

The first National Education Goal states that, "By the year 2000, all children in America will start school ready to learn." Although no national benchmark for "school readiness" has been agreed upon, the National Goal includes three specific objectives:

- "All children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school."
- "Every parent in the United States will be a child's first teacher and devote time each day to helping such parents' preschool child learn, and parents will have access to the training and support parents need."
- "Children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies, and to maintain mental alertness necessary to be prepared to learn, and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems."

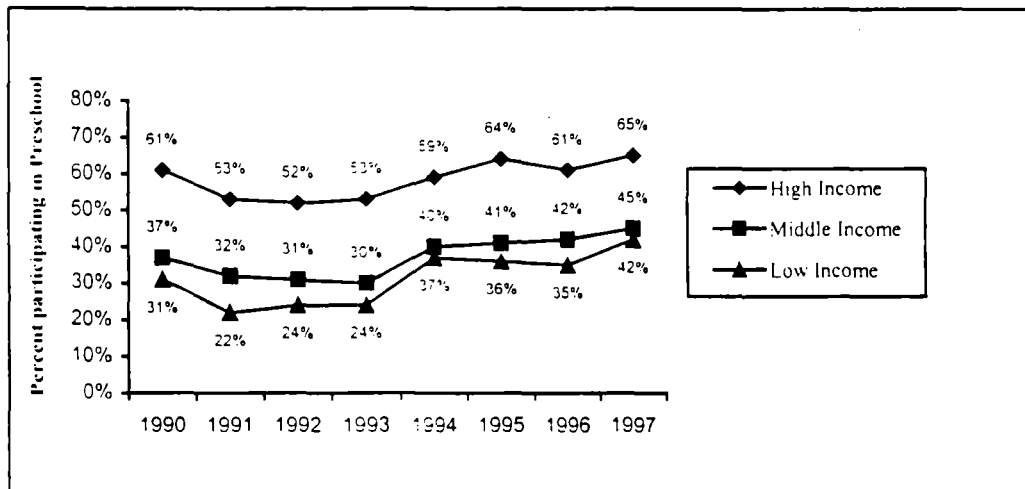
In addition, one of the objectives in the Department of Education's *Strategic Plan* is that all children will enter school ready to learn. One of the indicators of progress for this objective reflects the extent to which children from low-income families participate in preschool.

Despite the federal and state investment in early childhood programs, national data show that children from high-income families are more likely to attend preschool than children from low-income families, although participation rates for both groups have increased over the past decade. As Exhibit 3.1 shows, in 1997, 42 percent of three- and four-year-olds from low-income families were enrolled in preschool programs, compared to 45 percent of those from middle-income families and 65 percent of those from high-income families.¹

National Indicator: The disparity in preschool participation rates between children from high-income families and children from low-income families will become increasingly smaller.

Research in the field of early childhood education indicates that quality matters. While research suggests that participation in high-quality preschool services leads to short-term gains, often these effects "fade out" if not reinforced in the primary grades. In addition, researcher-developed model programs are the most likely to produce long-term learning gains; results of large-scale public programs reviewed by Barnett in 1995 were variable.² Studies have found that high quality programs produce positive outcomes, including enhanced school achievement, reduced retention in grade, and increased rates of high school graduation. However, the cost of these high-quality programs is high. The Perry Preschool program is an example of such a nationally-recognized high-quality program. Vinovskis cites data from Barnett showing that the Perry Preschool program would cost more than \$12,000 per child in 1990 dollars. Vinovskis also notes that this is about three times as costly as Head Start.³ Both the results of early childhood education programs as well as the cost-effectiveness of providing services of sufficient quality must be examined further.

EXHIBIT 3.1
PRESCHOOL PARTICIPATION OF CHILDREN FROM LOW-, MIDDLE-,
AND HIGH-INCOME FAMILIES, 1990-1997



Note: Data collected in 1994 and later were collected using new procedures and may not be comparable with figures for earlier years.

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations.

Research on brain development and reading difficulties provide an important incentive for further examination of the possibilities of early childhood education, specifically family literacy and services for very young children, starting at birth. Research has found that "important experiences related to reading begin very early in life."⁴ Reading is the foundation for all other learning. Ensuring that all children have the early learning experiences necessary for learning to read is vital to their future school success. Programs for young children that foster emergent literacy and help parents reinforce their children's learning may reduce the number of children who have difficulty learning to read once they enter school.

Introduction to the Programs and the 1994 Legislative Changes

Several programs funded by the federal government focus on school readiness, most notably the Head Start program administered through the U.S. Department of Health and Human Services. The Head Start program represents the federal government's largest investment in early childhood services, with a 1999 appropriation of almost \$4.7 billion.⁵ Head Start funds local programs that provide comprehensive health, education, parental involvement, nutritional, social, and other services to aid low-income, preschool-age children to attain their full potential.⁶ The program served almost 800,000 children in 1998.⁷ However, evidence of the program's effectiveness on increasing student achievement has been mixed.⁸

The Department of Education's efforts to increase children's school readiness generally focus on ensuring that needy children have access to preschool services and providing assistance in family literacy and

parent involvement. Several Department of Education programs include provisions for preschool services. The Department of Education also sponsors the Partnership for Family Involvement in Education, an initiative begun in 1994 to bring together employers, educators, families, religious groups, and community organizations to improve schools and raise student achievement. In 1994, Congress reauthorized three of these readiness-related programs: Title I, Part A, the Even Start Family Literacy Program, and the Education for Homeless Children and Youth provisions of the Stewart B. McKinney Homeless Assistance Act.

Title I, Part A, Improving Basic Programs Operated by Local Educational Agencies, is the largest of the programs reauthorized. This program focuses on enabling schools to provide opportunities for children served to acquire the knowledge and skills contained in challenging state content and student performance standards.⁹ The program provides grants to states to support the improvement of basic programs operated by school districts. Grants to states and districts are distributed on a formula basis. Program funds may be used at the local level for preschool services. The 1994 reauthorization of this program focused on improving the quality of preschool services provided through the program by requiring adherence to specific quality standards. Preschool programs under Title I, Part A are required to comply with the Head Start Performance Standards¹⁰ or use the Even Start model.

The Even Start Family Literacy Program is a state-administered discretionary grants program that provides support to states and local grantees for family literacy programs that integrate early childhood education, adult literacy or basic education, and parenting education for the purpose of breaking the cycle of poverty and illiteracy in low-income families. Even Start is a demonstration program and is designed to promote achievement of the National Education Goals and to help children from low-income families to prepare for success in school and their parents to improve their education, literacy, and potential for self-sufficiency. The program serves children from birth through age seven and their parents who are most in need of family literacy services as defined by a low level of income, a low level of adult literacy or English language proficiency, and other need-related indicators. Based on findings from the national evaluation of the program and lessons learned from implementation, the 1994 reauthorization made several substantive changes to the Even Start program, including:

- Targeting services to those families most in need, with special attention to teenage parents;
- Promoting continuity and retention of grantees by requiring projects to provide services to at least a three-year age range of children and to provide services over the summer months;
- Focusing on family services by allowing projects to involve ineligible family members in appropriate family literacy activities; and
- Requiring stronger collaboration between schools and communities in the application and implementation process.

Amendments subsequent to the 1994 reauthorization include a requirement, enacted in 1996, that instructional services be intensive.¹¹ Recent amendments to the Even Start program included in the Reading Excellence Act (part of the FY 1999 Appropriations Bill for Health and Human Services, Labor, and Education) address the need for local evaluations to collect data on program effectiveness and require the Department of Education to provide technical assistance to states and Even Start projects to ensure that local evaluations provide accurate information on the effectiveness of local projects. The legislation also requires states to develop results-based indicators of program quality and to use these indicators to monitor, evaluate, and improve Even Start programs.¹² The legislation lists several indicators that must be included for adults and children. For participants who are children, the indicators must include:

- “Improvement in ability to read on grade level or reading readiness:
- School attendance:
- Grade retention and promotion: and
- Such other indicators as the states may develop.”¹³

The Education for Homeless Children and Youth provisions of the Stewart B. McKinney Homeless Assistance Act require states to ensure that homeless children have equal access to a free, appropriate public education, and to provide funds that may be used to support preschool programs for homeless children at the local level. Funds for the Education for Homeless Children and Youth program are distributed to states on a formula basis. States have discretion in making subgrants to districts. Reauthorization of this legislation in 1994 added several provisions that were specific to preschool services, including:

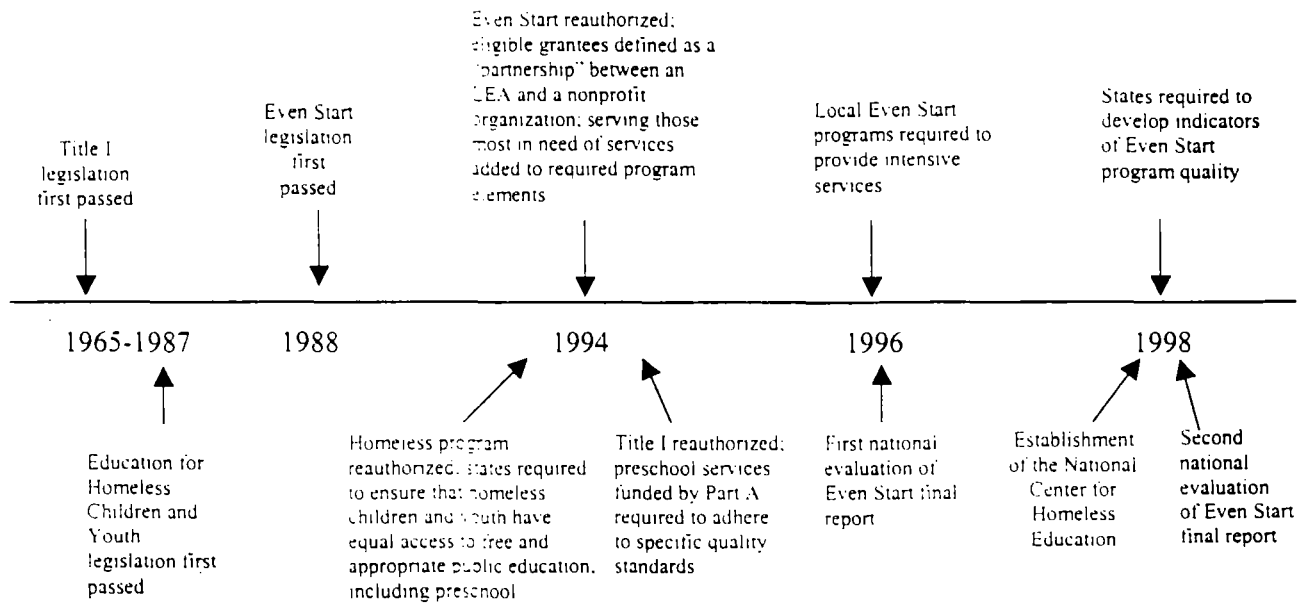
- A requirement that states must ensure that homeless children and youth have equal access to the same free and appropriate public education, including preschool education, as provided to other children and youth, and
- Provisions that specifically allow and encourage the funding of preschool services for homeless children through the program.¹⁴

In addition, the Department of Education funds preschool services for children with disabilities through programs authorized under the Individuals with Disabilities Education Act (IDEA), including Grants to States for the Education of Children with Disabilities, Preschool Grants for Children with Disabilities, and the Early Intervention Program for Infants and Toddlers with Disabilities. Although these programs represent the Department of Education’s largest investment in preschool services, programs funded through IDEA are not included in this chapter’s discussion because IDEA was recently reauthorized. While this reauthorization changed these programs, there are no new data on them to date.

The Department of Education also supports The National Center for Early Development and Learning, which is conducting a comprehensive research and development program in the field of early childhood education. In addition to federal programs, at least 32 states fund pre-kindergarten programs, mostly for low-income or otherwise at-risk children.¹⁵

This chapter focuses on the three readiness-related programs funded through the Department of Education that were reauthorized in 1994. Exhibit 3.2 summarizes key legislative events and program evaluations for school readiness programs.

EXHIBIT 3.2 TIMELINE FOR SCHOOL READINESS PROGRAMS



Source: U.S. Department of Education.

Exhibit 3.3 summarizes the key readiness-related provisions of these three programs and describes how each of the programs works.

EXHIBIT 3.3 SCHOOL READINESS PROGRAMS AT A GLANCE					
Program Name	1999 Appropriation	Purpose	Funding and Targeting	Participation	Readiness-related Services
Title I, Part A	An unknown percentage of \$7.676 billion is used for Title I preschool. Preschool children comprise an estimated 2 percent of Title I participants	Enable schools to provide opportunities for children served to meet challenging state content and student performance standards	Formula grants to states and districts based on poverty level	50 states More than 44,000 public schools More than 11 million children, including more than 260,000 preschool-age children	Preschool services for children who are failing or most at risk of failing to meet the state's challenging performance standards
Even Start Family Literacy Program	\$135 million	Improve educational opportunities of low-income families by integrating early childhood education, adult literacy or adult basic education, and parenting education into a unified family literacy program	Formula grants to states based on Title I, Part A, allocations Discretionary grants to local partnerships comprised of school districts and community-based organizations, based on demonstrated need and likelihood of success	50 states More than 700 local partnerships More than 34,000 families and 48,000 children below age eight, who are most in need of family literacy services	Local family literacy projects that provide: (1) adult education for parents; (2) early childhood education for their children; (3) assistance for parents to effectively promote their children's development
Education for Homeless Children and Youth	An unknown percentage of \$28.8 million supports ensuring equal access to public preschool education	Ensure that homeless children and youth have equal access to the same free, appropriate public education, including public preschool education, provided to other children and youth	Formula grants to states based on Title I, Part A, allocations Discretionary grants to local educational agencies based on demonstrated need	50 states Children and youth of preschool, elementary, or secondary school-age who are homeless	State and local activities to ensure that homeless children and youth have equal access to a free, appropriate public education and have an opportunity to meet challenging state student performance standards
Source: U.S. Department of Education.					

What Do We Know About Good Readiness Programs?

Preschool programs should prepare children for success in school. This includes encouraging the development of early literacy and the building blocks for later reading (such as learning the alphabet) and other school readiness skills. The Department of Education's *Guide to Quality for Even Start Family Literacy Programs* lists a variety of specific quality considerations for providing each of the instructional components of Even Start family literacy services.¹⁰ However, these quality considerations are not limited to Even Start but can serve as standards of good practice for all early childhood programs. The

considerations are drawn from guidelines published by the National Association for the Education of Young Children and findings from evaluations of the Even Start program.

In general, Even Start quality considerations address the importance of:

- **Well-qualified and well-trained staff;**
- **Staff-child ratios that allow for frequent staff-child interaction and meet state licensing standards;**
- **Safe, comfortable, age-appropriate, culturally-appropriate, and language-rich environments;**
- **Curricular bases that address all areas of children's development**—social, emotional, physical, cultural, cognitive, aesthetic, and language—and that encourage interactive experiences and child-initiated learning;
- **Language-rich environments** where children are read to daily, books and other reading material are abundant, and staff demonstrate ways to encourage children to talk and represent their ideas in stories and pictures;
- **Expectations and activities geared to the needs and development of each child;**
- **Parent input and involvement; and**
- **Sufficient intensity of early childhood experiences**—ideally at least 60 hours monthly for children ages three to five.

These quality considerations are based on the Even Start legislation, which calls for “high-quality” and “intensive” instructional programs and “developmentally appropriate” early childhood services. However, the quality considerations provide more specific guidelines for meeting these requirements than are provided in the legislation. For example, neither the legislation nor the guidance defines what is a “sufficiently intensive” instructional program, although the Department of Education’s performance indicator plan for Even Start identifies target levels for service intensity.

The Homeless Education legislation also requires that preschool services be “developmentally appropriate.” Preschool programs funded through Title I, Part A, may use the Even Start model or must meet the Head Start Program Performance Standards. The Head Start Program Performance Standards are generally consistent with the Even Start quality considerations, although they also do not address intensity of services.

How Well Are the Programs Working?

Little data exist on whether or not preschool programs funded through Title I, Part A adhere to either the specific quality considerations in the Guide to Quality for Even Start Family Literacy Programs or the Head Start Program Performance Standards or on the programs’ performance. Available data do suggest that, consistent with the Homeless program’s legislative mandate, access to preschool programs among homeless children may be improving.

The Even Start national evaluation provides rich descriptive data, but in-depth information on project quality is limited. Data on program performance from the second national evaluation of Even Start indicate that the program has been successful in improving participating children's school readiness skills, improving participating adults' parenting skills, and recruiting those families most in need of services. The program has been less successful in meeting the targets set in the program's performance indicator plan for intensity of services and retention of participants.

The following findings are organized around key indicators identified for the programs under the Government Performance and Results Act.

Even Start

In all three of the core areas (early childhood education, adult literacy or basic education, and parenting education) assessed throughout the life of the program, Even Start participants have made gains. However, in a small-scale experimental study in five projects during the first national evaluation (1989-90 through 1992-93), families in a control group achieved similar gains on most measures, suggesting that Even Start did not cause the gains of participating families.¹⁷ It is important to note that while control group families were restricted from participating in Even Start, they were not restricted from participating in other early childhood, parenting, or adult education programs they could find on their own. Thus, control group families may have received educational services similar to those provided through Even Start. In addition, this study was conducted during the early years of the program, and important changes to the program have been made since the time of the study.

The second national evaluation (1993-94 through 1996-97) assessed program outcomes through a sample study of Even Start projects and did not include a control group. The outcomes described below come from this sample study and are based upon data from participants who remained in Even Start long enough for at least two rounds of data collection (about one program year). This means that the results below cannot be generalized to the universe of Even Start participants.

The Even Start program shows progress toward key program performance indicators related to school readiness for families who participate for about one year.

In 1995-96, 50 percent of children in the second national evaluation of Even Start achieved moderate-to-large gains on a test of language development.¹⁸ This evaluation also found that children who participated in the Even Start program for at least one year made greater progress on tests of school readiness and language development than would be expected on the basis of development alone. The longer children participate in Even Start, the steeper their growth rate on average.¹⁹

Program Indicator: By fall 2001, 60 percent of Even Start children will achieve significant gains on measures of language development and reading readiness.

The second national evaluation assessed changes in the home environment, using a questionnaire that measured the quality of cognitive stimulation and emotional support provided to children by their families. **Throughout the second national evaluation, Even Start parents showed moderate gains in improving the home environment.**²⁰ This finding compares favorably to a national evaluation of the Comprehensive Child Development Program (CCDP), a family-support, two-generation program that was supported with funds from the Department of Health and

Program Indicator: Increasing percentages of parents will show significant improvement on measures of parenting skills, home environment, and expectations for their children.

Human Services. Control families in the CCDP evaluation showed no gains on this measure over time.²¹ In 1995-96, 41 percent of parents scored 75 percent or higher on the measure.²²

The second national evaluation of Even Start found that at least 90 percent of Even Start families participating in 1996-97 had incomes at or below the federal poverty level at intake.²³

Even Start families also demonstrate educational need. The percentage of Even Start adults without a high school diploma or GED at entry has increased from 79 percent in 1992-93 to 85 percent in 1996-97. Forty-five percent of adults who enrolled in 1996-97 had not gone beyond grade 9.²⁴ The percentage of Even Start parents with limited English proficiency has also increased since 1992-93.²⁵ More than one-third of families who enrolled in Even Start in 1996-97 were headed by parents who did not speak English at home.²⁶ About three-quarters of these parents had difficulties in understanding, speaking, and/or reading English.

Program Indicator: The projects will continue to recruit low-income, disadvantaged families with low literacy levels.

