Archived Information

CHAPTER 4

DISTRICT "PORTFOLIOS" OF EISENHOWER-ASSISTED PROFESSIONAL DEVELOPMENT ACTIVITIES

School districts shape the use of the majority of Eisenhower Professional Development Program (EPDP) funds; eighty-four percent of Eisenhower funds go to the district component of the program.[1] In the last chapter, we described patterns of teachers' participation in Eisenhower-assisted professional development activities, including teachers' reports of the characteristics and qualities of those activities, and how the activities increased teachers' knowledge and skills and changed their teaching practice. Now we turn to the district's role in shaping teachers' professional development experiences. Teachers' experiences in Eisenhower-assisted professional development activities depend largely on two things: (1) the types of professional development activities districts make available to teachers, and (2) how teachers come to participate in these activities. In this chapter we look at the mix of professional development activities that districts support with Eisenhower funds—their "portfolio" of Eisenhower-assisted activities—and the selection of teachers to participate in these activities.

Provisions of the authorizing legislation guide district decisions about the characteristics of Eisenhower-assisted professional development activities and who participates in them. The Elementary and Secondary Education Act, as amended by the Improving America's Schools Act of 1994, describes the characteristics that districts should strive to incorporate in the professional development opportunities that they provide. In particular, the legislation aims to support "intensive, ongoing professional development programs" (Section 2207(5)(A)) that include "sustained and intensive high-quality professional development" (Section 2101(a)(1)). Congress further directs that local Eisenhower plans be designed in ways that would likely affect teacher practice and "have a positive and lasting impact on the student's performance in the classroom" (Section 2208(d)(1)(E)).

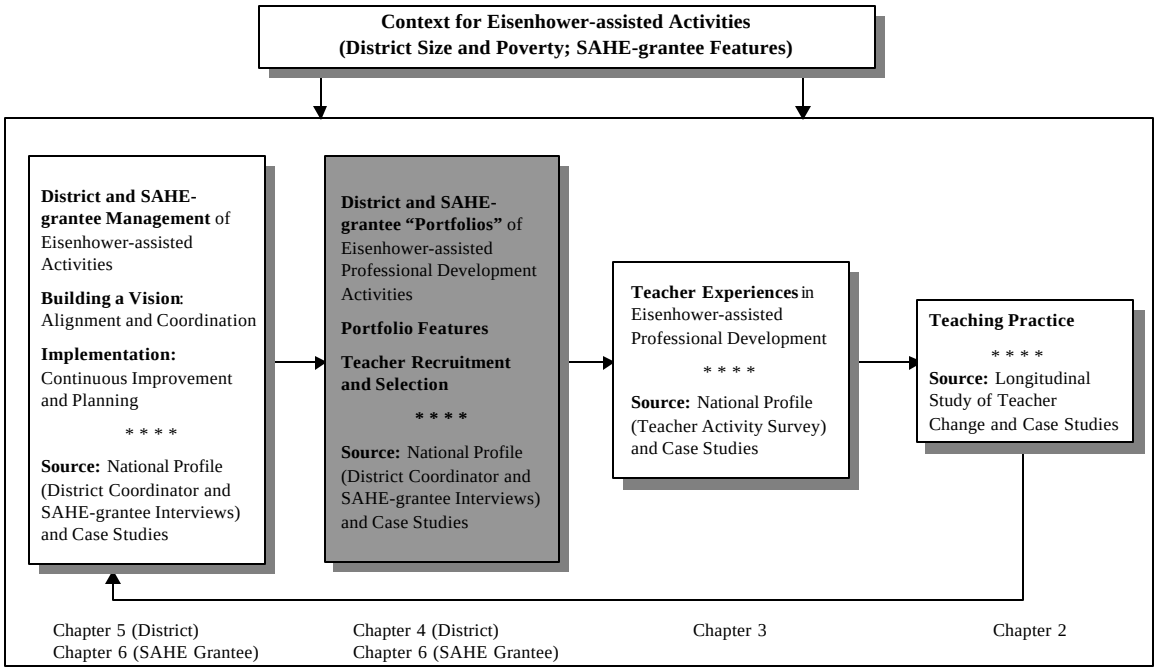
The legislation also provides that Eisenhower-assisted activities should address the needs of teachers of students from historically underrepresented groups (Section 2205(b)(2)(F)). In particular, because of Title I's size and prominence in serving children at risk of school failure, the Eisenhower legislation places a special emphasis on addressing the needs of teachers in schools receiving Title I, Part A funds (Sections 2205(b)(2)(E), 2208(b)(2), and 2208(d)(1)(B)). The Title I statute has a similar provision regarding the Eisenhower Professional Development Program (Section 1119(b)(11)(C)).

In this chapter, we describe how school districts differ from one another in the types of activities that they support with Eisenhower funds. We examine how these activities differ on several of the dimensions of the structural and core features that were related to teacher outcomes in Chapter 3. We also discuss district practices of targeting specific groups of teachers, and the ways that districts select teachers to participate in the activities. Exhibit 4.0 highlights how the issues that we address in this chapter fit into the framework of the entire report.

[1] State education agencies (SEAs) receive 84 percent of the total Title II allocation (16 percent goes to State Agencies of Higher Education). Of that 84 percent, SEAs are required to pass on at least 90 percent of the funds to districts; states have the option of using five percent of the funds for administration and five percent for their own programs.

EXHIBIT 4.0

Conceptual Framework for This Evaluation



While the last chapter described teachers' experiences in Eisenhower-assisted professional development activities, this chapter turns to *similarities and differences across districts* in the professional development activities that districts support. And while the previous chapter described the characteristics of teachers nationwide who participate in Eisenhower-assisted activities, this chapter describes the *similarities and differences across districts* in targeting and recruiting teachers to participate in Eisenhower-assisted activities.

Data Sources

We rely heavily in this chapter on National Profile data from our telephone surveys of a national probability sample of district Eisenhower coordinators. Where appropriate, we supplement these survey data with case-study information regarding district patterns of Eisenhower support for a variety of different types of professional development opportunities and experiences. Our case-study data come from two sources. One source is a series of in-depth case studies that we conducted during the 1997-1998 school year. We chose 10 districts, two from each of five states, to allow variation on state-level reform efforts, the district's approach to professional development, and demographic and geographic characteristics. The second source of case-study data is a series of six exploratory case studies that we conducted during the spring of 1997, also chosen to capture variation on these dimensions.

To obtain the National Profile data we conducted telephone interviews with a national probability sample of district Eisenhower coordinators in the spring of 1998. Through a system of stratified sampling to ensure variation on district poverty level, we randomly drew about 400 districts, giving larger districts a higher chance of being drawn; of these 400, we were able to

interview 363, which provides us with a response rate of 88 percent (see Appendices A and B for more details about our National Profile and case-study design).

During the telephone interviews, district coordinators reported on professional development activities that occurred during the time period from July 1 through December 31, 1997. As a result, the data referenced and exhibited in this chapter that represent characteristics of specific professional development activities refer to activities that took place during this time period. Questions that do not refer to specific activities, but to general practices (e.g., targeting groups of teachers), apply to the entire 1997-1998 school year. Ten districts in our sample report that they offered no activities over the period from July 1 through December 31, 1997; therefore, analyses in this chapter that apply to particular activities exclude these ten districts, and thus are conducted with a maximum sample of 353 districts.

The probability of a district being selected into our national sample was proportional to the number of teachers in the district. Consequently, all of the results are weighted by the size of the district (i.e., the number of teachers in the district). As a result, our data reflect information according to the percent of teachers in a district. For questions that ask about teacher participation in Eisenhower-assisted activities, we report the number of *participations* rather than the number of *participants*. As a rule, districts are unable to determine whether Eisenhower participants attended multiple Eisenhower-assisted activities. Therefore, a single participant may account for more than one "participation."

Organization of Chapter

In this chapter, we examine district "portfolios" of Eisenhower-assisted professional development activities. The mix of professional development activities that a district supports with Eisenhower funds can be viewed in its entirety as a "portfolio" of Eisenhower-assisted professional development activities. Activity portfolios can differ according to the types and range of opportunities offered, as well as according to the structure and substance, or core, of the opportunities.

For example, district portfolios of professional development activities can place more or less emphasis on particular subject areas; they can include several different kinds of activities or be limited to only one or two; and they can place more or less emphasis on strategies that afford teachers the time to learn complex subject matter and to reflect on and practice what they have learned. Taken together, the activities that comprise the portfolios of professional development activities represent a district's professional development strategy, although the degree to which districts strategically plan their portfolios varies from district to district.

To describe the district Eisenhower portfolio, we divide the chapter into five main sections. The first section examines the subject area focus of Eisenhower-assisted professional development activities. The second section describes districts' patterns of support for "traditional" versus "reform" types of professional development activities, and the other structural and core features of these activities. Workshops and conferences are considered to be "traditional" forms of professional development. Activities that appear to be structured to allow longer duration and greater depth and focus, such as mentoring or committee or task force participation, are considered to be "reform" activities (Little, 1993; Sparks & Loucks-Horsley, 1989). (See Chapter 3 for a detailed discussion of types of activities.) The structural and core features discussed in these sections include the duration of the activity, both in number of contact hours and span of time across days, weeks, or months;

collective participation, or the extent to which groups of teachers or whole schools participate together in the activity; and the types of active learning opportunities that the activities provide to teachers. As part of our examination of district portfolios in this section, we also compare Eisenhower-assisted activities in the district to the district's entire program of professional development.

In the third section of the chapter, we examine district strategies concerning targeting and recruiting teachers into Eisenhower-assisted professional development activities. There is sometimes greater need for professional development for teachers in high-poverty areas, and often district strategies for recruiting these teachers for participation in professional development meet with limited success. In Chapter 3, we showed that teachers from high-poverty schools are only somewhat more likely to participate in Eisenhower-assisted professional development than other teachers. Here we examine district strategies that may explain these participation rates. To address these targeting and participation issues, we focus on: 1) the targeting of Eisenhower-assisted activities toward special populations of teachers, 2) how teachers come to participate in Eisenhower-assisted activities (e.g., whether they volunteer or are selected), and 3) strategies that districts use to increase participation.

Throughout the chapter, we report where the structural and core features of district professional development, and district targeting patterns vary significantly by district poverty level (defined as the number of children living in poverty in the district) and the size of the district (defined as the number of teachers in a district), or both. Differences among variables by size and/or poverty are reported if they are statistically significant at the .05 level. For these analyses, both district poverty and district size are always estimated in the same model, so effects for one always control for the effects of the other. Therefore, any significant size effects are independent of poverty effects, and likewise any significant poverty effects are independent of size effects. Whenever we test for poverty and size differences, we report the findings. If there are significant effects either by district poverty level, by district size, or both, we show this in an exhibit; if the effects of both are insignificant, we report the findings in the text, but do not include an exhibit. Interaction effects between poverty and size are insignificant unless otherwise noted.[2]

We divide poverty into three levels—low (less than 10.9 percent of children in poverty), medium (from 10.9 to 21.4 percent of children in poverty), and high (greater than 21.4 percent of children in poverty).[3] District size is divided into four types—small (districts with less than 250 teachers), medium (districts with between 250 and 1500 teachers), large (districts with greater than 1500 teachers), and consortia. A consortium is a group of districts, ranging in size from several districts to several hundred districts, which can sometimes comprise a substantial portion of a state. To identify consortium status, we asked each sampled district whether or not the district participated in the Eisenhower program through a consortium. If the district indicated that the district participated through a consortium, we then drew the entire consortium into our sample, and adjusted the probability of the consortium being selected into the sample, based on the full set of member districts. In reporting results, we use "district" to indicate district or consortium, unless otherwise noted.

[2] Means and standard deviations for all of the variables analyzed in this chapter are located in Appendix F, listed by exhibit number. All parameter estimates reported in the chapter incorporate weights reflecting the sampling plan. Reported p-values and the standard errors on which they are based, however, do not reflect the stratification and variance in weights incorporated in the design. Analyses that take these elements of the complex sample design into account have been carried out, and the results are nearly identical to those reported in the chapter.

[3] These categories divide the population equally into thirds.

In the fourth section of the chapter, we summarize and synthesize the findings for district poverty and district size. We discuss how the level of poverty and the number of teachers in a district might affect district Eisenhower portfolios, and targeting and recruiting strategies, and discuss the implications of these findings for the Eisenhower program. The fifth and final section of the chapter summarizes our major findings about district portfolios of Eisenhower-assisted professional development, and discusses implications for district and federal policy.

DISTRICT PORTFOLIOS' EMPHASIS ON MATHEMATICS AND SCIENCE

Section Findings

- *Nearly all teachers are in districts that use Eisenhower funds for professional development activities in mathematics and science. Although a substantial number of districts use Eisenhower funds for activities outside of mathematics and science, particularly language arts and social studies, teacher participation is still mainly focused on mathematics and science activities.*

Like its predecessor, the Eisenhower Mathematics and Science Education Program, the reauthorized Eisenhower Professional Development Program focuses primarily on supporting professional development in mathematics and science. But the 1994 reauthorization changed the law to allow districts to use some portion of their Eisenhower funds to support professional development in subject areas outside of mathematics and science. Although the main focus of program-funded activities was to remain mathematics and science, appropriated funds in excess of $250 million could be targeted to other subject areas (Section 2206). During the 1997-98 school year, 22.7 percent of a district's Eisenhower funds could go to support professional development in other subject areas besides mathematics and science. Furthermore, states and districts could apply for waivers from the federal government to allow them to devote larger percentages of their Eisenhower grants to professional development in other subject areas. Ten states and two districts have been granted such waivers. In addition, states may apply to the Department of Education for "ED Flex" status, which if granted, allows states to grant waivers to LEAs that request them. These waivers may apply to Title II or to other federal programs. As of January 1998, twelve states had been granted Ed Flex status by ED: Colorado, Illinois, Iowa, Kansas, Maryland, Massachusetts, Michigan, New Mexico, Ohio, Oregon, Texas, and Vermont. Two of our case districts are located in ED Flex states—Ohio and Texas.

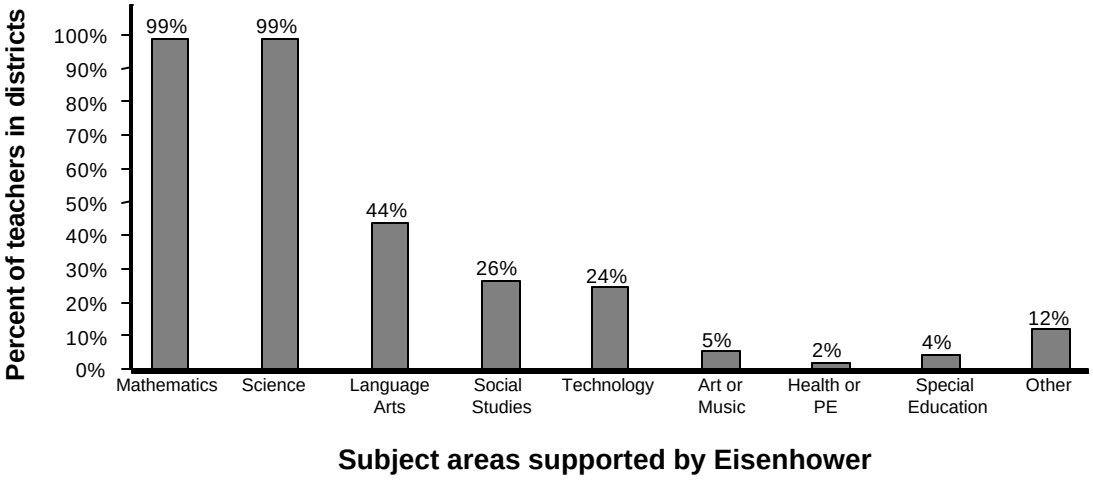
As with other parts of the ESEA, the intent of these provisions was to allow school districts flexibility in using Eisenhower funds; to allow professional development to be responsive to the National Education Goals that call for students to demonstrate competence in all major subject areas; and for professional development to prepare teachers to instruct students in these subject areas. Expanding the Eisenhower program to other subject areas besides mathematics and science was also designed, according to ED officials, to allow districts to keep pace with the standards-based reform movement, which has fostered the development of standards in all major subject areas.

