Compendium of MSP MIS Data for Comprehensive, Targeted, and Institute Projects: 2002–03 Through 2010–11 School Years

Authors

Molly Hershey-Arista
Lisa Schiavo
Holly Bozeman
Gary Silverstein
Joy Frechtling

January 2013

Prepared for:
National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230

Prepared by:
Westat
1600 Research Boulevard
Rockville, Maryland 20850-3129
(301) 251-1500

Westat®

Contents

Text tables **Page**

Exhibit

Appendix tables

Appendix tables **Page**

Appendix tables **Page**

Appendix tables **Page**

Appendix tables **Page**

Appendix tables **Page**

Overview of the Math and Science Partnership Program

The Math and Science Partnership (MSP) program is a major initiative designed to address the nation's growing concern about the performance of U.S. students in mathematics and science, grades K–12. The MSP effort is itself a partnership between two federal agencies—the National Science Foundation (NSF) and the U.S. Department of Education (ED). The program awards competitive grants to teams of institutions of higher education (IHEs), local K–12 school systems, and other supporting partners with a stake in educational excellence. The goals of the MSP program are as follows:

- Ensure that all K–12 students have access to, are prepared for, and are encouraged to participate and succeed in challenging curricula and advanced mathematics and science courses;
- Enhance the quality, quantity, and diversity of the K–12 mathematics and science teacher workforce; and
- Develop evidence-based outcomes that contribute to our understanding of how students effectively learn mathematics and science.

MSP projects aim to address these issues by incorporating a depth and quality of creative strategic actions that extend beyond commonplace approaches. The intellectual engagement of higher education faculty in science, technology, engineering, and mathematics ("STEM faculty") in K–12 reform is a cornerstone of the MSP program. Faculty contribute to the project in a variety of ways, including using their own research and scholarship to help educators rethink K–12 education, leading inservice professional development for K–12 teachers, and reviewing K–12 course curricula. Although all MSP projects share a focus on the same set of fundamental issues, individual projects differ in their activities and scope and are categorized accordingly. As of the 2010–11 data collection cycle, MSP provided awards to the following five distinct types of partnerships:

- *Comprehensive* partnerships implement change in mathematics and/or science educational practices in both IHEs and in K–12 schools and school districts, resulting in improved student achievement across the K–12 continuum.[1]
- *Targeted* partnerships focus on improved K–12 student achievement in a narrower grade range or disciplinary focus within mathematics or science.

[1] NSF only funded Comprehensive projects in Cohorts 1 and 2.

- *Institute* partnerships, also referred to as *Teacher Institutes for the 21st Century*, focus on the development of mathematics and science teachers as school- and district-based intellectual leaders and master teachers.

- *MSP Start* partnerships are awarded planning grants to support the necessary data analysis, project design, evaluation, and team-building activities needed to develop a full MSP Targeted or Institute project.

- *Phase II* partnerships are awarded to prior NSF MSP Partnership awardees to continue implementation of specific innovative areas of their work where evidence of the potential for significant positive impact is clearly documented.

A sixth type of MSP project addresses the research, evaluation, and technical assistance (RETA) component of the MSP program. The MSP RETA projects are intended to enhance the capacity of the MSP Comprehensive, Targeted, and Institute projects to achieve their goals and to contribute to the development and dissemination of the knowledge base necessary to achieve sustained educational reform.

This report covers the 12 Comprehensive projects, 36 Targeted projects, 44 Institute projects, and seven Phase II projects that were funded by NSF and completed the MSP Management Information System (MIS) between the 2002–03 and 2010–11 school years.[2] As Phase II projects are continuations of work done through previous Comprehensive and Targeted projects, all Phase II data are linked to the original project data and reported with each project's original cohort. Increases in the number of projects reported over time reflect the addition of new project cohorts. The number of projects that are included per year also reflects that some projects came to an end between collection years and were no longer required to complete any additional surveys. Table 1 shows a timeline of project increases and decreases by cohort.

Table 1. MSP project increases and decreases, by cohort

Project year	C&T Cohort 1	C&T Cohort 2	C&T Cohort 3	C&T Cohort 4	C&T Cohort 5	Institute Cohort 1	Institute Cohort 2	Institute Cohort 3	Institute Cohort 4
2002–03...	+22								
2003–04...		+12							
2004–05...			+6			+8			
2005–06...	-1								
2006–07...							+4		
2007–08...	-1								
2008–09...	-10	-2	-1	+8				+4	
2009–10...	-6					-5			+7
2010-11 ...	-3	-6	-2		+8	-3			

C&T = Comprehensive and Targeted.

NOTE: The addition of Phase II projects is not represented in this table. As Phase II projects are continuations of work performed in original Comprehensive or Targeted projects, data from Phase II projects are linked to the original project and reported with the original cohort. Therefore, the "ending" of original projects is also not recorded in this table.

[2] Annual data about the MSP RETAs were collected between 2002–03 and 2007–08 and were reported separately. Data about the MSP Start projects began being collected in July 2010 and are reported separately.

Overview of the MSP Management Information System

In September 2004, NSF and its contractor (Westat) initiated the MSP Management Information System—a web-based data collection system. The MSP MIS is designed to obtain annual information from each MSP-funded project that can be used by NSF and other stakeholders to assess the implementation and impact of the overall MSP program and to monitor the progress of individual MSP grants. These data also enable NSF program officers to assess the annual progress of the projects. Individual projects can make use of this information for their own planning, reporting, and evaluation efforts. Exhibit 1 summarizes the surveys that compose the MSP MIS.

Exhibit 1. MSP MIS surveys

MSP MIS Surveys for Comprehensive and Targeted Projects

- **Annual Project Survey for Comprehensive and Targeted Projects.** This survey, completed by MSP principal investigators (PIs), is designed to collect background information on each project's partner organizations, the grades and subject areas that the project is addressing, the scope of the project, the number of project participants, the type of project activities by key feature, challenges encountered during the previous year, and involvement with RETA awards.
- **Annual K–12 District Survey.** This survey, completed by participating K–12 school districts, collects data about each participating district and school. Information requested includes the number of schools within the district participating in MSP, the amount of MSP-sponsored professional development received by K–12 teachers and administrators, the demographic characteristics of all K–12 teachers in participating schools, teacher retention and recruitment in participating schools, the demographic characteristics of students in participating schools by grade level, the number of students enrolled in and completing challenging mathematics and science courses, and student performance on mathematics and science accountability assessments. Teacher and student data are always reported by demographic characteristics.
- **Annual IHE Partner Survey.** This survey, completed by each MSP IHE partner, obtains information on the number of individuals who developed and/or delivered MSP activities, the number of individuals who were recipients of MSP activities, preservice enrollment, graduation and teacher certification, and information about MSP-supported preservice courses.
- **Annual IHE Participant Survey.** This survey, completed by individual IHE participants (e.g., disciplinary faculty, administrators), collects information about the characteristics and contributions of all IHE faculty members and administrators who are active participants in an MSP project.