While the average intensity of services has increased over time, most projects still fall well below the performance indicator for service intensity. The first national evaluation of

Even Start found a relationship between service intensity and educational outcomes for children and adults.²⁷ Data from the second national evaluation of Even Start demonstrate that, on average, hours of instructional services offered to participants have increased steadily from 1993-94 to 1996-97.²⁸ In 1995-96, half of projects offered 32 hours or more of adult education per month, 13 hours or more of parenting education per month, and 34 hours or more of early childhood education per month.²⁹ Only about 25 percent of projects meet or exceed the Department's performance indicator for the number of service hours offered in the three core instructional components.

Program Indicator: By fall 2001, half of projects will offer at least 60 hours of adult education per month, 20 hours of parenting education per month, and 65 hours of early childhood education per month.

Projects face a tradeoff between the number of families they can serve and the intensity of services they can offer to each family. An observational study of 12 well-implemented projects examined projects' service intensity and found the following: "Almost all of the projects provided center-based services for at least 20 hours per week in at least one site; however, many projects served two different groups of participants every week by dividing their weekly operating schedules into morning and afternoon sessions or Monday/Tuesday and Wednesday/Thursday sessions. Fewer than half the projects were designed to provide at least 20 hours per week of center-based services to all families."³⁰ The Department of Education should continue to stress the importance of providing intensive services, even if it means serving fewer families per project. The fact that the Department of Education's leadership can be effective in this regard is suggested by the fact that the average number of families per project has decreased from 58 in 1993-94 to 54 in 1996-97.

The national evaluations show that, despite small improvements, improving retention is a major challenge for the Even Start program. Of new families entering in 1995-96, 41 percent stayed for more than one year.³¹ Almost 5 percent met family-defined goals and 6 percent moved out of the area.³²

Findings from the national evaluation of Even Start suggest that the program has been successful in building on existing services. Although not included in program performance indicators, an additional key legislative requirement for the implementation of Even Start is that the projects build on existing community resources to create a new range of services. As a result, Even Start funds are often referred to as "glue," which can bind existing community services.³³ In

Program Indicator: By fall 2001, at least 60 percent of new families will stay in the program for more than one year.

1996-97, collaborating agencies were solely responsible for providing adult education services in about one-third of project sites, and Even Start and collaborating agencies shared responsibilities for adult education in about one-quarter of project sites.³⁴ In the domain of early childhood education, collaborators exclusively provided or shared responsibility for services to three- and four-year-olds in just over half of the sites, and provided or shared responsibility for services to five-year-olds in approximately two-thirds of sites. Services for infants and toddlers and parenting education services were most likely to be provided directly by local Even Start projects.³⁵

Education for Homeless Children and Youth

Preliminary data from a 1998 study suggest that access to preschool programs among homeless children may be improving. According to this data, in 1998, 16 percent of state administrators reported that homeless children in their state had no difficulty accessing Head Start or other publicly-funded preschool programs.³⁶ This is an improvement from 1994, in which only 11 percent of state coordinators reported that homeless children in their state had no difficulty accessing these programs.³⁷

Program Indicator: An increasing percentage of preschool-age homeless children will enroll in preschool programs.

Options for Strengthening the Programs

In order to better assess progress toward the National Education Goal that by the year 2000 all children will start school ready to learn and to improve program quality and accountability, national standards for school readiness could be developed. There are no consistent standards on school readiness at the national or state levels to which programs can be held accountable, or by which progress toward the National Goal can be measured. Similarly, there is no regular source of information at the national level that can be used to monitor the school or reading readiness skills of preschoolers over time.³⁸

Specifically, such standards for school readiness should focus on ensuring that the preschool experience equips children with cognitive skills needed for learning to read in school. Such standards would take into account the work of the Committee on Early Childhood Pedagogy (National Research Council, National Academy of Sciences) that is currently being funded by the Department of Education to identify what young children between age two and five should be learning, the best ways to teach them these skills and knowledge, and how to measure the extent to which the desired learning is taking place.³⁹ An alternative would be to require states to develop state standards and to report annual progress toward them. This is one way to emphasize the importance of preschool experiences that stimulate children's cognitive growth and provide a solid foundation for academic learning.

The intensity of Even Start services should be improved. Although Even Start legislation calls for intensive services, what constitutes "intensive services" is not defined in the legislation or policy guidance. It is possible that this lack of clear guidance has contributed to the finding that relatively few projects meet the Department of Education's indicator for service intensity, and that projects vary greatly in the intensity of services they offer. Few projects meet a level of intensity that might be expected to produce large literacy gains for families who are most in need. **Projects need more clarity about what constitutes intensive services.** In addition to the indicators specifically listed in the Even Start amendments of 1998, additional indicators might address the issue of intensity. States could develop an indicator that identifies the levels of service intensity and duration of participation that are necessary to

achieve state-defined outcomes. For further guidance, the Department of Education's program performance plan for Even Start sets target levels of service intensity, as discussed above.

The retention of Even Start families should be improved. Even Start is unique among federal programs in its ability to serve families with children from birth through age seven. While many other programs serving young children are meant to last only nine months to a year, Even Start has the potential to help children progress from infancy through the third grade. Furthermore, Even Start families, having such profound educational and economic needs, need intensive, sustained services to achieve substantial outcomes. While not required, the Department has encouraged states to provide multiple-year services through policy and technical assistance, and is working in partnership with states to improve retention. However, about half of new Even Start families in 1995-96 dropped out of the program within the first year, for reasons other than accomplishing their goals or moving out of the area. Increasing the amount and duration of both instructional and support services offered and making them more flexible is critical to increasing the retention of families. **Further examination of the reasons families leave Even Start and the long-term benefits of participation in the program is needed to improve retention and to understand what level of treatment is needed to yield long-term benefits.**

The quality of Even Start services should be improved. The legislative framework that drives Even Start makes ensuring quality difficult. The requirement to build on existing services, while reducing unnecessary duplication, creates challenges since Even Start is only as good as the existing services it brings together. While projects have been successful in arranging a good number of collaborations, preliminary findings from an observational study of 12 well-implemented projects indicate that there is limited data collection and reporting of outcomes of services provided by collaborators.⁴⁰ This makes it very difficult to assess the quality of these existing services. **In order for Even Start to be successful, local projects should not only collaborate as the legislation requires, but also work to ensure that collaborations can produce the literacy outcomes expected of Even Start.** Projects need to start on a solid foundation by only building on existing services of high quality. Further, projects need to create meaningful relationships with collaborators to integrate the different services into a coherent program. Simply locating a Head Start or other preschool program that will take some of their preschool-aged children is not sufficient.

The accountability of the Even Start program, preschool programs under Title I, Part A and Education for Homeless Children and Youth needs to be strengthened. As discussed earlier, Title I, Part A preschool programs represent the largest of the Department of Education's investments in early childhood education. Yet very little is known about the quality and performance of preschool programs funded under this program. The Reading Excellence Act's amendments to the Even Start program will improve states' ability to hold projects accountable for their outcomes. As noted above, these amendments require states to develop results-based indicators of program quality for Even Start programs. **Preschool programs funded under Title I, Part A might also report on the child-based indicators (such as improvement in reading readiness), and, where appropriate, the adult-based indicators (such as receipt of a high school diploma or GED).**

The Department of Education should also coordinate with the Head Start program in the Department of Health and Human Services to develop a common set of core indicators for preschool outcomes. The 1998 reauthorization of Head Start, much like the amendments to the Even Start program, calls for the use of educational performance measures. The measures in the Head Start legislation are more specific than the indicators listed in the amendments to Even Start. Head Start programs are to include measures that ensure that children "know that letters of the alphabet are a special category of visual graphics that can be individually named; recognize a word as a unit of print; identify at least 10 letters of the alphabet; and associate sounds with written words."⁴¹

Local Even Start, Title I, and Homeless programs should be encouraged to adopt a continuous improvement framework for project management and evaluation, and to report results to state administrators, so as to help local project and state administrators ensure program quality and accountability.

Although local Even Start projects are required to conduct annual, independent evaluations, state administrators are not required to collect or review these evaluations. In addition, a 1998 synthesis of Even Start evaluations found that the quality of local evaluations varied,⁴² and that, as shown in their evaluation reporting, projects “rarely engage in the systematic use of data to manage and improve their programs.”⁴³ The underlying principle behind continuous improvement is the use of data. **Such a framework would include developing measurable goals and objectives, identifying and implementing strategies to reach those goals and objectives, engaging in rigorous and objective assessment, and using this assessment data for continuous program improvement.**

The Department of Education is currently exploring the viability of this framework as part of a three-year, in-depth study of 12 local Even Start projects. Although findings from this ongoing study are not yet available, all 12 projects expressed an interest in developing a continuous improvement framework for use in their projects. They are currently developing a rigorous, systematic plan for using the continuous improvement framework to evaluate their own services. The amendments to the Even Start program as part of the Reading Excellence Act also begin to build an infrastructure for such a framework. **The Department of Education should provide states and local projects with technical assistance to ensure that local evaluations provide accurate information on the effectiveness of local Even Start programs.** The Department will also provide assistance to states in developing and using results-based indicators through the Statewide Family Literacy Initiative grants authorized by the Reading Excellence Act.

-
- ¹ U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations, updated annually.
- ² W. Steven Barnett, "Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes," *The Future of Children* vol. 5, no. 3 (Los Altos, CA: The Center for the Future of Children, Winter 1995) 25, 40-51.
- ³ Maris A. Vinovskis, *The Development and Effectiveness of Compensatory Education Programs: A Brief Historical Analysis of Title I and Head Start*, Revised draft, October 1998. 20.
- ⁴ Committee on the Prevention of Reading Difficulties in Young Children, Commission on Behavioral and Social Sciences and Education, and National Research Council, *Preventing Reading Difficulties in Young Children* (Washington, DC: National Academy Press, 1998) 317.
- ⁵ U.S. Department of Health and Human Services, *Head Start 1998 Fact Sheet*, Head Start Bureau Web Page, http://www2.acf.dhhs.gov/programs/hsb/html/hs_98_fact_sheet.html, 29 Oct. 1998.
- ⁶ Head Start Act, section 638.
- ⁷ Head Start Bureau, Head Start 1998 Fact Sheet.
- ⁸ For more information, see U.S. General Accounting Office, *Research Insufficient to Assess Program Impact*, (GAO/T-HEHS-98-126, March 26, 1998), and General Accounting Office, *Head Start: Research Provides Little Information on Impact of Current Program*, (GAO/HEHS-97-59, April 15, 1997.)
- ⁹ Elementary and Secondary Education Act, section 1001(d).
- ¹⁰ For more information on the Head Start Performance Standards, see U.S. Department of Health and Human Services, "Program Performance Standards for the Operation of Head Start Programs by Grantee and Delegate Agencies" (Washington, D.C.: U.S. Department of Health and Human Services, October 1997) 231-232.
- ¹¹ P.L. 104-134, section 2755.
- ¹² Reading Excellence Act, sections 203 and 204.
- ¹³ Reading Excellence Act, section 204.
- ¹⁴ McKinney Fact Sheet prepared by Robin Bouckris, December 1998.
- ¹⁵ Gina Adams and Jodie Sandfort, *First Steps, Promising Futures: State Prekindergarten Initiatives in the Early 1990s* (Washington, D.C.: Children's Defense Fund, 1994).
- ¹⁶ M. Christine Dwyer, *Guide to Quality Even Start Family Literacy Programs* (Portsmouth, NH: RMC Research Corporation, 1995) 35-36.
- ¹⁷ Robert St.Pierre, Beth Gamse, Judith Alamprese, Tracy Rimdzius, and Fumiyo Tao, *Even Start: Evidence from the Past and a Look to the Future* (Washington, DC: U.S. Department of Education, 1998) 23.
- ¹⁸ U.S. Department of Education, unpublished tabulations from the *National Evaluation of the Even Start Family Literacy Program*; A small standardized gain is generally in the range of 0.20 standard deviation units; a medium or moderate gain is about 0.50, and a large standardized gain is in the range of 0.80 (from Cohen, J. (1988), *Statistical Power Analysis for the Social Sciences*, 2nd edition. Hillsdale NJ: Erlbaum.)
- ¹⁹ Fumiyo Tao, Beth Gamse, and Hope Tarr, *National Evaluation of the Even Start Family Literacy Program: 1994-97 Final Report* (Washington, D.C.: U.S. Department of Education, 1998) vii.
- ²⁰ Tao et al. ix.
- ²¹ Tao et al. ix.
- ²² U.S. Department of Education, *National Evaluation of the Even Start Family Literacy Program*.
- ²³ Fumiyo Tao, Beth Gamse, and Hope Tarr, *National Evaluation of the Even Start Family Literacy Program: 1994-97 Final Report* (Washington, D.C.: U.S. Department of Education, October 1998) xii; Due to ambiguity in the national evaluation (ESIS) data collection form's use of the terms family and household, the family income reported may underestimate the household income for some Even Start families.
- ²⁴ Tao et al. xii.

-
- ²⁵ Tao et al. xiii.
- ²⁶ Tao et al. xiii.
- ²⁷ Tao et al. x. This finding was not replicated in the second national evaluation of the Even Start program. The authors of this second evaluation noted that increased variability in the quality of the data collected decreased their confidence in it.
- ²⁸ Tao et al. xvii.
- ²⁹ U.S. Department of Education, *National Evaluation of the Even Start Family Literacy Program*.
- ³⁰ M. Bruce Haslam and Elizabeth Stief, *Observational Study of Even Start Family Literacy Projects: Preliminary Findings* (Unpublished draft prepared for the U.S. Department of Education, November 1998) 14.
- ³¹ U.S. Department of Education, *National Evaluation of the Even Start Family Literacy Program*.
- ³² U.S. Department of Education, *National Evaluation of the Even Start Family Literacy Program*.
- ³³ Tao et al. 68.
- ³⁴ Tao et al. 68.
- ³⁵ Tao et al. 69.
- ³⁶ U.S. Department of Education, unpublished tabulations from the *Study of Homeless Education: Follow-up to the 1995 National Evaluation of the Education for Homeless Children and Youth Program*, 1998, Item 21.
- ³⁷ Leslie Anderson, Matthew Janger, and Karen Panton, *An Evaluation of State and Local Efforts to Serve the Educational Needs of Homeless Children and Youth* (Washington, D.C.: U.S. Department of Education, 1995) 38.
- ³⁸ Federal Interagency Forum on Child and Family Statistics, *America's Children: Key National Indicators of Well-Being* (Washington, D.C.: Forum on Child and Family Statistics, 1998) 51.
- ³⁹ Personal communication from Naomi Karp, The National Institute on Early Childhood Development and Education, OERI. Unpublished supporting documentation from the Committee on Early Childhood Pedagogy.
- ⁴⁰ M. Bruce Haslam and Elizabeth Stief, 21.
- ⁴¹ Head Start Act, section 641A (4).
- ⁴² Robert St. Pierre, Anne Ricciuti, and Cynthia Creps, *Synthesis of State and Local Even Start Evaluations* (Washington, D.C.: U.S. Department of Education, November 1998) 25.
- ⁴³ St. Pierre et al. 23.

4. ARE FEDERAL PROGRAMS HELPING STATES DEVELOP AND IMPLEMENT STANDARDS?

KEY FINDINGS

Standards and Assessment Development

- States have made substantial progress developing state content standards. Currently, 48 states, Puerto Rico, and the District of Columbia have completed the development of state content standards. In 1995, only 19 states reported having content standards in place.
- States have made slower progress in developing state performance standards and aligned assessments. Twenty states and Puerto Rico have completed performance standards and 14 have assessments in place that are aligned to state content standards. Many other states are developing performance standards as they finalize their assessments, which are not required to be in place until the 2000-2001 academic year under Title I of the ESEA.
- Independent reviews of standards suggest that the quality and rigor of state standards varies. Differences in student achievement on the National Assessment of Educational Progress (NAEP) and student performance on state assessments suggest wide variation in the rigor of state standards.
- Ensuring that all students are held to challenging standards is also a concern. Policies for including disabled students and students with limited proficiency in English in state assessments vary across states and accommodations for students not participating in state assessments are limited.

Federal Program Support for Standards-Based Reform

- A recent study by the General Accounting Office found that states report that Goals 2000 has been a significant factor in promoting their education reform efforts and, in several cases, was a catalyst for standards-based reform.
- Almost half of district administrators report that Title I is "driving standards-based reform in the district as a whole" to a "moderate" or "great" extent, and 60 percent report that Title I is "driving standards based reform in the highest poverty schools in the district" to a "moderate" or "great" extent.

Alignment of Standards with Curriculum and Professional Development

- While awareness of standards has increased, states, districts and schools have a long way to go to align their educational practices with standards. The proportion of Title I principals who report using standards to guide curriculum and instruction to a great extent increased from about half in 1995-96 to 74 percent in 1997-98. But only six states currently have a policy that aligns professional development for teachers with standards. Only 38 percent of teachers feel well prepared to implement standards in the classroom.

In 1989, the President and the nation's governors met for an education summit to begin to focus a decentralized education system around common and challenging expectations for all students. The meeting helped launch a unique bipartisan and intergovernmental body of federal and state officials, the National Education Goals Panel, to articulate plans for helping all students receive a world class education. National goals were established, including ensuring that children are ready to learn when they enter school, raising student achievement, and improving adult literacy.

In response to the growing interest in standards, Congress created the National Council on Education Standards and Testing (NCEST) to explore the feasibility of national standards and recommend policies related to standards. NCEST observed that "In the absence of well-defined and demanding standards, education in the United States has gravitated toward *de facto* national minimum expectations" and the urged that standards be created that: specify the content and level of performance expected from students, reflect high expectations, are national but not federal, and are voluntary rather than mandated.¹

Standards-based reform is a systemic effort to increase the academic achievement of all students by raising expectations about what students should learn and by creating coordinated educational systems that support improved teaching and learning. Standards-based reform involves creating clear and challenging academic standards, and holding schools and districts accountable for student progress toward meeting those standards. It requires alignment of all components of educational systems—including curriculum, instruction, professional development, and family and community involvement activities—around the goal of increased academic achievement. Standards-based reform is focused on results, giving states, districts, and schools flexibility to carry out reforms, while putting in place measures to increase the accountability of schools and districts for improving achievement levels for all students.

Federal legislation has been designed to support standards-based reform in the states. The Goals 2000: Educate America Act and the 1994 reauthorization of the Elementary and Secondary Education Act (ESEA) encourage and support states in their efforts to develop and implement standards-based reform. Goals 2000 provides funds to help states and districts develop challenging standards and move them into classroom practice. To ensure that all students, particularly economically disadvantaged students, are held to high expectations for performance, Title I of the ESEA requires states to use the same academic standards for students in Title I programs as the standards established for all students.

Introduction to the Programs and the 1994 Legislative Changes

The Goals 2000: Educate America Act, and the reauthorized Elementary and Secondary Education Act (ESEA) were both passed in 1994. These acts were envisioned as a means of helping states and school districts develop challenging standards and improve the educational achievement of all students, especially students in low-income communities, for whom expectations have often been low and for whom academic performance has lagged behind their more advantaged peers.

A 1993 evaluation of the Title I program (then called Chapter 1) revealed that the program was a relatively marginal educational intervention for students and, as structured, was insufficient to close the gap in achievement between students in high- and low-poverty schools. An important finding was that students in high poverty schools were held to lower expectations and standards than their more advantaged peers.² This led to a rethinking of federal education programs in 1994, and legislative

changes to ensure that all children would be held to the same high standards and provided with the opportunities to meet those standards.

Goals 2000 and ESEA programs, particularly Title I, provide funds to states and local school districts to develop standards and implement programs that support improved teaching and learning for all students using standards-based reform as a framework.