Our national survey of district Eisenhower coordinators indicates that although the primary content focus of Eisenhower-assisted activities continues to be on mathematics and science, some districts have begun to fund professional development in other subject areas as well. We asked district coordinators in which subject areas they support professional development using Eisenhower

funds. Exhibit 4.1 illustrates the percent of teachers who are in districts that fund activities in mathematics, science, language arts, and several other subject areas, from July 1 through December 1997. As the Exhibit shows, nearly all teachers are in districts that fund professional development activities in mathematics (99 percent) and science (99 percent). Of the other subject areas, 44 percent of teachers are in districts that use Eisenhower funds for language arts, and 26 and 24 percent of teachers are in districts that use Eisenhower funds for professional development in social studies and technology, respectively. In fewer cases, teachers are in districts that use Eisenhower funds to provide professional development in the arts (five percent), special education (four percent), health and physical education (two percent), and other areas (12 percent) (i.e., vocational education, home economics, foreign language, and activities that are appropriate for multiple subject areas such as pedagogy and early childhood programs).

EXHIBIT 4.1

Percent of Teachers in Districts Using Eisenhower Funds to Support Professional Development Activities, by Subject Area (n=353[4])



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998, reporting on the 1997-1998 school year.
How to read this exhibit: The first bar shows that 99 percent of teachers are in districts that use Eisenhower funds to support professional development in mathematics. Each bar and the number on top of it represent the percent of teachers in districts for each category.

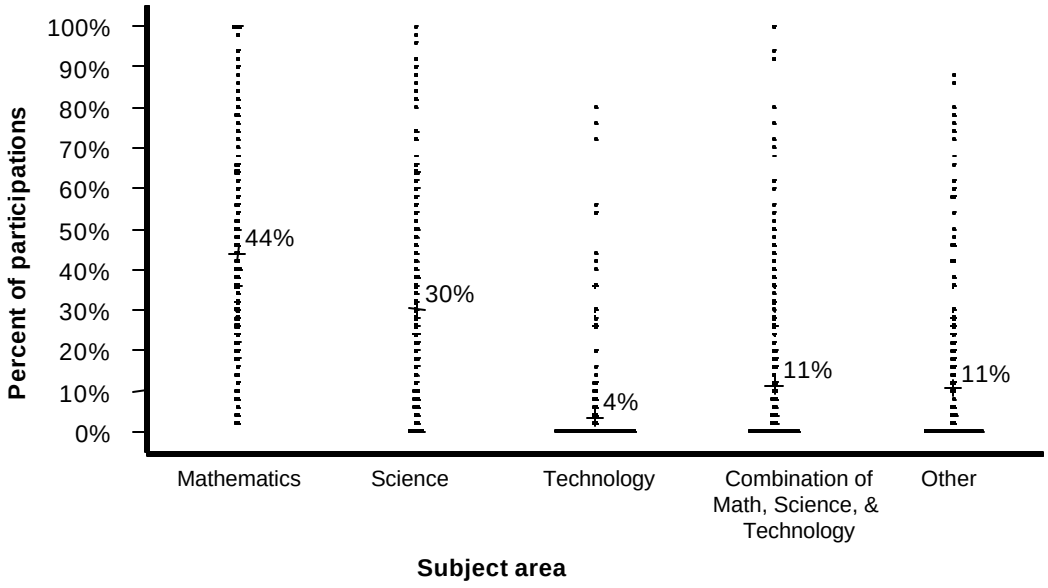
As part of our data collection, we asked Eisenhower coordinators to provide us with lists of the Eisenhower-assisted professional development activities that they offered from July 1 through December 1997, and the number of teachers and other staff who participated in each activity. An analysis of these activity lists confirms the findings from the district coordinator surveys, shown in Exhibit 4.1, that districts support Eisenhower activities in subject areas outside of mathematics and science.

[4] Of our total sample of 363 district Eisenhower coordinators, 10 districts did not use Eisenhower funds to support professional development activities; therefore there were a total of 353 district coordinators answering questions about Eisenhower professional development activities.

Although our survey data and information from the activity lists indicates that districts offer Eisenhower-assisted professional development across a range of subject areas, both sources of information also indicate that teachers participate mostly in mathematics and science-related activities. Results from our survey of Eisenhower coordinators, shown in Exhibit 4.2, illustrate how, for each district, the percent of teacher participations in Eisenhower-assisted professional development activities is distributed across subject areas; the mean percent of participations is listed to the right of each distribution. It is evident from these data that teacher participation is concentrated on professional development focused in mathematics and science. On average, districts report that the highest percent of participations is in mathematics (44 percent) and the second highest is in science (30 percent); 15 percent of participations are in technology alone, or technology in combination with mathematics and science. On average, only 11 percent of Eisenhower-assisted professional development participations are completely outside the areas of mathematics, science and technology.[5] None of these patterns differ significantly according to district poverty level or district size.

EXHIBIT 4.2

Percent of Participations in Eisenhower-assisted Professional Development Activities, by Subject Area (n=312)



Source: District coordinator lists of Eisenhower-assisted activities provided in the district from July 1 through December 31, 1997.
How to read this exhibit: The first distribution shows that on average, districts report that 44 percent of participations in Eisenhower-assisted activities are in mathematics. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of districts for that particular category. The number to the right of the distribution is the mean.

Our case-study data also indicate that the presence of Eisenhower funding in subject areas other than mathematics and science remains quite modest. Furthermore, our district survey and case-

[5] We did not collect survey data on the amount of district Eisenhower funds that were used to support professional development in these different subject areas; therefore, we cannot report on the percentage of funds that are spent in subjects other than mathematics and science.

study data both suggest that Eisenhower funding is essential for some districts' support of professional development in mathematics and science. All surveyed districts report that Eisenhower funds are important to their ability to provide professional development in mathematics and science, and 45 percent report that "most" or "all" professional development in mathematics and science in their districts is supported with Eisenhower funds (data not shown).[6] Furthermore, administrators in some case-study districts report that professional development in mathematics and science would be neglected without Eisenhower funds.

For example, in Northtown, Connecticut, all Eisenhower funds go to professional development in mathematics and science, because the Eisenhower coordinator feels that principals are predisposed to spend all unspecified professional development funds on reading. The coordinator suggests that it is important to set aside some funds to ensure the availability of professional development in mathematics and science. Similarly, in Maple City, Ohio, about 80 percent of the professional development activities conducted by the districts' mathematics and science supervisors is Eisenhower-assisted. The supervisors say that if it were not for Eisenhower funds, their professional development activities in mathematics and science would be "in a dismal state."

In general, case districts use their Eisenhower funds for professional development activities in both mathematics and science. However, some case districts choose to emphasize either mathematics or science rather than divide their Eisenhower funds equally between the two subjects. In Texas, for example, the state's testing program places much greater emphasis on mathematics than on science. Over the course of their school careers, students are tested five times in mathematics, but only once in science. The district coordinator said that the state's emphasis on mathematics through its assessment system led district administrators to focus Eisenhower funds in the area of mathematics, rather than science. Administrators in Rhinestone, Texas, state that the majority of Eisenhower funds are spent on professional development in mathematics, because the district wishes to improve scores on statewide assessments in mathematics. Thus, perhaps because statewide assessments generally are less common in science than in mathematics, some districts may be more inclined to use Eisenhower funds for professional development in mathematics rather than in science.

[6] The Eisenhower legislation includes a local cost-sharing requirement. At least 33 percent of the cost of district Eisenhower activities must be borne by the LEA from non-Title II sources. These sources may include cash or in-kind contributions, and may come from a variety of sources, including: (1) private, non-federal cash contributions, and (2) release time for teachers, and (3) federal funds. The stipulations on the use of federal funds are (1) that they are used consistently with Title II and the statute under which the funds were appropriated, and (2) that they are used to benefit students and teachers who otherwise would have been served by these funds. Furthermore, the SEA may waive this requirement if the LEA is unable to meet the requirement due to economic hardship, and that the requirement would preclude the LEA's participation in the program (Section 2209). Therefore, the Eisenhower legislation appears to allow Eisenhower funds, combined with other federal funds, to support most or all mathematics or science professional development activities in a district. The legislation also appears to allow Eisenhower funds alone to support most or all mathematics and science professional development activities, if the LEA has obtained a waiver from the cost-sharing requirement. Also, the 1994 legislation no longer includes a requirement that Eisenhower funds must "supplement, not supplant" other funding sources.

In some case districts, however, Eisenhower coordinators report that, without Eisenhower funds, professional development in science would not exist. For example, Eisenhower funds are primarily spent on science activities in East City, New York, where they play a critical role in supporting professional development in science. In East City, the twin goals of literacy and mathematics dominate every school effort. Schools spend an hour every school day on sustained reading, known as the "golden hour." The hour is golden because it is sacrosanct, and cannot be skipped or interrupted. Mathematics receives similar attention; schools spend an hour every school day on mathematics instruction, known as the "silver hour." Locally funded professional development efforts focus on literacy and mathematics as well.

Science, in contrast, is viewed as a luxury in East City, according to district officials. Although districts have science coordinators who organize and conduct professional development activities for the district, local budget cuts have been aimed at these positions. According to district officials, professional development in mathematics receives support from many sources; science now receives reliable support from only one—Eisenhower program funds. Therefore, the district has decided that 90 percent of Eisenhower dollars would fund professional development in science.

Similarly, in Riverside, Washington, Eisenhower funds have been instrumental in a 10-year effort to overhaul the elementary science curriculum, according to interviews with district officials. After a period of planning, the overhaul of the Riverside science curriculum began in earnest in 1990, when many of the district's teachers attended 30-hour classes at a local university. The classes were intended to help teachers understand concepts in the life, earth, and physical sciences. Then, in response to teachers' reported enthusiasm for the courses, some teachers took advanced classes in these concepts over the next few years. By 1993, a core group of about 30-50 teachers was trained and ready to begin creating kits—curriculum units that include instructions and materials to help teach them. Currently, there are three or four kits at each grade level; teachers build some of the kits, and others are purchased from outside sources. Now, professional development in Riverside involves a "train the trainer" model, in which teachers observe classes taught by those teachers who have expertise in the kits. According to the district Eisenhower coordinator, Eisenhower funds have been instrumental in developing the kit-based science curriculum in the district, and in fostering a strategy for professional development in science that is more coherent than the district's approach to professional development in other subjects.

Some of our case districts do use Eisenhower funds outside of mathematics and science. Data from these districts suggest that there may be three general strategies that districts take to using Eisenhower funds in other subject areas. One strategy is to hand over Eisenhower resources to the district-level staff responsible for the particular subject area other than mathematics or science. For example, in Commuteville, Virginia, the district's language arts and social studies specialists received less than five percent of the district's Eisenhower funds to provide professional development in those subjects. The district had plans to substantially increase Eisenhower support for social studies during the following school year, to over 20 percent of the district's Eisenhower budget. District officials say that this would begin to provide a better balance in professional development opportunities, because social studies teachers had less access to professional development than did science teachers.

A second strategy for using Eisenhower funds in other subjects is to provide professional development activities that span multiple subject areas. In Rhinestone, Texas, Eisenhower funds support an activity that focuses on both mathematics and language arts. For the activity, a committee of teachers developed "Starstruck Vocabulary," a set of vocabulary words pertaining to mathematics to be used by teachers at each grade level.

A third strategy is to allow schools, in districts that have delegated responsibility for professional development to schools, to elect to use Eisenhower funds in other subject areas. In Richmond, New York, schools apply for Eisenhower funds from the district, and some schools request funds to support professional development in subject areas other than mathematics or science.

Summary: District Portfolios' Emphasis on Mathematics and Science

This section has demonstrated that while some districts use Eisenhower funds to support professional development in areas other than mathematics and science, the professional development activities that teachers participate in the most are focused on mathematics and science. In 1997-98, almost 23 percent of Eisenhower funds could be used for subjects outside of mathematics and science, and in our sample, approximately 11 percent of teachers are in districts that use Eisenhower funds for non-mathematics or science activities. Our results may indicate fewer non-mathematics or science activities than are truly being implemented because we did not collect information on every non-mathematics/science activity that a district offered. However, if expanding the use of Eisenhower funds to support professional development in subjects other than mathematics and science is intended to help provide more flexibility for school districts, our data suggest that school districts may not be taking advantage of that flexibility. In our previous report on a series of exploratory case studies (Birman, Reeve, & Sattler, 1998) we discussed a number of reasons why this might be the case. One reason is that mathematics and science are the program's traditional focus. A second reason is that the amount of program funding for other subjects, in the absence of a waiver, is insufficient to warrant the shift in focus. Data from our case studies suggest a third reason—that in the perspective of some district administrators, there would be little professional development in mathematics, and even less in science, without Eisenhower funds.

This continuing use of Eisenhower funds to focus on mathematics and science can be considered a positive feature of the program, based on its role in fostering content-focused professional development opportunities. In the last chapter we highlighted the importance of a focus on content in professional development in changing teacher practice, and highlighted literature indicating that professional development that focuses on content knowledge appears to promote student achievement more than "generic" professional development that is not embedded in content. Having a critical mass of funding available in a particular content area over a substantial period of time helps to foster professional development that focuses on content knowledge. The reliability of Eisenhower funding supports districts' ability to engage in long-term planning, and to leverage other funds for professional development (Birman, Reeve, & Sattler, 1998). Thus, the continuity and focus provided by Eisenhower funds appears to have enabled some districts to build the capacity for designing content-specific professional development strategies.

To build on these findings about the subject-matter focus of Eisenhower supported activities, we now turn to a description of district portfolios of Eisenhower-assisted activities.

STRUCTURAL AND CORE FEATURES OF DISTRICT EISENHOWER PORTFOLIOS

Section Findings

- *Nationwide, Eisenhower district coordinators report that almost all school districts use Eisenhower funds to support traditional types of professional development (i.e., in-district workshops and institutes, and out-of-district workshops and conferences). While many districts support reform types of professional development (i.e., study groups, teacher networks, mentoring, committees, internships, individual research projects), teacher participation in these reform activities is generally low.*

- *Some districts rely more heavily on traditional approaches such as workshops, than on other approaches, but districts vary substantially in the characteristics of the workshops that they support. Some districts support workshops of relatively long duration that emphasize collective participation and foster opportunities for active learning. Similarly, reform types of professional development vary in their duration; many districts offer reform types of activities that span less than one month.*

- *Large districts are more likely than others to have a higher percentage of participations in reform activities, and to have activities that span a longer period of time, offer more active learning strategies, and more collective participation.*

- *Almost all districts that offer traditional types of activities use Eisenhower funds to support at least some of them; however, many districts that offer reform types of activities do not use Eisenhower funds to support them.*

The Title II legislation stipulates that Eisenhower-assisted activities should be "sustained and intensive," "ongoing," and of "high quality," but it does not provide detailed guidance regarding the characteristics of activities that districts should fund.

In the last chapter, we examined teacher reports of Eisenhower-assisted activities along a number of dimensions. We examined the structural features of professional development activities—traditional vs. reform types, duration and collective participation—and core features—content emphasis, opportunities for active learning, and coherence. We found that all of these dimensions were associated, either directly or indirectly, with enhanced teachers' knowledge and skills and changes in teaching practice. We continue to use this framework in this chapter, but here we focus on how *district portfolios of activities* offer opportunities for professional development that have the features we found to be associated with teachers' learning and change in teaching practice.

As discussed in Chapter 3, research on teachers' professional development suggests that high-quality professional development is characterized by activities that allow teachers to focus in depth on the content that they are trying to master and on how children learn that content (Cohen & Hill, 1998; Fennema et al., 1996; Hiebert, 1999; Kennedy, 1998; Sparks & Loucks-Horsley, 1989). High quality also is associated with activities that are long in duration, allow teachers an opportunity to practice and reflect upon their teaching, and are embedded in the ongoing work of the school.

Some traditional types of professional development, such as workshops and conferences, are thought to be less likely to have these characteristics (Little, 1993). One reason is that traditional approaches often are isolated from teaching practice and characterized by "one-shot" workshops at which teachers listen passively to "experts" and learn about topics that are not essential to teaching (National Foundation for the Improvement of Education, 1996).