Exhibit 1. MSP MIS surveys—continued

MSP MIS Surveys for Institute Projects

- **Annual Survey for Institute Partnership Projects.** This survey, completed by MSP Institute PIs, collects background information on each Institute project's partner organizations, school-level data (i.e., total number of students and participating teachers), the scope of the project, the type of project activities by key feature, and challenges encountered during the previous year.
- **Annual Survey for IHE Institute Participants.** This survey, completed by individual IHE Institute participants (e.g., disciplinary faculty, administrators), collects information about the characteristics and contributions of all IHE faculty members and administrators who are active participants in an MSP Institute project.
- **Initial Survey for K–12 Institute Participants.** This survey, completed by K–12 participants, is administered at the onset of participants' Institute involvement. Baseline data collected from this survey include demographic characteristics, professional and academic achievements, and professional status of each participant.
- **Annual Survey for K–12 Institute Participants.** This survey, completed by K–12 Institute participants, is administered after the first year of Institute participation and each subsequent year. Data collected in this survey cover the academic and professional experiences of Institute participants and follow up on data collected in the Initial Survey for K–12 Institute Participants.

Methodology

The MIS surveys are completed online by all MSP projects, their IHE and K–12 district partners, and their IHE faculty and administrator participants. The online system uses computer technology to check data for completeness, validity, and consistency prior to final submittal. This review is performed as data are entered into the online system. Questionable or incomplete entries are called to respondents' attention before they are formally submitted. Features such as automatic tabulations, drop-down menus, and predefined data input forms facilitate the reporting process, provide useful and rapid feedback to the data providers, and reduce response burden.

Survey Completion Rates

The survey completion rates for the 2010–11 collection cycle were high. Survey completion rates by Comprehensive and Targeted projects for the Annual K–12 District Survey, the Annual IHE Partner Survey, and the Annual IHE Participant Survey are shown in Table 2. Among Comprehensive and Targeted projects:

- 23 of 24 active projects (95.8 percent) completed all sections of the Survey for Partnership Projects (not shown in table).

- 59 of 64 active IHE partners (92.2 percent) completed the IHE Partner Survey.
- The projects reported a total of 334 active IHE participants during the 2010–11 school year. Of this number, 300 (89.8 percent) completed an IHE Participant Survey.
- 188 of 198 active K–12 district partners (94.9 percent) completed the K–12 District Survey.

For the most part, survey completion rates were also high among Institute projects, as shown in Table 3. Among Institute projects:

- 14 of 15 active Institute projects completed all sections of the 2010–11 Survey for Partnership Projects (not shown in table).
- 479 of 561 K–12 participants (85.4 percent) completed the Annual Survey for K–12 Institute Participants.
- All 247 new K–12 participants completed the Initial Survey for K–12 Institute Participants.
- 174 of the 222 active Institute IHE participants (78.4 percent) fully completed and submitted their individual Annual IHE Institute Participant Survey.

Key Findings From Cumulative Unduplicated Count Tables

This section provides cumulative, unduplicated data on the MSP program. Where possible, we have tallied the cumulative, unduplicated number of projects, partners, participants, recipients, and courses—as well as their characteristics—that have been reported through the MSP MIS since the beginning of the MSP program.[3] These tables appear in Section 6 of Appendix A. The purpose is to provide a summary of the key findings from these tables rather than an exhaustive analysis of all the data that were collected.

The presentation of cumulative unduplicated data is organized around five basic questions about the MSP program: (1) What has been the focus of MSP work? (2) What organizations were involved in the MSP program? (3) What were the contributions of the individuals involved in the design and delivery of MSP activities? (4) What MSP activities were targeted to IHE recipients? (5) What MSP activities were targeted to K–12 recipients?

[3] The structure of some items on the MSP MIS surveys prevents us from providing these counts for all data elements. For example, the IHE Partner Survey collects annual data on the number of IHE individuals who are recipients of MSP activities. We are unable to calculate an unduplicated tally of IHE recipients over time since the same individuals may be included in multiple years. The survey does not ask IHE partners to report a cumulative, unduplicated tally of IHE recipients.

What has been the focus of MSP work?

Since the start of the MSP program, NSF has funded a total of 71 MSP projects: 12 Comprehensive projects, 44 Targeted projects, and 23 Institute projects. All of these projects have completed the surveys composing the MSP MIS. The program has funded slightly more mathematics-focused projects, with 38.0 percent of projects focusing on mathematics, 31.6 percent focusing on science, and 30.4 percent focusing on both subjects. Most projects (65.8 to 84.8 percent) have targeted the middle and/or high school grades (grades 6 through 12; Table A.6.1).

What organizations have been involved in the MSP program?

Institutes of higher education. A total of 253 IHEs have participated in the MSP program, an increase of 18 IHE partners since 2009–10 (Table A.6.3). Of these IHE partners, 45 served as lead organizations for their projects (Table A.6.2). Most IHE partners have been Doctoral-granting institutions (45.4 percent) or Master's colleges and universities (26.9 percent; Table A.6.4).

K–12 districts and schools. MSP projects have partnered with a total of 1,569 school districts or consortia,[4] an increase of 88 school districts or consortia since 2009–10 (Table A.6.3). Overall, 17.0 percent of districts have served cities, 26.1 percent of districts have served suburbs, 14.9 percent of districts have served towns, and 31.4 percent of districts have served rural areas (Table A.6.5).

A total of 6,379 schools have worked with Comprehensive and Targeted MSP projects in some capacity since the start of the MSP program, an increase of 249 schools since 2009–10 . Almost half of these schools (44.2 percent) were elementary schools, 28.8 percent were middle schools, 27.6 percent were high schools, and 1.2 percent were ungraded schools (Table A.6.6).

Of the 6,379 schools that worked with Comprehensive and Targeted MSP projects, 2,569 (40.3 percent) met the criteria for signification participation[5] in at least one collection year, an increase of 145 schools since 2009–10 (Table A.6.7). Most of the schools that met the criteria (83.7 percent) reported that 30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities during the school year. In addition, 42.3 percent of schools that met

[4] This number also includes individual schools that worked with Institute projects.

[5] Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

the criteria reported that 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during the school year, and 16.4 percent of schools that met the criteria reported that 30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during the school year (Table A.6.7).

What were the contributions of the individuals involved in the design and delivery of MSP activities?

IHE participant characteristics. A total of 2,582 IHE faculty and administrators have completed the Annual IHE Participant Survey, an increase of 180 respondents since 2009– 10 (Table A.6.8). Of the 2,582 participants:

- 52.2 percent were male, and 80.9 percent were White (Table A.6.8).
- 65.3 percent had prior experience working with K–12 education initiatives (Table A.6.8).
- 49.0 percent were tenured, while 20.1 percent were on a tenure track (Table A.6.9).
- 37.6 percent conducted research in education, 33.1 percent conducted research in science,[6] and 17.2 percent conducted research in mathematics (Table A.6.10).
- 39.6 percent taught science, 23.7 percent taught mathematics, and 27.5 percent taught education (Table A.6.10).