Goals 2000

Since it was enacted, Goals 2000 has provided \$1.7 billion in funds to support states and local school districts as they develop standards and align professional development, curricula and materials, and parental and community involvement with the goal of increased student achievement for all students. To participate in Goals 2000 states must:

- Submit a comprehensive educational improvement plan outlining state efforts to implement systemic, standards-based reform, including strategies for developing challenging content and performance standards;
- Adopt strategies for developing and implementing state assessments aligned with state standards and administered to all students, including students who have limited-English proficiency and students with disabilities;
- Adopt strategies for developing and implementing accountability systems that are aligned with the standards; and
- Adopt strategies for the provision of teacher preparation, professional development, and community and family involvement aligned with standards.³

Title I

ESEA resources, especially almost \$8 billion a year in Title I funds, have been used by states and local districts to develop standards and help all children, particularly children from economically disadvantaged communities, meet challenging academic standards. In relation to standards, Title I requires states to:

- Develop or adopt challenging content and performance standards for all children, including those who participate in Title I programs. The statute requires that performance standards include at least three levels of performance such as “basic”, “proficient”, and “advanced”. States were required to develop content and performance standards by the 1997-98 academic year;
- Develop or adopt high-quality yearly assessments in at least reading and mathematics to determine how well children served by Title I are learning the material according to the state content standards;
- Use the same assessments adopted for all students for Title I and disaggregate results by student subgroups. States are required to develop or adopt these assessments by the 2000-01 academic year.⁴

Exhibit 4.1 summarizes milestones, evaluations, and legislative requirements related to the development of standards.

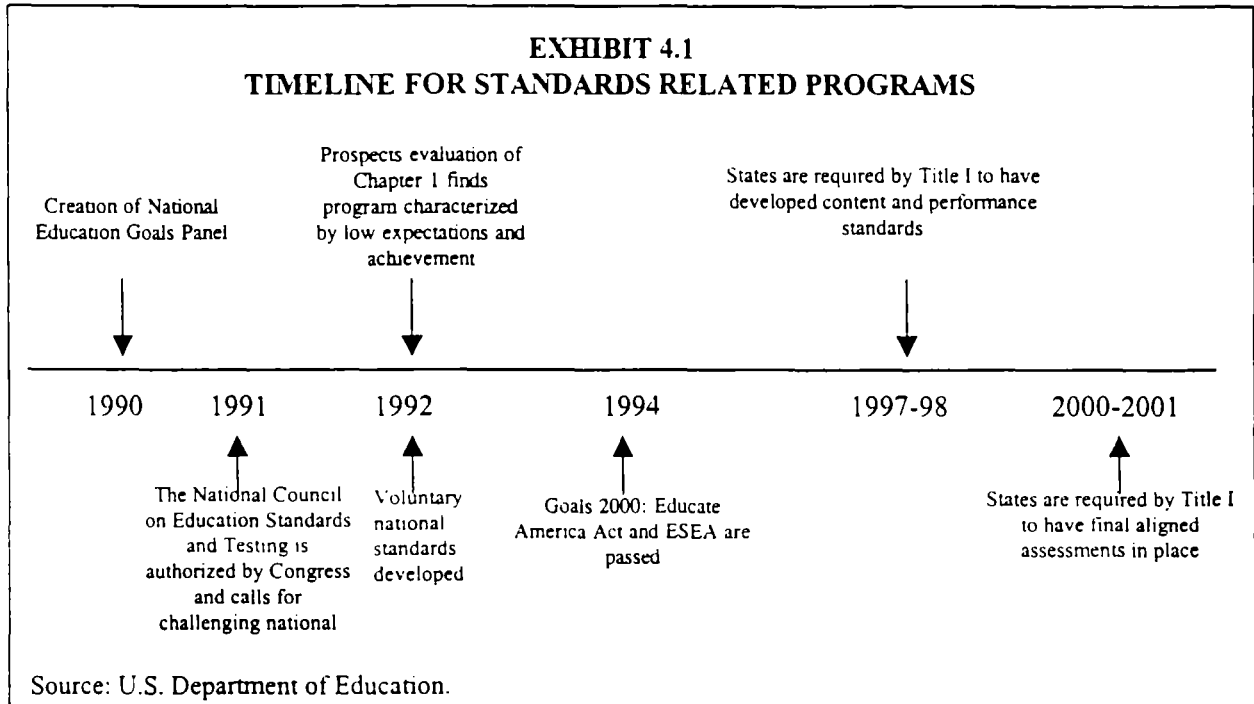


Exhibit 4.2 describes the key characteristics of the Goals 2000 and ESEA programs that support the development and implementation of standards-based reform strategies. The chart reflects the full appropriation for each program, as the purposes of all of the funds are related to helping all students reach high standards.

EXHIBIT 4.2
FEDERAL PROGRAMS SUPPORTING DEVELOPMENT AND
IMPLEMENTATION OF STANDARDS

Program	FY1999 Appropriation	Purpose	Funding and Targeting	Participation	Standards-Related Services
Goals 2000: Educate America Act	\$461 million	Supports states and districts in developing and implementing systemic standards-based education reforms focused on raising student achievement	Formula grants to states then competitive sub-grants to districts. Direct grants to districts under certain circumstances	48 states; the District of Columbia, Puerto Rico, outlying areas and the Bureau of Indian Affairs	Support for local, standards-based systemic reform efforts and standards-based preservice training and professional development for teachers
ESEA: Title I, Part A	\$7.6 billion	Supports schools to improve learning for students at risk of educational failure	Formula grants to school districts based on numbers of poor school-age children	All states; approximately 13,500 districts, and 45,000 schools	Instructional staff, professional development, aligning curriculum and assessments with state standards; helping disadvantaged students meet standards
ESEA: Title II	\$335 million	Provides professional development to help all children reach high standards, particularly in math and science	States provide formula grants to districts and competitive grants to institutions of higher learning	All states; approximately 14,500 districts, and 1,000 institutions of higher education	Professional development related to educational standards

Source: U.S. Department of Education.

What Do We Know About Good Standards-Based Reform?

The development of challenging standards is a beginning step in implementing systemic standards-based reform. The important features of standards-based reform are delineated in education research that indicates that students learn best when:

- All stakeholders share clear and common expectations about what students should know and be able to do;
- All components of the educational system are coordinated and aligned around student learning; and
- Education is results-oriented, focusing on improving academic achievement, increased accountability for student learning, and continuous improvement.

Content and Performance Standards. Content standards identify broadly what students should learn in a particular subject area, and performance standards more specifically identify how well students should perform. These standards should focus on teaching students higher-order thinking skills such as conceptual understanding, reasoning, and analytical skills that can be applied in real-world situations. Challenging content and performance standards should be rigorous and require students to gain more depth of understanding in particular subject areas than previously required.⁵

Aligned Assessments and Educational Systems. “Aligned assessments” refers to tests that accurately measure student achievement against content and performance standards. In order to help all students meet standards, assessments should be administered to *all* students, including students with disabilities and limited proficiency in English. State assessment results should be disaggregated by student characteristics such as gender, ethnicity, English proficiency, migrant status, and poverty status in order to direct attention to the special needs of groups in meeting standards. Curriculum and instruction, professional development, and teacher certification should be coordinated and aligned with standards.

Local Flexibility with Accountability. Standards provide a framework for judging the progress of schools and districts in helping all students meet standards and draw attention to the needs of students who are not meeting standards. Strong accountability systems should be designed to give districts and schools maximum flexibility in designing educational programs to meet the needs of students in exchange for responsibility for ensuring that all students meet high standards. The degree to which this exchange of flexibility for accountability has been successful is discussed in Chapter 11 of this report.

How Well Are the Programs Working?

Goals 2000 and Title I have had an important role in moving all states toward engaging in systemic reform efforts to improve their educational systems for all students. Funds from these programs have been used to support activities designed to align educational systems around high academic standards for all children.

A 1998 Report by the General Accounting Office (GAO) has concluded that “Many state officials reported that Goals 2000 has been a significant factor in promoting their education reform efforts and, in several cases, was a catalyst for some aspect of the state’s reform movement. State and local officials said that Goals 2000 funding provided valuable assistance and that, without this funding, some reform efforts either would not have been accomplished or would not have been accomplished as quickly.”⁶

Exhibit 4.3 shows findings from a 1998 national survey of district administrators that found that districts using Goals 2000 funds have made the development of standards a priority.⁷

EXHIBIT 4.3
DISTRICT USE OF GOALS 2000 FUNDS
FOR STANDARDS DEVELOPMENT

Activity	Percent of district administrators responding that they use Goals 2000 funds to support this strategy "a great deal"
Providing professional development linked to standards	89
Aligning curricula and instructional materials with content/performance standards	76
Developing or adopting assessments linked to standards	70
Source: U.S. Department of Education. Study of Educational Resources and Federal Funding.	

The following examples describe how some districts have used Goals 2000 funds to support standards-based reform efforts.

Examples of How Goals 2000 Funds Support Standards-based Reform

In Kent County, a rural school district on Maryland's Eastern Shore, Goals 2000 grants supported district reform by providing funds for 1) substitutes while teachers participated in in-service training, 2) consultants who conducted staff development in computer usage, and 3) transportation of students, salaries of teachers, and other expenses related to developing and implementing an extended-day and extended-year program. Student test scores on local and state assessments are increasing and administrators contend that the increases are a result of the reform efforts in the state and district. To sustain the efforts, the district developed a partnership with a state juvenile prevention program to help support the extended-day program in some schools, and developed a similar partnership with the local Parks and Recreation Department to help finance the extended-year program.

District leaders in Broward County, Florida used a Goals 2000 grant as seed money for an intervention program in schools that were identified by the state as having "critically low" scores on state assessments. As part of the program, a team of experts provided immediate intervention in each school in the areas of curriculum, instruction, classroom management, and parental involvement. The intervention proved successful. Students in the targeted schools increased their scores on state assessments and 24 of the 25 schools in Broward were removed from Florida's list of "critically low-performing" schools.

In Gresham, Oregon, the Gresham-Barlow School District used a series of Goals 2000 grants to develop a comprehensive standards-based assessment system that plays a central role in the district's reform effort. A leadership team, composed of teachers with expertise in assessment, developed and piloted districtwide assessments in reading and mathematics. These assessments were aligned with state and local standards. To familiarize other teachers with the assessments, team members helped their peers develop similar assessments at the classroom level and district administrators implemented a collegial review process in which teachers score and discuss student work samples. Goals 2000 funding supported these efforts.

Source: U.S. Department of Education. *Goals 2000. Reforming Education to Improve Student Achievement.*

Districts also used Title I resources to support reform efforts such as developing standards and assessments, aligning curriculum with standards, and providing professional development – particularly in high-poverty school districts. About half of school districts nationally report that Title I is driving standards-based reform in the district as a whole to a great or moderate extent and 60 percent report that Title I is driving standards based reform in the highest poverty schools in the district to a moderate or great extent. Over 95 percent of the small poor districts and over 80 percent of the large poor districts report the same.⁸

According to a 1998 survey of district administrators:⁹

- Thirty-nine percent of respondents reported that Title I funds support aligning curricula and instructional materials with content and performance standards “a great deal”;
- Twenty-five percent of respondents reported that Title I funds support developing or adopting assessments linked to standards “a great deal”; and
- Forty-five percent of respondents reported that Title I funds support providing professional development linked to standards “a great deal”.

States are making considerable progress toward meeting Title I program requirements for developing standards but slower progress toward developing student performance standards.

Goals 2000 requirements are being implemented, though many states have not met timelines identified in Title I for completion of performance standards because they are developing the standards along with final state assessments which are not required to be in place until the 2000-01 school year.

With regard to the program requirements of Goals 2000:

- Forty-seven states plus the District of Columbia and Puerto Rico have comprehensive educational improvement plans under Goals 2000.

With regard to the program requirements of Title I of the ESEA:

- Forty-eight states, Puerto Rico, and the District of Columbia have completed the development of state content standards. Of the remaining states, one is still in the process of developing state standards and in the other state local districts have the responsibility for developing standards acceptable to the state.¹⁰ Before 1994, 19 states reported that they had state content standards in place.¹¹
- Twenty states and Puerto Rico have completed the development of challenging performance standards in at least reading/language arts and mathematics.¹²
- Fourteen states have transitional assessments in place aligned to state content standards.¹³

Title I Program Indicator: By 1997-98, all states will have developed state content and student performance standards.

Title I Program Indicator: By 2000-01, all states will have assessments aligned with state content and student performance standards for core subjects.

- For the 1996-97 school year, 21 states submitted annual Title I performance data disaggregated by school poverty. Twelve states disaggregated student assessment data for low-income students, 19 for students with limited proficiency in English, and 16 for migrant students.¹⁴

While all states have adopted a timeline that will produce assessments aligned with content and performance standards by 2000-2001 and there has been significant progress in the development of content standards, a number of states did not meet the 1997-98 deadline for completion of content and performance standards outlined in the 1994 legislation. These states are operating under a waiver that extends the deadline for the completion of content and performance standards through Spring, 1999. Most of these states have not yet completed performance standards because they are creating performance standards and assessments simultaneously. The process, though methodologically sound, is taking longer than envisioned when the 1994 legislation was written.

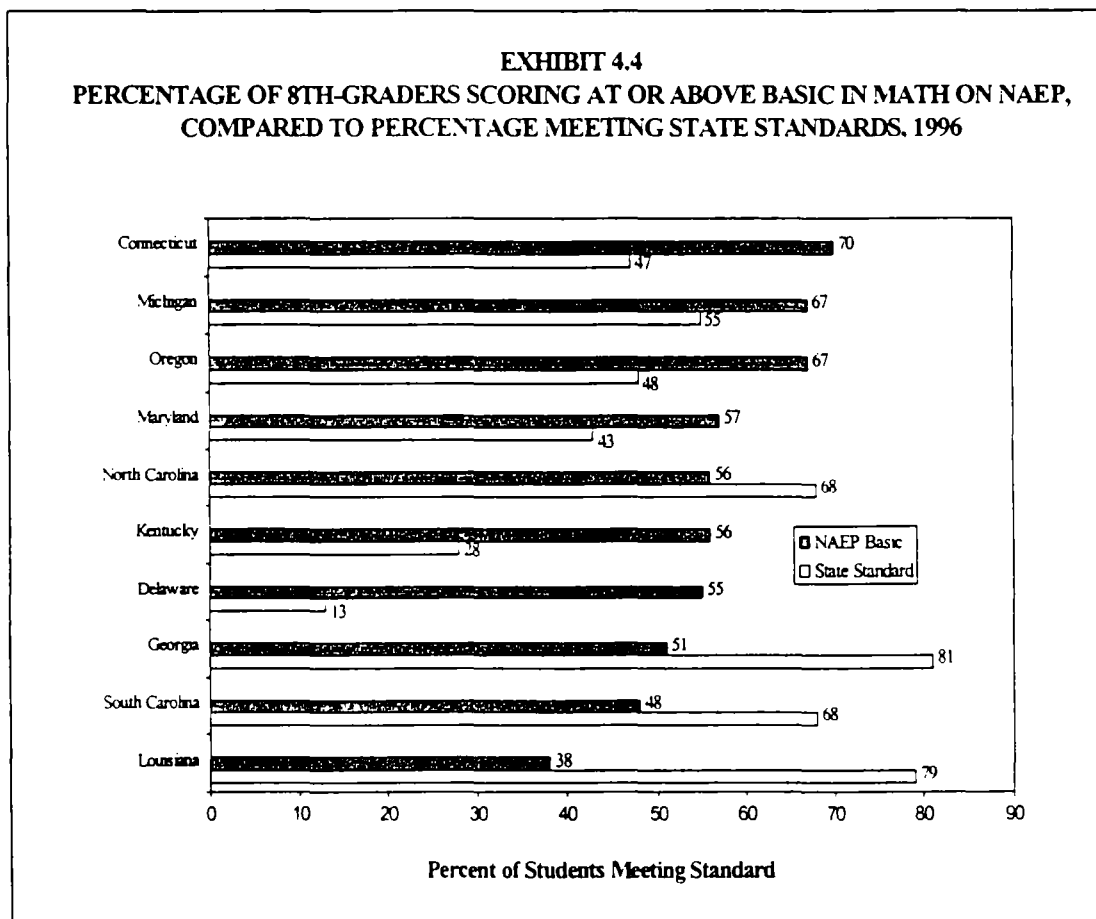
The quality and rigor of state standards is a concern. States are not required to submit their standards to the Department of Education for review. But provisions in Title I of the ESEA do require states to submit evidence that challenging standards are in place and that states followed a rigorous process in adopting them. The Department of Education uses peer review panels to examine such evidence to verify that states have developed or adopted challenging content and performance standards and that these standards apply to all students. The types of evidence considered by peer reviewers include:

- Conclusions from an independent peer review panel convened by the state to review its standards;
- A detailed description of the process the state used to develop its standards and review their rigor, such as its participation in a process to benchmark them to nationally recognized standards;
- Evidence demonstrating that student performance on a state assessment that is aligned to the state content and performance standards is generally comparable to student performance on a rigorous nationally recognized assessment such as NAEP; and
- Alternative satisfactory evidence demonstrating that the state has challenging and aligned content and performance standards.

Examining the process states use to develop standards makes it difficult for the Department of Education to evaluate the quality of standards themselves. Independent studies of the quality and rigor of standards reveal different and sometimes contradictory findings on the quality of state standards. A 1998 review of state standards by the American Federation of Teachers shows that the overall quality of state standards is improving, while the Fordham Foundation concluded that “an unacceptably large number of state standards were judged to be of inadequate quality.”¹⁵ While discrepancies across independent reviewers are, in part, the result of the use of different criteria for assessing the standards, subjectivity of the reviewers and the timing of reviews, the reviews highlight the fact that state standards vary in organization and content and that no consensus has emerged about what constitutes “challenging” standards and how to measure them.

Few states have benchmarked their standards for quality. According to a 1997 review of state plans, only 4 states provided evidence that their standards were benchmarked against the National Assessment of Educational Progress (NAEP) or another external assessment.¹⁶

One method of assessing the rigor of state standards is to compare student performance on state assessments to performance on NAEP. Exhibit 4.4 compares the percentage of eighth grade students scoring at or above the basic level on the 1996 National Assessment of Educational Progress (NAEP) in math with the percentage of students judged to have met their state standards for the same year.



This comparison reveals that in some states—such as Connecticut, Michigan, Maryland, Kentucky and Delaware—state standards may be more rigorous than those used for NAEP, but in other states, a much larger percentage of students are meeting state standards than are meeting the basic level on NAEP. Such large differences in student achievement of proficiency levels suggests that there is wide variance in the rigor and challenge of state standards.

The quality and rigor of standards is also related to the expectation that all students will be held to standards and participate in state assessment systems.

Most states are establishing policies related to the assessment of students with disabilities, and students with limited proficiency in English, but the policies vary across states. Including all students in state standards and assessment systems is an important priority for Title I, which serves approximately 2 million students with limited proficiency in English.¹⁷

- A review of state practices in 1997 found that 43 states had at least partially developed policies for assessing all students. But only 28 states provided evidence that procedures were being enforced.¹⁸
- More than half of state administrators responsible for Title I report that their states are having difficulty with adaptations or accommodations in assessments for students with limited proficiency in English, and a third are having difficulties with assessing the performance of special education and migrant students.¹⁹

There are increasing levels of awareness and understanding of standards-based reform. State and district administrators, teachers, and parents are growing in their awareness and understanding of standards and standards-based reform. The first systematic study of states and school districts regarding the progress they are making in implementing standards-based reforms, *Reports on Reform From the Field*, (1997) indicated that:

- Districts with more experience with reform (districts located in states that began reform efforts in the early 1990s) had a more realistic estimate of the extent to which change is needed;
- Districts in such early reform states showed higher levels of progress and understanding in implementing key components of reform and federal programs;
- District and state administrators reported a high level of understanding of standards-based reform and the provisions under ESEA;²⁰
- Districts that had received Goals 2000 subgrants reported a greater understanding of the elements of standards-based reform than other districts.²¹
- According to a 1998 survey by Public Agenda, teachers and parents are gaining increased understanding of standards-based reform. The survey revealed that a majority of teachers and parents are familiar with efforts to raise standards for their students.²²

While awareness and understanding of standards is high, alignment of other components of educational systems with standards is an ongoing challenge. In order to be effective, standards must be aligned with state, district, and school policies and practices such as teacher training and certification, curriculum and instruction.

