation is for activities directed specifically to K-12 teachers. This funding includes \$2.93 billion for the Principal and Teacher Training and Recruiting Fund added to the ESEA in 2002 by P.L. 107-110 (described below), \$70.5 million for the Troops-to-Teachers and Transition to Teaching programs (described below), \$62.1 million for the Preparing Tomorrow's Teachers to Use Technology program (transferred by P.L. 107-110 to the Higher Education Act, described below), and \$89.4 million for the Higher Education Act's Teacher Quality Enhancement program (described below). Significant levels of funding also support teachers under other programs that are not targeted to teachers (e.g., the ESEA Title I program).

**Changing Federal Role.** The No Child Left Behind Act marked a significant shift in the federal role with regard to K-12 teachers and teaching, but, in some ways, it is the most recent in a series of congressional actions modifying that federal role. These changes in the federal role are described below.

Immediately prior to the 105<sup>th</sup> Congress, federal aid for K-12 teaching was largely focused on in-service training, with limited funding for preservice training and recruitment. The 105<sup>th</sup> Congress began a shift in this focus by enacting amendments in 1998 to the Higher Education Act (HEA) that included the Teacher Quality Enhancement program. Significantly, these amendments also had broad-based accountability requirements for teacher education programs (see CRS Report RL31254, *Pass Rates as an Accountability Measure for Teacher Education Programs*). Funded states and their higher education institutions are now required to report publicly on teacher preparation, including the pass rates of graduates on certification assessments. States must identify low-performing teacher preparation programs. If low-performing programs lose state approval or financing, their institutions cannot receive professional development funding from ED and cannot accept or enroll any HEA-aided student in the teacher education program.

In an effort to improve student performance, the 105<sup>th</sup> Congress also appropriated funding for the general hiring of new, qualified teachers to reduce class size. The program was appropriated funding for 3 fiscal years (\$1.2 billion for FY1999, \$1.3 billion for FY2000 and \$1.623 billion for FY2001). This program broke new ground with its explicit and primary focus on federal support for the hiring of teachers. Further, until enactment of the No Child Left Behind Act, this program and the Eisenhower Professional Development program (Title II of the ESEA under prior law) had been the two largest federal initiatives targeting support to K-12 teachers and teaching. The Teacher and Principal Training and Recruiting Fund in the reauthorized ESEA replaced those two programs and is the largest single source of federal support directed to K-12 teaching.

The 106<sup>th</sup> Congress continued this redefinition of the federal role in this area. For FY2001, the Congress specified that appropriated amounts for the Eisenhower program above the FY2000 level (\$335 million) were to be spent on such activities as reducing the percentage of teachers without certification or with emergency or provisional certification, the percentage teaching out of field, or the percentage lacking requisite content knowledge. These excess funds could also be directed to such other activities as mentoring for new teachers, multi-week institutes providing professional development, and retention efforts for teachers with a record of increasing low-income students' academic achievement. Among other new money for teachers approved in the FY2001 appropriations for ED was \$3 million for the Troops-to-Teachers program (supporting entry of former military personnel into teaching), available for transfer from ED to the Department of Defense;<sup>4</sup> and \$31 million for new teacher recruitment activities targeting mid-career professionals in other occupations and highly qualified recent college graduates with BAs in fields other than education.

The 107<sup>th</sup> Congress further expanded the federal role in issues of teacher quality and quantity. On January 8, 2002, the No Child Left Behind Act of 2001 was signed into law (P.L. 107-110). In amending and reauthorizing the ESEA, this legislation

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<sup>4</sup> P.L. 106-65 (National Defense Authorization Act for FY2000), signed on October 5, 1999, transferred the Troops to Teachers program from the Defense and Transportation Departments to the Education Department.

authorized federal support for a broad array of activities to improve K-12 teaching, ranging from recruitment to hiring to retention. It more firmly focused federal interest on teacher quality by, for example, requiring all core academic subject teacher to be “highly qualified” by the end of the 2005-2006 school year. The programs and provisions added to the ESEA by the No Child Left Behind Act are described in the following section.

## Selected Major Programs

This section provides descriptions of the major federal programs addressing K-12 teaching. Its primary focus is on the programs in the ESEA as amended by the No Child Left Behind Act.

**ESEA as Amended by the No Child Left Behind Act.** In amending and reauthorizing the ESEA, the No Child Left Behind Act continued ESEA Title II as the primary title for teacher programs. The major teacher-related provisions in Title II and elsewhere in the ESEA are described below.