IHE participant involvement in Comprehensive and Targeted projects. Approximately two-thirds (65.6 percent) of IHE participants involved in Comprehensive and Targeted projects reported 40 or more hours of involvement in the development and/or delivery of MSP activities in at least one reporting year (1,693 IHE participants). These respondents participated in a wide range of activities targeted to preservice students, K–12 teachers, and K–12 students. The most commonly reported IHE participant activities targeted to preservice students were teaching or co-teaching a preservice STEM content course (30.1 percent) and mentoring (29.9 percent; Table A.6.11). The most commonly reported IHE participant activities targeted to K–12 teachers were conducting workshops/institutes/courses that increased general content and/or pedagogical knowledge (61.8 percent) and remaining on call for classroom teachers (49.2 percent; Table A.6.12). In contrast, very few IHE participants reported participating in efforts to link the preservice process to national teacher certification activities (12.1 percent; Table A.6.11) or

[6] Science includes biological science, physics, chemistry, engineering, geosciences, computer science, astronomy, atmospheric sciences, and ocean sciences.

helping K–12 school utilize computer-communications technology for challenging courses (8.8 percent; Table A.6.12). The most commonly reported IHE participant activities targeting K–12 students were participating in activities that motivate K–12 student participation in challenging mathematics and science courses (32.9 percent) and participating in efforts to align K–12 mathematics and science curricula to other courses/standards (35.8 percent; Table A.6.18).

IHE participant involvement in Institute projects. Most IHE participants (88.1 percent) in Institute projects reported 40 or more hours of involvement in the development and/or delivery of MSP activities in at least one reporting year (370 IHE participants). The most commonly reported summer activities undertaken by IHE participants were teaching courses with K–12 teachers that increase mathematical or science content knowledge (59.5 percent) or pedagogical skills in mathematics and science (57.8 percent; Table A.6.25) . The most commonly reported academic year activities undertaken by IHE participants were remaining on call for classroom teachers (44.9 percent) and conducting workshops and/or courses with K–12 teachers that increased content and/or pedagogical knowledge (42.4 percent; Table A.6.26)

What MSP activities were targeted to the IHE recipients?

IHE activities in Comprehensive and Targeted projects. Comprehensive and Targeted MSP projects have undertaken a wide range of recruitment and preparation activities targeted to IHE recipients. The five most commonly reported activities were developing or revising preservice courses to align with national and/or state standards (58.9 percent), providing opportunities for preservice students to gain experience in K–12 classroom settings before formal student teaching (55.4 percent), creating or providing opportunities for STEM undergraduate or graduate students to tutor K–20 students (51.8 percent), and designing or offering preservice STEM content courses specifically for K–12 teacher certification programs (55.4 percent; Table A.6.14).

IHE courses supported by Comprehensive and Targeted projects. Since the beginning of the MSP program, projects have supported 562 preservice courses (Table A.6.15), an increase of 20 courses since 2009–10. These 562 courses include 157 new courses and 378 modified or enhanced courses. The majority of courses (77.8 percent) have targeted undergraduate students. In terms of subject matter, science[7] was the focus of 57.4 percent of undergraduate courses and 75.2 percent of graduate courses, mathematics was the focus of 38.0 percent of undergraduate and 50.4 percent of graduate courses, and education was the focus of 20.1 percent of undergraduate and 38.4 percent of graduate courses (Table A.6.16).

[7] Science includes biological science, physics, chemistry, engineering, geosciences, computer science, astronomy, atmospheric sciences, and ocean sciences.

What MSP activities were targeted to K–12 recipients?

K–12 activities in Comprehensive and Targeted projects. Comprehensive and Targeted projects have conducted a variety of retention and enhancement activities targeted at inservice K–12 teachers. The most commonly reported project activities were conducting workshops, institutes, or courses with K–12 teachers that increase general content and/or pedagogical knowledge (96.4 percent), conducting activities that develop and utilize teacher leaders (94.6 percent), and conducting targeted workshops, institutes, or courses with K–12 teachers (87.5 percent). However, few projects reported providing externship opportunities for K–12 teachers (12.5 percent; Table A.6.17).

Strategies used by the projects to engage K–12 students in challenging mathematics and science curricula most frequently placed an emphasis on standards-driven instruction and assessment. Projects reported aligning challenging curricula to other courses and/or standards (77.5 percent for mathematics, 76.3 percent for science) and implementing standards-based curricula (72.5 percent for mathematics, 68.4 percent for science; Tables A.6.19 and A.6.20).

K–12 teachers receiving professional development. A total of 250,664 K–12 teachers have received MSP-supported professional development from Comprehensive and Targeted projects since the start of the MSP program, an increase of 9,741 teacher recipients since 2009–10 (Table A.7.21). Nearly two-thirds of these teachers (62.7 percent) have been elementary school teachers. The large majority of teachers (81.0 percent) have received between 1 and 80 hours of professional development, while 10.6 percent received between 81 and 160 hours, and 7.1 percent received 161 or more hours.[8]

K–12 activities in Institute projects. Institute projects conduct activities targeted to K–12 teachers and administrators during the summer as well as the academic year All projects reported conducting the following activities during the summer in at least one reporting year: conducting courses with K–12 teachers that increase mathematical and science content knowledge, and providing opportunities for participants to earn a master's, other advanced degree or certification, or graduate credits upon completion of the Institute. Almost all projects also reported conducting courses with K–12 teachers that increase pedagogical knowledge (91.3 percent) and providing curriculum resources to teacher participants during the Institute (82.6 percent). In contrast, very few projects taught courses through distance learning (21.7 percent; Table A.6.29).

During the academic year, almost all projects provided mentoring and instruction on professional development strategies and other leadership responsibilities in at least one reporting year (95.7 percent). Most projects (87.0 percent) also continued conducting workshops and/or

[8] Percents may not add to 100 because hours for some teachers were reported as unknown.

courses with K–12 teacher that increase content and/or pedagogical knowledge in at least one reporting year. In addition, many projects reported conducting courses with K–12 teachers that increase their ability to use research to inform their teaching (78.3 percent), working with K–12 building staff to facilitate the work of teacher leaders (78.3 percent), and having IHE faculty remain on call for classroom teachers (78.3 percent). In contrast, only 17.4 percent of projects provided externship opportunities for K–12 teachers, and only 17.4 percent of projects provided preservice professional development opportunities for K–12 teachers (Table A.6.30).

Interpreting Trend Data

The tables in Sections 1 through 5 of Appendix A present eight or nine years of trend data from the MSP program. Many of these tables show large decreases in numbers in 2008–09, 2009–10, and 2010–11. These decreases are heavily influenced by the completion of 21 projects from Comprehensive and Targeted Cohort 1, eight projects from Comprehensive and Targeted Cohort 2, and eight projects from Institute Cohort 1 during this time. Over these three years, declines were caused by decreased activity among these 37 projects as they neared the end of their NSF funding cycles and ultimately closed. Once closed, these projects were no longer required to complete the online surveys composing the MSP MIS. Although new cohorts of Targeted and Institute projects began work during this time, these projects were smaller in number and only in their first few years of project activities (meaning that they had fewer participants).