On the state level:

- Only 6 states have a policy that links or aligns teacher professional development to the state content standards, although an additional 11 states are developing such a policy.
- Nineteen states have policies that link textbook selection to state content standards.²³

Goals 2000 Program Indicator:
Increasing numbers of principals in states or districts with standards will indicate that schools have curriculum, instruction, professional development and assessments aligned to standards.

On the school level:

- Principals reporting that they use standards to guide curriculum and instruction to a great extent increased from about half in 1995-96 to three quarters in 1997-98.²⁴
- In 1998, 81 percent of public school teachers reported that they had participated in professional development focused on standards in the past 12 months. However, teachers also report feeling not very prepared to use standards in the classroom, particularly in high-poverty schools. In 1998 only 38 percent of teachers overall, and 30 percent of teachers in high-poverty schools (with 60 percent or more students qualifying for free and reduced-price lunch) reported they felt very well prepared to implement state or district curriculum and performance standards.²⁵

Title I Program Indicator: The percentage of teachers who indicate that they are engaged in professional development that is enabling them to teach to challenging standards will increase annually.

Measuring progress of student achievement against standards is difficult as few states have consistent state assessment data over time. During the transitional period while states are in the process of developing final assessments, which are not required to be in place until the 2000-01 school year, state assessment systems are in flux. This makes it difficult to evaluate the impact of standards on student performance. The Council of Chief State School Officers reports that only seven states have consistent trend data from their state assessments for three or more years.²⁶

Goals 2000 Program Indicator: By 2002, 32 states with 2 years of assessment data and aligned standards and assessments will report an increase in the percentage of students in schools with at least 50 percent poverty who meet proficient and advanced levels of performance in reading and math on their state assessments.

Although there has been no systematic study of achievement on NAEP related to the quality of state standards and assessments across states, some evidence suggests that standards-based reform is contributing to improved student performance in states. A recent report from the National Education Goals Panel attributes significant student achievement gains in Texas and North Carolina on NAEP to efforts in the states to raise standards for all students and hold schools accountable for performance.²⁷

Options for Strengthening the Programs

While much progress has occurred since 1994, ESEA programs need to be strengthened in at least three key areas central to the development and implementation of standards:

- Ensure the quality and rigor of state standards and assessments
- Align assessments with state and local standards
- Include all students in state standards and assessments
- Align key elements of educational systems with standards

Ensure the quality and rigor of state standards and assessments. Standards-based reform requires states to develop challenging content and performance standards. However, we have seen that it is difficult to assess the quality and rigor of state standards. In order to help states raise their standards the Department of Education could:

- Strengthen the peer review process that assesses the standards-development process that states undergo by requiring that states benchmark their standards against standards that are nationally recognized as rigorous. Numerous states such as North Carolina, Michigan, and Maine have benefited from benchmarking their state standards.
- Set aside additional funds to help states complete the development and refine standards, as well as align state assessments with standards.

Align assessments with state and local standards. Another challenge to the implementation of standards-based reform is the difficulty that many states are experiencing in creating aligned assessments. Maryland, Kansas, Vermont, and other states have been engaged in the difficult process of creating new forms of assessment that are aligned with the advanced skills delineated in state standards. Often new assessments have required students to demonstrate mastery of higher order-thinking skills such as communicating, analyzing situations, and problem solving. Such test items are difficult to develop and score, and therefore present problems in test development for many states.

- What “alignment” means and how it is measured has been defined in a number of ways and a standard method has not yet emerged from research. Because no consensus exists on how to determine or measure alignment, the Department of Education could propose a set aside or line item should be created to support research in assessments and alignment.
- The Department of Education currently relies on self-reports to determine whether states have aligned assessments linked to accountability systems. The Department needs to develop a process for determining the extent to which states are developing assessments aligned with standards, even if limited by law to only review of the alignment process, rather than standards and assessments themselves.

Include all students in state standards and assessments. Related to the issue of rigorous standards is the application of standards to all students. Another important challenge in implementing standards-based reform is the inclusion of students with limited English proficiency (LEP) and students with disabilities in state assessments. Guidelines and criteria for the inclusion of students with special needs are inconsistent across and within states. Currently, most states allow exemptions for some students, including exemptions for time in the U.S., time in English-as-a-second-language classes, and special education status. While the law requires inclusion of and accommodations for students with disabilities or limited proficiency in English, a host of technical and practical considerations have limited progress in implementing reform.

- To address the inclusion of students in state standards and assessments, the first step might be for states to adopt common statewide policies for which students are to be tested and how they are to be tested. The Department could require that states develop first-language assessments for Spanish-speaking students or for the largest group of students whose first language is not English. Similarly, the Department could hold schools and districts accountable for showing progress among LEP students in the development of English language skills in addition to the core subject areas.

- The Department should help states move toward including all students in state assessments within a three-year period. This would require technical assistance and resources for states to develop and implement effective accommodations and alternative assessments.

Align key elements of educational systems with standards. Standards-based reform is a long and difficult process. It involves changing ways of teaching and learning that have been in place for decades. Standards-based reform is not only about making expectations explicit, but aligning key components of educational systems with standards.

- ESEA programs should continue to emphasize the need to move standards to the classroom level by supporting strategies to tie teacher certification, professional development, curriculum, and assessments to standards and strengthen measures to hold states, districts, and schools accountable for performance against standards.

States, districts, and schools have made a tremendous amount of progress implementing standards-based reform in the past five years. Educators are making fundamental changes in expectations for what all students should know and be able to do. They are re-training teachers, involving parents, and developing systems designed to hold schools and districts accountable for increased academic achievement. The implementation of standards-based reform requires systemic change. Goals 2000 and the ESEA programs created a framework for this type of change.

The development of rigorous academic standards has been the focal point for education reform in the 1990's. Federal programs have been an important force in the development of standards. As we move into the next century, the challenge is to hold the course on standards-based reform, expect more from students, and help all students become equipped to reach high standards.

-
- ¹ National Council on Education Standards and Testing, *Raising Standards for American Education* (Washington D.C.: NCEST, 1992).
- ² U.S. Department of Education, *Reinventing Chapter 1* (Washington D.C.: U.S. Department of Education, 1993).
- ³ Goals 2000: Educate America Act, Title III, 1994.
- ⁴ Improving America's Schools Act, Title I, 1994.
- ⁵ Milbrey W. McLaughlin and Lorrie A. Shephard, *Improving Education Through Standards based Reform: A Report by the National Academy of Education Panel on Standards-Based Education reform*, (Stanford, CA: National Academy of Education, 1995) 9.
- ⁶ General Accounting Office, *Goals 2000: Flexible Funding Supports State and Local Education Reform* (Washington D.C.: GAO, 1998).
- ⁷ U.S. Department of Education, unpublished tabulations from *the Study of Educational Resources and Federal Funding*, 1999.
- ⁸ U.S. Department of Education, unpublished tabulations from the *Local Implementation Study*, 1999.
- ⁹ U.S. Department of Education, unpublished tabulations from *the Study of Educational Resources and Federal Funding*, 1999.
- ¹⁰ U.S. Department of Education, status of evidence and waivers for state performance standards, peer reviews, 1997-99.
- ¹¹ Council of Chief State School Officers, *Status Report: State Systemic Education Improvements* (Washington D.C.: CCSSO, 1995).
- ¹² U.S. Department of Education, status of evidence and waivers for state performance standards, peer reviews, 1997-99.
- ¹³ Allen Schenck and Dale Carlson, *Standards-Based Assessment and Accountability in America: A Report on the States' Progress*, as of 1997, in *Implementing the Requirements of IASA*. Title I, draft (January 28, 1999).
- ¹⁴ Council of Chief State School Officers, *State Education Indicators With a Focus on Title I: 1998* (Washington D.C.: CCSSO, 1999).
- ¹⁵ American Federation of Teachers, *Making Standards Matter 1998* (Washington D.C.: AFT, 1998); Fordham Foundation, *The State of State Standards* (Washington D.C.: The Fordham Foundation, 1998).
- ¹⁶ Schenck and Carlson, 1999.
- ¹⁷ U.S. Department of Education, *Title I Performance Reports from the States, 1996-97*.
- ¹⁸ Schenck and Carlson, 1999.
- ¹⁹ U.S. Department of Education, unpublished tabulations from the *Follow-Up State Survey*, 1998.
- ²⁰ Jane Hannaway with Kristi Kimball, *Reports on Reform from the Field: District and State Survey Results*, (Washington, DC: U.S. Department of Education, 1997).
- ²¹ U.S. Department of Education, *Goals 2000: Reforming Education to Improve Student Achievement*.
- ²² Public Agenda, *Reality Check* (New York: Public Agenda, 1998).
- ²³ Council of Chief State School Officers, *Key State Education Policies on K-12 Education: A 50 State Report* (Washington D.C.: CCSSO, 1998).
- ²⁴ U.S. Department of Education, unpublished tabulations from the *Follow up Survey of Education Reform*, 1998.
- ²⁵ U.S. Department of Education, unpublished tabulations from the *Follow up Survey of Education Reform*, 1998.
- ²⁶ Council of Chief State School Officers, *State Education Indicators With a Focus on Title I: 1998* (Washington D.C.: CCSSO, 1999).
- ²⁷ David Grissmer and Ann Flanagan, *Exploring Rapid Achievement Gains in North Carolina and Texas* (Washington D.C.: National Education Goals Panel, 1998).

5. ARE FEDERAL PROGRAMS SUPPORTING EFFECTIVE PROFESSIONAL DEVELOPMENT FOR TEACHERS?

KEY FINDINGS

Title II

- The Eisenhower Professional Development Program is the single largest federal effort funding professional development for teachers. Eisenhower-assisted professional development activities have succeeded in enhancing teachers' knowledge and skills in some areas, but not in others. For example, while about two-thirds of teachers participating in Eisenhower-assisted activities supported under the district component of the program reported that those activities enhanced their knowledge and skills in instructional methods, only 49 percent reported that participation deepened their knowledge in mathematics and science.
- About half of the teachers who participated in Eisenhower-assisted activities supported under the district component of the program reported that the activities enhanced their capacity to teach in ways consistent with state standards and curriculum frameworks.
- The goal of providing extended, in-depth learning opportunities as part of Eisenhower-assisted professional development has not yet been achieved for teachers participating in district sponsored activities. Results are more positive for teachers participating in activities sponsored by institutions of higher education/nonprofit organizations.
- Districts are more likely to co-plan and co-fund Eisenhower activities with the National Science Foundation (NSF) systemic initiatives than with most other federal programs. This is partly due to the common focus on mathematics and science across Eisenhower and the NSF projects. Case study data suggest that coordination between Title I and Title II may be superficial and that there is room for growth in this area.
- Districts that co-fund and co-plan their Eisenhower Professional Development Activities with other federal programs are more likely to offer Eisenhower activities that are of high quality.
- Eisenhower Professional Development activities are not especially targeted on teachers from high-poverty schools. The proportion of district-level Eisenhower participants who teach in high-poverty schools is not significantly higher than the proportion of teachers across the nation who teach in such schools.

Titles I, VI, VII

- Professional development is an allowable activity under these programs. Varying portions of their funds go to support professional development. Little, however, is known about the quality of the professional development activities supported by these programs or about their outcomes or impact on teacher practice.

Teachers' knowledge and skills are significant contributors to students' learning. In a recent article, "Teaching for High Standards: What Policymakers Need to Know and Be Able to Do," Linda Darling-Hammond explains:

...[S]tudies discover again and again that teacher expertise is one of the most important factors in determining student achievement ...[T]eachers who know a lot about teaching and learning and who work in settings that allow them to know their students well are the critical elements of successful learning...What teachers know and can do...affects all the core tasks of teaching [and it] shapes how judiciously they select from texts and other materials and how effectively they present material in class.¹

Teachers' experience and education are associated with increases in student achievement, according to evidence found in a review of 60 studies examining the correlation between school resources and student learning.² Although other factors also influence learning, teachers' qualifications in relation to their teaching assignments make an important difference in how well students learn, across all categories of students.

In recognition of the ongoing importance of professional development, the National Education Goals include two goals concerning the quality of the teacher workforce.

- Goal 4 focuses directly on teachers: By the year 2000, the Nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.
- Goal 5 addresses teacher competence in mathematics and science: By the year 2000, the number of teachers with a substantive background in mathematics and science will increase by 50 percent.³

The Department's current strategic plan also sets the objective (1.4) of:

- A talented and dedicated teacher is in every classroom in America.

This chapter describes the Department of Education's efforts to support effective professional development for teachers.

Introduction to the Programs and the 1994 Legislative Changes

Federal legislation includes various programs and activities intended to improve teachers' competence and establish school arrangements that nurture continuous professional learning. The 1991 evaluation of Title II, the Eisenhower program, reported that it funded professional development on a wide scale, but much of it was low-intensity training or conferences.⁴ In the 1994 legislation, Congress noted that the lack of intensive and sustained professional development activities for school staff was problematic, in light of the goal of achieving high standards for all.⁵

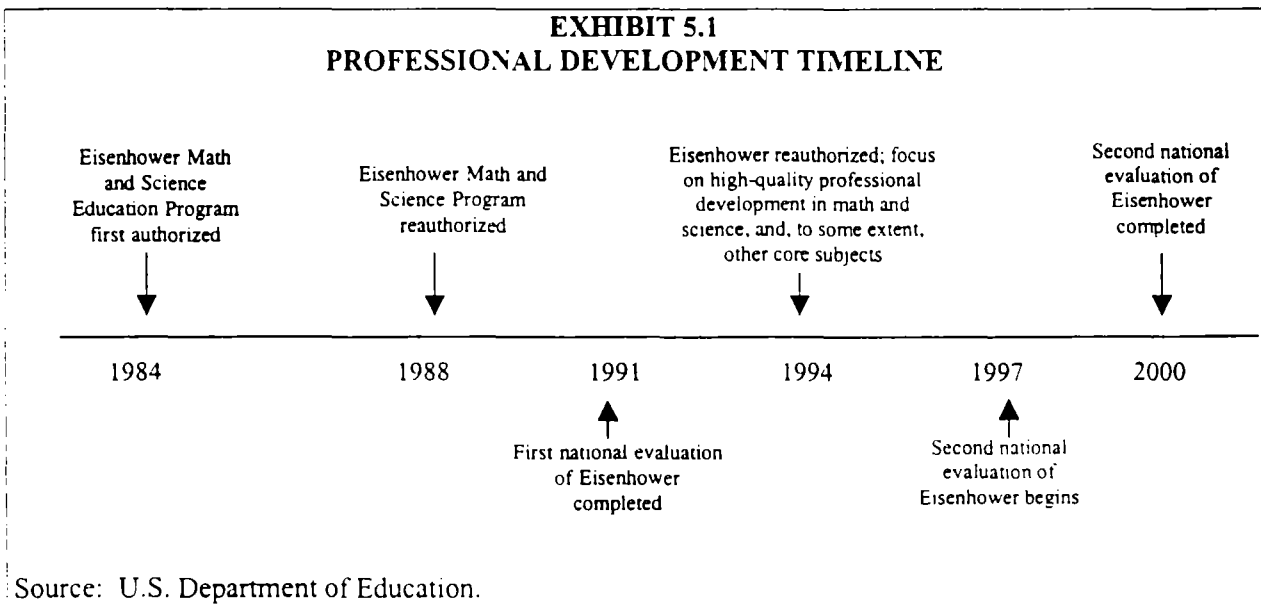
The 1994 reauthorization encouraged recipients of funds to invest in sustained professional development and made it easier to do so by permitting them to pool funds from various programs and required coordination among activities for teachers of the same children. ESEA called for "high quality" professional development focusing on ambitious standards for children and

accommodating their diversity as learners more effectively. The Act referred to research-based professional development that spreads out over time and engages expert partners in learning. Teacher and other school community involvement in planning was encouraged for particular programs.

This chapter reports on the activities funded under several laws enacted in 1994, and focuses mainly on Title II of ESEA, the Eisenhower program. This program has the single aim of strengthening the educational experience of America's children by improving the capacity of their teachers to help them achieve high academic standards. The seriousness of Congress' intent was reflected in the requirement for a comprehensive evaluation of the Eisenhower program, some of the early results of which are reported here. A full report on this evaluation is expected to be published in the summer of 1999. By that time other data will also be available about the extent of funding of professional development by other programs.

First established in 1984, and reauthorized as Title II of the Elementary and Secondary Education Act, as amended by the 1994 Improving America's Schools Act, the Eisenhower program has undergone a dramatic evolution since its inception.

In 1988, the program was first reauthorized. The first national evaluation of Eisenhower occurred in 1991. The 1994 reauthorization emphasized not only high quality professional development in mathematics and science, but also allowed the use of program funds for professional development in other content areas. It also explicitly provided that funded activities should be designed to improve teacher practice, and, ultimately, student performance. Exhibit 5.1 illustrates this brief history of the Eisenhower program.



Federal programs stimulate state and local investment in professional development through leadership, seed money, and program requirements that mandate or recommend professional development for program implementation.

While teacher professional development is most effectively planned and implemented at the state and local levels, several federal programs support professional development related to their purposes:

- **Title II**, the Eisenhower Professional Development Program, focuses exclusively on professional development, primarily in mathematics and science but also in other core subjects.

Several ESEA programs also typically provide professional development as part of their direct service to children:

- **Title I** funds professional development related to implementing academic standards in schools serving poor children.
- **Title VI**, Innovative Education Program Strategies, is designed to support school innovation, and some of its funds are spent on professional development.
- **Title VII**, Bilingual Education, Language Enhancement, and Language Acquisition Programs, funds professional development for teachers of students with limited English proficiency.
- **Goals 2000 and School to Work Opportunities Act** also encourage investment in professional development.

Other federal agencies also provide professional development programs. For example, the National Science Foundation's Teacher Enhancement Program supports projects that empower "teachers to engage all students in rich and challenging science, mathematics, and technology" lessons and help develop leadership and organizational arrangements that promote excellence in these areas.⁶ NSF's State Systemic Initiatives also promote professional development. The U.S. Department of Health and Human Services supports professional development for Head Start staff, through local projects.

Some ESEA programs that fund professional development are awarded by formula and others by competitive grant. Some support activities at the state level, others at the district or school level or in institutions of higher education. Details of program operation are described below. Exhibit 5.2 summarizes key characteristics of the Department of Education's professional development programs. The highest percentage of professional development is paid for by the Eisenhower program. Eisenhower pays for around 40 percent of Department of Education supported professional development.⁷

Title II, The Eisenhower Professional Development Program

The Eisenhower program is the largest of the Department of Education's efforts to develop teachers' competence.⁸ Part B, with a 1999 appropriation of about \$335 million, awards funds to states and districts on the basis of a formula and to institutions of higher education and nonprofit organizations through state-run competitive grant programs. The funds are earmarked to provide teachers with opportunities to learn more about the content and processes of teaching math and science, with allowable expenditures for work in other content areas when the total exceeds \$250 million.⁹

The law specifies that districts and institutions of higher education and nonprofits receiving Eisenhower funds must:

- Provide professional development that emphasizes deep content knowledge and reflection on classroom teaching practice

- Coordinate Eisenhower activities with other aspects of reform
- Involve teachers who serve Title I students and students from diverse populations in Eisenhower activities
- Develop and use performance indicators for the program

Allowable activities are wide-ranging and include workshops and conferences, study groups, professional networks and collaboratives, task force work, and peer coaching. The activities may be sponsored by the district, an institution of higher education, or other non-profits.