Although teachers sometimes value such workshops or conferences because they increase their awareness or rejuvenate their interest (Knapp, Zucker, Adelman, & St. John, 1991), reform types of professional development such as study groups, teacher networks, mentoring, committees or task forces, internships, and individual research projects appear to have the potential for a stronger impact on teaching practice (Darling-Hammond, 1995, 1997b; Hargreaves & Fullan, 1992; Little, 1993; Richardson, 1994; Sparks & Loucks-Horsley, 1989; Stiles, Loucks-Horsley, & Hewson, 1996). This is because reform types of professional development seem more likely than traditional types to offer opportunity for reflection, in-depth study, and prolonged focus, and thus are more likely to be associated with changes in teacher practice and improvements in student achievement (Sparks & Loucks-Horsley, 1989).

In Chapter 3, we found that these reform activities offer more opportunities for active learning and other core features that reflect high-quality professional development than traditional types of activities do. Our findings in Chapter 3 also indicated that reform types of professional development are more likely to be of substantial duration and allow collective participation, which in turn are related to high-quality core features such as active learning opportunities and a focus on content knowledge. However, according to the teachers in our National Profile, to some extent traditional types of professional development also offer some of these high-quality core characteristics, depending upon their duration and other structural features.

Consequently, in this chapter, we not only describe the district provision and participation rates for traditional and reform types of professional development, but we provide information about the average number of contact hours and span (i.e., in days, weeks, months, or years) of the activities that districts support, and the different types of learning methods used in the activities. In examining the quality of professional development activities in this section, there is one aspect of these activities that we do not focus on directly—their content. We were not able to collect detailed information about activity content from district coordinators because of the wide range of professional development activities that districts provided. Therefore, we focus our discussion on the structural aspects of professional development activities that appear to be related to desirable core features and positive teacher outcomes—whether they are traditional or reform, their average duration and whether they offer opportunities for collective participation. We also present information for one core feature for which we do have district-level information: opportunities for active learning.

The first set of analyses in this section focuses on the districts' use of traditional types of professional development. We then discuss district provision of reform approaches, followed by an analysis of the district's overall strategy of professional development, which compares Eisenhower-assisted activities in the context of the district's complete portfolio of professional development activities.

Traditional Types of Professional Development

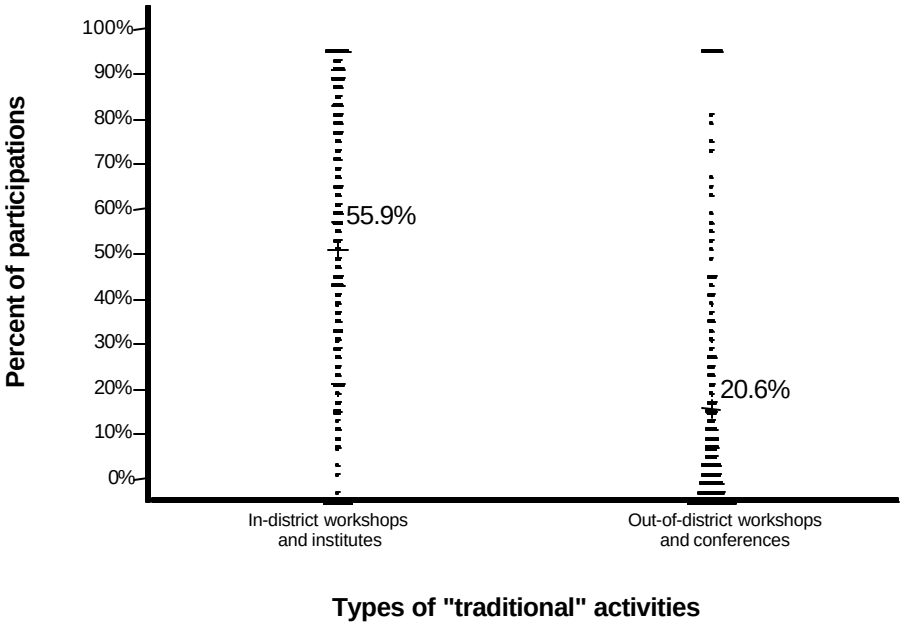
During our telephone interviews with district Eisenhower coordinators, we asked whether their district supported in-district workshops or institutes from July 1 through December 1997. We

then asked whether any of the workshops or institutes were supported, at least in part, with Eisenhower funds. We asked the same questions about out-of-district workshops and conferences. We also asked about a third traditional type of professional development—college courses. But we do not report on this type because the percent of teacher participations in courses supported with Eisenhower funds is negligible. Essentially, Eisenhower funds are very rarely used to support attendance at college courses, according to district coordinators. As we would expect, our findings from our survey of project directors at Institutions of Higher Education (IHEs) indicate that IHEs often use Eisenhower funds to support college courses; consequently, this type of professional development is discussed in Chapter 6, where we present an analysis of our data from IHEs.

On our survey, district Eisenhower coordinators indicated how many participants attended Eisenhower-assisted workshops, institutes, or conferences, counting participants more than once if they attended multiple activities. Exhibit 4.3 demonstrates that, by adding the percent of participations in in-district workshops and institutes and out-of-district workshops and conferences, on average, over three-quarters of total participations in Eisenhower-assisted activities (77 percent) are in these two types of traditional activities, with substantially more participations in in-district workshops and institutes than out-of-district workshops and conferences (56 percent compared to 21 percent, respectively).

EXHIBIT 4.3

Percent of Participations in Traditional Types of Eisenhower-assisted Activities (n=353)



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report that 56 percent of participations in Eisenhower-assisted activities are in in-district workshops and institutes. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of districts for that particular category. The number to the right of the distribution is the mean.

While most districts use Eisenhower resources to fund traditional approaches to professional development, districts differ dramatically in the extent of their reliance on these approaches for providing professional development to teachers. Exhibit 4.3 indicates that, on average, districts report that 56 percent of Eisenhower-assisted participations are in in-district workshops and institutes. However, in some districts, *no* teachers who participate in Eisenhower-assisted activities attend in-district workshops and institutes, while in other districts *all* teachers who participate in Eisenhower-assisted activities attend in-district workshops and institutes. The same variation in distribution is true of out-of-district workshops and conferences.

Our data suggest that most districts rely heavily on traditional forms of professional development in their use of Eisenhower funds. If traditional types of professional development are less likely to be "sustained and intensive," then most districts are not using Eisenhower funds in line with the intent of the provisions of the 1994 reauthorization. However, it is clear from the last chapter that traditional types of professional development activities can vary in their structure and substance. Further, districts may have more participations in traditional than in reform types of activities, but the extent to which this represents disproportionate spending is not clear, given that reform activities may be more expensive per participant than traditional activities.

Next we delve more deeply into districts' support of traditional types of professional development activities by examining structural and core features of these activities—specifically the duration and extent of opportunities for collective participation, and opportunities for teachers to engage in active learning in traditional professional development activities. These analyses help to demonstrate whether and how districts differ in the quality of traditional types of professional development activities that they support with Eisenhower funds.

The Structural and Core Features of Traditional Activities

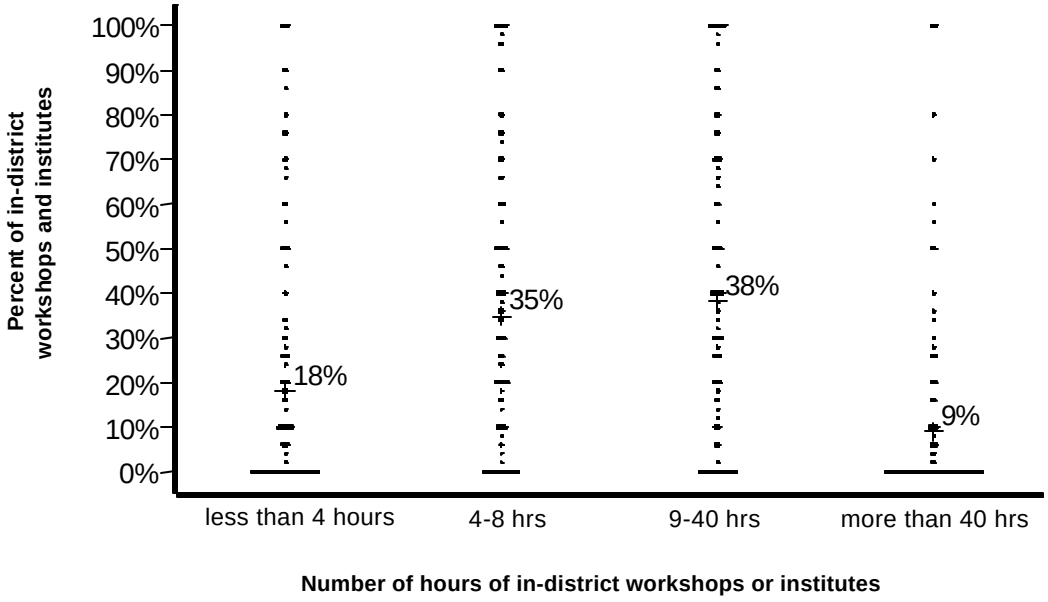
As discussed in Chapter 3, certain structural features are associated with desirable core features of professional development activities, which in turn are associated with improved teacher outcomes. Specifically, the duration of the activity, which includes both the number of contact hours and the time span over which the activity extends (i.e., the number of days, weeks, months, or years across which the activity is spread), as well as the combination and number of types of active learning used in the activity, are indications of high-quality professional development (Cohen & Hill, 1998; Sparks & Loucks-Horsley, 1989).

The fact that many school districts rely heavily on in-district workshops in their Eisenhower-assisted activities could be cause for concern, since such workshops often are assumed to be short experiences that are disconnected from ongoing teacher practice (National Foundation for the Improvement of Education, 1996). The Eisenhower legislation's language that professional development activities be "sustained and intensive" implies that high-quality professional development should involve a relatively large investment of time and should be spread over a long period of time. Sustained, intensive professional development activities would allow teachers opportunities to absorb complex content, practice new techniques in their own classrooms, and discuss their experiences with other teachers. Short, "one-shot" workshops would not generally provide teachers such opportunities.

Duration. Data from our national survey of district Eisenhower coordinators suggest, however, that in-district workshops are not always "one-shot" events.[7] We asked district coordinators to report on the percentages of in-district workshops and institutes that lasted varying numbers of hours, including follow-up events. As shown in Exhibit 4.4a, coordinators indicated what percent of Eisenhower-assisted workshops or institutes lasted less than four hours, between four and eight hours, between nine and 40 hours, and more than 40 hours.

EXHIBIT 4.4a

Percent of Eisenhower-assisted In-district Workshops and Institutes, by Contact Hours (n=314[8])



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, 18 percent of Eisenhower-assisted in-district workshops and institutes last for less than four hours. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of districts for that particular category. The number to the right of the distribution is the mean.

The range observed across districts on these measures suggests that districts vary greatly in terms of the number of hours of their workshops or institutes. For all four categories of total hours, the minimum reported was zero percent and the maximum reported was 100 percent. In other words, there are districts in which *all* in-district workshops and institutes last less than four hours, and there are districts in which *no* workshops or institutes last less than four hours; and this pattern applies to the other three time categories as well.

[7] We did not ask district coordinators about the duration of out-of-district workshops or conferences. Based on data collected during pilot-testing of the survey instrument, out-of-district workshops and conferences all were assumed to last less than one month. Therefore the analyses on the quality of traditional professional development activities focuses on in-district workshops and institutes.

[8] Of our total sample of 363 district Eisenhower coordinators, 314 provided Eisenhower-assisted in-district workshops and institutes; therefore all analyses that pertain to in-district workshops and institutes have a sample of 314.

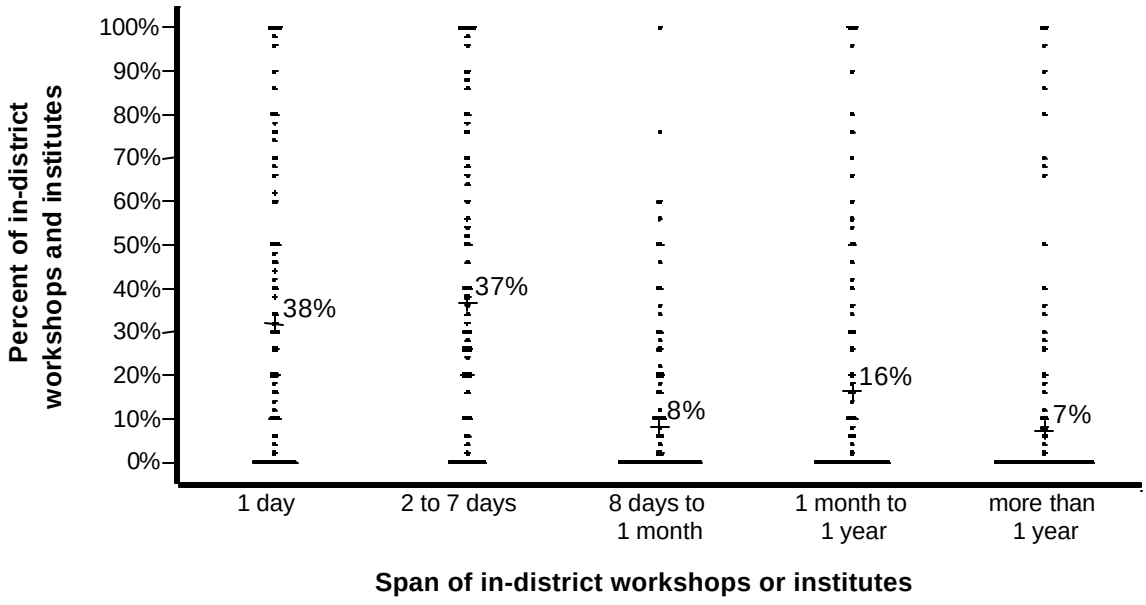
Given this range of findings, it is clear that some districts support workshops that seem to meet the high-quality professional development criterion of "sustained and intensive." It is also clear that most districts do not.

In addition to asking about the number of contact hours of in-district workshops and institutes, we asked Eisenhower coordinators to report the percent of their Eisenhower-assisted workshops or institutes, including follow-up activities, that were spread across different time periods. The options were one day, two to seven days, eight days to one month, one month to a year, and more than a year.

Exhibit 4.4b shows that district coordinators report that many in-district workshops and institutes span a relatively short period of time. Some districts, however, support workshops and institutes that span a relatively long period of time. These findings demonstrate that, as with the number of hours, span across time in days, weeks and months varies considerably from district to district. As Exhibit 4.4b shows, districts that support in-district workshops and institutes report that more than three-quarters of their workshops extend over less than one month.

EXHIBIT 4.4b

Percent of Eisenhower-assisted In-district Workshops and Institutes, by Time Span (n=314)



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, 38 percent of in-district workshops or institutes last for one day only. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of districts for that particular category. The number to the right of the distribution is the mean.

Although we do not have information about the quality of the learning that takes place in these activities, they would seem to lack the "sustained" characteristic associated with high-quality professional development. At the same time, almost a quarter of Eisenhower in-district workshops

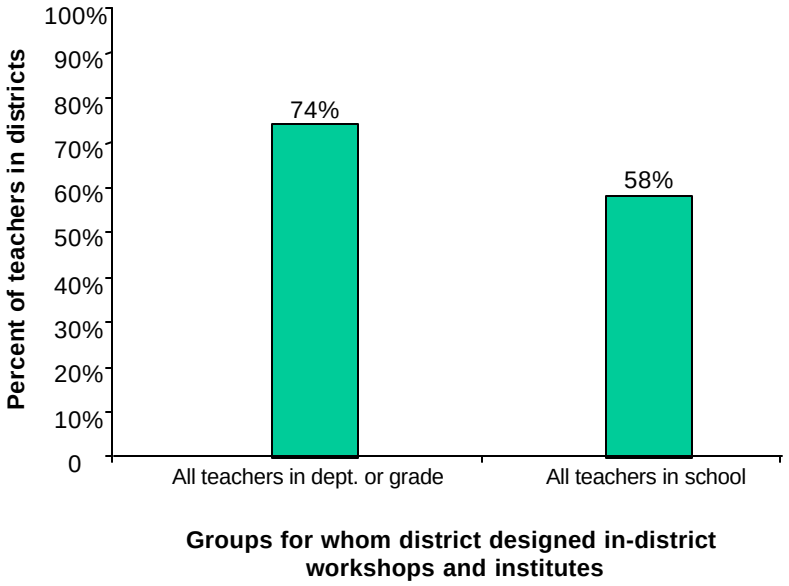
and institutes span over a month or more. Given the common perception of workshops as very short learning opportunities, this is perhaps a surprising finding. It should be noted that in the early 1990s, districts were providing Eisenhower-assisted activities of shorter duration than they are presently—a median of six hours compared to the current median of 15 hours (Knapp et al., 1991). Thus, since the 1994 reauthorization of ESEA and its emphasis on "sustained and intensive" activities, districts have increased the duration of the professional development activities that they provide.