The numbers from new cohorts of MSP projects did partially offset the decreases; however, overall decreases in many areas are still substantial. These declines make it difficult to interpret some of the trends that emerge from the tables in the Compendium. For example, some of the data may be disproportionately influenced by individual projects with significant numbers of K–12 students that either enter or exit the MSP program in any given year. For this reason, the following section provides an overview of the status of the MSP program during the 2010–11 collection year, rather than making an attempt to interpret trend data.

Status of the MSP Program During the 2010–11 Reporting Year

This section summarizes the status of the MSP program during the 2010–11 reporting year. The purpose is to highlight key findings related to project activities and participants rather than to provide an exhaustive analysis of all the data that were collected.

The presentation of data is organized around five basic questions about the MSP program that are similar to those addressed in the previous section on cumulative unduplicated counts: (1)

What organizations were involved in the MSP program? (2) What were the contributions of the individuals involved in the design and delivery of MSP activities? (3) What MSP activities were targeted to IHE recipients? (4) What MSP activities were targeted to K–12 recipients? (5) What challenges did MSP projects face?

What organizations were involved in the MSP program?

Institutions of higher education. IHEs were heavily involved in MSP projects during the 2010–11 reporting year, with 93 degree-granting IHEs serving as MSP partners (Table A.1.3). Of the 93 degree-granting IHE partners, 66.7 percent were Doctoral-granting institutions, 22.6 percent were Master's colleges and universities, and only 2.2 percent were Baccalaureate colleges. Compared to 2009–10, a larger percent of participating IHEs were Doctoral-granting institutions and a smaller percent were Baccalaureate colleges (Table A.1.4).

All 23 lead organizations for Comprehensive or Targeted projects were IHE partners. (Table A.1.2).

K–12 school districts/consortia. A total of 332 K–12 school districts/consortia[9] were also involved in MSP projects in 2010–11 (Table A.1.3). Overall, K–12 districts made up 60.7 percent of the 547 core and supporting partners in all project types (Table A.1.3).

Geographically, 21.3 percent of districts served cities, 23.5 percent of districts served suburbs, 18.9 percent of districts served towns, and 34.6 percent of districts served rural areas (Table A.1.5).

K–12 schools. Comprehensive and Targeted projects worked with a total of 1,057 schools in some capacity during the 2010–11 school year (Table A.1.6). Of these schools, 254 met the criteria for significant MSP participation[10] during the collection year (24.0 percent of all participating schools; Table A.1.7).

[9] This number also includes individual schools that worked with Institute projects.

[10] Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

What were the contributions of the individuals involved in the design and delivery of MSP activities?

IHE participants. At the IHE level, a total of 1,411 STEM and Education faculty, undergraduate and graduate students, administrators, and other IHE individuals participated in the development and/or delivery of MSP activities (Table A.2.1). This number includes IHE participants in Comprehensive, Targeted, and Institute projects. Of the 474 IHE faculty and administrators who participated in Comprehensive, Targeted, and Institute projects and completed the 2010–11 Annual IHE Participant Survey:

- 52.3 percent were male, and 81.6 percent were White (Table A.2.2).
- 73.4 percent of new IHE faculty participants had prior experience working with K–12 education initiatives (Table A.2.2a).
- 50.8 percent were tenured, while 14.8 percent were on a tenure track (Table A.2.3).
- 37.1 percent of participants conducted research in education, 31.4 percent conducted research in science,[11] and 16.9 percent conducted research in mathematics (Table A.2.4).
- 28.4 percent of participants taught mathematics, 36.3 percent of participants taught science,[12] and 27.0 percent of participants taught education (Table A.2.4).
- 61.0 percent reported spending 81 or more hours on MSP-related activities during the 2010–11 school year (Table A.2.5).

K–12 participants. At the K–12 level, 937 K–12 participants were involved in the development and/or delivery of MSP activities (Table A.2.11). Most K–12 participants (73.3 percent) were teachers (Table A.2.11).

Non-academic participants. A total of 81 non-academic scientists, mathematicians, and engineers were involved in developing and/or delivering MSP activities (Table A.2.10). Most participating non-academic individuals (67.9 percent) were categorized as scientists. Overall, 11 MSP projects (28.9 percent) reported working with a scientist, three projects (7.9 percent) reported working with an engineer, and one project (2.6 percent) reported working with a mathematician (Table A.2.9).

[11] Science includes biological science, physics, chemistry, engineering, geosciences, computer science, astronomy, atmospheric sciences, and ocean sciences.

[12] See footnote 11.

What MSP activities were targeted to IHE recipients?[13]

IHE activities. MSP projects conducted a wide range of activities at the IHE level that were designed to recruit and prepare new STEM teacher candidates. The most frequently cited activities were providing opportunities for preservice students to gain experience in K–12 classroom settings before formal student teaching (30.4 percent), involving IHE STEM faculty in the preservice program (39.1 percent), creating/providing opportunity for STEM undergraduate/graduate students to tutor K–20 students (26.1 percent), and designing/offering preservice STEM content courses specifically for K–12 teacher certification programs (34.8 percent; Table A.3.1).

IHE recipients. A total of 1,894 IHE individuals were recipients of MSP activities from Comprehensive and Targeted projects during the 2010–11 reporting year (Table A.3.2). The majority of IHE recipients were undergraduate students, with 909 preservice undergraduate and alternative certification students and 79 STEM undergraduate students receiving services from MSP projects. An additional 440 recipients were K–12 teachers in residence.

IHE preservice courses. MSP projects reported status updates on 98 MSP-supported preservice courses at 22 IHE partners (Table A.3.5). Of the 98 courses, 55 were fully developed and offered and 24 were fully developed but not yet offered. Most MSP-supported courses (41 courses) target undergraduate students.

What MSP activities were targeted to K–12 recipients?[14]

Strategies targeting K–12 teachers. Projects used a variety of strategies to enhance the skills of K–12 teachers. The most popular activities were conducting activities that developed and utilized the skills of teacher leaders (82.6 percent) and conducting workshops/institutes/courses with K–12 teachers that increase general content and/or pedagogical knowledge (82.6 percent). Large numbers of projects also conducted targeted workshops/institutes/courses with K–12 teachers (69.6 percent) and provided instructional materials for K–12 teachers (69.6 percent; Table A.4.1).

[13] Data were collected from Comprehensive and Targeted projects only.

[14] See footnote 13.

K–12 teachers receiving professional development. The majority of K–12 teachers who received professional development from MSP projects received between one and 80 hours of professional development (86.6 percent). The majority of teacher recipients were elementary school teachers (65.9 percent; Table A.4.5).

Strategies targeting K–12 students. The most prominently cited activities targeting K–12 students included aligning math (58.3 percent) and science (57.1 percent) curricula to other courses/standards. Among projects focused on mathematics, 50.0 percent of projects also reported emphasizing the importance of K–12 gateway courses. Among projects focused on science, 28.6 percent of projects reported implementing standards-based science curricula and 35.7 reported supporting expert review of challenging science course curricula (Tables A.4.3 and A.4.4).