The Eisenhower Program requires efforts supported by its funds to reflect appropriate attention to the characteristics of effective professional development. These include:

- **Ensuring that high standards are held for all students.** The Eisenhower Program incorporates effective strategies for meeting the educational needs of diverse student populations, including females; minorities; and individuals with disabilities, individuals with economic disadvantage, and students with limited English proficiency.
- **Increasing teachers' knowledge and skills.** The Eisenhower Program requires that programs be based on solid research on teaching and learning and include strong academic and pedagogical components. The law gives priority to mathematics and science, but provides for other core subjects as well.
- **Providing extended, in-depth learning opportunities.** The Eisenhower Program specifies that professional development activities be of sufficient duration and intensity to have a positive, lasting impact on teachers' classroom performance.
- **Expanding roles for teachers.** The Eisenhower Program requires that professional development activities be incorporated into the everyday life of the school. It further specifies that districts "shall use not less than 80 percent of such funds for professional development of teachers, and, where appropriate, administrators, and where appropriate, pupil services personnel, parents, and other staff of individual schools in a manner that (A) is determined by such teachers and staff" and "(B) to the extent practicable, takes place at the individual school site."
- **Linking to programs and standards.** The Eisenhower Program requires that professional development activities be directed to helping students achieve high academic standards. In addition, Title II requires that states coordinate Eisenhower professional development programs with those supported by other programs.
- **Bolstering accountability for results.** The Eisenhower Program requires states and districts to develop and use performance indicators to measure the quality and effects of professional development.

Other Programs That Support Professional Development

Titles I, VI, and VII of ESEA, which target other aspects of education reform, allow the use of funds for professional development related to their purposes, as do Goals 2000 and School to Work Opportunities Act.

EXHIBIT 5.2
PROFESSIONAL DEVELOPMENT PROGRAMS AT A GLANCE

Program Name	FY 1999 Funding for Professional Development	Purpose	Funding and Targeting	Participation	Professional Development Services
Title II: the Eisenhower Professional Development Program	\$335 million	Provide sustained and intensive high-quality professional development, primarily in mathematics and science, that is aligned to state content and student performance standards	States provide formula grants to districts and competitive grants to institutions of higher education	50 states, DC, Puerto Rico and territories; approximately 14,500 districts; approximately 1,000 institutions of higher education and non-profit organizations	Activities include a wide range of professional development such as mentoring, workshops, and study groups
Title I, Part A: Helping Disadvantaged Children Meet High Standards	\$191 million (est.)*	Supports schools to improve learning for students at risk of educational failure	Formula grants to school districts based on numbers of poor school-age children	50 states, DC, Puerto Rico and territories; 13,500 districts; 45,000 schools	Professional development activities for teachers in Title I schools may include workshops, mentoring, and study groups
Title VI: Innovative Education Program Strategies	\$42.8 million (est.)*	Support state and local education reform efforts	Formula to states and then formula to districts based on population and other factors such as poverty	50 states, DC, Puerto Rico and territories; approximately 15,000 districts	Wide range of professional development activities
Title VII, Part A, Subparts 1 and 3: Bilingual Education, Language Enhancement, and Language Acquisition Programs	Total appropriation for Subpart 1 is \$160 million; Percentage used for professional development is not known. Total appropriation for Subpart 3 is \$50 million; Subpart 3 is devoted entirely to teacher training.	Improve educational services for limited English proficient students through professional development for educators	Subpart 1: competitive grants to districts (primary emphasis) Subpart 3: competitive grants to institutions of higher education (primary emphasis)	Subpart 1: 40 states and DC, 4 territories; 679 grants to districts (a given district can receive more than one grant). Subpart 3: 28 states and DC, 4 territories; 141 grants to institutions of higher education (a given institutions of higher education can receive more than one grant)	Bilingual career ladder programs; in-service and preservice professional development
Title III, Goals 2000: Educate America Act	\$187 million (est.)*	Supports states and districts in developing and implementing systemic, standards-based education reforms focused on raising student achievement	Formula to states and then competitive grants to districts	48 states, DC, Puerto Rico, territories, Bureau of Indian Affairs and approximately 5,000 districts in all 50 states, P.R. and territories	Preservice and professional development activities focused on systemic, standards-based reform

Note: Funds are not specifically appropriated for professional development. *Estimate is based on program year 1997-98 data collected under the Study of Education Resources and Federal Funding (SERFF).

Source: U.S. Department of Education.

What Do We Know About Good Professional Development?

Taken together, studies of effective professional development suggest that six characteristics typify high-quality professional development. These characteristics are reflected in the Eisenhower legislation, either as program requirements, or as guidelines for good practice to be considered in program design.

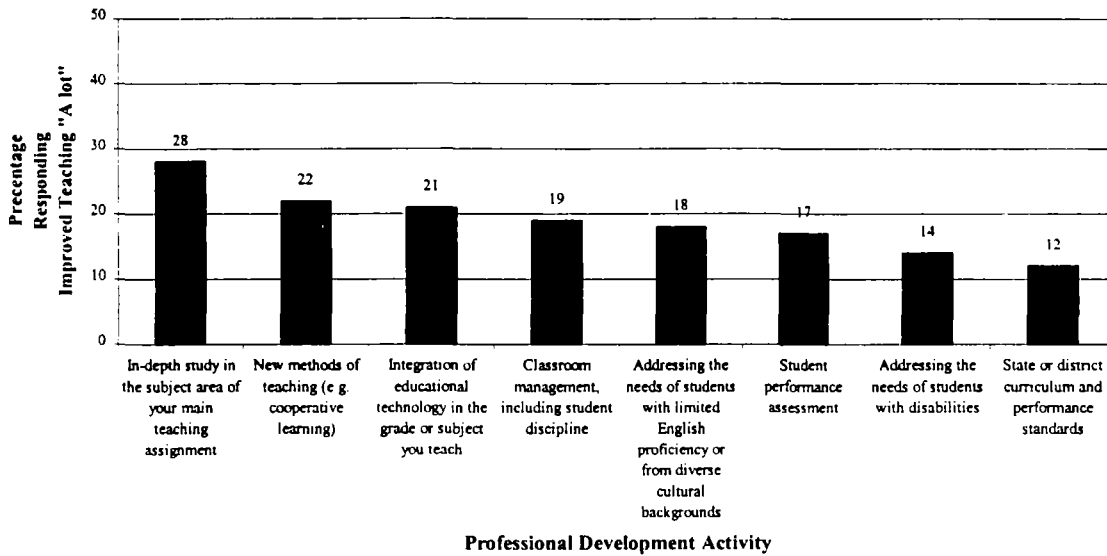
High-quality professional development:¹⁰

- **Reflects an image of teaching and learning that embraces high standards for all students.** Those who provide professional development must have a clear image of effective classroom learning and teaching. Good professional development is grounded in approaches to teaching that enable all students to achieve high standards, and makes these approaches real and accessible.
- **Focuses on deepening teachers' knowledge of content and how students learn specific content.** Good professional development develops teachers' skill and knowledge regarding the disciplines that they teach and children's ways of learning at different ages and in different contexts. It is rigorous, relevant, and research-based.
- **Provides extended, in-depth learning opportunities for teachers.** Good professional development promotes learning through, among other things, modeling the methods to be used with students and showing how methods are adapted for different types of students. Like all good teaching, such experiences build on existing knowledge, immerse learners in stimulating processes, allow for teamwork, and spread out over time to permit learners to digest new ideas, try them out, and re-gather for critical feedback. Professional learning is embedded in the life of the school whenever appropriate.
- **Supports expanded roles for teachers as leaders and colleagues.** Good professional development provides opportunities for teachers to serve as mentors, peer coaches, leaders, designers, planners, and facilitators. Such roles encourage collegial relationships in a community of learners. These, in turn, could entail changes in allocations of authority, responsibility, and time in schools.
- **Links to an educational system's programs and standards.** To strengthen the effectiveness of schools, professional development should be linked to other federal, state or district initiatives. It should be tied to relevant curricula, assessments, and standards.
- **Is accountable for results.** Professional development should be regularly evaluated for its impact on teaching and learning, and evaluation results should be used to support continuous improvement.

High-quality, content-based professional development is associated with increases in student achievement. A recent study of professional development in California found that teachers who participated in ongoing curriculum-centered professional development were more likely to report reform-oriented teaching practices in mathematics. In addition, the more teachers were engaged in such professional development and reform-oriented practice, the higher their students' mathematics achievement on the state assessment, holding student characteristics and school conditions constant.¹¹ In addition, a review of the research shows that high-quality professional development that helps teachers to understand how students learn specific content is associated with gains in student achievement.¹²

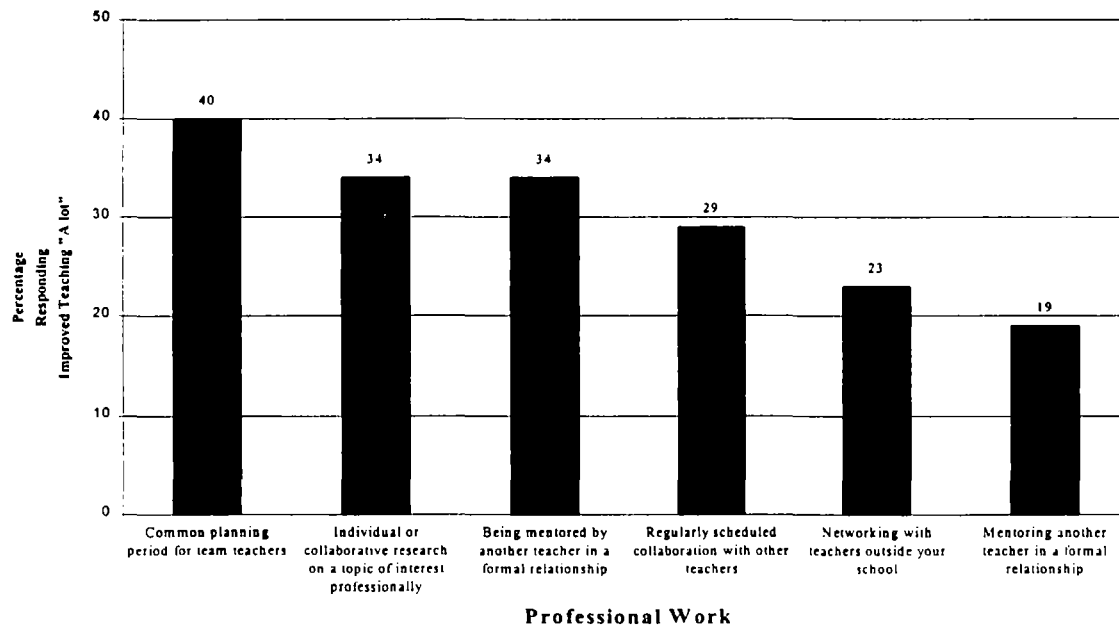
A 1998 national survey found that many teachers believe job-embedded, collaborative professional activities are more helpful to teachers than are traditional forms of professional development. For example, 19 percent of teachers participating in traditional professional development on classroom management indicated that it improved their teaching “a lot,” while 40 percent of teachers engaging in common planning with other teachers reported that it improved their teaching “a lot.”¹³ (See Exhibits 5.3 and 5.4.) These data imply that some of the best professional development activities may be those that involve collaborative work among teachers that is embedded into their work at school.

EXHIBIT 5.3
PERCENTAGE OF FULL-TIME PUBLIC SCHOOL TEACHERS WHO PARTICIPATED IN
TRADITIONAL PROFESSIONAL DEVELOPMENT ACTIVITIES IN THE LAST 12 MONTHS WHO
INDICATED THAT THE ACTIVITY IMPROVED THEIR TEACHING "A LOT" IN 1998



Source: U.S. Department of Education. National Center for Education Statistics. *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers.*¹⁴

EXHIBIT 5.4
PERCENTAGE OF FULL-TIME PUBLIC SCHOOL TEACHERS WHO PARTICIPATED IN
COLLABORATIVE PROFESSIONAL WORK IN THE LAST 12 MONTHS WHO
INDICATED THAT THE ACTIVITY IMPROVED THEIR TEACHING "A LOT" IN 1998



Source: U.S. Department of Education. National Center for Education Statistics. *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers.*¹⁵

When districts follow closely the provisions of ESEA, they can implement programs that make professional development a powerful tool in reform. One good example, as illustrated below, can be found in rural Alaska, where Chugach School District pooled funds from several sources to build a highly effective, standards-based program taught by staff well-equipped for the challenge.

**AN EXEMPLARY PROFESSIONAL DEVELOPMENT PROGRAM
IN CHUGACH, AK: STUDENT ACHIEVEMENT IS UP,
TEACHER TURNOVER IS DOWN**

In Chugach School District, where about 25 staff teach 160 students spread out over 22,000 square miles, virtually all indicators of academic success were low and teacher turnover ran as high as 50 percent a year. With the help of one of the Department's Comprehensive Regional Assistance Centers, Chugach learned how to use Title I and other public and private funding to plan comprehensively to incorporate high standards in their curriculum. The district then designed and implemented a staff development program to equip all teachers to help students meet those standards. Ten days of inservice training occur during the school year, providing both regular updates on methods and content and a remedy for cabin fever, a side effect of the isolation of remote village schools inaccessible by road. In addition, district staff members gather for 20 more days of professional learning during summer break. This college of colleagues is held in modest accommodations, such as a church camp or postsecondary dormitory, and engages participants actively in lessons about how best to achieve district goals. The district pays for the program costs, and the teachers, many of whom summer in "the lower 48 states," contribute their time. Since this summer institute was started, teacher turnover has dropped to virtually zero, while student achievement and high school completion have soared. Between 1994 and 1998, teacher attrition dropped from 50 percent to 5 percent annually, and students' standardized test scores rose from the 33rd to the 62nd percentile.¹⁶

How Well Is the Nation Meeting Its Goals for Teacher Quality and Professional Development?

We have seen that teacher quality and professional development are central to helping all students achieve high standards. What is known about the qualifications of our nation's teachers and their preparedness to teach to high standards?

Teachers in high-poverty schools. The preparation of teachers is an especially important issue in high-poverty schools. For example, in 1993-94, teachers lacking a major in their primary assignment taught almost a quarter of the classes offered to students in high-poverty schools (compared with less than 15 percent of classes in low-poverty schools).¹⁷ In addition, students in high-poverty schools are more likely than others to be taught some of the day by teachers' aides with limited education and training.^{18,19,20} Furthermore, the number of teachers equipped to serve students who enter school with limited English proficiency is not keeping pace with the demand for services, which is growing annually.^{21,22}

Teachers' preparation to teach standards. The 1994 reauthorization placed a major emphasis on linking professional development to challenging state and district standards. There is some evidence that teachers are enhancing their understanding of standards, and professional development has played a role in this development. **For example, in 1995-96, 42 percent of teachers in a national survey reported that they "understood the concept" of higher standards very well.**²³ However, when surveyed during in the 1997-98 school year, only 36 percent of a national sample of teachers (elementary teachers and secondary teachers of the core academic subjects) said that they felt "very well prepared" to implement state or district standards.²⁴ These data imply there is a difference between "understanding" standards and feeling ready to implement standards.

In the 1997-98 school year, 81 percent of teachers of the core academic subjects reported that they had participated in professional development focused on “state or district curriculum and performance standards” sometime within the previous 12 months.²⁵ However, 50 percent of teachers participated in standards-based professional development that lasted less than 9 hours over the previous year, and only 7 percent participated in such professional development that lasted more than 32 hours over the previous year.²⁶

The data also imply that the more time that a teacher has to learn about standards, the more confident he or she feels about implementing them. For example, 38 percent of the teachers who participated in professional development focused on state or district standards reported that they felt “very well prepared” to implement standards, compared to only 20 percent of the teachers who did not participate in such professional development. In addition, teachers with more than 32 hours of standards-based professional development were more likely to feel “very well prepared” to implement state or district standards than were teachers with fewer hours.²⁷

How Well Are the Programs Working?

Exhibit 5.5 shows which federal programs encourage or require elements of high quality professional development. Although a number of sources of data are available on the quality and effectiveness of federally supported professional development, the most detailed data are being collected as part of the national evaluation of the Eisenhower program. Thus, the discussion that follows begins with an extended discussion of the Eisenhower program. The remaining sections briefly summarize analyses of data for other federal programs that support professional development.

EXHIBIT 5.5 DO FEDERAL PROGRAMS REQUIRE OR ENCOURAGE ELEMENTS OF HIGH QUALITY PROFESSIONAL DEVELOPMENT?					
Factors in High Quality Professional Development	Professional Development Program	Other Service Programs, When They Provide Professional Development			
	Eisenhower	Title I	Title VI	Title VII	Goals 2000
High standards, all students	Requires	Requires	Encourages	Requires	Requires
Professional knowledge & skills	Requires	Requires	Encourages	Encourages	Requires
Extended, in-depth learning opportunities	Requires	No reference	Encourages	Encourages	Encourages
Expanded roles	Requires	Requires	Encourages	Encourages	Requires
Linkages	Requires	Requires*	Encourages	Encourages	Encourages
Accountability	Requires	Requires	Encourages	Encourages	Encourages
Note: * Title I encourages some linkages (Sec. 1119(g)) and requires others (Sec. 1119(b)(1)(C)). Source: U.S. Department of Education.					

Title II—Eisenhower Professional Development Program

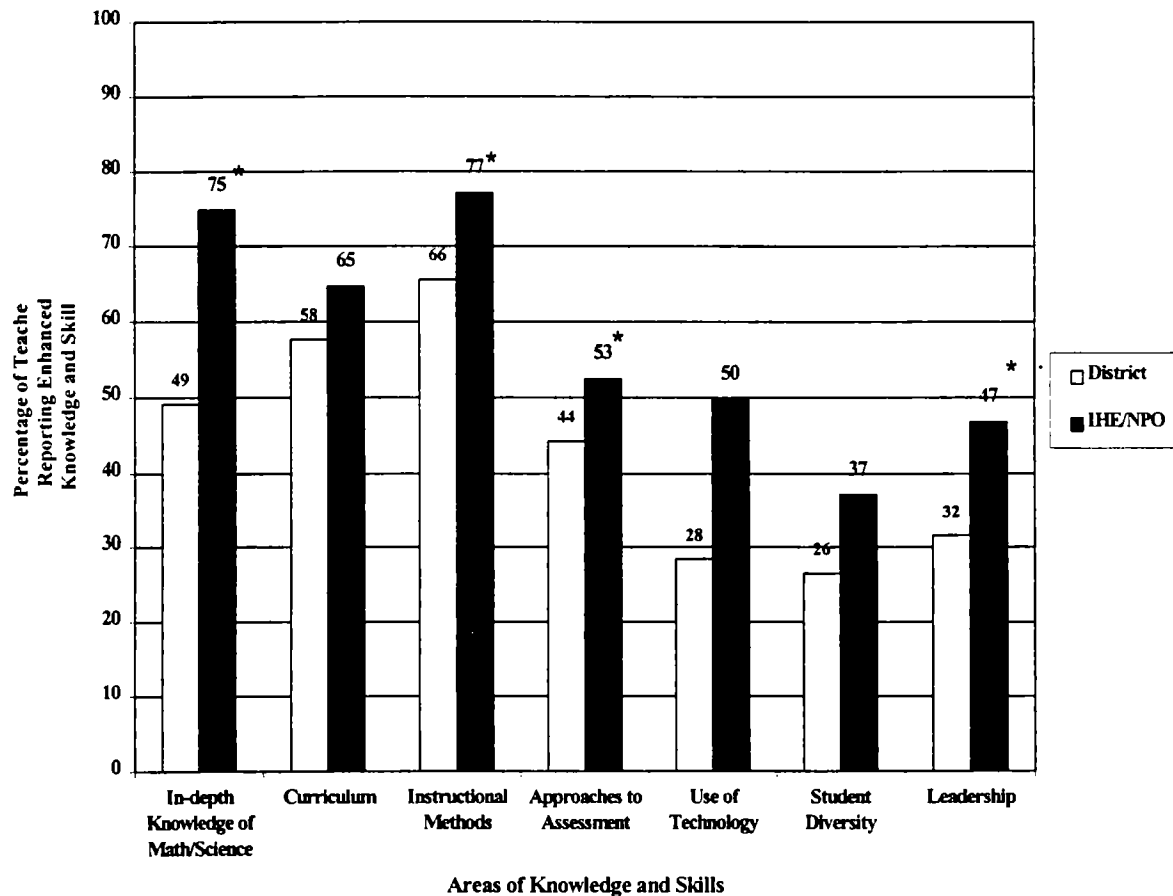
The Eisenhower program has achieved some of the goals established in the Department of Education's performance indicators for the Government Performance and Results Act, and has come close to meeting others.