Collective participation. In addition to being too short, both in number of contact hours and time span, traditional professional development also has been criticized as being geared too little toward developing approaches that allow teachers to work together over time and exchange information to enhance their teaching of a subject area (Little, 1993). While high-quality professional development should meet the learning needs of individual teachers, systemic reform emphasizes that teachers in the same school or who teach the same subject ought to have consistent knowledge bases and approaches to teaching and learning (O'Day & Smith, 1993). Collective participation by whole schools, a critical mass of teachers, or particular groups of teachers in a school allows teachers to share effective practices and reinforces new ideas and methods (Newmann et al., 1996); it also provides opportunities for teachers to discuss issues, and offers them a basis for comparing and choosing alternative practices (Ball, 1996). Our study of teachers, reported in Chapter 3, suggests that collective participation in professional development, which offers the opportunity to foster a common body of knowledge among teachers, is associated with teachers' self-reported enhanced knowledge and skills. Further, the authorizing legislation acknowledges its importance by specifying that districts can use Eisenhower funds to support professional development geared not just toward individual teachers' needs but also toward the needs of groups of teachers (Section 2210(b)(3)(A)).

To measure this idea of collective participation, or the extent to which districts provide opportunities for in-district workshops designed for groups of teachers or all teachers in a school, we asked Eisenhower coordinators for whom they designed their workshops. Coordinators indicated whether workshops and institutes were specifically designed for: 1) all teachers in department or grade-level groupings and/or 2) all teachers in a school or set of schools, as opposed to being designed for teachers as individuals or teachers as representatives of their departments, grade level, or school.

Exhibit 4.5a shows that almost three-quarters (74 percent) of teachers are in districts that design in-district workshops and institutes for all teachers in a department or grade, while 58 percent of teachers are in districts that design workshops for all teachers in a school or set of schools. However, while most districts report that they use Eisenhower funds to support workshops and institutes that provide opportunities for collective participation, we do not have data about how frequently districts support workshops and institutes that offer such opportunities.

EXHIBIT 4.5a
Percent of Teachers in Districts in Which Eisenhower-assisted In-district Workshops and Institutes Include Collective Participation (n=314)



***Source*:** Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first bar shows that 74 percent of teachers are in districts that design in-district workshops and institutes for all teachers in a department or grade level. Each bar and the number on top of it represent the percent of teachers in districts for each category.

We combined and averaged responses to these two questions to create an index of the extent to which districts provide opportunities for collective participation in professional development activities that go beyond the needs of individual teachers; the scale is from zero to one, where zero indicates no opportunities for collective participation, .5 indicates one opportunity for collective participation, and one indicates opportunities for both types of collective participation. Exhibit 4.5b illustrates that while collective participation opportunities do not vary by the poverty level of the district, large and medium districts are significantly more likely to design in-district workshops to offer collective participation than are small districts. Smaller districts may not have enough teachers across grade levels or departments to justify designing activities for them. Also, compared to small districts, large districts may have more funding sources for professional development and therefore have more resources to serve whole schools or large groups of teachers.

EXHIBIT 4.5b

Collective Participation in Eisenhower-assisted In-district Workshops and Institutes, Overall and by District Poverty and District Size (n=314)

	Significant Pairwise Contrasts
Size	Small vs. Medium, Small vs. Large

Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report a collective participation score of .66 where zero indicates no opportunities for collective participation in in-district workshops and institutes and one indicates that the district offers both types of collective participation in in-district workshops and institutes. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of the number of opportunities for collective participation that districts offer in their in-district workshops and institutes. The number to the right of the distribution is the mean.

Opportunities for active learning. Workshops vary not only in their duration and opportunities for collective participation, but also in the types of opportunities they provide for teachers to practice what they have learned. Active learning is an important dimension of the quality of professional development, as we demonstrated in Chapter 3. While the term "workshop" may evoke the image of a relatively traditional learning format, workshops can vary along this dimension. "At their best, [workshops] provide adult learners with important and relevant new knowledge and opportunities to try new ideas, practice new behaviors, and interact with others as they learn" (Loucks-Horsley, Hewson, Love, & Stiles, 1998, p. 88). For any type of activity, active learning opportunities are critical to allow teachers to reflect, discuss, and practice new ideas and methods (Carey & Frechtling, 1997; Carpenter et al., 1989; Darling-Hammond, 1997b; Lieberman, 1996; Schifter, 1996). Although the extent of in-depth, reflective learning depends to a large extent on the content of the curricula, the use of active learning strategies provides one measure of the opportunity for such conceptual learning.

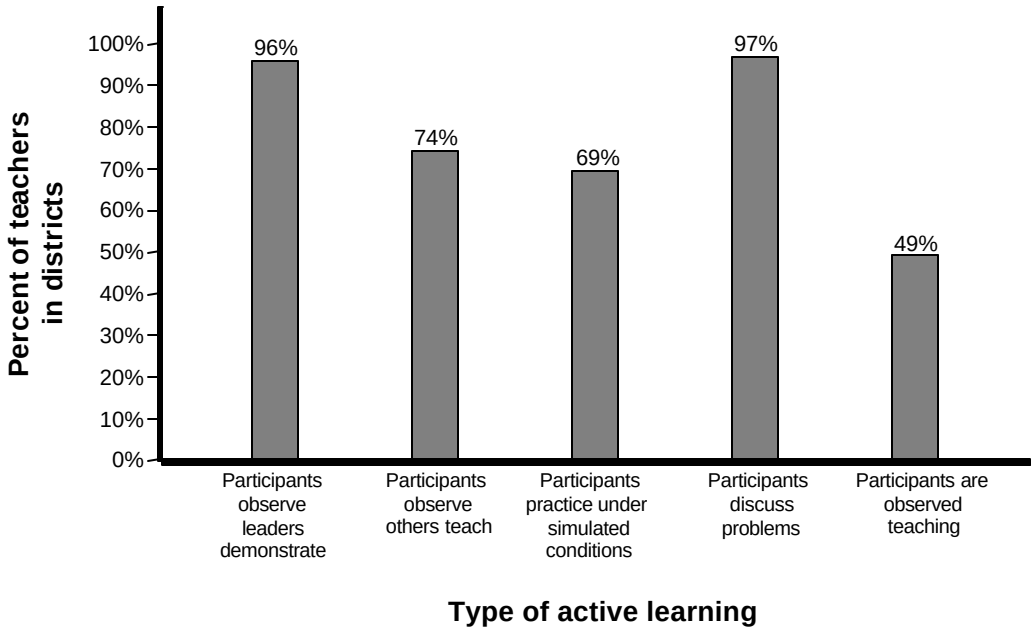
To find out about the opportunities for active learning that in-district workshops and institutes offer to participants, we asked district Eisenhower coordinators which of the following strategies were used regularly in Eisenhower-assisted workshops or institutes to help teachers implement new skills:

- observe professional development providers demonstrating or modeling skills,
- observe other teachers teaching,
- practice under simulated conditions with feedback,
- meet in groups to discuss problems in implementation, and
- be observed teaching in his or her own classroom.

Exhibit 4.6 shows the relative frequency with which districts report using each of these strategies in their in-district workshops and institutes. As the exhibit illustrates, virtually all districts report that they use Eisenhower funds to support workshops in which teachers have to meet in groups to discuss problems with the implementation of new practices and to observe professional development providers demonstrating skills.

EXHIBIT 4.6

Percent of Teachers in Districts That Provide Each of Five Types of Opportunities for Active Learning in Eisenhower-assisted In-district Workshops and Institutes (n=314)



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first bar shows that 96 percent of teachers are in districts that offer in-district workshops or institutes that provide opportunities for participants to observe the workshop leader demonstrating or modeling skills. Each bar and the number on top of it represent the percent of teachers in districts for each category.

As Exhibit 4.6 shows, fewer districts use Eisenhower funds to provide the other three types of active learning opportunities. Almost three-quarters (74 percent) of teachers are in districts in which district coordinators report that in-district workshops and institutes allow participants to

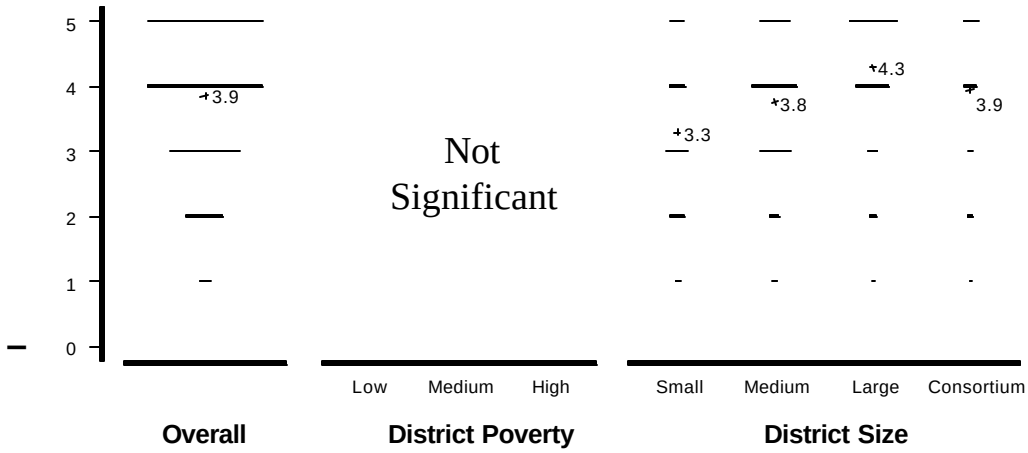
observe others, and almost 70 percent are in districts that report that the workshops and institutes provide opportunities to simulate practice. However, only about half of teachers are in districts (49 percent) that support workshops and institutes that include opportunities to have teachers observed teaching in their own classrooms, perhaps the strategy most likely to relate to change in teacher practice. Since this part of the survey specifically asked coordinators to indicate which activities were conducted "regularly" in workshops, these data provide an approximate measure of the frequency and/or prevalence of these opportunities for active learning in the workshops, from the perspective of district Eisenhower coordinators.

To examine how varied a district's workshop learning methods are, we developed a scale that represents each district's provision of active learning opportunities for teachers in Eisenhower-assisted in-district workshops and institutes. The scale is a composite that combines the five strategies for active learning (i.e., observe leaders demonstrate, observe other teachers, simulate practice, discuss problems with the implementation of new techniques, and have their own practice observed).[9]

Exhibit 4.7 shows on average how many of these five relative types of opportunities for active learning districts report using during in-district workshops and institutes. By and large, district coordinators report that Eisenhower-assisted workshops and institutes provide teachers with four of the five types of learning opportunities.

EXHIBIT 4.7

Number of Types of Opportunities for Active Learning in Eisenhower-assisted In-district Workshops and Institutes, Overall and by District Poverty and District Size (n=314)



	Significant Pairwise Contrasts
Size	Small vs. Medium, Small vs. Large, Small vs. Consortium, Medium vs. Large

Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report that they offer 3.9 types of opportunities for active learning in their in-district workshops and institutes. The number of types of opportunities for active learning differs significantly by district size, but not by district poverty level. Each dot represents one district. As the number of districts at one data point increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of the number of opportunities for active learning for that particular category. The number on the distribution is the mean.

[9] See Appendix D for more details about the scale's composition and reliability.

However, Exhibit 4.7 also indicates that the larger the district, the more likely the district is to provide Eisenhower-assisted activities that are characterized by multiple opportunities for active learning. Small districts provide significantly fewer opportunities for active learning than medium or large districts or consortia, and medium districts provide fewer active learning opportunities than large districts. Here consortia outperform small districts, and, as with collective participation, large districts outperform small districts.

Case-study Examples of District Support for Traditional Types of Professional Development

Consistent with our data from teachers reported in Chapter 3, the data from district coordinators presented so far indicate that most school districts continue to rely heavily on traditional types of professional development. For the most part, these activities last less than eight hours and extend over a span no greater than a week. These results appear to indicate that most districts have a way to go in order to meet the intent of the 1994 reauthorization to provide "sustained, intensive" professional development. However, we do not know the proportion of Eisenhower funds that districts spend on traditional types of activities; since reform approaches to professional development may be more expensive per participant than traditional approaches, a district may have more participations in traditional activities, but spend a higher proportion of funds on reform activities.

Further, while most teacher participations are in traditional types of professional development with short durations, the data from district Eisenhower coordinators also indicate that some districts are able to use their Eisenhower funds for traditional professional development activities that have features of high quality.

Our case-study data illustrate how traditional types of professional development can have characteristics of high quality. In Rainforest, Washington, a small, rural district, all Eisenhower funding goes to support one major professional development activity each year: a science institute. The institute employs a fairly traditional format—five days of classes during the summer. However, it extends over the subsequent school year through in-class observations, modeling, and coaching of teachers by the district's science coordinator, a well-respected leader in her field. The institute also is characterized by collective participation, since all science teachers in the district—that is, all elementary teachers as well as high school science teachers—are expected to participate. Thus all teachers who teach science in the district's schools will have shared the same learning experience. This is an example of how one district is able to use Eisenhower funds for professional development that has a traditional format, but has features of high-quality professional development.

East City, New York, is another example of a district that invests Eisenhower funds in professional development activities that have a traditional format, but with features of high quality. The primary activities supported by Eisenhower funds in this large, urban district are grounded in the district's "partnerships" with cultural and science-related institutions. Institutions such as the local botanical gardens and the local zoo have relationships with the district to support science education, and the associated professional development, for teachers in selected schools. The teachers in the schools participate in these activities only if the school itself has demonstrated sufficient administrative support for the partnership, illustrating how the activities are linked to collective participation.

The partnership with the local zoo is characteristic of the district's approach. The zoo provides multi-session summer workshops lasting 21 to 36 hours, a traditional type of professional

development that extends over a much longer-than-average time period. This workshop introduces teachers in selected schools to a full curriculum related to the zoo's exhibits and activities; thus, the workshops focus on particular schools and emphasize collective participation. Furthermore, the summer workshop is followed up throughout the school year by visits from zoo staff, and access to teaching materials and programs for students.

The examples of Rainforest and East City illustrate how two districts, one a small rural community, and the other a large urban area, have used substantial proportions of their Eisenhower funds to support traditional types of professional development—workshops and institutes—that have features of high-quality professional development. In particular, the activities extend over a longer-than-typical time period, are geared toward collective participation, and, in Rainforest, build in opportunities for observation of teaching practice and coaching. While our survey data indicate that districts that use most of their funding for these types of activities are not the norm, these cases also illustrate that such uses of Eisenhower funds can occur.

Reform Types of Professional Development

We now turn from traditional types of professional development to discuss districts' use of Eisenhower funds to support reform types of professional development. As discussed earlier in this report, some types of professional development have features that make them particularly compatible with systemic reform, because they appear to afford teachers the opportunity to learn content knowledge in greater depth than more traditional types of professional development and give teachers more of an opportunity to reflect on what they have learned. These types of professional development also may afford teachers the opportunity to work together and learn from one another so that they have common understandings about content, and teaching and learning (O'Day & Smith, 1993). Finally, these reform types of professional development also might be more embedded in ongoing activities, so they are more integrated into the daily life of schools than more traditional types of professional development (Elmore, 1996; Little, 1993).