K–12 students potentially reached by MSP activities. A total of 240,177 K–12 students were potentially reached by MSP activities by being enrolled in schools that met the criteria for significant MSP participation (Table A.4.7). Of the total number of students enrolled in these schools in 2009–10, 26.6 percent were White, 23.7 percent were Hispanic, and 22.2 percent were Black or African American (Table A.4.7).

Gateway courses. Slightly more than half (55.1 percent) of middle schools[15] participating in projects with a math or math/science focus and meeting the criteria for significant MSP participation offered Level 1 Math (Table A.4.8).

Among high school courses, projects with a math or math/science focus reported that 96.6 percent of high schools that met the criteria for significant participation offered Level 1 Math (Table A.4.9). Projects with a science or math/science focus reported that 97.6 percent of high schools that met the criteria for significant participation offered Biology 1st Year (Table A.4.9a).

What challenges did MSP projects face?

The largest hindrances toward projects' partnership efforts in 2010–11 were the lack of time or other resources among K–12 partners (36.8 percent) and IHE partners (23.7 percent). The largest hindrance toward projects' ability to use data to assessment implementation and impact continued to be difficulty linking student achievement data to individual K–12 teachers (23.7 percent; Table A.5.2). Few projects reported any other hindrances toward their ability to use data in this way.

[15] Middle schools are defined as schools with an 8th grade.

Appendix A.

Overall Trends

Section A.1:
What organizations were involved in the MSP program?

Table A.1.1. Project type, subject focus, and grade spans of MSP projects: All projects

Project characteristic	2003–04 (n = 34 projects)		2004–05 (n = 48 projects)		2005–06 (n = 47 projects)		2006–07 (n = 51 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Project type								
Targeted	23	67.6	28	58.3	28	59.6	28	54.9
Comprehensive	11	32.4	12	25.0	11	23.4	11	21.6
Institute	0	0.0	8	16.7	8	17.0	12	23.5
Subject focus								
Mathematics	13	38.2	20	41.7	20	42.6	21	41.2
Science	5	14.7	8	16.7	8	17.0	11	21.6
Mathematics and science	16	47.1	20	41.7	19	40.4	19	37.3
Targeted grade levels								
Pre-kindergarten	10	29.4	11	22.9	9	19.1	11	21.6
Kindergarten	19	55.9	23	47.9	22	46.8	22	43.1
1st	19	55.9	23	47.9	22	46.8	22	43.1
2nd	19	55.9	23	47.9	22	46.8	22	43.1
3rd	20	58.8	24	50.0	23	48.9	24	47.1
4th	23	67.6	27	56.3	26	55.3	28	54.9
5th	25	73.5	32	66.7	32	68.1	33	64.7
6th	30	88.2	42	87.5	41	87.2	43	84.3
7th	32	94.1	43	89.6	42	89.4	44	86.3
8th	32	94.1	43	89.6	42	89.4	44	86.3
9th	27	79.4	38	79.2	36	76.6	38	74.5
10th	27	79.4	36	75.0	35	74.5	37	72.5
11th	25	73.5	34	70.8	33	70.2	35	68.6
12th	25	73.5	34	70.8	33	70.2	35	68.6

Table A.1.1. Project type, subject focus, and grade spans of MSP projects: All projects—continued

Project characteristic	2007–08 (n = 50 projects)		2008–09 (n = 48 projects)		2009–10 (n = 44 projects)		2010–11 (n = 38 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Project type								
Targeted	28	56.0	24	50.0	21	47.7	22	57.9
Comprehensive	10	20.0	8	16.7	5	11.4	1	2.6
Institute	12	24.0	16	33.3	18	40.9	15	39.5
Subject focus								
Mathematics	21	42.0	19	39.6	17	38.6	15	39.5
Science	11	22.0	15	31.3	15	34.1	18	47.4
Mathematics and science	18	36.0	14	29.2	12	27.3	5	13.2
Targeted grade levels								
Pre-kindergarten	11	22.0	7	14.6	5	11.4	2	5.3
Kindergarten	21	42.0	19	39.6	14	31.8	4	10.5
1st	21	42.0	19	39.6	14	31.8	5	13.2
2nd	22	44.0	19	39.6	14	31.8	5	13.2
3rd	24	48.0	19	39.6	14	31.8	8	21.1
4th	26	52.0	21	43.8	16	36.4	11	28.9
5th	31	62.0	27	56.3	22	50.0	16	42.1
6th	42	84.0	38	79.2	35	79.5	29	76.3
7th	43	86.0	40	83.3	36	81.8	29	76.3
8th	43	86.0	41	85.4	37	84.1	30	78.9
9th	37	74.0	36	75.0	32	72.7	25	65.8
10th	36	72.0	35	72.9	31	70.5	21	55.3
11th	34	68.0	36	75.0	32	72.7	22	57.9
12th	34	68.0	36	75.0	32	72.7	22	57.9

NOTE: Percents for project type and subject focus may not add to 100 because of rounding.

Table A.1.2. Lead organizations: Comprehensive and Targeted projects

Type of organization	2003–04 (n = 34 projects)		2004–05 (n = 40 projects)		2005–06 (n = 39 projects)		2006–07 (n = 39 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Institution of higher education (IHE)	22	64.7	28	70.0	27	69.2	27	69.2
Higher education system/ consortium	3	8.8	4	10.0	4	10.3	4	10.3
Nonprofit organizations focused on K–12 mathematics/science education	3	8.8	3	7.5	3	7.7	3	7.7
K–12 school district	2	5.9	2	5.0	2	5.1	2	5.1
County, regional, or state education agency	2	5.9	2	5.0	2	5.1	2	5.1
Other	2	5.9	1	2.5	1	2.6	1	2.6

Table A.1.2. Lead organizations: Comprehensive and Targeted projects—continued

Type of organization	2007–08 (n = 38 projects)		2008–09 (n = 32 projects)		2009–10 (n = 26 projects)		2010–11 (n = 23 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Institution of higher education (IHE)	27	71.1	27	84.4	21	80.8	23	100.0
Higher education system/ consortium	3	7.9	2	6.3	2	7.7	0	0.0
Nonprofit organizations focused on K–12 mathematics/science education	3	7.9	0	0.0	0	0.0	0	0.0
K–12 school district	2	5.3	1	3.1	1	3.8	0	0.0
County, regional, or state education agency	2	5.3	1	3.1	1	3.8	0	0.0
Other	1	2.6	1	3.1	1	3.8	0	0.0

NOTE: Percents may not add to 100 because of rounding.