Enhancing teachers' knowledge and skills. Preliminary analyses of survey data show that the program meets the goal of improving teacher knowledge and skills. However, the higher education and non-profit organization part of Eisenhower is producing results comparable to exemplary professional development activities, whereas the district-sponsored part of the Eisenhower program is not. Sixty-six percent of teachers participating in Eisenhower-assisted

activities funded under the district component of the program reported that the activities enhanced their knowledge and skills in instructional methods, and 58 percent reported that participation enhanced their knowledge and skills in curriculum content.²⁸ (These percentages reflect the percentage of teachers who reported a "4" or a "5" on a 5-point scale where "5" means to "a great extent" and "1" means "not at all.") (See Exhibit 5.6.)

Program Indicator: By 1998, over 50 percent of a sample of teachers participating in Eisenhower-assisted professional development will show evidence that participation has resulted in an improvement in their knowledge and skills.

EXHIBIT 5.6
PERCENTAGE OF TEACHERS REPORTING ENHANCED KNOWLEDGE
AND SKILLS DUE TO PARTICIPATION IN TWO TYPES OF
EISENHOWER-ASSISTED PROFESSIONAL DEVELOPMENT ACTIVITIES



Notes: "District" refers to teachers who participated in Eisenhower-assisted activities provided through the district component of the program.

"IHE/NPO" refers to teachers who participated in Eisenhower-assisted activities supported through the IHE/NPO (institution of higher education/not-for-profit organization) component of the program.

The symbol "*" indicates that the difference between district and IHE/NPO activities is statistically significant at least the .01 level.

Source: U.S. Department of Education, unpublished tabulations from the Evaluation of the Eisenhower Professional Development Program—State and Local Activities, 1999. (Results are based on preliminary analyses and do not include teachers who were late in responding.)

However, only 49 percent of participants in district-level Eisenhower activities reported that the professional development deepened their knowledge of math or science content. The 49 percent represents teachers who answered with a "4" or a "5" on a 5-point scale (1= "not at all," "5" = "to a great extent") when asked to report the extent to which a selected Eisenhower-assisted activity enhanced their knowledge and skills.

In a recent study of exemplary math and science professional development programs sponsored by the National Science Foundation (NSF), 44 percent of participants in outstanding teacher development programs reported that the programs enhanced their knowledge and understanding of science content to “a great extent.”²⁹ If we isolate the percentage of participants in Eisenhower district-level activities who reported that the activity enhanced their math or science knowledge “to a great extent” (value of “5” on the 5-point scale), the percentage is reduced to 24 percent. Thus, a comparison of the NSF study results with these Eisenhower district-level results indicates that district-level Eisenhower activities are not producing the outcomes exhibited by exemplary professional development programs.

On the other hand, Eisenhower-assisted activities funded through competitive state grants to institutions of higher education (IHEs) and not-for-profit organizations (NPOs) are exhibiting outcomes that are comparable to those exhibited by exemplary professional development programs. For example, 49 percent of teachers participating in activities sponsored by institutions of higher education (IHEs) and nonprofits reported that participation deepened their content knowledge in mathematics and science to a “great extent.” (This is even better than the 44 percent of teachers who reported such an outcome as summarized in the NSF study of exemplary programs.) When the percentage of IHE/NPO participants answering with a value of “4” are added to the percentage answering with a value of “5,” the total percentage increases to 75 percent.

Preliminary analyses suggest that Eisenhower activities funded through IHEs and NPOs are more effective than district-sponsored activities because the IHE/NPO activities are more intensive and are more consistent with best practices in professional development activities. The report of the national evaluation to be released in summer 1999 will examine activities sponsored by institutions of higher education and nonprofits and district activities in more detail.

In other areas of teacher knowledge and skill development, less than half of participating teachers in district-administered Eisenhower activities felt that the activities enhanced their knowledge and skills. Only 44 percent of teachers in district-sponsored Eisenhower activities indicated that the professional development improved their approaches to student assessment. Approximately 28 percent of teachers reported that district-sponsored activities improved their use of technology, and 26 percent reported that the professional development helped to improve their strategy for teaching diverse student populations. (These percentages reflect the percentage of respondents who answered a question about enhanced knowledge and skills with a value of “5” or “4” on the five-point scale.)

It should be emphasized that these results are based on teacher self-reported data collected at one point in time, and it is possible that teachers may overstate the degree to which professional development has enhanced their knowledge and skills. The national evaluation of the Eisenhower Program also collected longitudinal data on classroom teaching practices for a sample of teachers. When these data are analyzed, they will permit a more rigorous assessment of the extent to which participation in professional development has enhanced teaching skills. Results from this longitudinal study will be available early in 2000.

The Department’s goal of having over 50 percent of Eisenhower teachers participate in activities aligned with high standards is being met. Exhibit 5.7 shows that the alignment of professional development with standards can take a variety of forms.

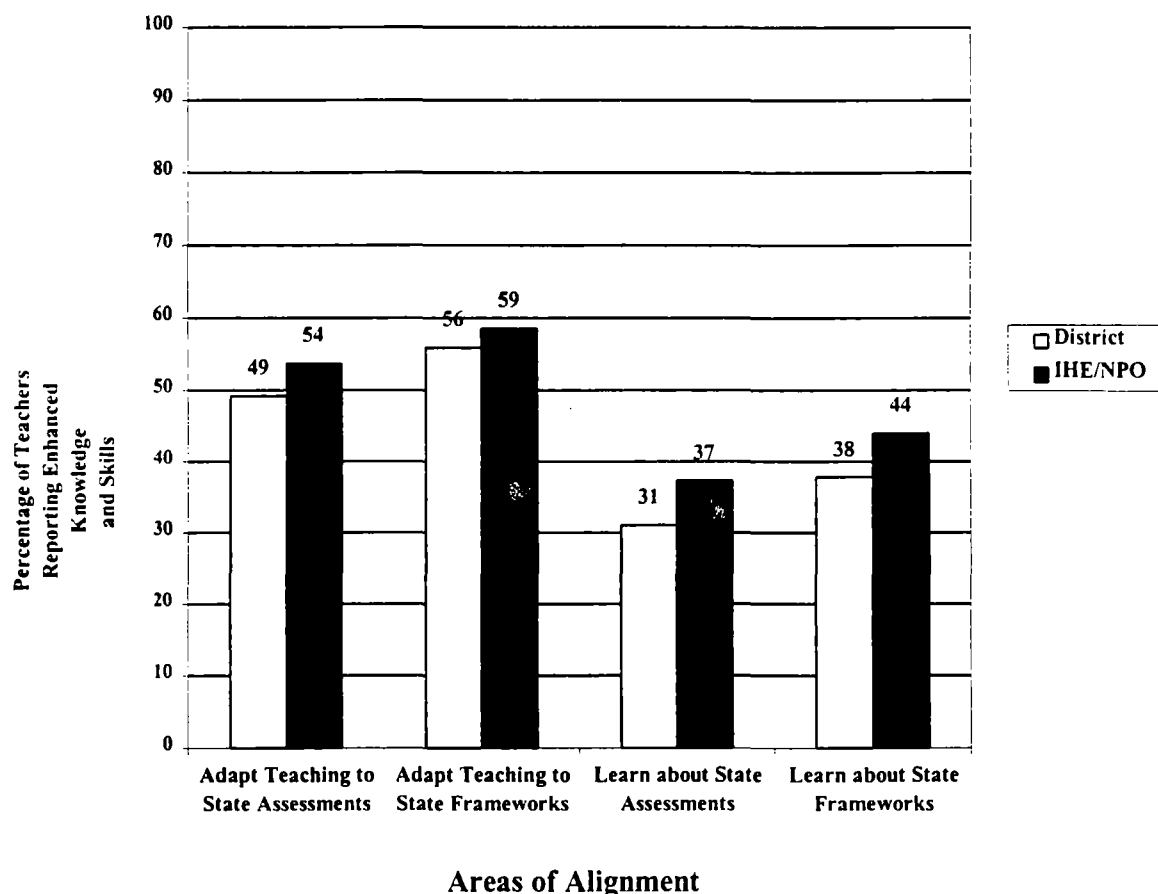
- Fifty-six percent of teachers who participated in district Eisenhower-assisted activities reported that the activities

Program Indicator: By 1998, over 50 percent of teachers participating in district-level or higher education Eisenhower-assisted professional development will participate in activities that are aligned with high standards.

enhanced their capacity to teach in ways consistent with state standards and curriculum frameworks, and 49 percent reported that the activities enhanced their capacity to meet state assessment requirements.

- The degree of alignment with high standards is similar for district activities and activities sponsored by institutions of higher education and nonprofits.

EXHIBIT 5.7
PERCENTAGE OF TEACHERS REPORTING ENHANCED KNOWLEDGE
AND SKILLS CONCERNING STATE ASSESSMENTS
AND FRAMEWORKS DUE TO PARTICIPATION IN EISENHOWER-ASSISTED
PROFESSIONAL DEVELOPMENT ACTIVITIES



Source: U.S Department of Education, unpublished tabulations from the Evaluation of the Eisenhower Professional Development Program—State and Local Activities, 1999. (Results are based on preliminary analyses and do not include teachers who were late in responding.)

Notes: “District” refers to teachers who participated in Eisenhower-assisted activities provided through the district component of the program.

“IHE/NPO” refers to teachers who participated in Eisenhower-assisted activities supported through the IHE/NPO (institution of higher education/not-for-profit organization) component of the program.

There are no statistically significant differences between district and IHE/NPO activities.

Surveys of districts corroborate the extent of alignment. For example, a national survey of district administrators found that 56 percent of districts reported spending Eisenhower funds on professional development focused on district or state content or performance standards and 45 percent on assessments linked to those standards.³⁰ (The 56 percent of districts represent 76 percent of students and the 41

percent of districts represent 54 percent of all students.) Virtually all Eisenhower project coordinators surveyed by the national evaluation of Title II report that their activities are aligned with state mathematics and science standards, and most district coordinators report that activities are aligned with state mathematics and science assessments.³¹

Providing professional development that emphasizes deeper content knowledge and reflection on practice.

Approximately 50 percent of teachers participating in district activities reported that the Eisenhower-assisted activities placed a major emphasis on deepening content knowledge, and 67 percent of teachers participating in activities sponsored by institutions of higher education and nonprofits reported a major emphasis on content knowledge. A recent research synthesis of professional development in mathematics and science conducted for the national evaluation of Title II, as well as a study of professional development and student mathematics achievement in California, indicate that professional development that focuses on subject-matter content and how to teach it is more effective in boosting student achievement than professional development that focuses on general classroom practices.³²

Program Indicator: By 1998, over 50 percent of teachers participating in district-level Eisenhower-assisted activities will participate in activities reflecting best practices, including a focus on continuous improvement.

Exhibit 5.8 shows that Eisenhower-assisted activities are more likely to provide teachers with an opportunity to discuss the implementation of new teaching approaches than to provide teachers with an opportunity to practice new methods in their classrooms and receive feedback on the quality of implementation. For example, about 33 percent of teachers reported that the activities provided an opportunity to meet with other participants to discuss classroom implementation. But just 9 percent received coaching or mentoring in the classroom.

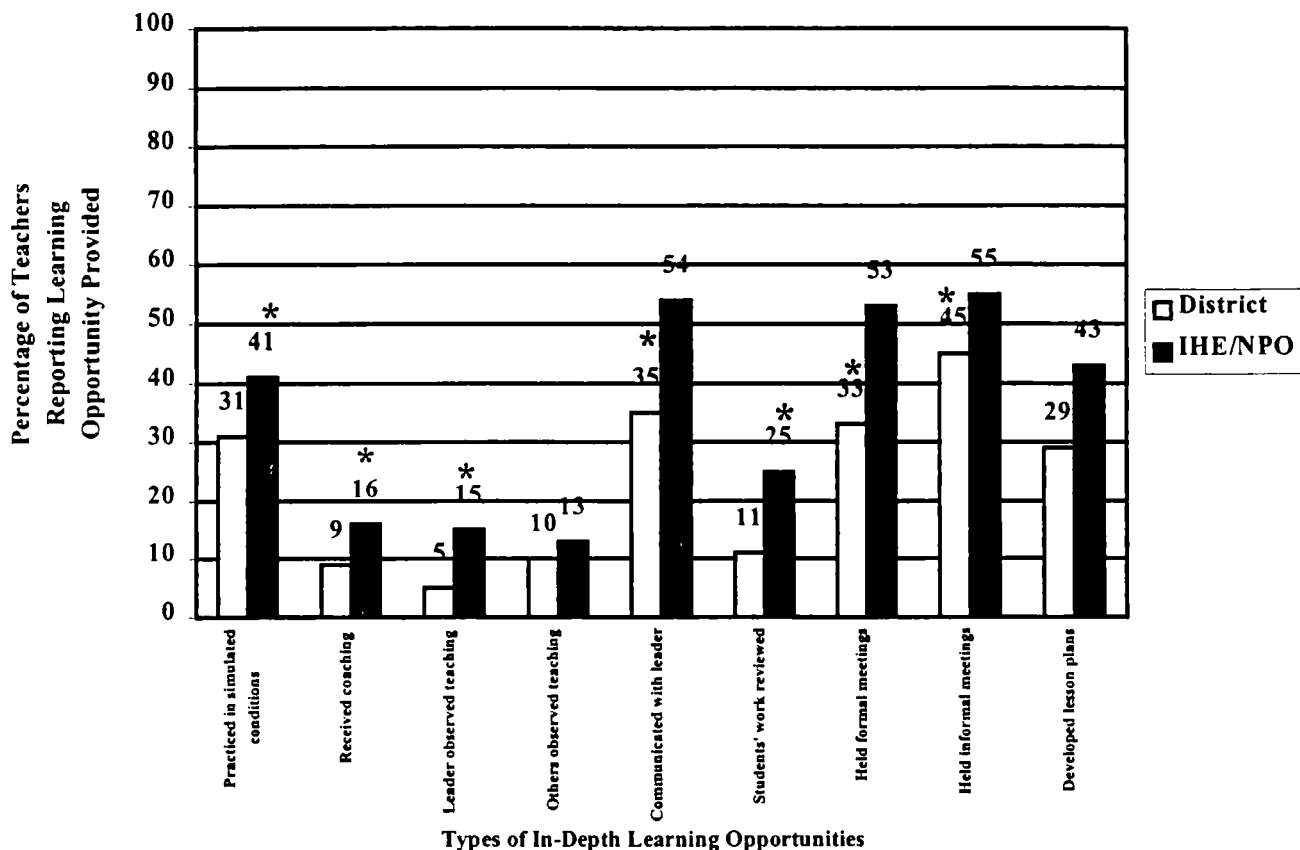
The institutions of higher education and nonprofits component of the program tends to provide more extensive opportunities for teachers to practice new methods.

The district-administered part of the Eisenhower program has not yet met the goal of providing at least 35 percent of participants with a professional development activity that is a component of professional development extended over an entire school year. Results are much more positive for the institutions of higher education and nonprofits component. About 31 percent of teachers participating in district Eisenhower-assisted activities reported that the activity extended more than one month, while about 61 percent of activities sponsored by institutions of higher education and nonprofits extended for more than one month.

Program Indicator: By 1998, 35 percent of teachers participating in district-level Eisenhower-assisted activities will participate in activities that are a component of professional development that extends over the school year.

Similar differences between district activities and those sponsored by institutions of higher education and nonprofits can also be observed in the total number of hours of instruction provided. During the 1997-98 school year, district Eisenhower-assisted activities lasted an average of 27.4 hours, while activities sponsored by institutions of higher education and nonprofits lasted an average of 59.2 hours. The number of hours of instruction provided as part of district-level, Eisenhower-assisted activities appears to have more than doubled since 1988-89, when an earlier evaluation of the Eisenhower program was conducted.³³

EXHIBIT 5.8
PERCENTAGE OF TEACHERS REPORTING THAT SPECIFIC LEARNING
OPPORTUNITIES WERE PROVIDED AS PART
OF EISENHOWER-ASSISTED PROFESSIONAL DEVELOPMENT ACTIVITIES



Source: U.S. Department of Education, unpublished tabulations from the Evaluation of the Eisenhower Professional Development Program—State and Local Activities, 1999. (Results are based on preliminary analyses and do not include teachers who were late in responding.)

Notes: "District" refers to teachers who participated in Eisenhower-assisted activities provided through the district component of the program.

"IHE/NPO" refers to teachers who participated in Eisenhower-assisted activities supported through the IHE/NPO (institution of higher education/not-for-profit organization) component of the program.

The symbol "*" indicates that the difference between district and IHE/NPO activities is statistically significant at least the .01 level.

The national evaluation also asked teachers about the extent to which Eisenhower-assisted activities built explicitly on earlier professional development, and were followed up by activities that extended what teachers learned. About 33 percent of teachers who participated in district Eisenhower-assisted activities reported that the activities built on earlier activities, and 54 percent indicated that Eisenhower-assisted activities were followed up with other professional development. The latter differs substantially between institutions of higher education and nonprofits and districts: about 69 percent of teachers in activities

sponsored by institutions of higher education and nonprofits reported follow-up professional development.

Involving teachers who serve Title I students and others from diverse populations in Eisenhower activities. The law

encourages districts to make special efforts to provide Eisenhower activities to teachers from high poverty schools.