***Requirement That All Teachers Be Highly Qualified.*** Each state educational agency (SEA) receiving ESEA Title I, Part A funding (compensatory education of disadvantaged students) must have a plan to ensure that all teachers teaching in core academic subjects within the state meet the definition of *highly qualified* no later than the end of the 2005-2006 school year.

To be highly qualified, a **public elementary or secondary school teacher** must meet the following requirements:

- **Any public elementary or secondary school teacher** must have full state certification (a charter school teacher must meet the requirements in the state charter school law) and must not have had any certification requirements waived on an emergency, temporary, or provisional basis.
- A **new public elementary school teacher** must also have at least a BA and have passed a test demonstrating subject knowledge and teaching skills in reading, writing, math, and other basic elementary school curricular areas (such tests may include state certification exams in these areas).
- A **new public middle or secondary school teacher** must also have at least a BA and have either demonstrated a high level of competency in all subjects taught by passing rigorous state academic tests in those subjects (may include state certification exams in those subjects), or completed an academic major (or equivalent course work), graduate degree, or advanced certification in each subject taught.
- An **experienced public elementary, middle, or secondary school teacher** must also have at least a BA and either meet the requirements just described for a new teacher (depending upon his or her level of instruction), or demonstrate competency in all subjects taught using a state evaluation standard. Among other

requirements, such a standard must provide objective information about the teacher's content knowledge in subjects taught and considers, but is not primarily based on, time teaching those subjects.

As part of this plan, each Title I-funded state must establish annual measurable objectives for each local educational agency (LEA) and school that, at a minimum, include annual increases in the percentage of highly qualified teachers at each LEA and school to ensure that the 2005-2006 deadline is met, and an annual increase in the percentage of teachers receiving high quality professional development.

Each LEA receiving Title I Part A funding must have a plan to ensure that all of its teachers are highly qualified by the 2005-2006 deadline. In addition, beginning with the first day of the 2002-2003 school year, any LEA receiving Title I funding must ensure that all teachers hired after that date who are teaching in Title I-supported programs are highly qualified.

Questions were raised about the scope of the application of these requirements, that is, whether they apply to *all* teachers, including vocational education teachers, special education teachers, or others not teaching core academic subjects. Final regulations for the Title I program published 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.

The final regulations also clarify that a teacher in an alternative certification program will have a maximum of 3 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 making satisfactory progress toward full certification.

States and LEAs must publicly issue annual reports describing progress on the state-set objectives.

***Teacher and Principal Training and Recruiting Fund.*** ESEA Title II, Part A replaced the Eisenhower and CSR programs with a new state formula grant program authorized at \$3.175 billion for FY2002 and such sums as may be necessary for the 5 succeeding fiscal years. The FY2003 appropriation is \$2.93 billion.

***State Allocation Formula.*** The allocation formula for Title II Part A provides each state with a base guarantee of funding equal to the amount it received for FY2001 under the Eisenhower and CSR programs. Any excess funding is allocated by formula among the states based 35% on school-aged population (5-17) and 65% on school-aged population in poverty. Each state is assured 0.5% of this excess. At the state level, 95% of the state grant is to be distributed as subgrants to LEAs, 2.5% for local partnerships (the Secretary calculates an alternative percentage if 2.5% of the state grant would generate a total for all states in excess of \$125 million for partnerships), and the remainder for state activities.

*LEA Subgrants.* LEA subgrant funding is distributed first as a base guarantee of the FY2001 Eisenhower and CSR grants to individual districts, with the remainder distributed by formula based 20% on school-aged population and 80% on school-aged population in poverty.

LEAs are authorized to use their funding for one or more of various specified activities. Among the authorized activities are the following: assistance to schools in the recruitment and retention of highly qualified teachers (see definition above), principals, and, under certain conditions, pupil services personnel; assistance in recruiting and hiring highly qualified teachers through such means as scholarships and signing bonuses; use of these teachers to reduce class sizes; initiatives to increase retention of highly qualified teachers and principals, particularly in schools with high percentages of low-achieving students, through mentoring, induction services during the initial 3 years of service, and financial incentives for those effectively serving all students; professional development, including professional development that involves technology in teaching and curriculum and professional development delivered through technology; improvement of the quality of the teaching force through such activities as tenure reform, merit pay, and teacher testing in their subject areas; and professional development for principals and superintendents.