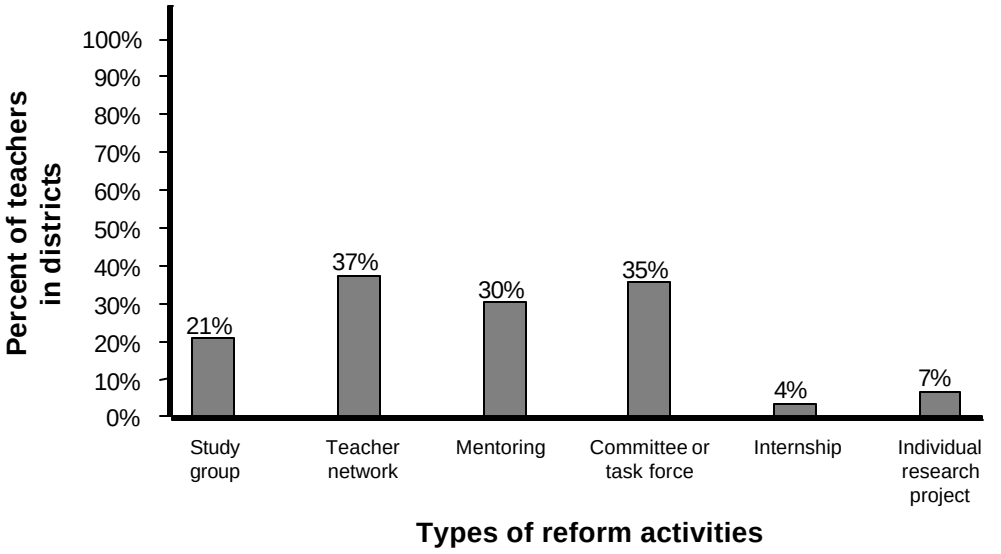
In this part of the chapter we examine how districts differ in their use of Eisenhower funds to support the following reform types of professional development, as defined in Chapter 3: teacher study groups, teacher collaboratives or networks, mentoring, committees or task forces, internships, and individual research projects. We asked about an additional type of professional development—teacher resource rooms. But this reform type of professional development is not discussed in the analyses in this chapter because the percent of teachers who participate in such resource rooms is very small (i.e., .04 percent). Our data show that teacher resource rooms are the least likely professional development activity to be offered to teachers as part of a district's Eisenhower-assisted professional development portfolio. Therefore, we focus on the other six types of reform activities.

Exhibit 4.8a shows that, according to our national sample of district Eisenhower coordinators, only a minority of teachers are in districts that offer each of the reform types of professional development, and districts vary substantially in which types of reform professional development they support with Eisenhower funds. During our telephone interviews, we asked Eisenhower coordinators whether their district supported participation in each type of reform activity, from July 1 through December 1997, and then asked whether each activity, at least in part, was supported with Eisenhower funds. As Exhibit 4.8a illustrates, over one-third of teachers (37 percent) are in districts that use Eisenhower funds to support teacher networks, mentoring or coaching, and committees or task forces. A smaller percent of teachers are in districts that support study groups (21

percent), internships (four percent) and individual research projects (seven percent). Thirty-five percent of teachers are in districts that do not support any type of reform activity (results not shown).

EXHIBIT 4.8a

Percent of Teachers in Districts That Support Reform Types of Professional Development Activities with Eisenhower Funds (n=353)



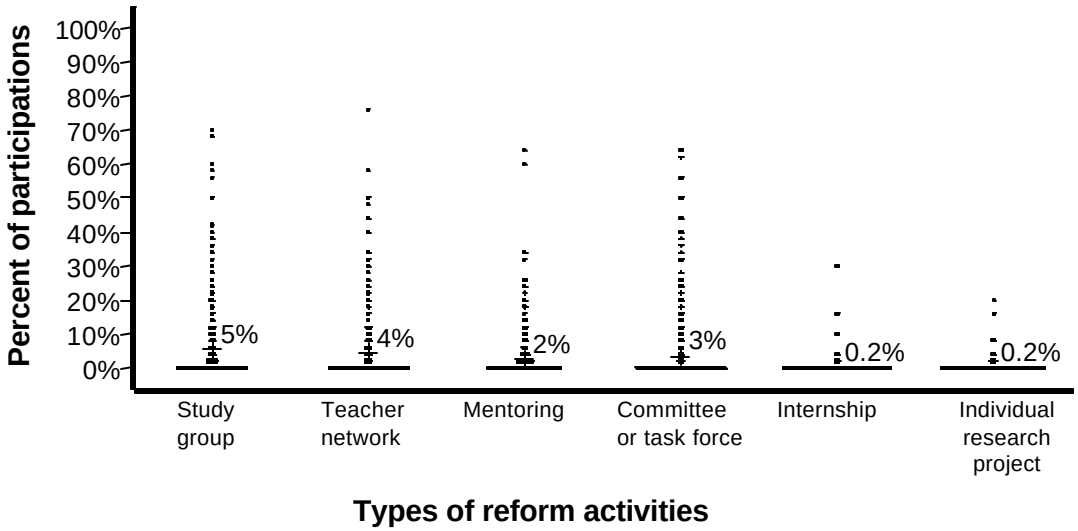
Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first bar shows that 21 percent of teachers are in districts that use Eisenhower funds to support teacher study groups. Each bar and the number on top of it represent the percent of teachers in districts for each category.

Although nearly two-thirds of teachers are in districts that are trying reform activities (data not shown), relatively few teachers participate in them. We asked coordinators to tell us the number of teachers that Eisenhower funds supported to participate in each type of reform activity, from July 1 through December 1997. As Exhibit 4.8b shows, according to district Eisenhower coordinators nationwide, none of the six reform types of professional development activities accounts for an average of more than five percent of all participations in all Eisenhower-assisted activities. Although an average of four percent and seven percent of teachers are in districts that *offer* internships and individual research projects, respectively (as illustrated in Exhibit 4.8a), Exhibit 4.8b shows that average teacher *participations* in these activities is less than one-half of one percent. As we suggested earlier, however, the number of participations in reform approaches may not reflect the proportion of funds devoted to these reform types of activities.

Exhibit 4.8b also illustrates that some districts rely much more heavily than others on these reform types of activities. Some districts report that the majority of teachers who participate in Eisenhower-funded activities participate in reform types of professional development. For example, some districts report as many as 60 to 70 percent of Eisenhower-assisted participations on teacher committees or in study groups. However, many districts have participations well below the average, including districts that have no participations in any reform activities.

EXHIBIT 4.8b

Percent of Participations in Reform Types of Eisenhower-assisted Professional Development Activities (n=353)



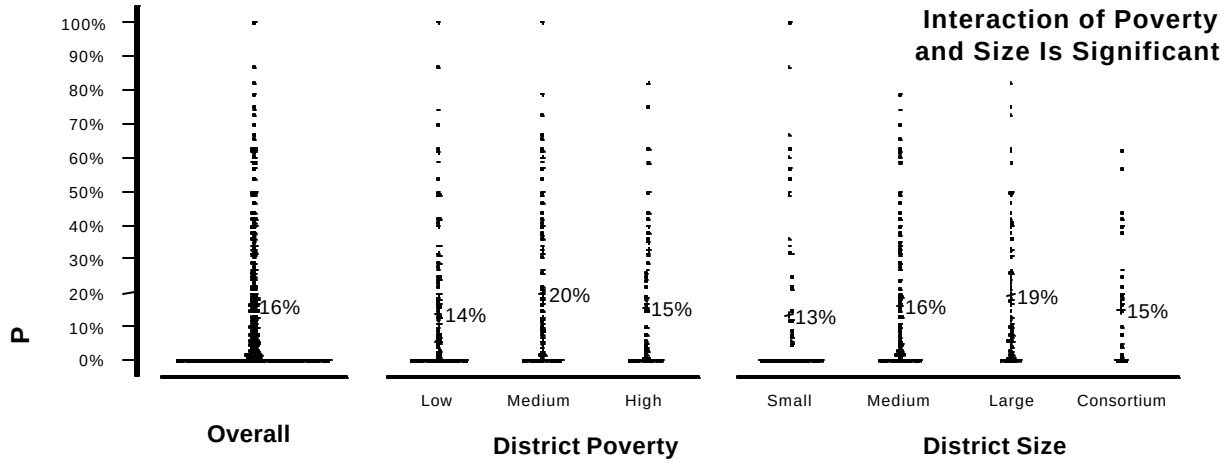
Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report that five percent of participations in Eisenhower-assisted activities are in study groups. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of districts for that particular category. The number to the right of the distribution is the mean.

Adding the total number of participations in all six of the reform types of professional development provides a measure of the proportion of Eisenhower-assisted participations in reform versus traditional approaches to professional development. Exhibit 4.9a shows that the district average for teacher participations in reform types of professional development is 16 percent. There is substantial variation on this measure, however; a few districts have close to half of total participations in reform approaches, while many others have no participations in reform approaches. Further, the interaction effect between poverty and size is significant.

The main message illustrated by the interactions in Exhibit 4.9b seems to be that while high- and medium-poverty districts have more participations in reform activities as the size of the district increases, low-poverty districts have the same relatively low percent of participations in reform activities regardless of the size of the district. Reform participations in consortia mirror the pattern in large districts, except in high-poverty districts, where consortia have fewer participations in reform activities than do large districts.

EXHIBIT 4.9a

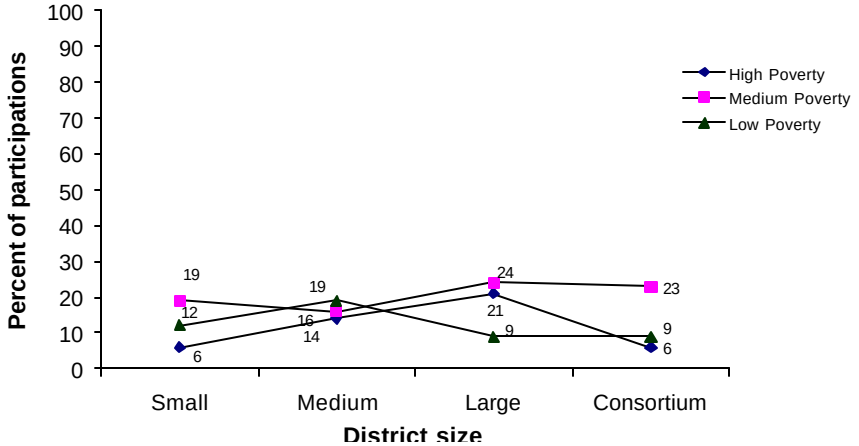
Percent of Participations in Reform Types of Eisenhower-assisted Professional Development Activities, Overall and by District Poverty and District Size (n=353)



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report that 16 percent of all participations are in reform types of professional development. The interaction effects of district poverty and size on the percent of participations in reform activities are significant. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of districts for that particular category. The number to the right of the distribution is the mean.

EXHIBIT 4.9b

Percent of Teacher Participations in Reform Types of Professional Development Activities, Interaction of District Poverty and District Size (n=353)



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The data point designated by the first square indicates that the average percent of participations in reform activities in medium-poverty small districts is 19 percent. The line with data points designated by diamonds indicates the percent of participations in reform activities for high-poverty districts in each of four sizes/types of districts (i.e., consortia, large, medium, and small districts); the line with data points designed by squares indicates the percent of participations in reform activities for medium-poverty districts for each of the four sizes/types of districts; and the line with data points designated by triangles indicates the percent of participations in reform activities in low-poverty districts for each of the four sizes/types of districts.

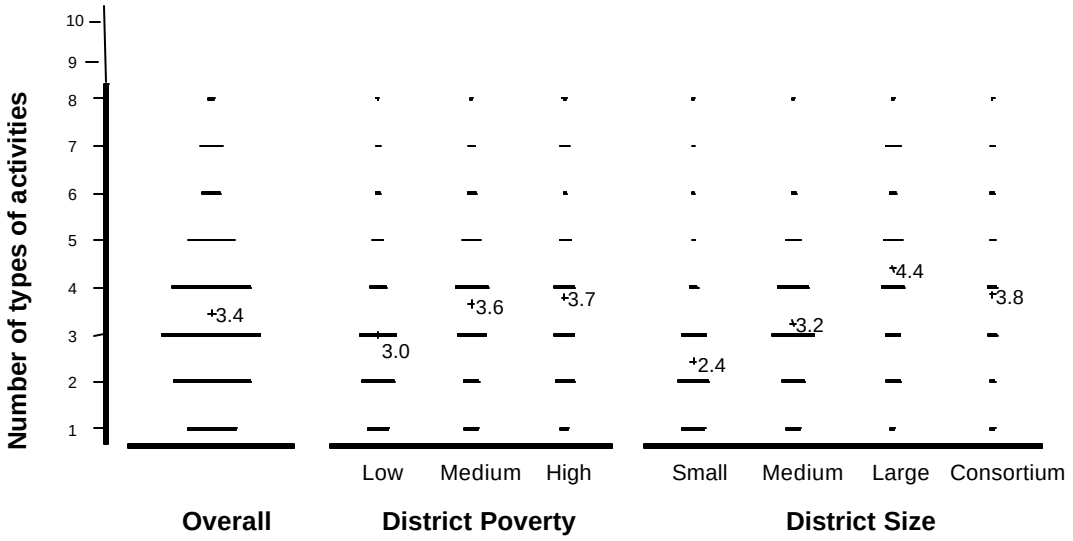
This may reflect the fact that large districts are more likely to have teachers available who have the time to participate in reform activities, which sometimes span a longer period of time than traditional activities; that is, large districts are more likely to have department leaders and/or curriculum specialists or other positions that do not require 100 percent classroom time, whereas districts with smaller numbers of teachers may be less likely to have these positions. The findings also may reflect the fact that reform activities typically cost more per teacher than traditional activities. Large districts may have more resources available per teacher, in addition to benefiting from economies of scale, both of which might enable them to offer more reform activities, compared to smaller districts. Low-poverty districts generally do not provide many opportunities for participation in reform activities, possibly because, on average, their students perform better than in other districts. As a result, low-poverty districts may not feel the need to offer reform approaches to professional development.

The total number of types of activities that a district funds is another measure of a district's portfolio of professional development activities. This measure reflects a district's emphasis on reform types of professional development and allows us to compare how districts vary in their support of these types of professional development. Since almost all districts support the two traditional types of professional development activities (i.e., in-district workshops and institutes, and out-of-district workshops and conferences), the larger the number of types of activities that the district supports, the more likely it is that they are supporting reform types of professional development activities. Exhibit 4.10 shows the percent of teachers in districts reporting that they use Eisenhower funds to support different numbers of types of activities. We created this measure by adding the number of types of activities that district coordinators said that they supported, at least in part, with Eisenhower funds, from July 1 through December 31, 1997. Of a possible ten types of activities (the two traditional and six reform that we address in this chapter, plus courses and teacher resource centers), districts support an average of 3.4 types of activities with Eisenhower funds. Three percent of teachers are in districts that support only one type of activity (data not shown).

Consistent with our previous findings on across-district variation, some districts use Eisenhower funds to support very few types of activities during the time period in question, while some support as many as eight of the different types. Further, low-poverty districts have significantly fewer types of activities than medium- or high-poverty districts. In addition, as one would expect, small districts support fewer types of activities than either medium or large districts or consortia, and medium-sized districts support fewer activities than large districts. Perhaps the higher the poverty, the greater the perceived need to experiment with multiple and new forms of professional development; and the larger the district, the greater capacity to do so.

EXHIBIT 4.10

Number of Types of Eisenhower-assisted Activities, Overall and by District Poverty and District Size (n=353)



	Significant Pairwise Contrasts
Size	Small vs. Medium, Small vs. Large, Small vs. Consortium, Medium vs. Large
Poverty	Low vs. Medium, Low vs. High

Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report that they offer 3.4 out of a possible 10 activities, with no districts offering more than eight types of activities. The number of types of Eisenhower-assisted activities differs significantly by both district poverty and district size. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of the number of types of activities supported by Eisenhower funds. The number to the right of the distribution is the mean.

The Structural Features of Reform Types of Activities

Even when districts support reform types of professional development activities, they may not have other features such as long duration that would foster better teacher outcomes. As we suggested earlier in this report, recent literature has described certain reform types of professional development as having features that enable teachers to reflect on their new knowledge, practice new skills, and engage in in-depth discussions of implementation issues. This implies that these reform types of professional development occur over a period of time that allows for such reflection, practice, and discussion.