Table A.1.3. MSP partner organizations: All projects

Type of partner and organization	2003–04 (n = 34 projects)		2004–05 (n = 48 projects)		2005–06 (n = 47 projects)		2006–07 (n = 51 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All partners	633	100.0	825	100.0	1,010	100.0	1,206	100.0
IHE and K–12 partners								
Institution of higher education (IHE)[1]	113	17.9	160	19.4	160	15.8	169	14.0
K–12 school district/ consortium or individual school[2]	417	65.9	544	65.9	726	71.9	896	74.3
Other core partner								
County, regional, or state education agency	9	1.4	17	2.1	20	2.0	24	2.0
Public or private organization	4	0.6	5	0.6	5	0.5	5	0.4
Science center or museum	1	0.2	1	0.1	1	0.1	1	0.1
Research laboratory	1	0.2	1	0.1	1	0.1	1	0.1
Other	7	1.1	9	1.1	8	0.8	8	0.7
Other supporting partner								
Public or private organization	16	2.5	21	2.5	21	2.1	21	1.7
County, regional, or state education agency	13	2.1	14	1.7	14	1.4	18	1.5
Science center or museum	13	2.1	13	1.6	14	1.4	14	1.2
Business or industry organization	12	1.9	13	1.6	13	1.3	13	1.1
Disciplinary or professional society	6	0.9	6	0.7	6	0.6	8	0.7
Dissemination or implementation center	5	0.8	5	0.6	5	0.5	5	0.4
Research laboratory	4	0.6	4	0.5	4	0.4	5	0.4
Community organization	3	0.5	3	0.4	3	0.3	3	0.2
Other noneducation government agency	2	0.3	2	0.2	2	0.2	3	0.2
Private foundation	2	0.3	2	0.2	2	0.2	3	0.2
Other	5	0.8	5	0.6	5	0.5	9	0.7

Table A.1.3. MSP partner organizations: All projects—continued

Type of partner and organization	2007–08 (n = 50 projects)		2008–09 (n = 49 projects)		2009–10 (n = 45 projects)		2010–11 (n = 39 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All partners	1,102	100.0	758	100.0	737	100.0	547	100.0
IHE and K–12 partners								
Institution of higher education (IHE)[1]	160	14.5	135	17.8	109	14.8	93	17.0
K–12 school district/ consortium or individual school[2]	806	73.1	481	63.5	466	63.2	332	60.7
Other core partner								
County, regional, or state education agency	24	2.2	24	3.2	25	3.4	5	0.9
Public or private organization	5	0.5	5	0.7	4	0.5	3	0.5
Science center or museum	1	0.1	0	0.0	0	0.0	1	0.2
Research laboratory	1	0.1	0	0.0	0	0.0	0	0.0
Other	7	0.6	8	1.1	7	0.9	3	0.5
Other supporting partner								
Public or private organization	20	1.8	15	2.0	14	1.9	14	2.6
County, regional, or state education agency	18	1.6	31	4.1	33	4.5	33	6.0
Science center or museum	14	1.3	12	1.6	13	1.8	4	0.7
Business or industry organization	11	1.0	13	1.7	21	2.8	23	4.2
Disciplinary or professional society	7	0.6	9	1.2	13	1.8	11	2.0
Dissemination or implementation center	5	0.5	6	0.8	6	0.8	2	0.4
Research laboratory	5	0.5	4	0.5	7	0.9	4	0.7
Community organization	3	0.3	1	0.1	2	0.3	4	0.7
Other noneducation government agency	3	0.3	3	0.4	3	0.4	3	0.5
Private foundation	3	0.3	3	0.4	3	0.4	1	0.2
Other	9	0.8	8	1.1	11	1.5	11	2.0

[1] Four IHE partners were excluded from this table because they were not degree-granting institutions.

[2] Some Institute projects partnered with individual schools.

NOTE: Percents may not add to 100 because of rounding.

Table A.1.4. Carnegie Classification of MSP IHE partners: All projects

2005 Carnegie Classification	2003–04 (n =113 IHEs)		2004–05 (n =160 IHEs)		2005–06 (n = 160 IHEs)		2006–07 (n = 169 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Doctoral-granting institutions								
Research Universities (very high research activity)	20	17.7	34	21.3	33	20.6	36	21.3
Research Universities (high research activity)	6	5.3	12	7.5	12	7.5	13	7.7
Doctoral/Research Universities	10	8.8	14	8.8	14	8.8	14	8.3
Master's colleges and universities								
Master's Colleges and Universities (larger programs)	25	22.1	31	19.4	31	19.4	33	19.5
Master's Colleges and Universities (medium programs)	5	4.4	7	4.4	7	4.4	7	4.1
Master's Colleges and Universities (smaller programs)	4	3.5	4	2.5	4	2.5	4	2.4
Baccalaureate colleges								
Baccalaureate Colleges, Arts & Sciences	9	8.0	13	8.1	13	8.1	13	7.7
Baccalaureate Colleges, Diverse Fields	18	15.9	18	11.3	18	11.3	19	11.2
Baccalaureate/Associate's Colleges	0	0.0	0	0.0	0	0.0	0	0.0
Associate's colleges								
Public Urban-serving Multicampus	3	2.7	8	5.0	9	5.6	9	5.3
Public Urban-serving Single Campus	1	0.9	1	0.6	1	0.6	1	0.6
Public Suburban-serving Multicampus	2	1.8	2	1.3	2	1.3	3	1.8
Public Suburban-serving Single Campus	1	0.9	1	0.6	1	0.6	1	0.6
Public Rural-serving Large	4	3.5	6	3.8	6	3.8	6	3.6
Public Rural-serving Medium	2	1.8	3	1.9	3	1.9	3	1.8
Public Rural-serving Small	0	0.0	1	0.6	1	0.6	1	0.6
Medical schools and medical centers	2	1.8	4	2.5	4	2.5	4	2.4
Tribal colleges and universities	1	0.9	1	0.6	1	0.6	2	1.2
Unknown	0	0.0	0	0.0	0	0.0	0	0.0

Table A.1.4. Carnegie Classification of MSP IHE partners: All projects—continued

2005 Carnegie Classification	2007–08 (n = 160 IHEs)		2008–09 (n = 135 IHEs)		2009–10 (n = 109 IHEs)		2010–11 (n = 93 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Doctoral-granting institutions								
Research Universities (very high research activity)	36	22.5	34	25.2	29	26.6	34	36.6
Research Universities (high research activity)	14	8.8	20	14.8	20	18.3	21	22.6
Doctoral/Research Universities	13	8.1	12	8.9	8	7.3	7	7.5
Master's colleges and universities								
Master's Colleges and Universities (larger programs)	32	20.0	29	21.5	23	21.1	17	18.3
Master's Colleges and Universities (medium programs)	6	3.8	6	4.4	5	4.6	3	3.2
Master's Colleges and Universities (smaller programs)	2	1.3	0	0.0	1	0.9	1	1.1
Baccalaureate colleges								
Baccalaureate Colleges, Arts & Sciences	13	8.1	10	7.4	7	6.4	1	1.1
Baccalaureate Colleges, Diverse Fields	19	11.9	6	4.4	5	4.6	0	0.0
Baccalaureate/Associate's Colleges	0	0.0	1	0.7	1	0.9	1	1.1
Associate's colleges								
Public Urban-serving Multicampus	5	3.1	4	3.0	3	2.8	2	2.2
Public Urban-serving Single Campus	1	0.6	0	0.0	0	0.0	0	0.0
Public Suburban-serving Multicampus	2	1.3	1	0.7	1	0.9	2	2.2
Public Suburban-serving Single Campus	1	0.6	2	1.5	2	1.8	1	1.1
Public Rural-serving Large	6	3.8	2	1.5	0	0.0	0	0.0
Public Rural-serving Medium	3	1.9	2	1.5	0	0.0	0	0.0
Public Rural-serving Small	1	0.6	1	0.7	0	0.0	0	0.0
Medical schools and medical centers	4	2.5	1	0.7	0	0.0	0	0.0
Tribal colleges and universities	2	1.3	1	0.7	1	0.9	1	1.1
Unknown	0	0.0	3	2.2	3	2.8	2	2.2

NOTE: 2003–04 IHE partners were recategorized according to their 2005 Carnegie classifications. Four IHE partners were excluded from this table because they were not degree-granting institutions. Percents may not add to 100 because of rounding.