*Partnership Subgrants.* These funds are awarded competitively to partnerships that must include a higher education institution and its division preparing teachers and principals; a higher education school of arts and sciences; and a high need LEA (defined as one with at least 10,000 poor children or a child poverty rate of at least 20% which, in addition, has either a high percentage of out-of-field teachers or a high percentage of teachers with emergency, provisional, or temporary certificates). Other entities, such as charter schools or another LEA, may be part of these partnerships. Partnerships must use their funds for professional development in the core academic subjects for teachers, highly qualified paraprofessionals, and principals.

*State Activities.* States must use their funding for one or more of several specified activities. Among these activities are the following: teacher and principal certification reform; mentoring and intensive professional development for teachers and principals, including those new to their careers; assistance to LEAs and schools in the recruitment and retention of highly qualified teachers, principals, and, under certain conditions, pupil services personnel; tenure reform; subject matter testing for teachers; projects to promote teacher and principal certification reciprocity across states; training to help teachers integrate technology into the curriculum and instruction; assistance to help teachers become highly qualified by the end of the fourth year of state funding; and a clearinghouse for teacher recruitment and placement.

*Accountability.* If, after the second year of the plan to ensure that all teacher are highly qualified (see above), an LEA has failed to make progress toward the annual objectives in such plan, it must develop an improvement plan. Failure after

the third year coupled with failure to make *adequate yearly progress*<sup>5</sup> for 3 consecutive years requires the SEA to identify the professional development the LEA will use and, generally, precludes use of Title I Part A funds for paraprofessionals. In addition, the SEA provides funding directly to schools in the LEA to enable their teachers to choose their own professional development activities.

**National Activities.** The Secretary of Education is authorized to use national activities funding for several specific activities. Authorized activities include a national teacher recruitment campaign, which may include activities through a national teacher recruitment clearinghouse, to help high need LEAs recruit and train teachers and to conduct a national public service campaign about the resources and routes into teaching; a national principal recruitment program of competitive grants to help high need LEAs; support for advanced certification of teachers, including grants to entities to develop teacher standards, and to encourage teachers to pursue advanced certification by the National Board for Professional Teaching Standards or the National Council on Teacher Quality, among others; a grant to the University of Northern Colorado to help other higher education institutions train special education teachers; a program to support professional development of early childhood educators; and a national panel on teacher mobility to study ways of facilitating the mobility of highly qualified teachers. National activities funding is at such sums as may be necessary for FY2002 and the 5 succeeding fiscal years. The FY2003 appropriations legislation provides \$37.3 million of which \$12.4 million is for principal recruitment, \$9.9 million is for advanced credentialing of teachers, and \$14.9 million is for early childhood educator professional development.

**Mathematics and Science Partnerships.** Title II Part B authorizes funding for partnerships to improve math and science instruction. An eligible partnership must include an SEA (if funds are awarded competitively), the engineering, mathematics, or science department of a higher education institution, and a high need LEA. Other entities such as LEAs and charter schools may be included as well. The annual authorization of appropriations is \$450 million for FY2002 and such sums as may be necessary for the next 5 fiscal years. The FY2002 appropriation was \$12.5 million; the FY2003 appropriation is \$100.3 million. When the annual appropriation is less than \$100 million, the program's 3-year grants are awarded competitively; otherwise, funds are awarded to SEAs based on school-aged population in poverty with a 0.5% small state minimum.

Partnerships must use their grants for one or more of several specific activities. Among them are the following: professional development to improve math and science teachers' subject knowledge; activities to promote strong teaching skills among these teachers and teacher educators; math and science summer workshops or institutes with academic year followup; recruitment of math, science, or engineering majors to teaching through signing and performance incentives, stipends for alternative certification, and scholarships for advanced course work; development or redesign of more rigorous, standards-aligned math and science curricula; distance

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<sup>5</sup> For information on *adequate yearly progress* under the reauthorized ESEA, see CRS Report RL31487, *Education for the Disadvantaged: Overview of ESEA Title I-A Amendments Under the No Child Left Behind Act*, by Wayne Riddle.

learning programs for math and science teachers; and opportunities for math and science teachers to have contact with working mathematicians, scientists, and engineers.

The Secretary is to consult and coordinate activities with the Director of the NSF, particularly regarding the appropriate roles of the two entities in workshops, institutes, and partnerships.