Forty percent of teachers are in districts that strongly emphasize recruiting teachers of low-income students, and about 18 percent of teachers are in districts that give some emphasis to recruiting teachers of low-income students. Approximately 30 percent of teachers are in districts that strongly emphasize recruiting teachers from Title I schools, and 28 percent of teachers are in districts that place some emphasis on recruiting teachers from Title I schools.³⁴

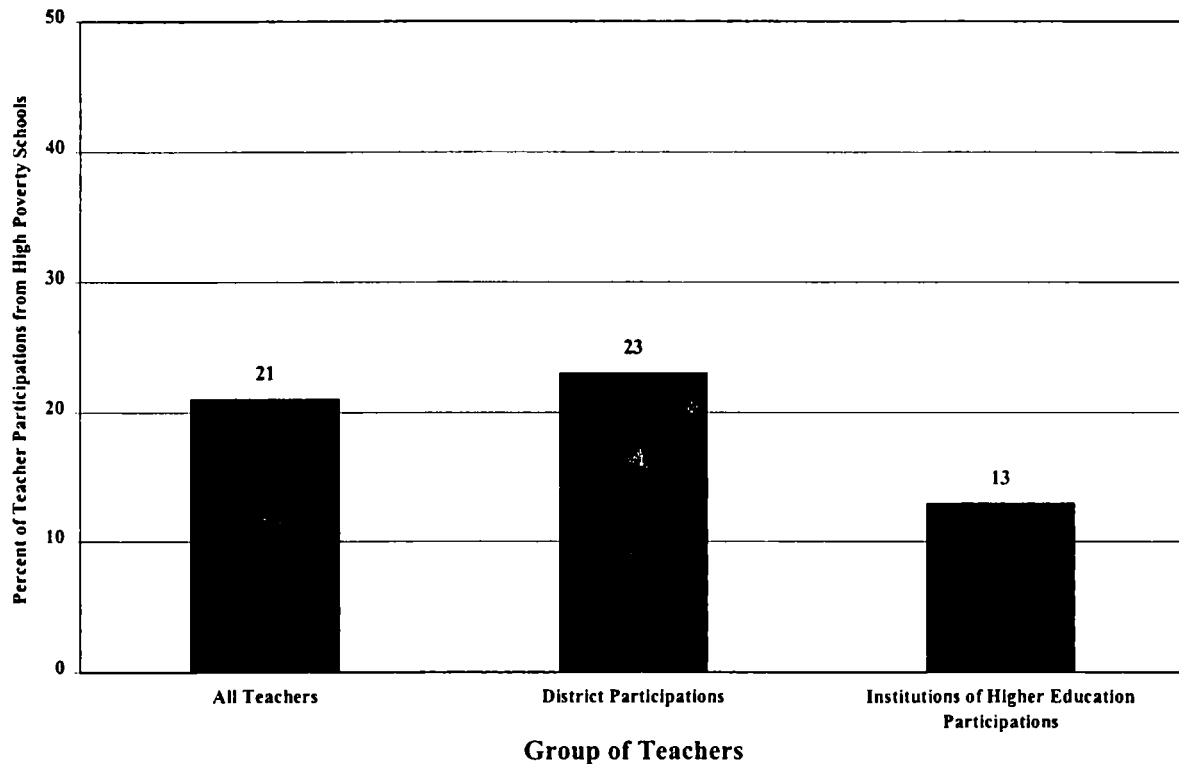
Program Indicator: The proportion of teachers participating in Eisenhower-assisted activities who teach in high-poverty schools will exceed the proportion of the national teacher pool who teach in high-poverty schools.

However, preliminary analyses of survey data show that Eisenhower Professional Development activities are not especially targeted on teachers from high-poverty schools. The proportion of district-level Eisenhower participations that represent teachers who teach in high-poverty schools is not significantly higher than the proportion of teachers across the nation who teach in such schools.

Exhibit 5.9 shows that 23 percent of Eisenhower district-level participations represent teachers who teach in high-poverty schools, and 21 percent of teachers across the nation teach in such schools.³⁵

Eisenhower-assisted activities sponsored by institutions of higher education (IHEs) and non-profit organizations (NPOs) are even less targeted on teachers who work in high-poverty schools. Only 13 percent of the participations in the Eisenhower activities sponsored by IHEs and NPOs represent teachers who work in high-poverty schools.

EXHIBIT 5.9
PERCENTAGE OF TEACHER PARTICIPANTS FROM HIGH POVERTY SCHOOLS
IN EISENHOWER-SPONSORED ACTIVITIES



Source: US Department of Education, unpublished tabulations from the Evaluation of the Eisenhower Professional Development Program—State and Local Activities, 1999.

Coordinating Eisenhower activities with other aspects of reform. Overall, among teachers who work in districts that receive both Eisenhower and Title I funds, more than 80 percent are in districts where the Eisenhower coordinators report that they work closely with the Title I staff. Among teachers who work in districts that receive both Eisenhower and Title I funds, 50 percent work in districts where Eisenhower coordinators report that they have co-funded activities with Title I.

Among teachers who work in districts that receive both Eisenhower and Title III, VI, VII, or Goals 2000 funds, 60 to 80 percent are in districts that report coordination among activities sponsored by Title II and these programs³⁶ More than 80 percent of teachers in districts that receive NSF Local Systemic Initiative, Urban Systemic Initiative, or Rural Systemic Initiative funds report coordination among activities supported by Eisenhower and these NSF projects.

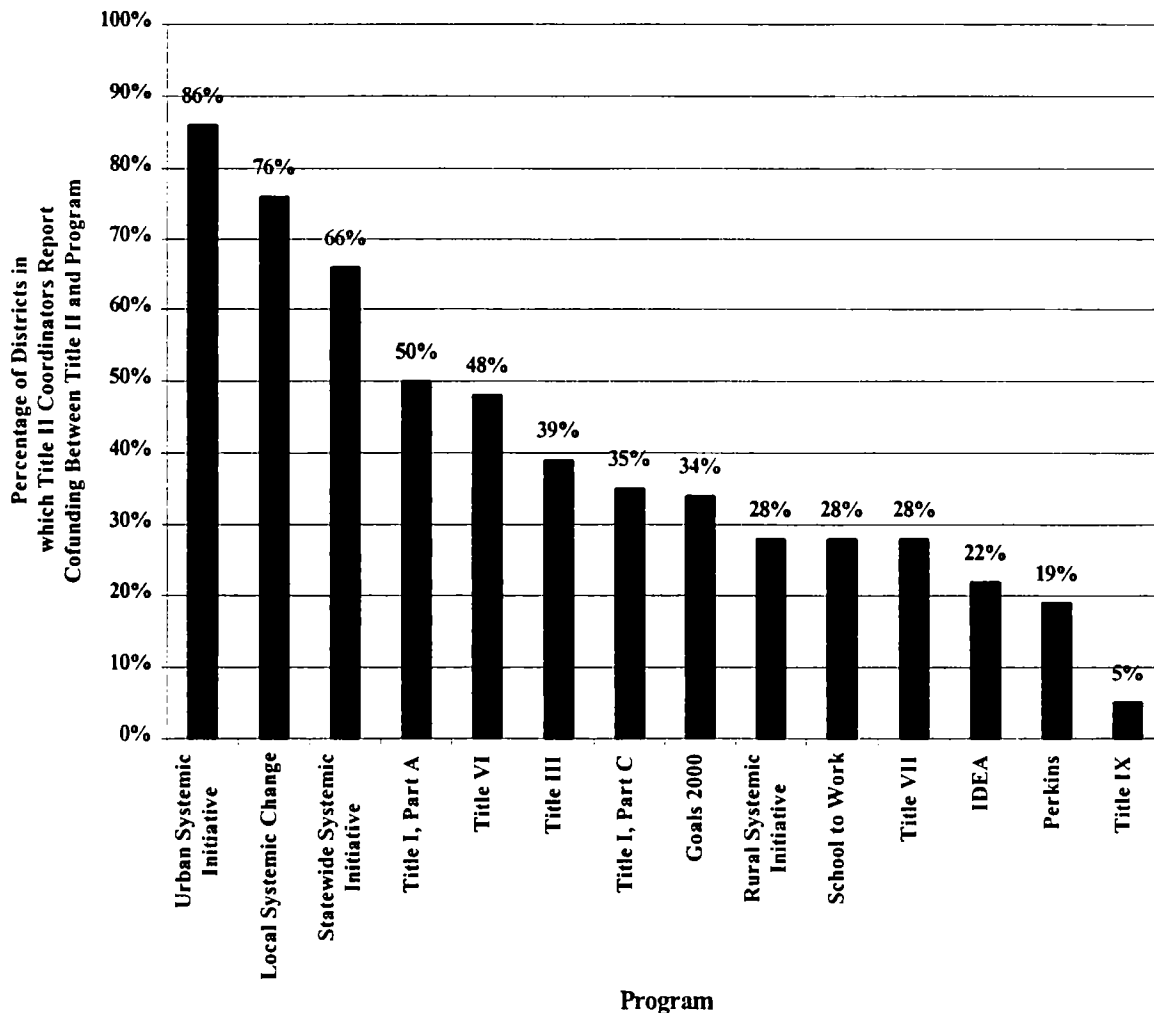
Program Indicator: By 2000, over 80 percent of States will report that they coordinate and collaborate with Title I state coordinators when they develop their plans for professional development.

Although most programs are coordinating Eisenhower professional development funds with funds from other programs, case study data suggest that some coordination activities may be superficial and that there is room for growth in this area. Evaluation

case study data indicate that districts are more likely to co-plan and co-fund Eisenhower activities with the NSF systemic initiatives than with most other federal programs. This is partly because of the common focus on mathematics and science across Eisenhower and the NSF projects.

Districts that co-fund and co-plan their Eisenhower Professional Development Activities with other federal programs are more likely to offer Eisenhower activities that are of high quality.

EXHIBIT 5.10
PERCENTAGE OF DISTRICT TITLE II COORDINATORS REPORTING COFUNDING
WITH OTHER FEDERAL PROGRAMS



Note: These data are conditional on the program operating in the district.

Source: U.S. Department of Education, unpublished tabulations from the Evaluation of the Eisenhower Professional Development Program—state and local activities, 1999.

Developing and using performance indicators for the program. The 1994 reauthorization required the development of performance indicators for professional development. Thus far, only 30 states have done so for Title II.

Overall, as of the fall of 1998, 30 states had developed performance indicators for the Eisenhower program, but only 8 states had developed these indicators jointly with other programs.³⁷ For the purpose of comparison, Exhibit 5.11 provides information on the percentage of states that have developed indicators for other programs. The legal requirement for states to have indicators has, not surprisingly, had the intended effect: the Eisenhower program tends to have indicators while other programs that are not legally required to have indicators, do not. The quality of the Eisenhower state indicators, however, remains uneven.

Program Indicator: By 1998, 50 percent of all states will have developed performance indicators for integrated professional development across programs (including Eisenhower) in order to support systemic reform and will have data collection systems in place.

The Eisenhower Program also requires that *districts* set performance indicators for improving teaching and learning through professional development.³⁸ Less than one-third of sampled teachers are in districts with Title II projects that have developed performance indicators. In addition, only about 19 percent of teachers work in Eisenhower districts that are collecting data for Eisenhower performance indicators. It appears that many districts are unaware of the requirement that they do so.³⁹

Limited information is available on the other Department programs that provide professional development as part of their services to children. Available information is summarized below:

Title I

Most Title I schools use Title I funds to support professional development. Almost 80 percent of Title I principals report using their Title I funds for teacher learning related to helping all students achieve high standards, although no information is available on the quality of these activities.⁴⁰

Title VI: Innovative Education Program Strategies

Only 24 percent of districts said they used Title VI funds for professional development. However, these tend to be the larger districts, and they enroll approximately 57 percent of all students.⁴¹ In addition, 44 percent of the districts that use Title VI for professional development “a great deal” report that the Title VI professional development is focused on “district or state content or performance standards.”⁴²

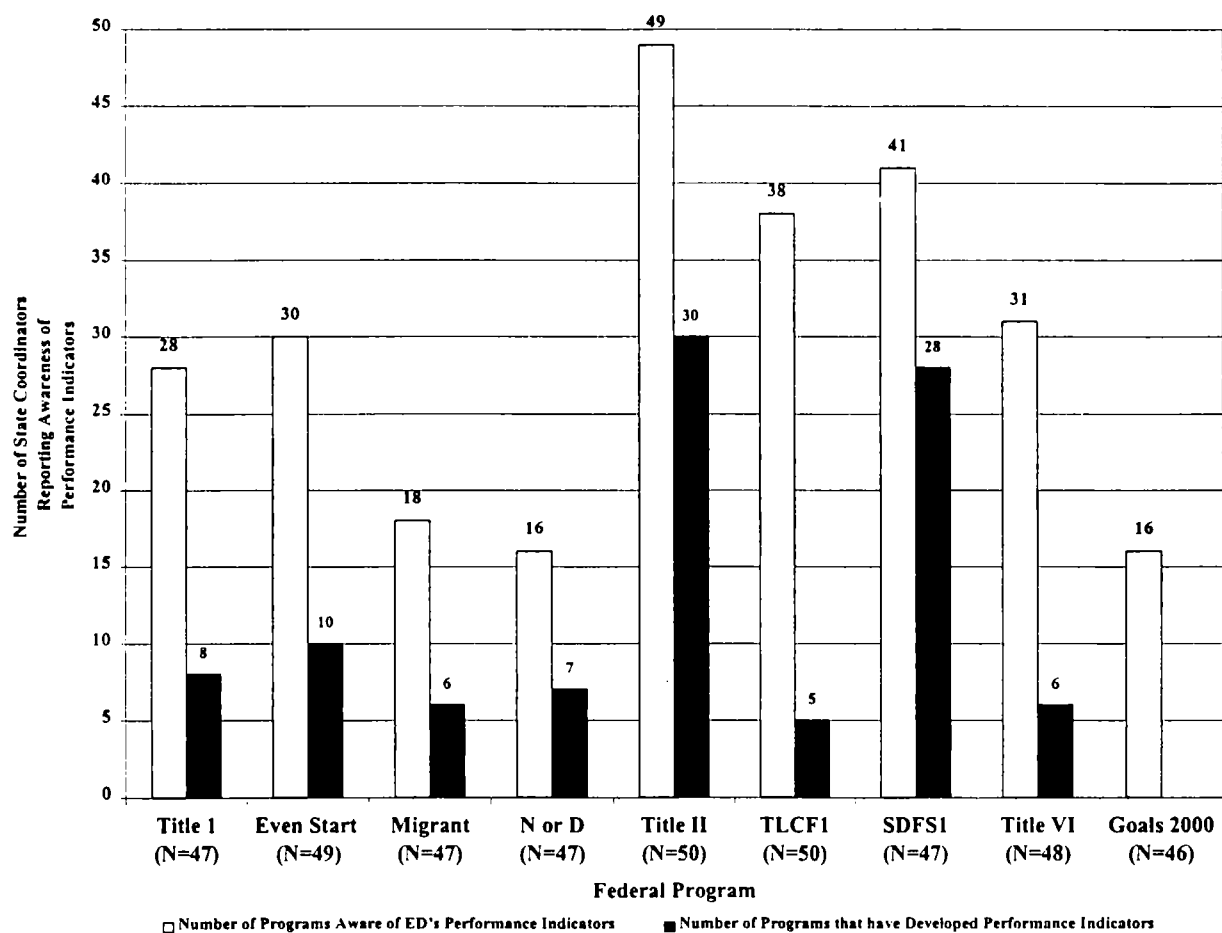
Title VII: Bilingual Education, Language Enhancement, and Language Acquisition Programs

The Department has set the following target for Title VII: each year, the numbers of teachers in Title VII systemwide and comprehensive school grants receiving quality professional development in the instruction of LEP students will increase by 20%. Data are expected next year on whether or not the Department of Education’s target has been met.

Goals 2000

Goals 2000 funds are being used to improve teacher knowledge and skills. For example, according to 1997 state reports, more than 60 percent of Goals 2000 grantee districts sponsored activities to improve the specific skills or content knowledge of teachers and student teachers.⁴³ In 1998, 89 percent of Goals 2000 grantee districts reported spending Goals 2000 funds for professional development linked to standards.⁴⁴ About 41 percent of public schools in the country have involved staff in standards-based professional development funded through Goals 2000 grants.⁴⁵

EXHIBIT 5.11
NUMBER OF STATE PROGRAM ADMINISTRATORS WHO REPORT
DEVELOPING OR BEING AWARE OF PERFORMANCE INDICATORS



Source: Follow-up Study of State Implementation of Federal Elementary and Secondary Education Programs

Options for Strengthening the Programs

The national evaluation of the Eisenhower program shows that many Eisenhower-assisted activities reflect some of the characteristics of high-quality professional development, and program

administrators show an awareness of what it takes to provide high quality professional development. On the other hand, a substantial portion of Eisenhower-assisted activities—especially activities supported through the district formula grant component of the program—do not yet provide the kinds of in-depth, extended learning opportunities that research suggests will lead to important improvements in teaching practice and student achievement. Furthermore, the requirement for integrated planning, monitoring, and continuous improvement of Eisenhower-supported professional development in conjunction with other professional development is only beginning to take hold.

Given the ambitious professional development initiatives in the 1994 amendments to ESEA, federal programs appear to have established a strong foundation for future development. At the same time, the available evidence to date suggests six strategies that should be followed to sustain and improve the influence and effectiveness of federally funded professional development.

First, federal professional development policies must continue to emphasize the importance of professional development that focuses on subject matter content and how to teach it. The national evaluation of Title II indicates that, in many districts, the decade-long focus of the program on mathematics and science has helped foster the capacity to deliver effective professional development in these disciplines. One indication of this discipline-based capacity is the widespread co-planning and co-funding of Eisenhower activities with the NSF State, Urban, and Rural Systemic Initiatives, as well as the NSF Local Systemic Change Program.⁴⁶ As federal efforts to improve professional development expand, federal guidance and reporting requirements should ensure that this content focus is sustained and deepened. In particular, if federal support of professional development expands to include additional core subjects beyond mathematics and science, it is critical to ensure that content specialists are involved at the district, state, and federal levels.

Second, federal professional development programs should focus more on collaborative, “active learning” opportunities. Data from the evaluation of the Eisenhower Program indicate that teachers perceive collaborative, “active learning” opportunities—observing instructional practices, being coached on new instructional practices, practicing in simulated conditions, developing lesson plans and reviewing student work -- to lead to greater improvements in knowledge, skills and classroom practice. Therefore, these practices should become a priority in all federal professional development programs.

Third, state and local indicator reporting systems should be strengthened through technical assistance and increased resources. The requirement that States and districts develop indicators has resulted in Eisenhower having more and higher quality indicators than other federal programs, but these state and local indicators are still inadequate. State and local agencies lack the capacity to develop sophisticated indicator systems. Partly this is due to a lack of expertise, but it is also a direct result of a lack of funds for developing and reporting on indicators. Another important factor is the uneven condition of state and local data collection and reporting systems and the fragmented nature of education data at the local, state, and federal levels.

Fourth, grantees should be required to use data on the quality and effects of their professional development activities for both continuous improvement and accountability purposes. They should be encouraged to collect and analyze data on quality and effects in order to identify areas that need improvement. Grantees should also be accountable for their use of professional development funds, and should thus be required to track and report on the quality and effects of professional development more carefully without constraining local options. Given the limited funds available for professional development and the evidence that these funds are often spent on activities that research suggests have

limited results, adding accountability provisions to the reauthorized legislation might lead to greater productivity.

Accountability provisions should encourage grantees to:

- **Measure changes in teaching practice.** For example, because teaching practice is the target of professional development, one direct way to assess the impact of professional development activities funded by federal programs is to measure changes in teacher classroom behavior. This would provide evidence about whether methods, arrangements, and materials held to be beneficial for students are being used as a result of expenditures for professional development. Evaluations of professional development targeting classroom practices could include follow up measures of the extent to which they are used as intended and adapted in the recommended ways.
- **Measure the extent to which schools incorporate time for classroom observation, reflection, and the analysis of teaching.** In addition, given the evidence that Eisenhower-assisted activities frequently do not provide teachers with the kinds of in-depth learning opportunities required to practice and reflect on new skills, it may be useful to encourage districts to report explicitly on the degree to which such opportunities are offered. For example, one could evaluate the impact of extended interventions, such as those funded by Eisenhower, intended to improve teachers' capacity to observe teaching, coach each other in new methods, and participate in study groups related to effective teaching, by collecting data on changes in school schedules that provide time explicitly for such activities. Many dimensions of impact may be difficult to measure, but some may be observed readily. Although any federally-supported comprehensive plan ought to have improved achievement for all students as its goal, a useful way to demonstrate the effectiveness of professional development is to show that it led to improved teaching.