SOURCE: http://www.carnegiefoundation.org/classifications/index.asp?key=809.

Table A.1.5. Metropolitan status of K–12 district partners: All projects

Metropolitan status	2003–04 (n = 417 districts)		2004–05 (n = 544 districts)		2005–06 (n = 726 districts)		2006–07 (n = 896 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
City								
City, Large	17	4.1	27	5.0	44	6.1	62	6.9
City, Midsize	17	4.1	24	4.4	36	5.0	44	4.9
City, Small	31	7.4	39	7.2	52	7.2	56	6.3
Suburb								
Suburb, Large	121	29.0	162	29.8	213	29.3	239	26.7
Suburb, Midsize	4	1.0	8	1.5	15	2.1	27	3.0
Suburb, Small	4	1.0	5	0.9	13	1.8	17	1.9
Town								
Town, Fringe	18	4.3	23	4.2	29	4.0	31	3.5
Town, Distant	29	7.0	33	6.1	39	5.4	47	5.2
Town, Remote	25	6.0	34	6.3	35	4.8	48	5.4
Rural								
Rural, Fringe	63	15.1	65	11.9	78	10.7	103	11.5
Rural, Distant	42	10.1	51	9.4	66	9.1	91	10.2
Rural, Remote	31	7.4	47	8.6	69	9.5	84	9.4
Not a public school district	11	2.6	20	3.7	31	4.3	41	4.6
Not available	4	1.0	6	1.1	6	0.8	6	0.7

Table A.1.5. Metropolitan status of K–12 district partners: All projects—continued

Metropolitan status	2007–08 (n = 806 districts)		2008–09 (n = 481 districts)		2009–10 (n = 466 districts)		2010–11 (n = 332 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
City								
City, Large	57	7.1	19	4.0	18	3.9	19	5.7
City, Midsize	49	6.1	20	4.2	23	4.9	22	6.6
City, Small	51	6.3	32	6.7	34	7.3	30	9.0
Suburb								
Suburb, Large	227	28.2	121	25.2	107	23.0	66	19.9
Suburb, Midsize	17	2.1	6	1.2	8	1.7	8	2.4
Suburb, Small	13	1.6	0	0.0	1	0.2	4	1.2
Town								
Town, Fringe	27	3.3	15	3.1	18	3.9	18	5.4
Town, Distant	42	5.2	30	6.2	26	5.6	20	6.0
Town, Remote	50	6.2	43	8.9	43	9.2	25	7.5
Rural								
Rural, Fringe	82	10.2	40	8.3	30	6.4	30	9.0
Rural, Distant	63	7.8	63	13.1	65	13.9	50	15.1
Rural, Remote	71	8.8	63	13.1	71	15.2	35	10.5
Not a public school district	50	6.2	24	5.0	21	4.5	5	1.5
Not available	7	0.9	5	1.0	1	0.2	0	0.0

NOTE: Percents may not add to 100 because of rounding.

SOURCE: National Center for Education Statistics, Common Core of Data.

Table A.1.6. K–12 schools that worked with MSP projects in any capacity: Comprehensive and Targeted projects

School level	2002–03		2003–04		2004–05		2005–06		2006–07	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All school levels										
Total	1,067	100.0	3,526	100.0	3,873	100.0	4,171	100.0	4,660	100.0
Average	59.3		106.8		101.9		112.7		125.9	
Median	31.5		53.0		49.0		65.0		69.0	
Elementary schools										
Total	600	56.2	2,012	57.1	2,135	55.1	2,093	50.2	2,219	47.6
Average	54.5		80.5		71.2		72.2		74.0	
Median	31.0		54.0		43.0		36.0		46.0	
Middle schools										
Total	201	18.8	801	22.7	893	23.1	1,078	25.8	1,243	26.7
Average	13.4		25.0		24.8		30.8		35.5	
Median	8.0		19.0		19.0		21.0		22.0	
High schools										
Total	260	24.4	685	19.4	807	20.8	968	23.2	1,161	24.9
Average	17.3		23.6		23.1		29.3		35.2	
Median	13.0		14.0		14.0		17.0		17.0	
Ungraded schools										
Total	6	0.6	28	0.8	38	1.0	32	0.8	37	0.8
Average	3.0		3.5		3.8		2.9		3.1	
Median	3.0		2.5		3.5		2.0		2.0	

Table A.1.6. K–12 schools that worked with MSP projects in any capacity: Comprehensive and Targeted projects—continued

School level	2007–08		2008–09		2009–10		2010–11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All school levels								
Total	4,036	100.0	2,622	100.0	1,484	100.0	1,057	100.0
Average	115.3		87.4		70.7		46.0	
Median	60.0		75.5		58.0		29.0	
Elementary schools								
Total	1,869	46.3	1,397	53.3	710	47.8	448	42.4
Average	64.4		58.2		41.8		26.4	
Median	31.0		50.0		28.0		11.0	
Middle schools								
Total	1,078	26.7	649	24.8	438	29.5	319	30.2
Average	32.7		25.0		24.3		15.2	
Median	19.0		19.5		20.5		11.0	
High schools								
Total	1,061	26.3	561	21.4	319	21.5	274	25.9
Average	34.2		20.8		16.8		14.4	
Median	18.0		16.0		13.0		12.0	
Ungraded schools								
Total	28	0.7	15	0.6	17	1.1	16	1.5
Average	2.8		1.9		4.3		5.3	
Median	2.0		1.0		1.5		2.0	

NOTE: Averages indicate the average number of schools per project. Medians indicate the median number of schools across all projects. Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because of rounding.

Table A.1.7. K–12 schools that ever met the criteria for significant MSP participation:1 Comprehensive and Targeted projects

School type	2002–03		2003–04		2004–05		2005–06		2006–07	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schools working with MSP in any capacity	1,067	100.0	3,526	100.0	3,873	100.0	4,171	100.0	4,660	100.0
Schools that met the criteria in the collection year	159	14.9	704	20.0	1,188	30.7	1,336	32.0	1,251	26.8
Schools that did not meet the criteria in the collection year but did meet the criteria in a prior year	0	0.0	19	0.5	89	2.3	357	8.6	679	14.6
Schools that did not meet the criteria in any collection year	908	85.1	2,803	79.5	2,596	67.0	2,478	59.4	2,730	58.6

Table A.1.7. K–12 schools that *ever* met the criteria for significant MSP participation:[1] Comprehensive and Targeted projects—continued

School type	2007–08		2008–09		2009–10		2010–11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schools working with MSP in any capacity	4,036	100.0	2,622	100.0	1,484	100.0	1,057	100.0
Schools that met the criteria in the collection year	1,129	28.0	506	19.3	201	13.5	254	24.0
Schools that did not meet the criteria in the collection year but did meet the criteria in a prior year	817	20.2	842	32.1	501	33.8	192	18.2
Schools that did not meet the criteria in any collection year	2,090	51.8	1,274	48.6	782	52.7	611	57.8

[1] Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

NOTE: Excludes SCALE due to incomplete K–12 district data.