Each partnership must have an evaluation and accountability plan that includes objectives measuring the impact of the funded activities. Among these objectives must be improvement of student achievement on state math and science assessments.

*FY2002 Appropriation for Mathematics and Science Partnerships.* As noted above, the FY2002 appropriation was \$12.5 million for the Mathematics and Science Partnerships authorized in the amended ESEA. Some in the business, and math and science education, communities were concerned that this FY2002 funding was a sharp reduction in the prior funding level for math and science instruction improvement.<sup>6</sup> In response, others noted that, under the major ESEA program for teachers, states and localities can support such math and science activities if they choose.

Prior to enactment of the No Child Left Behind Act, the ESEA authorized the Eisenhower Professional Development program with a funding reservation targeted to professional development for math and science teachers. This reservation was added to the program in 1994 when its focus was expanded beyond math and science to include other core academic subjects. It required, in part, that when the annual appropriation exceeded \$250 million, “[s]tate and local shares of the first \$250 million of appropriated funds must be expended on professional development in mathematics and science.”<sup>7</sup> As implemented, the reservation did not dedicate a full \$250 million to math and science professional development.<sup>8</sup> Further, the funding reservation was waived for some states and districts in some years under various ESEA and other waiver authorities. Complete, conclusive data on the amount of Eisenhower funds actually supporting math and science professional development do not appear to be available. An ED official is cited in a recent article as stating that \$375 million of the FY2001 appropriation for the Eisenhower program was spent on math and science.<sup>9</sup>

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<sup>6</sup> Hoff, David J. Math and Science Could Be Big Losers Under New Law. *Education Week*, January 16, 2002. (Hereafter cited as Hoff, *Math and Science*.)

<sup>7</sup> U.S. Department of Education. *Guidance for Title II, Part B*, p. 6-7.

<sup>8</sup> The proportion of the SEA, LEA and state agency for higher education (SAHE) funds required to be spent on math and science professional development was based on the total appropriation, but certain funds (SEA and SAHE administrative funds, and national evaluation funds) were subsequently excluded from the actual implementation of the reservation requirement.

<sup>9</sup> Hoff, *Math and Science*.

Some would argue that the Mathematics and Science Partnerships were to continue the focus on math and science originally supported under the Eisenhower program, but that the FY2002 appropriations and ESEA reauthorization processes, which overlapped extensively, failed to do so. The House-passed version of the ESEA reauthorization legislation did not include a separate authority for Mathematics and Science Partnerships; rather, it provided a funding reservation in the new teacher program directing funds to such partnerships. The Senate-passed version of the ESEA legislation included the Mathematics and Science Partnership program as a separate authority. The House- and Senate-passed FY2002 appropriations legislation reflected this different treatment of the partnerships. The House had no separate appropriation for the partnerships,<sup>10</sup> while the Senate appropriated \$25 million for the partnerships. The final agreement on the No Child Left Behind Act followed the Senate approach of a separately authorized program; the FY2002 appropriations legislation enacted into law provided \$12.5 million for the program. The appropriation conferees acknowledged that under prior law the Eisenhower program provided significant levels of support for math and science and that high-quality math and science instruction is critical. As a result, they “strongly urge the Secretary [of Education] and the States to continue to fund math and science activities within the Teacher Quality Grant program [i.e., the new program for teachers] at a comparable level in fiscal year 2002.”<sup>11</sup>

As noted, the FY2003 appropriation for ED’s math and science partnership program is \$100.3 million. At this level, the program is to be administered as a formula grant to states.

***NSF’s Mathematics and Science Partnership Program.*** The Congress also provided \$160 million in FY2002 funding to the National Science Foundation for a Mathematics and Science Partnership program. The FY2003 level is down somewhat at \$127.5 million (impact of across-the-board reduction required by FY2003 appropriations legislation not available). The National Science Foundation Authorization Act of 2002 included authorizing language delineating this program. That legislation also, among other provisions addressing K-12 math and science instruction, authorized the Robert Noyce Scholarship program providing scholarships to college juniors and seniors majoring in math, science, or engineering, in exchange for K-12 teaching service.

***Other ESEA Programs and Activities.*** The ESEA authorizes a number of other programs and activities targeting K-12 teachers and teaching. Some of these are highlighted below.