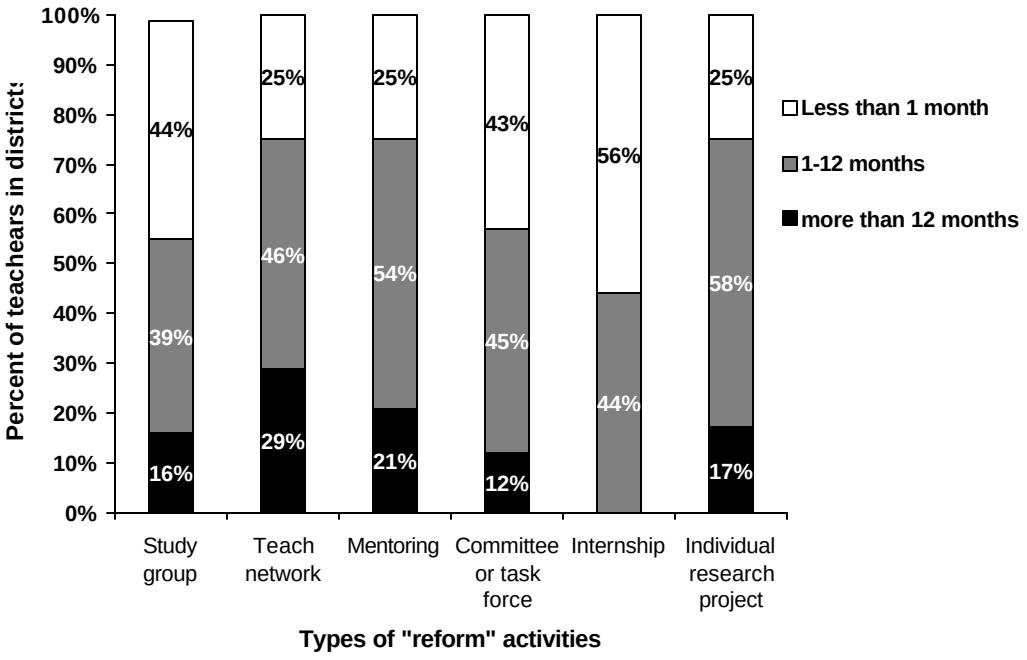
Span. We did not ask coordinators the number of hours that teachers spent in reform activities, since for most of the activities a measure of hours did not seem easy for coordinators to know; for example, the literature suggests that participation in teacher networks often is ongoing. We did ask Eisenhower coordinators to report the time period over which each type of reform activity was typically spread; the choices were 1) one month or less, 2) more than one month but less than six months, 3) between six months and one year, or 4) more than one year. For the analysis, we combined the two middle categories. Exhibit 4.11a shows the percentage of districts reporting

"typical" Eisenhower-assisted reform activities that lasted less than one month, one month to a year, and more than a year.

While reform activities typically extend over a relatively long period, this is not always the case. Exhibit 4.11a shows that Eisenhower coordinators report that nearly half (44 percent) of all teachers are in school districts where "typical" study groups last less than one month, and one quarter (25 percent) of teachers are in school districts where typical collaboratives or networks last less than one month. Such activities are generally described in the literature as ongoing, often regularly scheduled opportunities for teachers to meet to discuss students' learning and teacher practice (Lieberman & McLaughlin, 1992; Little, 1993). Therefore, it seems surprising that such a relatively high percentage of teachers are in districts that report that typical Eisenhower-assisted activities of these types last for less than a month. However, a majority of teachers are in districts that support reform activities that typically last for more than a month, with the exception of internships. In the case of teacher networks, over a quarter of teachers (29 percent) are in districts that typically offer this activity for longer than a year.

EXHIBIT 4.11a

Percent of Teachers in Districts by Span of Eisenhower-assisted Reform Activities (n varies by type)

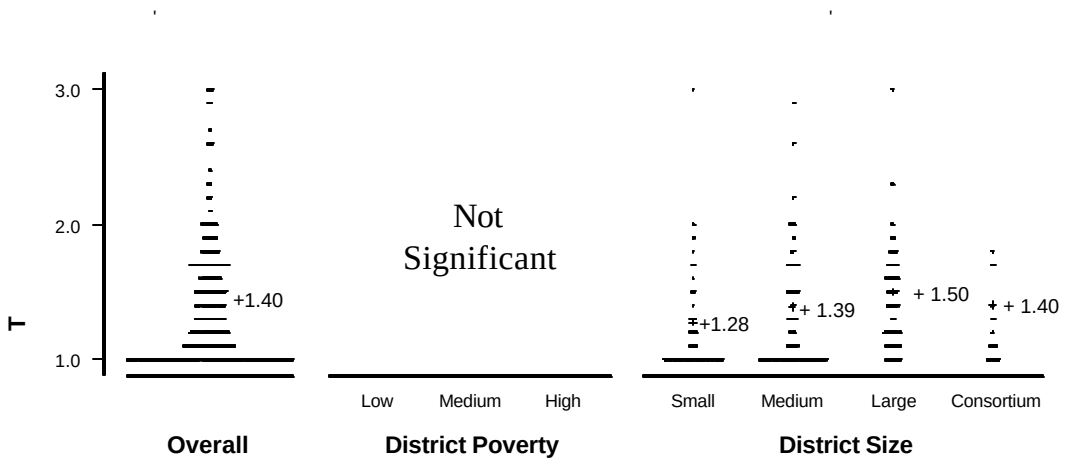


Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first bar shows that 44 percent of teachers are in districts that have study groups that typically last less than one month, 39 percent of teachers are in districts that have study groups that typically last between one and 12 months, and 16 percent of teachers are in districts that have study groups that typically last more than 12 months. Each bar shows the percent of teachers in districts that report having a particular activity for each of the three time span categories, illustrated in the key. The number at the top of each shaded area is the percent of teachers in districts for the corresponding time span category.

We created a composite variable of the span of all activities, both traditional and reform, where 1=less than one month, 2=one to 12 months, and 3=more than one year. As Exhibit 4.11b shows, professional development activities in large districts extend for a significantly longer span of time than activities in small districts. There are no statistically significant differences for district poverty level. These results support the notion that the greater capacity of larger districts may enable them to design and offer activities that span a greater length of time.

EXHIBIT 4.11b

Average Span of Eisenhower-assisted Activities, Overall and by District Poverty and District Size (n=353)



	Significant Pairwise Contrasts
Size	Small vs. Large

Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report that their Eisenhower-assisted activities have a span of 1.4 (i.e., between "less than one month" and "one month to a year"). The span of traditional and reform activities differs significantly by district size, but not by district poverty level. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of the number of types of activities supported by Eisenhower funds. The number to the right of the distribution is the mean.

Case-study Examples of District Support for Reform Types of Professional Development Activities

Survey data show that some districts use their Eisenhower funds predominantly for reform types of professional development activities, and our case-study data provide us with examples of districts. Boonetown, Kentucky, one of our in-depth case studies, is an example of a district in which the great majority of Eisenhower-assisted professional development supports reform types of professional development.

In Boonetown, Eisenhower funds support teacher mentoring and coaching, as well as other forms of activities where teachers share knowledge with their peers. Almost all Eisenhower funds in the district go toward building school capacity. The district does this by supporting four resource teachers who act as mentors to other teachers in the district. These resource teachers provide in-class modeling, assistance in preparing lessons, and observations of other teachers. In each school, the

principal determines priorities for the resource teachers, based on the school goals that, in turn, reflect the performance of students on the statewide assessment. Even where funds are used to enhance the skills of individual teachers, they are expected to teach these skills to other teachers. The principals encourage teachers with strong leadership qualities and specific professional development interests to use Eisenhower funds to develop their expertise in an area (e.g., graphing calculators), then return to the school and train their peers. Teachers may use Eisenhower funds to attend conferences as well as workshops if they will share their knowledge with other teachers in their schools.

Comparing Eisenhower-assisted Activities to All District Professional Development Activities

So far we have been focusing on district portfolios of Eisenhower-assisted professional development activities. But Eisenhower-assisted professional development is only one part of a district's professional development program. Title II provides only a portion of a district's budget and incentives for professional development. Each district has its larger portfolio of professional development that includes both Eisenhower-assisted activities and non-Eisenhower funded activities. Most school districts offer teachers opportunities for professional development that they fund from state, local, or other federal sources. Our survey data allow us to further examine the whole pattern of district professional development activities, both those funded by Eisenhower and those funded by other sources.[10]

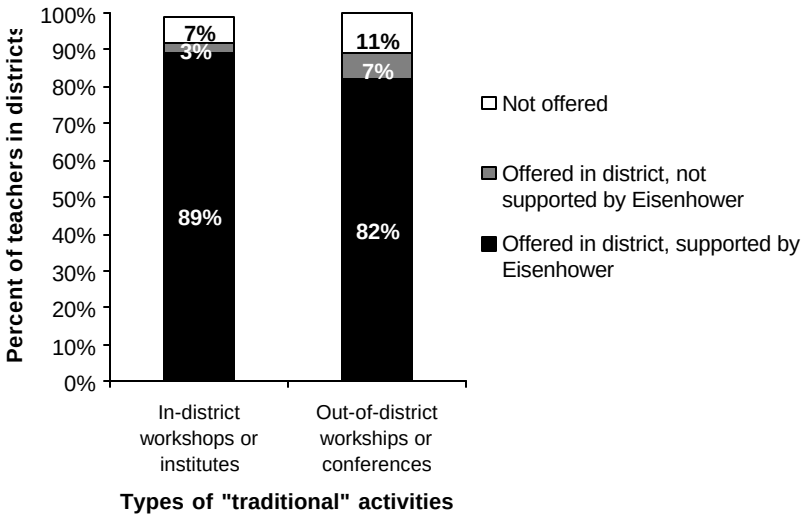
We asked district coordinators whether their districts offer each type of professional development activity, and if so, if they support the activity with funds from the Eisenhower program. As Exhibit 4.12 illustrates, over 80 percent of teachers work in districts that support in- and out-of-district workshops and use Eisenhower funds to do so. Less than 10 percent of teachers are in districts that support these workshops but do not use Eisenhower funds for them.

As illustrated in Exhibit 4.13, many districts offer reform types of professional development activities but do not use the Eisenhower funds to support them. For example, of those teachers in districts that support mentoring and committee or task force membership, about half are in districts that use Eisenhower funds to do so. That is, 30 percent of teachers are in districts that use Eisenhower resources to fund mentoring, and 31 percent of teachers are in districts that support mentoring, but not with Eisenhower funds. Similarly, 35 percent of teachers are in districts that fund committees or task forces with Eisenhower resources, and 35 percent of teachers are in districts that offer these activities, but do not use Eisenhower funds for them.

[10] We explored a number of analyses to identify clusters of districts that were similar in their portfolios of professional development, but for the most part we did not find any clear clusters; instead there appeared to be great variability among districts in the kinds of professional development that they provide. We were therefore unable to classify districts according to the types or characteristics of the professional development that they provide.

EXHIBIT 4.12

Percent of Teachers in Districts That Fund Workshops with Eisenhower Funds, Other Sources, or Not at All (n=353)



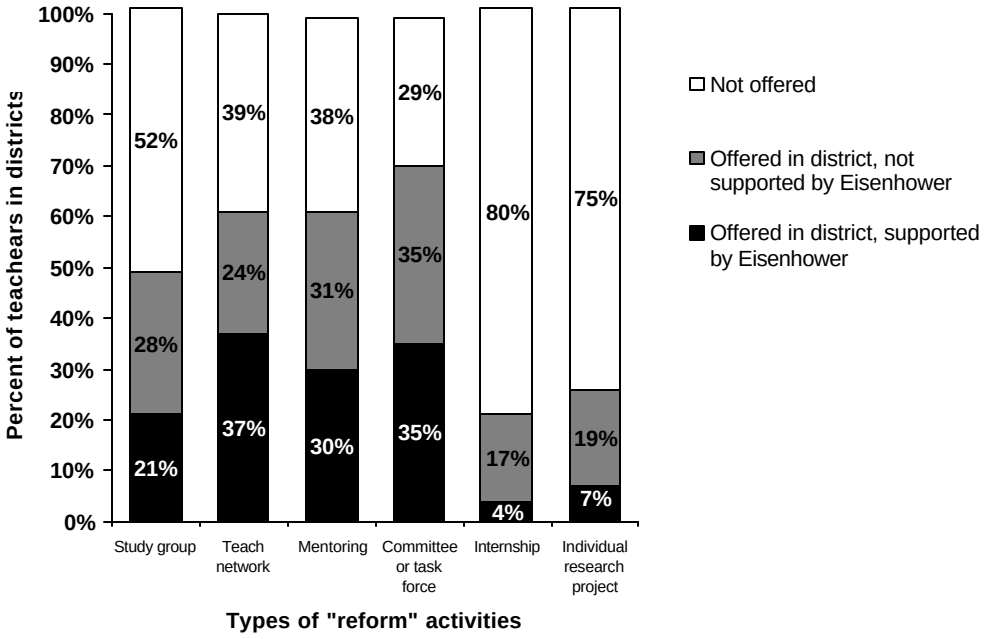
Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first bar shows that 7 percent of teachers are in districts that do not offer in-district workshops and institutes, 3 percent of teachers are in districts that offer them but do not support them with funds from the Eisenhower program, and 89 percent of teachers are in districts that offer them and support them with Eisenhower funds. Each bar shows the percent of teachers in districts that report the status of a particular type of activity, for each of the three status categories illustrated in the key. The number at the top of each shaded area is percent of teachers in districts for the corresponding status category.

Eisenhower support for the remaining four reform activities varies. Districts that support teacher networks are more likely than not to use Eisenhower funds to do so; thirty-seven percent of teachers are in districts that fund teacher networks with Eisenhower dollars, and 24 percent are in districts that support networks, but do not use Eisenhower funds for them. In contrast, districts are less likely to use Eisenhower funds to support study groups, internships, and individual research projects. For example, 21 percent of teachers are in districts that use Eisenhower funds to support study groups, while 28 percent of teachers are in districts that support study groups without using Eisenhower funds. Very few districts use money from the Eisenhower program to support internships and research projects. Only four percent of teachers are in districts that use Eisenhower money to support internships, compared to 17 percent of teachers in districts that support this activity without using Eisenhower funds. The same pattern exists for individual research projects; only seven percent of teachers are in districts that support research projects with Eisenhower funds, while 19 percent of teacher are in districts that support them but do not use Eisenhower funds to do so.

Although Eisenhower funds may be used to provide support for all types of professional development, districts are much more likely to report using Eisenhower resources to fund traditional types of professional development—specifically in- and out-of-district workshops and institutes—than any other type of activity. Teacher networking is the only type of reform activity for which more than half of teachers in districts that offer the activity are in districts that use Eisenhower funds to support it.

EXHIBIT 4.13

Percent of Teachers in Districts That Fund Reform Types of Activities with Eisenhower Funds, Other Sources, or Not at All (n=353)



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first bar shows that 52 percent of teachers are in districts that do not offer study groups; 28 percent of teachers are in districts that offer them but do not support them with Eisenhower funds; and 21 percent of teachers are in districts that offer them and support them with Eisenhower funds. Each bar shows the percent of teachers in districts that report the status of a particular activity, for each of the three categories illustrated in the key. The number at the top of each shaded area is percent of teachers in districts for the corresponding status category.

Given the goals of the Eisenhower program to support professional development that is sustained, intensive, and of high quality, and given our finding in Chapter 3 that reform types of professional development are associated with other structural and core features of high-quality, these findings may be cause for concern. They may indicate that many districts do not view Eisenhower funds as a resource for precisely the types of activities that the legislation is intended to support.[11]

It is unclear why districts may choose to use Eisenhower funds disproportionately for workshops rather than for other types of activities. Districts may choose to spend Eisenhower money on workshops for the same reason that workshops are popular generally—because this method allows districts to reach more teachers for less money than would be possible with most of the reform types of activities. Another possibility is that several of the reform activities, such as mentoring and internship/immersion activities, require resources that are greater than those available through the Eisenhower program. In such cases, districts may use other sources of funding for these extended, more expensive activities, and use Eisenhower funds for add-on programs and activities, such as

[11] Our data do not provide information on the proportion of *within* district funds spent on traditional vs. reform activities.

workshops and institutes, which are less typically less expensive. Further, systems may already be in place that channel Eisenhower funds to these traditional professional development activities before any other type of activities, and these systems may be difficult to alter.