Fifth, federal professional development programs should place a much greater emphasis on serving teachers who work in high-poverty schools and teachers who would not necessarily volunteer to participate in professional development. The Eisenhower Professional Development Program has not especially targeted teachers from high-poverty schools. In addition, most districts serve many teachers who volunteer to participate in Eisenhower rather than targeting teachers who may be less inclined to want to improve their content knowledge and pedagogical practices. If federal programs are to increase educational equity and excellence, they must reach teachers of the most disadvantaged students and teachers who are most in need of improving their practice.

Finally, new strategies should be developed to encourage districts and institutions of higher education and nonprofits to collaborate in the design and provision of professional development. Given the evidence that Eisenhower-assisted professional development funded through the institutions of higher education and nonprofits component of the program tends to be of higher quality and greater intensity than professional development funded through the district formula grant component, it may be helpful to encourage districts to provide explicit plans for collaboration with institutions of higher education and nonprofits as one element of a district application.

-
- ¹ Linda Darling-Hammond and Deborah Ball, *Teaching for High Standards: What Policymakers Need to Know and Be Able to Do*, (Philadelphia, PA: CPRE Joint Report Series, 1998): 1
- ² R. Greenwald, L. Hedges, and R. Laine, "The Effect of School Resources on Students' Achievement," *Review of Educational Research*, 66, (1996, Fall): 361-396.
- ³ The National Education Goals Panel, *The National Education Goals Report*, (Washington, DC: National Education Goals Panel, 1997) xv-xvi
- ⁴ Michael Knapp, Andrew Zucker, Nancy Adelman, and Mark St. John, *The Eisenhower Mathematics and Science Education Program: An enabling Resource for Reform*, (Washington DC: U.S. Department of Education, 1991): 35.
- ⁵ PL 103-382, Section 1001(c)(5), (6)
- ⁶ National Science Foundation, Guide to Programs, FY 1997, Arlington, VA: Author, p. 19
- ⁷ The exact percentage is not known due to the uncertainty in the expenditure of Title VII, Subpart 1 funds.
- ⁸ Beatrice Birman et al., i.
- ⁹ States and districts may apply to the federal for waivers from most ESEA provisions, including the requirement that the grantee's share of the first \$250 million be spent on math and science professional development.
- ¹⁰ Beatrice Birman, Alison Reeve, and Cheryl Sattler, *The Eisenhower Professional Development Program: Emerging Themes from Six Districts*, (Washington, DC: U.S. Department of Education, 1998) 16; United States Department of Education, nd; American Federation of Teachers, 1995; *National Education Goal 4*, (Washington, DC: Authors, 1995); PL 103-382, Section 2001(4)
- ¹¹ Cohen, David K., and Hill, Heather C., (1998) *Instructional Policy and Classroom Performance: The Mathematics Reform in California*. Philadelphia: Consortium for Policy Research in Education.
- ¹² Kennedy, M.M. (1998). *Form and substance in inservice teacher education*. Madison, WI: National Institute for Science Education.
- ¹³ *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers*, Fast Response Survey System, (Washington, DC: National Center for Education Statistics, 1999). Pages 27 to 31.
- ¹⁴ NCES 1999-080, by Laurie Lewis, Basmat Parsad, Nancy Carey, Nicole Barfai, Elizabeth Farris, Becky Smerdon. Project Officer: Bernie Greene. Washington, DC: 1999.
- ¹⁵ NCES 1999-080, by Laurie Lewis, Basmat Parsad, Nancy Carey, Nicole Barfai, Elizabeth Farris, Becky Smerdon. Project Officer: Bernie Greene. Washington, DC: 1999.
- ¹⁶ *Implementing Schoolwide Programs: Volume 1, An Idea Book for Planning*, (Washington, DC: U.S. Department of Education, 1990, p. 41 and 49). Phone communication with Richard Dilorenzo, 11/4/98.
- ¹⁷ Kati Haycock, "Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap," *Thinking K-16*, 3, Issue 2, (1998, Summer): 7-9.
- ¹⁸ *Follow-Up Public School Survey on Education Reform*, Unpublished tabulations, Table 38, 9/20/98.
- ¹⁹ *Follow-Up Public School Survey*, Unpublished tabulations, Tables 38, 39, 42, 9/20/98.
- ²⁰ Mary S. Leighton, Eileen O'Brien, Karen Walking Eagle, Lisa Weiner, George Wimberly, and Peter Youngs, *Roles for Education Paraprofessionals in Effective Schools: An IdeaBook* (Washington, DC: U.S. Department of Education, 1997).
- ²¹ H. Fleischman and P. Hopstock, *Descriptive Study of Services to LEP Students: Volume II, Survey Results*, (Washington, DC: U.S. Department of Education, 1993).
- ²² Ramirez, JD. *Longitudinal Study of Structured English Immersion Strategy: Early Exit and Late Exit Transitional Bilingual Programs for Language Minority Children*, Washington, DC: USED PES, 1992
- ²³ *Status of Education Reform in Public Elementary and Secondary Schools: Teachers' Perspectives*, (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1999), page 4.

²⁴ *Teacher Quality: A Report on the Preparation and qualifications of Public School Teachers*, (Washington, DC, National Center for Education Statistics, U.S. Department of Education, 1999). In addition, it is important to note that 41 percent of teachers surveyed felt that they were “moderately” prepared to implement state or district standards in their classrooms.

²⁵ *Teacher Quality: A Report on the Preparation and qualifications of Public School Teachers*, (Washington, DC, National Center for Education Statistics, U.S. Department of Education, 1999), Page 23.

²⁶ *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers*, (Washington, D.C., National Center for Education Statistics, U.S. Department of Education, 1999), page B-24.

²⁷ *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers*, (Washington, D.C., National Center for Education Statistics, U.S. Department of Education, 1999).

²⁸ American Institutes for Research, *Evaluation of the Eisenhower Professional Development Program*, unpublished tabulations, March 1999. Teachers were asked to report the extent to which a selected Eisenhower-assisted activity in which they participated enhanced their knowledge and skills, using a 5-point scale (1=not at all, 5=to a great extent). Unless otherwise noted, the percentages discussed are the percentages of teachers reporting 4 or 5 on the 5-point scale.

²⁹ Nancy Carey, Joy Frechtling, Westat, Inc., *Best Practice in Action: Followup Survey on Teacher Enhancement Programs*, (Washington, DC: National Science Foundation, March 1997): 32.

³⁰ U.S. Department of Education, Unpublished tables from the *Study of Education Resources and Federal Funding*, 2/17/99, Table 28.

³¹ American Institutes for Research, *Evaluation of the Eisenhower Professional Development Program*, Unpublished Tabulations, March 1999.

³² See Mary Kennedy. (1998) *Form and Substance in Inservice Teacher Education*. National Institute for Science Education. Research Monograph No. 13. University of Wisconsin; and David K. Cohen and Heather C. Hill. (1998) *Instructional Policy and Classroom Performance: The Mathematics Reform in California*. Consortium for Policy Research in Education. CPRE Report Series RR-39. University of Pennsylvania

³³ The 1988-89 evaluation collected data on duration from districts rather than teachers, so a comparison of results from the 1988-89 and 1997-98 years should be interpreted as providing an indication of the general magnitude of the change in hours of instruction rather than a precise numerical estimate. The 1988-89 evaluation reported that, in the median district, activities supported by Eisenhower funds provided an average of 6 hours of instruction per participant. Preliminary data from the current evaluation indicate that the median duration of Eisenhower-supported activities was about 14 hours in 1996-97. The average of 27.4 hours reported in the text is a mean. (See Knapp, Michael S.; Zucker, Andrew A., Adelman, Nancy E., and St. John, Mark.. (1991). *The Eisenhower Mathematics and Science Education Program: An Enabling Resource for Reform*. U.S. Department of Education. Page 109).

³⁴ American Institutes for Research, *Evaluation of the Eisenhower Professional Development Program: Preliminary Tables*, Unpublished Tabulations, March, 1999.

³⁵ A high poverty school is defined as a school in which 50 percent or more of the students enrolled are eligible for a free lunch, as reported in the Common Core of Data.

³⁶ AIR, Unpublished Tabulations, March 1999.

³⁷ *Follow Up State Implementation Study Survey*, Unpublished tabulations, 1998.

³⁸ PL 103-382, Section 2208(a)(2).

³⁹ AIR, Unpublished Tabulations, March 1999.

⁴⁰ *Follow-up Public School Survey*, Unpublished tabulations, Table 32A, 11/6/98.

⁴¹ Preliminary tabulation, Study of Education Resources and Federal Funding, Table 25, 2/11/99.

⁴² Preliminary tabulation, Study of Education Resources and Federal Funding, Table 28, 2/17/99.

⁴³ Policy Studies Associates, *Goals 2000: Supporting State and Local Educational Improvement*, (Washington, DC: PSA, December 1997): 10

⁴⁴ U.S. Department of Education, Unpublished tables from the *Study of Education Resources and Federal Funding*, Table 6, February 5, 1999.

⁴⁵ *Follow-up Public School Survey*, question 53.

⁴⁶ Data from the current evaluation indicate that districts are more likely to co-plan and co-fund Eisenhower activities with the NSF systemic initiatives than with most other federal programs.

6. IS THE SAFE AND DRUG-FREE SCHOOLS AND COMMUNITIES ACT SUPPORTING EFFECTIVE SCHOOL DRUG AND VIOLENCE PREVENTION?

KEY FINDINGS

National Trends

- ***Drug and Alcohol Use.*** For the nation as a whole, in grades 8, 10, and 12, alcohol and drug use continue at much lower rates at school than they do overall. Overall, while the use of alcohol remains high (with a recent slight decrease for grades 8 and 10), 1998 results indicate that the aggregate use of other illicit drugs may finally be heading downward after six years of steadily climbing (due primarily to increases in marijuana use).
- ***School Violence.*** Schools nationally are comparatively safe places, and students in school today are not significantly more likely to be victimized than in previous years. Crime in or on the way to school has fallen, and most school crime is theft, not serious violent crime. However, a small proportion of schools experience serious crime and violence.

Safe and Drug-Free Schools Program

- ***Local Prevention Efforts.*** Nearly all elementary and secondary school principals report that their schools have formal written rules about drugs (95%) and weapons (94%). Elementary and secondary principals report implementing a variety of activities at school that are intended to prevent or reduce problem behavior.
- ***Problems with Implementation.*** While the flexibility that the Safe and Drug-Free Schools and Communities Act (SDFSCA) provides may be a boon to districts seeking to tailor program activities to local needs, districts may not necessarily select activities to match their needs assessments or goals and may seldom use activities that are based on research.
- ***Performance Indicators.*** The statute requires states to develop goals and objectives for their SDFSCA program, and all states have met this requirement. However, the quality of these goals and objectives varies.
- ***State Leadership.*** SDFSCA state coordinator offices often have very small staffs; in some cases, only one or two persons are responsible for hundreds of school districts, making intensive technical assistance to districts and oversight of district activities very difficult.
- ***Principles of Effectiveness.*** The Department has established these Principles to strengthen the quality of drug and violence prevention programs implemented with SDFSCA funds.
- ***Targeting.*** To target a greater percentage of program funds on high-quality programs in areas of significant need, the Department will expand National Programs activities in Fiscal Year 1999 by investing more than \$95 million in competitive grants designed to meet that goal.

The importance of providing safe havens for learning—schools that are free of drugs and violence—cannot be overstated. Schools, communities, and families must work together to provide effective programs to prevent drug use and violence and to establish and maintain safe, orderly, and drug-free learning environments. The seventh National Education Goal provides that by the year 2000, all schools in America will be free of drugs and violence and the unauthorized presence of firearms and alcohol, and will offer a disciplined environment conducive to learning. Similarly, one of the objectives of the U.S. Department of Education's Strategic Plan is that schools be strong, safe, disciplined, and drug free.

Federal efforts to prevent and reduce youth drug use and violence involve many different agencies including the Departments of Transportation, Defense, and Labor. Primary responsibility, however, rests with the Departments of Education, Health and Human Services, and Justice, and the Office of National Drug Control Policy, which oversees and coordinates all federal efforts to combat drug trafficking and to prevent and treat drug use. The Department of Education participates in the efforts of other agencies to prevent youth drug use and violence through joint planning and review of policies, plans, and reports, and through support for interagency data collection efforts and grants, such as the new "Safe Schools, Healthy Students" coordinated grant initiative of the Departments of Education, Justice, and Health and Human Services.

Introduction to the Program and the 1994 Legislative Changes

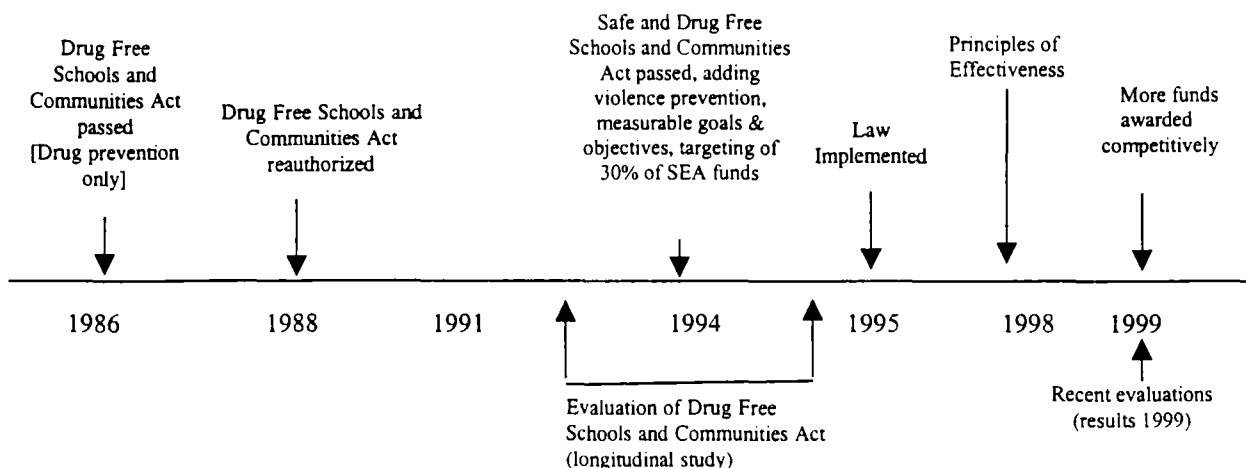
At the Department of Education, the Safe and Drug-Free Schools and Communities Act is the primary federal program that supports school-based drug prevention activities in schools nationally. Congress enacted the Drug-Free Schools and Communities Act (DFSCA) in 1986 to establish, operate, and improve drug and alcohol abuse education and prevention programs throughout the nation. When the program was reauthorized in 1994, it was expanded to include violence prevention efforts and renamed the Safe and Drug-Free Schools and Communities Act (SDFSCA). Through this Act, Congress sought to support the seventh National Education Goal by preventing violence in and around schools and by strengthening programs that prevent the illegal use of alcohol, tobacco, and drugs.

Other major legislative changes in 1994 were the addition of a requirement that states and districts develop measurable goals and objectives for their SDFSCA programs, and a new provision targeting a percentage of program funds to districts with a high need for drug- and violence-prevention funding.

The Gun-Free Schools Act of 1994 (enacted in response to concern about handgun-related youth violence) requires that each state have in effect a law requiring districts to expel for not less than one year any student found to have brought a firearm to school. In addition, districts receiving ESEA funds must adopt a policy that requires any student who brings a firearm to school to be referred to the criminal justice or juvenile delinquency system. Expelled students may be referred to an alternative educational setting, and administrators may modify expulsions on a case-by-case basis.

Exhibit 6.1 traces the Safe and Drug-Free Schools legislation from 1986 to the present.

EXHIBIT 6.1 SAFE AND DRUG FREE SCHOOLS AND COMMUNITIES ACT TIMELINE



Source: U.S. Department of Education.

SDFSCA is the primary source of federal funds to support school-based education to prevent drug use and violence. It has two major programs, the State Grants program and the National Programs. The majority of funds go to the State Grants program, with separate allocations for the state education agency (SEA) and the Office of the Governor. SEA funds flow to districts, primarily by a formula based on enrollment, with some funds targeted based on need for prevention programming. Governors' program funds go to local grantees, mainly community groups and organizations.

The average state award approaches \$10 million; 59 percent of districts receive grants of less than \$10,000. The average grant for all districts amounts to approximately \$6 per student (except in the 10 percent of districts in each state that share the 30 percent of state funding targeted to districts with the greatest needs, where the average per-pupil expenditure is greater).

Some states have been able to supplement SDFSCA funds with their own funds, but in many school districts, the program is the only source of prevention funding. Some districts supplement their SDFSCA grants with local funds. For example, a 1998 audit by the Office of the Inspector General (OIG) found that of the 26 districts studied, the 12 small ones (which received grants of \$10,000 or less) used local funds to supplement program expenses, such as paying coordinators' salaries or substitute teachers while regular teachers attend meetings.¹

SDFSCA requires that when districts apply to SEAs for funds, they include in their application "a detailed explanation of the local educational agency's comprehensive plan for drug and violence prevention," including the district's goals for its program, how it plans to use its funds, and how it will coordinate with community prevention efforts and with projects supported by other federal, state, and local sources.

In the Department's 1998 national survey of school districts, "Study on Educational Resources and Federal Funding," most districts reported that their SDFSCA program expenditures fell into three categories: (1) drug, alcohol, and violence prevention programs; (2) other strategies; and (3) professional development. Expenditures for parent and community involvement, extended-day programs, school security, and program administration accounted for a small percentage of the total. In addition, 83 percent of districts reported emphasizing activities aimed at affecting student attitudes toward drug use and violence. Just over half emphasized responding to needs of students at high risk for drug use and violence, and just under half reported emphasizing improving staff knowledge and skills for preventing violence and use of alcohol, tobacco, and other drugs, and reduction of bias-related incidents.

Preliminary data from a 1997-98 national study² provide information from school administrators in a nationally-representative sample of schools on the extent of school efforts (not necessarily funded by SDFSCA) to prevent problem behavior. Elementary and secondary schools offer a large number and great variety of activities to prevent problem behavior in school.

- **Nearly all elementary and secondary school principals reported that their schools have formal written rules about drugs (95%) and weapons (94%).** A large number also reported having formal written rules about carrying items or wearing clothing in which drugs or weapons could be concealed. The percentage of middle and junior high schools reporting such rules (62%) is higher than the percentage of elementary schools (39%) or high schools (42%).
- Elementary and secondary principals reported implementing a variety of activities at school that are intended to prevent or reduce problem behavior. Principals were asked to identify whether or not their schools used activities in any of 14 distinct categories of prevention efforts. On average, they reported using prevention efforts that fell into 9 of the 14 different categories (such as prevention curriculum/instruction/training and behavioral programming/behavior modification). The average number of categories implemented was higher for middle/junior high schools (10) than for high schools (8).

As Exhibit 6.2 shows, half of elementary and secondary school principals reported that their schools engaged in 14 or more different activities intended to prevent or reduce problem behavior. For example, on average, schools used 2 activities from the prevention curriculum/instruction/training category, and 1.7 activities from the recreation/enrichment/leisure category. Hence, while schools employed an average of 14 different activities, these activities on average fell into 9 categories. The median number of unique activities was higher for middle and junior high schools (16) than for high schools (11). Large percentages of elementary and secondary school principals reported employing activities in the following categories: prevention curriculum/instruction/training activities (76%); counseling/social work/psychological/therapeutic activities (75%); and use of external personnel in classrooms (72%).