***Troops-to-Teachers.*** Title II Part C, Subpart 1, Chapter A authorizes funding and administration of the Troops-to-Teachers program, an effort to facilitate the movement of members of the armed forces into K-12 teaching. This legislation

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<sup>10</sup> At the FY2002 House-passed appropriation level for the House-passed version of the teacher program in the No Child Left Behind legislation, roughly \$450 million, at least, might have been directed to the partnerships.

<sup>11</sup> U.S. House of Representatives. Conference Report to Accompany H.R. 3061, H.Rept. 107-342, p. 121.

authorizes the Secretary of Education to enter into a memorandum of agreement with the Department of Defense for the actual administration of the program, which was first enacted in the FY1993 Defense Authorization Act. The program assists eligible members of the armed forces to become certified as elementary or secondary school teachers or vocational technical teachers. A single authorization of appropriations of \$150 million for FY2002 and such sums as may be necessary for the next 5 fiscal years is provided for the Troops-to-Teachers program and the Transition to Teaching program (see below), of which the Secretary is to reserve not more than \$30 million in FY2002 for the Troops-to-Teachers program. The FY2003 appropriation provides \$28.8 million for this program.

*Transition to Teaching.* This is a continuation of a program to recruit mid-career professionals and others to teaching that was first initiated through the Consolidated Appropriations Act of 2001. Under this ESEA authority (Title II Part C, Subpart 1, Chapter B), the Secretary of Education may competitively award 5-year grants to SEAs, high need LEAs, higher education institutions in partnership with SEAs or high need LEAs, among others, for the establishment of state and local “teacher corps” projects. These projects are to recruit highly qualified mid-career professionals, highly qualified paraprofessionals, and recent college graduates to teach in high need schools. Among the activities these programs can support are financial incentives effective at retaining teachers in high need schools in high need LEAs; pre- and post-placement support such as mentoring; payments for the costs of hiring these teachers or subsidies to participants; and state or regional clearinghouses for recruitment and placement. Participating teachers are to be placed in high need schools in high need LEAs with a priority on schools in areas with the highest percentages of low-income students. Participants have a 3-year service commitment. Projects failing to make substantial progress by the end of their third year toward goals and objectives established in their applications have their grants revoked. The FY2003 appropriations legislation provides \$41.7 million for this program.

*Preparing Tomorrow’s Teachers to Use Technology.* The new legislation amends and reauthorizes the Preparing Tomorrow’s Teachers to Use Technology program, moving it to Title II of the Higher Education Act. This program is intended to support the training of prospective teachers to use advanced technology in their teaching. It authorizes the Secretary of Education to fund consortia, each including at least one higher education institution that prepares individuals for teaching, one SEA or LEA, and one or more of other entities, such as higher education institutions, higher education schools of education, higher education schools of arts and sciences, museums, foundations, etc. Federal funds are provided in the form of matching grants. There are authorized to be appropriated such sums as may be necessary for FY2002 and for FY2003. The FY2003 appropriation is \$62.1 million.

*Teacher Liability.* The No Child Left Behind Act included the Paul D. Coverdell Teacher Protection Act of 2001, which provides liability protection to school employees (including teachers, administrators, and school board members) acting to control, discipline, expel, or suspend a student or to maintain order in the classroom or school.

**HEA Teacher Quality Enhancement Grants.** Title II of the Higher Education Act authorizes the Teacher Quality Enhancement Grants program. The

program includes three kinds of grant programs – state grants, partnership grants, and teacher recruitment grants – targeting improvement in K-12 teacher preparation and recruitment. Each of these grants is awarded competitively. The annual appropriation is to be divided 45% to state grants, 45% to partnership grants, and 10% to recruitment grants. Recruitment grants can be awarded to either states or eligible partnerships. The FY2003 appropriation for these grants is \$89.4 million.

As noted previously, this legislation includes a series of accountability provisions that essentially apply to all teacher preparation programs in the country. These provisions seek to hold teacher preparation programs accountable for the knowledge and skills of their graduates. In doing so, they require institutions and states to report on the rates at which teacher education graduates pass teacher certification exams, and require states to develop and implement procedures for identifying teacher education programs as low-performing. Any higher education institution with a teacher preparation program that loses state approval or financial support because of its designation by the state as a low-performing program is ineligible for any professional development funding from ED, and cannot accept or enroll in its teacher preparation program any student receiving assistance under HEA Title IV. These accountability requirements are delineated in CRS Report for Congress RL31254, *Pass Rates as an Accountability Measure for Teacher Education Programs*.