Finally, districts may be unaware that they can use Eisenhower funds for some reform types of professional development. In response to questions about whether they used Eisenhower funds for reform types of professional development activities, some district coordinators in our national sample appeared surprised that they could use Eisenhower funds for these purposes.

Summary: Structural and Core Features of Traditional and Reform Activities

Findings from our National Profile of Eisenhower coordinators and from our case-study districts clearly indicate that districts differ substantially in the patterns of activities that they support with Eisenhower funds. Data from district Eisenhower coordinators indicate that most school districts use Eisenhower funds to support traditional types of professional development—that is, in-district workshops and institutes, and out-of-district workshops and conferences. According to district Eisenhower coordinators, these activities generally are eight hours or less, and span over less than a week. In most districts, the great majority of participations are in such traditional types of professional development activities. Further, district coordinators also report that the opportunity for active learning that they are least likely to offer is teachers being observed in their own classrooms, which may be one of the most important methods for changing teacher practice.

However, data from district coordinators indicate that districts vary tremendously in their reliance on traditional types of professional development activities and in the quality of these activities. While most districts have large proportions of participations in such activities, other districts do not. Some districts support workshops that have high-quality structural and core features—by involving greater amounts of learning time, more collective participation, and opportunities for active learning, for example—while workshops in other districts are less likely to have these features.

Similarly, while many districts use Eisenhower funds to support teachers' participation in reform types of professional development activities, teacher participation in these reform types is typically very low. This is even more true in small and low-poverty districts.

This pattern may be partially explained by the fact that several of these reform activities do not lend themselves to large numbers of participants, but rather are designed specifically for small numbers of participants, such as teacher committees. Districts also may not be able to afford support for some of the reform types of professional development for large numbers of their teachers. By their nature, some reform types of professional development may be more costly than traditional types of professional development, or may take more time than teachers have to commit. For example, if districts were to pay teachers for the time involved in formal mentoring relationships that extend over long periods of time, or for ongoing study groups, or for substitutes so that teachers could participate in such activities, they would certainly be more costly than traditional workshop arrangements.

District coordinators' reports about patterns of support for reform activities mirror the data from our teacher survey, reported in Chapter 3. While a notable number of school districts use

Eisenhower funds for reform types of professional development activities, most districts tend to support such activities for only a small proportion of their teachers.

These findings appear to indicate that there is room for districts to improve in meeting the intent of the 1994 reauthorization. However, in the absence of information about the use of Eisenhower funds for reform types of professional development activities prior to the 1994 reauthorization, we do not know for sure whether districts are moving in the direction of using Eisenhower funds for reform activities. The previous evaluation of the Eisenhower program did not ask a national sample of districts about their support of reform types of activities (Knapp et al. 1991). If such activities were supported very rarely in the past, then the proportions that we report could represent an increase in districts' reliance on reform types of professional development activities supported by Eisenhower funds.

Further, we found that not all of the traditional activities have characteristics of low-quality professional development, nor are all reform types of high quality. The literature on professional development suggests that traditional types of professional development generally provide less opportunity for reflection, practice, and discussion than do reform types of professional development (Little, 1993; Sparks & Loucks-Horsley, 1989). This means that, in general, traditional types of activities would be less likely than reform activities to foster the types of reflection, in-depth treatment of content, and opportunities for active learning that were envisioned in the 1994 reauthorization. While this may generally be true, as we demonstrated in Chapter 3, our data from district Eisenhower coordinators indicate that the duration of both types of activities varies substantially across districts. In some districts, traditional types of professional development meet for many hours, extend over a long period of time, include multiple learning strategies, and have opportunities for collective participation. And in some districts, reform types of professional development, such as networks or study groups, last only a few weeks. The range across districts in the duration of reform types of activities, and the fact that a substantial proportion of these activities are spread over less than one month, are surprising findings. They lead us to conclude that both traditional and reform types of professional development can have characteristics of high-quality professional development, and that reform types of professional development are not automatically of higher quality than professional development activities with a traditional format.

Our results indicate that although some districts provide "sustained and intensive" professional development, whether structured as a traditional or reform activity, most districts do not. Thus it seems that the legislative intent of the1994 reauthorization has not yet been realized, except in a minority of sites. Districts do not adequately use their Eisenhower funds to support professional development activities that have the features of high quality as identified in the literature on professional development and in the findings from our study of teachers in Chapter 3. Although districts provide activities of longer duration than in the early 1990s (see Knapp et al., 1991), our findings suggest that there is still a great deal of room for improvement. This leads us to the conclusion that federal efforts must continue to encourage districts to support sustained, intensive, and high-quality professional development activities with Eisenhower funds.

TARGETING AND RECRUITMENT OF TEACHERS

Section Findings

- *Districts report that they target professional development activities more to teachers in low- achievement, high-poverty, and Title I schools than to other groups of teachers. High-poverty districts and large districts target these groups of teachers significantly more than other districts.*

- *Almost all teachers come to participate in Eisenhower-assisted activities through volunteering or principal selection.*

- *Nearly all districts publicize their professional development activities, and most also try to increase participation by tailoring the focus of activities to specific groups of teachers and creating incentives for participation.*

So far, we have discussed differences in professional development opportunities among districts according to their emphasis on particular subject matter, their focus on traditional versus reform types of activities, and the structure and core experiences of these activities. Two other important factors that affect teachers' professional development opportunities are the extent to which districts target activities toward specific groups of teachers and their methods of recruiting teachers to participate in activities. In Chapter 3, we found that, despite the program's formula that targets more funding to higher poverty districts, and the legislative emphasis on serving teachers of special populations of children, such teachers were only somewhat more likely to participate in Eisenhower-assisted professional development than would be expected from their numbers in the population as a whole.

The Eisenhower legislation, like other federal, state, and local efforts, aims to improve the educational outcomes of all students, including those who historically have not had access to high-quality educational opportunities, or who have had greater difficulty succeeding in school. Several Title II provisions emphasize that activities for teachers funded by the Eisenhower program should benefit students from diverse backgrounds. The law states as one of its purposes the goal of "meeting the educational needs of diverse student populations," including economically disadvantaged students (Section 2002(2)(D)).

In addition, the local plan for professional development, required in the legislation, must describe how local professional development activities meet the needs of these students. The law contains a number of provisions that share a particular emphasis on activities that meet the needs of teachers who work in school with high rates of poverty and low achievement, and with diverse student populations.

In particular, local applications for Title II funds must include a description of how Title II activities will be designed to address the needs of teachers who are working in schools that receive assistance from the federal government under Part A of Title I (Section 2208(d)(1)(B)).

The rationale for these provisions is that teachers of special populations of students are more likely than other teachers to have little teaching experience; be working at schools with fewer

resources; have larger classes; have behavior, safety, and other non-academic issues to confront; and have students who are more challenging to teach than more advantaged students (Darling-Hammond, 1997a; U.S. Department of Education, 1999a). Teachers of disadvantaged students often do not feel prepared to meet the needs of their students (U.S. Department of Education, 1999a). Thus, these are often the teachers who most need professional development (Corcoran, 1995; Darling-Hammond, 1997b). Although they may be more in need of professional development than others, teachers of students in schools with high rates of poverty, and low-achievement, or Title I schools, sometimes have less opportunity to participate in certain types of professional development than teachers of students in more advantaged schools (U.S. Department of Education, 1998a).

In this section of the chapter, we present data that demonstrate the extent to which districts address the legislative emphasis on targeting and recruiting specific groups of teachers to participate in Eisenhower-assisted professional development opportunities. First we show how districts choose different groups of teachers to target, then we present data about the different ways that teachers come to participate in Eisenhower professional development activities. Finally, we show how districts vary in the type and number of methods that they use to increase teacher participation in Eisenhower-assisted professional development opportunities.

Targeting Teachers of Special Populations of Students

The district can influence who participates in professional development activities in several ways. One way is by focusing professional development opportunities on a particular subject area. As we illustrated in the first section of this chapter, virtually all school districts target their Eisenhower-assisted activities on mathematics and science and, therefore, target teachers of these subjects.

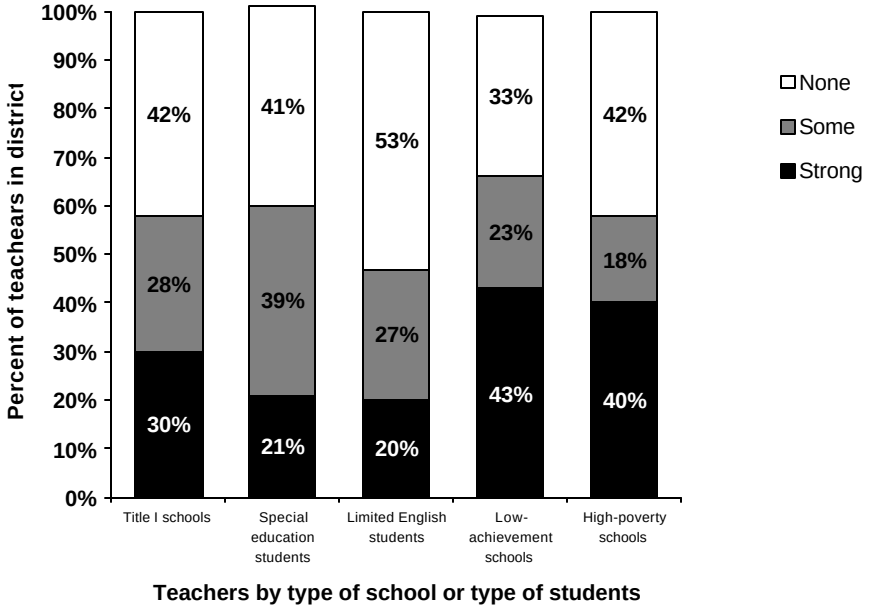
Another way districts influence what type of teachers participate is by focusing district recruitment efforts on specific groups of teachers. To find out whether districts are targeting teachers of special needs and disadvantaged students as outlined in the legislation, we asked district Eisenhower coordinators to indicate whether they placed “no particular emphasis,” “some emphasis,” or a “strong emphasis” on recruiting the following types of teachers: 1) teachers from Title I schools, 2) special education teachers, 3) teachers of limited English proficiency students, 4) teachers from schools with low achievement levels, and 5) teachers from high-poverty schools (50 percent or more students eligible for free/reduced-price lunch).[12]

As Exhibit 4.14 illustrates, similar percentages of teachers are in districts that report placing some or a strong emphasis on recruiting teachers from Title I schools (58 percent), schools with low achievement (66 percent), and high-poverty schools (58 percent). Sixty percent of teachers are in districts where the Eisenhower coordinator reports placing some or a strong emphasis on recruiting special education teachers, and 47 percent of teachers are in districts that place an emphasis on recruiting teachers of students with limited English proficiency. Thus, a majority of district coordinators say that they are targeting their professional development programs to the particular groups of teachers emphasized in the legislation.

[12] A teacher can work at a high-poverty *school* whether or not he or she is in a high-poverty *district*. A district is categorized as high-poverty based on the percent of low-income students in the district; within a district, schools vary in the number of low-income students who attend them, and low-income students are often concentrated in particular schools within a district.

EXHIBIT 4.14

Percent of Teachers in Districts That Report Placing No, Some, or a Strong Emphasis on Recruiting Teachers of Special Student Populations (n=363)



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first bar shows that 42 percent of teachers are in districts that place no emphasis on recruiting teachers in Title I schools, 28 percent of teachers are in districts that place some emphasis on recruiting these teachers, and 30 percent of teachers are in districts that place a strong emphasis on recruiting them. Each bar shows the percent of teachers in districts that report placing "none," "some," or a "strong" emphasis (as illustrated in the key) on recruiting teachers of special populations of students. The number at the top of each shaded area is percent of teachers in districts for the corresponding category of emphasis.

Further analysis of these data indicates that districts that emphasize recruiting teachers of one special population group (e.g., special education teachers) tend to emphasize recruiting teachers of other special populations as well. As Exhibit 4.15 illustrates, correlations of the emphasis given to recruiting different groups of teachers range from a moderate .53 to a high of .8. (A coefficient of one indicates perfect correlation.) In other words, some districts tend to emphasize recruiting multiple types of teachers; other districts do not tend to target at all.

We formed a scale to measure the extent of district targeting efforts by adding district responses to how much emphasis they placed on recruiting the different groups of teachers, where 1="no particular emphasis," 2="some emphasis," and 3="strong emphasis." As Exhibit 4.16 shows, the extent to which districts try to recruit various groups of teachers varies significantly by both district poverty and size. High-poverty districts are more likely to recruit teachers of special populations than either low- or medium-poverty districts. Similarly, large districts are more likely to recruit particular types of teachers than small- or medium-sized districts.

EXHIBIT 4.15

Correlations Among the Emphasis on Recruitment of Teachers of Special Populations of Students (n=363)

	Teachers from Title I	Special Education Teachers	Teachers of Limited English Students	Teachers from Low-Achievement Schools
Special Education Teachers	.65			
Teachers of Limited English Students	.56	.62		
Teachers from Low-Achievement Schools	.63	.60	.53	
Teachers from High-Poverty Schools	.70	.56	.60	.80

Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first correlation shows that recruiting special education teachers and recruiting teachers from Title I schools are significantly correlated at .65 where one indicates a perfect correlation. Each coefficient indicates the magnitude of the correlation between the two variables it represents. All correlations are significant at the .05 level.
Note: The coefficients are Pearson correlation coefficients.

Districts' reports of an emphasis on recruiting teachers of diverse student populations, especially teachers from low-achievement or high-poverty schools, is curious in light of the findings of the previous chapter. In Chapter 3, we found that teachers from high-poverty schools, or schools with high proportions of minority students, are only somewhat more likely than other teachers to participate in Eisenhower-assisted professional development activities. This is the case despite the fact that the Eisenhower formula provides a greater amount of funding to districts with large proportions of poor children. Thus, while most teachers are in *districts* that report placing an emphasis on recruiting teachers of students from diverse populations, teachers in high-poverty *schools* are not much more likely than others to participate, according to our national survey of teachers. To explore this issue further, we now turn to a description by district coordinators of how teachers come to participate in Eisenhower-assisted activities.

EXHIBIT 4.16

Extent of Recruitment of Teachers of Special Populations of Students, Overall and by District Poverty and District Size (n=363)

	Significant Pairwise Contrasts
Poverty	Low vs. High, Medium vs. High
Size	Small vs. Large, Medium vs. Large

Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report that they place "some emphasis" (i.e., 1.9, where one=no emphasis, two=some emphasis, and three=strong emphasis) on recruiting teachers of various types of students. The extent of targeting differs significantly both by district poverty and district size. Each dot represents one district. As the number of participations at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the extent of emphasis that districts place on recruiting various types of teachers. The number to the right of the distribution is the mean.

How Teachers Come to Participate in Eisenhower-assisted Professional Development Activities

Teachers can come to participate in Eisenhower-assisted professional development activities in a number of ways. For instance, they can volunteer to participate, they can be selected to attend by their principals, they can take turns participating, or they can be selected to participate by the professional development provider. An evaluation of NSF's Statewide Systemic Initiatives noted that heavy reliance on teachers to volunteer for high-quality professional development activities is "at best only a part of a strategy for systemic reform of mathematics and science education" (Corcoran, Shields, & Zucker, 1998). One reason is that districts may not be able to shape the incentives and constraints that determine which teachers volunteer. Therefore districts that rely on other methods to increase teacher participation besides volunteering may be more likely to access teachers who otherwise would not participate. With this in mind, we asked district coordinators to indicate what percent of the teachers in Eisenhower-assisted activities come to participate in each of the following ways: 1) volunteering, 2) selection by their principal or other administrator, 3) selection by providers, 4) rotation, and 5) other ways.

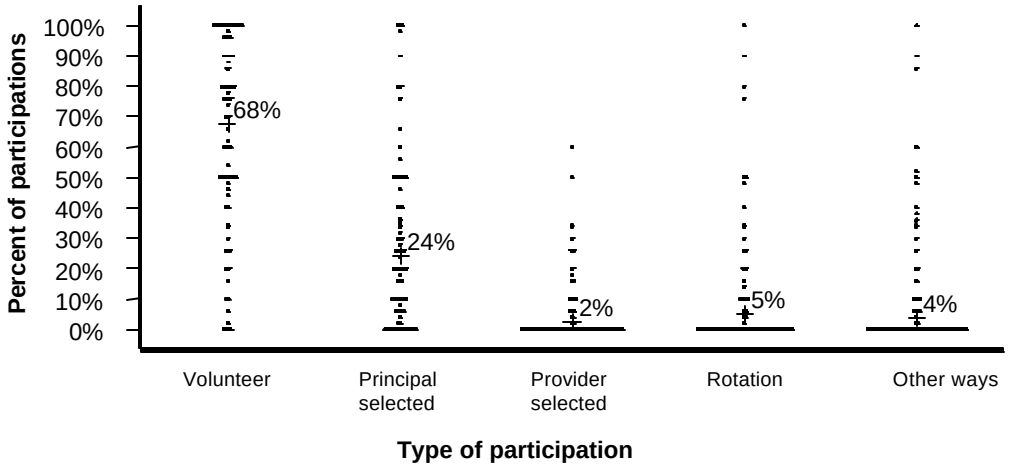
Exhibit 4.17 illustrates that the vast majority of teachers participate in Eisenhower-assisted professional development either by volunteering (68 percent) or by being selected by the principal

(24 percent). The exhibit also shows that districts vary tremendously in their use of these different methods of drawing teachers to participate in Eisenhower-assisted professional development opportunities. A good number of districts rely exclusively or nearly exclusively on volunteers. And though by and large districts do not rely heavily on rotation or selection by provider to attract teachers to participate, some districts use these methods extensively.

The heavy reliance by districts on volunteers may be one explanation of the fact that teachers of students with the greatest needs do not participate in Eisenhower-assisted activities in greater numbers, despite districts' reported emphasis on recruiting such teachers. Analyses (not shown) indicate that teachers in high-poverty schools are no more or less likely to volunteer for professional development than other teachers; thus, it may be more effective to use other strategies to increase the participation of teachers of high-need students. Designing activities for whole schools may be one way of addressing this problem, while also achieving the benefits of collective participation. However, a whole-school approach may not be effective in some cases; successful participation in professional development activities demands a certain level of commitment by teachers, and recruiting volunteers helps to ensure that teachers are willing to devote the time and effort required to benefit from the activity.

EXHIBIT 4.17

Percent of Participations in District Eisenhower-assisted Activities, By How Teachers Come to Participate (n=358[13])



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first distribution shows that on average, districts report that 68 percent of teacher participations are volunteers. Each dot represents one district. As the number of districts at one data point (or value) increases, the dots form a horizontal line that increases in length. Each distribution represents the distribution of districts for that particular category. The number to the right of the distribution is the mean.

[13] Of our total sample of 363 district Eisenhower coordinators, five did not answer this survey question; therefore the sample size for this variable was 358.

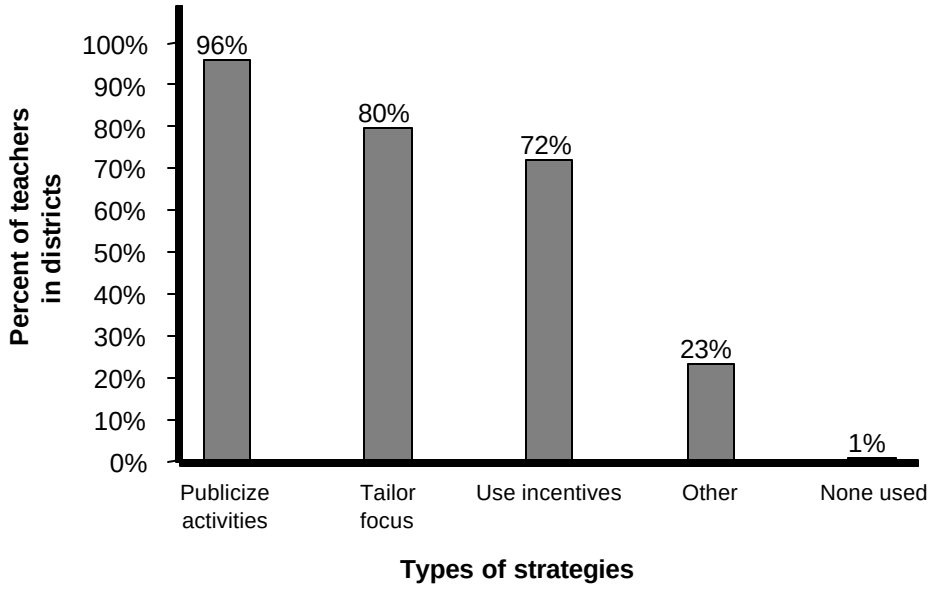
Methods of Increasing Teacher Participation

As part of targeting particular groups of teachers for participation in Eisenhower-assisted professional development activities, districts can take a number of steps to ensure that teachers have information about these activities. We asked district coordinators to indicate the ways in which they try to increase the participation of teachers, paraprofessionals, or other staff. District coordinators indicated whether they 1) publicize activities, 2) tailor the focus of professional development toward the needs of special populations, 3) use incentives, 4) use other strategies, or 5) use no special strategies. The question did not ask *how often* districts used these strategies, but only *whether* they used a particular strategy.

Exhibit 4.18 shows the percent of district Eisenhower coordinators who report undertaking different methods to increase participation in Eisenhower-assisted professional development activities.

EXHIBIT 4.18

Percent of Teachers in Districts That Use Various Strategies to Increase the Participation of Teachers in Eisenhower-assisted Activities (n=363)



Source: Telephone Survey of District Eisenhower Coordinators, Spring 1998.
How to read this exhibit: The first bar shows that 96 percent of teachers are in districts that try to increase teacher participation by publicizing their professional development activities. Each bar and the number on top of it represent the percent of teachers in districts for each category.

Most districts use several methods to increase teacher participation, but some methods are used more than others. Most teachers (96 percent) are in districts that publicize their professional development activities, 80 percent of teachers are in districts that tailor the focus of the activities to special populations, and 72 percent are in districts that use incentives to increase participation in professional development activities. The finding that 80 percent of teachers work in districts that report tailoring the focus of professional development activities toward the needs of special

populations goes hand-in-hand with the findings reported earlier that a majority of teachers are in districts that report placing either some or a strong emphasis on including teachers in low-achievement, high-poverty, and Title I schools, and, to a lesser extent, special education teachers and teachers of LEP students. Nevertheless, neither developing a tailored focus, nor the other strategies designed to increase the participation of teachers, appear to be effective in fostering the actual participation of teachers in high-poverty or high-minority schools, as reported in Chapter 3.

Summary: Targeting and Recruitment of Teachers

Our data show that most teachers are in districts that report making an effort to target teachers of students in schools with particular risk factors, such as high poverty or low achievement. Further, most teachers work in districts that use several strategies for informing teachers about professional development opportunities. Despite these efforts, and despite greater funding to districts that have large numbers of high-poverty students, teachers of students in high poverty are only slightly more likely than others to participate in Eisenhower-assisted activities. These findings question the actual implementation and effectiveness of recruitment strategies. Although in our national survey, district coordinators reported extensive targeting, in our six exploratory case sites (see Birman, Reeve, & Sattler, 1998), Eisenhower coordinators followed the approach of making Eisenhower-assisted activities available to all teachers, without making special efforts to target teachers of at-risk children. Our in-depth cases also did not find explicit strategies to recruiting teachers from high-poverty schools, or teachers of other at-risk students. These apparently mixed findings suggest that more in-depth questioning of Eisenhower coordinators may reveal less implementation of targeting and recruiting strategies than might be represented by our telephone survey results.

Even if districts do engage in targeting practices, the practices do not seem to be very effective. One reason that teachers of high-need students appear not to participate as extensively as district targeting strategies might suggest, could be the heavy emphasis that districts place on teachers' volunteering for professional development activities, since districts may be restricted in their ability to influence which teachers volunteer. These teachers in high-poverty schools may feel less comfortable taking time away from their students to attend professional development activities, given the academic challenges that their students face, as well as the behavior, safety, and non-academic problems that they may confront.

It would be helpful to have supplemental data that provide a measure of the quality of districts' targeting and recruiting efforts, as well as data about what might encourage teachers to volunteer for professional development. Even without this information, our findings suggest that policymakers and program administrators should increase efforts to target teachers of at-risk students, and develop effective methods of accomplishing this important goal.

DIFFERENCES IN DISTRICT PORTFOLIOS OF EISENHOWER-ASSISTED ACTIVITIES BY DISTRICT POVERTY AND SIZE

Throughout this chapter, for key variables we have indicated where patterns of Eisenhower support for professional development differ significantly according to the district poverty level or the size of the district. As we noted previously, all of the analyses simultaneously control for size and poverty, so any significant effects are independent of one another. Taken together, these findings help us understand how district demographic factors affect districts' use of Eisenhower resources. This section discusses these findings.

The level of poverty in a district sometimes is significantly associated with particular patterns of support for Eisenhower activities. Our data from Eisenhower coordinators indicate that, compared to lower-poverty districts, higher-poverty districts' portfolios of Eisenhower-assisted activities:

- have more participations in reform activities and fewer participations in traditional activities;
- offer more types of Eisenhower-assisted activities, both traditional and reform; and
- place more emphasis on recruiting teachers of special populations of students.

The Eisenhower program's funding formula provides more funds to districts that serve poorer populations, and our findings suggest that having more funds available enables a district to support more types of activities. Further, districts with more funds may be more willing to use resources to try reform methods of professional development, which may explain why high-poverty districts have more teacher participations in reform types of activities. In addition, districts with more students from low-income families probably place greater emphasis on recruiting teachers of special populations because these districts are more likely than others to serve students from these populations. In addition, high-poverty districts have more funding from Title I and other federal programs, which also provide support and encouragement for professional development for teachers of special groups of students. So it seems that one of the intentions of the legislation, to provide support for professional development to teachers of children in high-poverty communities, is at least in part being met. But there is a great deal of room for improving districts' targeting of their professional development activities to meet the needs of teachers of special populations of students, and the participation of these teachers in Eisenhower-assisted professional development activities.

The analysis for district size shows that, compared to districts with fewer teachers, the portfolios of Eisenhower-assisted activities in districts with larger numbers of teachers:

- have fewer participations in traditional types of professional development (except in low-poverty districts);
- provide more opportunities for active learning in professional development activities;
- have activities designed with more opportunities for collective participation;

- offer activities that span a longer period of time;
- provide a larger number of different types of activities, both traditional and reform; and
- place more emphasis on recruiting teachers of special populations of students.

Larger districts may have fewer participations in traditional types of professional development activities than smaller districts because, although large districts virtually always offer traditional activities, they also are more likely to offer reform types of activities. Small districts, perhaps because they have fewer resources and therefore have to limit the number of activities that they offer, support fewer types of professional development than large districts. The result is that smaller districts have more participations (in percentage terms) in traditional activities than large districts. For the most part, the ratio of participations in reform to traditional activities increases as size increases. The exception to this pattern is low-poverty districts, which do not have much variation in participations between small and large districts. These findings suggest that large districts are able to offer more reform activities and less traditional activities because of economies of scale that enable them to offer the sometimes more expensive reform activities and because of infrastructure and organizational advantages. Large *low-poverty* districts may be less inclined to seek change and innovation because on average, their students perform better than students in other districts.

Districts with more teachers also have higher quality in-district workshops and institutes than districts with fewer teachers. The in-district Eisenhower-assisted workshops and institutes offered by larger districts provide more opportunities for active learning and are more likely to be designed to foster collective participation. In addition, larger districts place more emphasis on recruiting teachers of special populations of students than do smaller districts.

The observed positive effects of size may be due in large part to the fact that large districts often have more Eisenhower money to spend on professional development than do small districts. Although Eisenhower funds available on a *per-teacher* basis are comparable, a critical mass of funds available in larger districts may allow them to offer a wider range of types of professional development, and to offer activities that span over longer periods of time. Larger districts may also tend to have more resources of other sorts, such as nearby universities, that will allow them to tap into a wider range of professional development types. In addition, large districts also have a more comprehensive, efficient infrastructure for planning and delivering professional development. This may allow them more opportunities and resources to shape and organize their professional development activities to be more sustained and intensive, and to be responsive to the needs of whole schools or groups of teachers from a school, rather than just individual teachers. Consortia seem to operate primarily like large districts. They provide significantly more opportunities for active learning and more types of activities than do small districts. In addition, in many cases consortia provide the same higher levels of collective participation and participation in reform approaches to professional development that large districts do. Thus, it appears that consortia, with similar capacity and resource advantages, enjoy the same positive effects of size as do large districts.

SUMMARY AND CONCLUSIONS

In this chapter, we examined how district portfolios of Eisenhower-assisted activities vary according to subject area focus, quality—as measured by the structural and core features of the activities, strategies for targeting and recruiting teachers for participation, and how these differences are accounted for by district poverty and district size. We identified a number of patterns that have implications for the Eisenhower program.

First, we found that nearly all districts use Eisenhower funds to support professional development in mathematics and science. These funds appear to have played an important role in supporting content knowledge in these subject areas in some districts, and fostering content knowledge is critical for teaching and learning. Continuing the subject area focus of Eisenhower-assisted professional development activities would allow the program to continue its important contribution in this area of professional development.

Second, we found that nearly all districts use Eisenhower funds to support traditional approaches to professional development activities that are not "sustained" or "intensive," as intended by the Eisenhower legislation. Even among districts that support reform types of professional development activities generally, many do not use Eisenhower funds to do so. Nevertheless, the fact that some districts manage to use Eisenhower funds almost exclusively for professional development activities that have features of high quality indicates that the program could perhaps do more to increase the number of districts using their Eisenhower funds in optimal ways. Along these lines, our findings suggest that since *either* reform or traditional activities can offer characteristics of high-quality professional development, it is more important for districts to focus on improvements in the structure and substance of the activities, rather than the particular type of activity.

Third, despite an emphasis on recruiting teachers from high-poverty schools, and other teachers of at-risk students, such teachers appear to participate in Eisenhower-assisted activities in numbers only somewhat greater than their proportions in the population. If targeting of professional development activities is an important goal of the Eisenhower program, districts may wish to rely less on teachers volunteering as the primary way teachers come to participate in Eisenhower-assisted activities. One alternative that could increase the impact of professional development is targeting certain schools and requiring all teachers to participate in the same professional development activity, although this may not be possible in some districts.

Finally, our data indicate that high-poverty districts, and large districts and consortia, often are more able and willing to support a diverse and extensive set of Eisenhower-funded activities than other districts. A greater amount of funding goes to such districts, but this alone does not fully explain the results. Perhaps larger districts have greater capacity, and higher poverty large districts see the greater need to provide new and more ambitious forms of professional development.

Thus, this chapter has identified areas in which districts need to focus in order to bring Eisenhower-assisted activities more in line with the intent of the legislation. But the Eisenhower legislation already contains provisions that intend to move districts toward higher quality professional development activities. By requiring that districts align Eisenhower-assisted professional development activities with state and district standards, coordinate these activities with those funded by other federal programs, and plan and evaluate professional development activities, the legislation intends to foster high-quality professional development.

In the next chapter we examine these aspects of the district-level management and implementation of Eisenhower-assisted professional development activities. We examine how school districts align, coordinate, plan, and evaluate their activities, and how district context (i.e., size and poverty) is associated with these district operations. In addition, we present a model of how district management and implementation is associated with features of its "portfolio" of Eisenhower-assisted professional development activities, including structural and core features that are associated with improvements in teacher knowledge and skills and changes in teacher practice. The goal of the next chapter is to identify and describe key factors in how districts manage and implement the program, and relate these to the district's use of Eisenhower funds to support high-quality professional development.