Table A.1.7a. K–12 schools that met the criteria for significant MSP participation[1] *in the collection year*: Comprehensive and Targeted projects

School level	2002–03			2003–04			2004–05		
	Number of schools working with MSP	Schools that met criteria		Number of schools working with MSP	Schools that met criteria		Number of schools working with MSP	Schools that met criteria	
		Number	Percent		Number	Percent		Number	Percent
All levels	1,067	159	14.9	3,526	704	20.0	3,873	1,188	30.7
Elementary schools	600	101	16.8	2,012	338	16.8	2,135	596	27.9
Middle schools	201	35	17.4	801	187	23.3	893	307	34.4
High schools	260	23	8.8	685	174	25.4	807	276	34.2
Ungraded schools	6	0	0.0	28	5	17.9	38	9	23.7

Table A.1.7a. K–12 schools that met the criteria for significant MSP participation[1] *in the collection year*: Comprehensive and Targeted projects—continued

School level	2005–06			2006–07			2007–08		
	Number of schools working with MSP	Schools that met criteria		Number of schools working with MSP	Schools that met criteria		Number of schools working with MSP	Schools that met criteria	
		Number	Percent		Number	Percent		Number	Percent
All levels	4,171	1,336	32.0	4,660	1,251	26.8	4,036	1,129	28.0
Elementary schools	2,093	664	31.7	2,219	587	26.5	1,869	559	29.9
Middle schools	1,078	407	37.8	1,243	390	31.4	1,078	316	29.3
High schools	968	258	26.7	1,161	268	23.1	1,061	247	23.3
Ungraded schools	32	7	21.9	37	6	16.2	28	7	25.0

Table A.1.7a. K–12 schools that met the criteria for significant MSP participation[1] *in the collection year*: Comprehensive and Targeted projects—continued

School level	2008–09			2009–10			2010–11		
	Number of schools working with MSP	Schools that met criteria		Number of schools working with MSP	Schools that met criteria		Number of schools working with MSP	Schools that met criteria	
		Number	Percent		Number	Percent		Number	Percent
All levels	2,622	506	19.3	1,484	201	13.5	1,057	254	24.0
Elementary schools	1,397	246	17.6	710	58	8.2	448	59	13.2
Middle schools	649	131	20.2	438	74	16.9	319	107	33.5
High schools	561	128	22.8	319	69	21.6	274	86	31.4
Ungraded schools	15	1	6.7	17	0	0.0	16	2	12.5

[1] Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

NOTE: Excludes SCALE due to incomplete K–12 district data.

Table A.1.8. How K–12 schools met the criteria for significant MSP participation *in the collection year*:[1] Comprehensive and Targeted projects

Criterion	2002–03		2003–04		2004–05		2005–06		2006–07	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schools that met *any* of the criteria	159	100.0	704	100.0	1,188	100.0	1,336	100.0	1,251	100.0
Schools that met *one* of the criteria										
30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a school year	47	29.6	466	66.2	776	65.3	920	68.9	729	58.3
30 percent of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a school year	6	3.8	62	8.8	161	13.6	239	17.9	303	24.2
30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during a school year	9	5.7	6	0.9	2	0.2	2	0.1	112	9.0

Table A.1.8. How K–12 schools met the criteria for significant MSP participation *in the collection year*:[1] Comprehensive and Targeted projects—continued

Criterion	2007–08		2008–09		2009–10		2010–11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schools that met *any* of the criteria	1,129	100.0	506	100.0	201	100.0	254	100.0
Schools that met *one* of the criteria								
30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a school year	441	39.1	296	58.5	172	85.6	173	68.1
30 percent of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a school year	453	40.1	173	34.2	4	2.0	7	2.8
30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during a school year	43	3.8	1	0.2	2	1.0	11	4.3

Table A.1.8. How K–12 schools met the criteria for significant MSP participation *in the collection year*:[1] Comprehensive and Targeted projects—continued

Criterion	2002–03		2003–04		2004–05		2005–06		2006–07	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schools that met *two* of the criteria										
30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities and 30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during a school year	0	0.0	5	0.7	16	1.3	10	0.7	12	1.0
30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities and 30 percent of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a school year	15	9.4	133	18.9	184	15.5	120	9.0	39	3.1
30 percent of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a school year and 30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during a school year	78	49.1	5	0.7	7	0.6	11	0.8	29	2.3
Schools that met *all* three of the criteria	4	2.5	27	3.8	42	3.5	34	2.5	27	2.2

Table A.1.8. How K–12 schools met the criteria for significant MSP participation *in the collection year*:[1] Comprehensive and Targeted projects—continued

Criterion	2007–08		2008–09		2009–10		2010–11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schools that met *two* of the criteria								
30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities and 30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during a school year	1	0.1	0	0.0	1	0.5	8	3.1
30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities and 30 percent of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a school year	164	14.5	21	4.2	4	2.0	13	5.1
30 percent of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a school year and 30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during a school year	2	0.2	0	0.0	2	1.0	5	2.0
Schools that met *all* three of the criteria	25	2.2	15	3.0	16	8.0	37	14.6

[1] Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

NOTE: Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because of rounding.

Section A.2:
What were the contributions of the individuals involved in the design and delivery of MSP activities?

Table A.2.1. Type of IHE faculty and administrators involved in the development/delivery of MSP activities: All projects

Type of individual	2002–03 (n = 51 IHEs)		2003–04 (n = 115 IHEs)		2004–05 (n = 142 IHEs)		2005–06 (n = 142 IHEs)		2006–07 (n = 148 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,113	100.0	1,704	100.0	2,739	100.0	3,011	100.0	2,535	100.0
IHE STEM faculty (tenure track)	195	17.5	486	28.5	677	24.7	732	24.3	605	23.9
STEM undergraduate students	130	11.7	221	13.0	346	12.6	401	13.3	408	16.1
Preservice undergraduate and alternative certification students	305	27.4	189	11.1	111	4.1	136	4.5	95	3.7
Graduate students (including doctoral candidates)	141	12.7	177	10.4	379	13.8	699	23.2	301	11.9
IHE administrators	75	6.7	135	7.9	149	5.4	144	4.8	136	5.4
MSP liaison/coordinators	55	4.9	131	7.7	184	6.7	170	5.6	204	8.0
IHE education faculty (tenure track)	53	4.8	112	6.6	183	6.7	180	6.0	159	6.3
IHE STEM faculty (nontenure track)	60	5.4	102	6.0	213	7.8	167	5.5	176	6.9
K–12 teachers in residence	19	1.7	37	2.2	165	6.0	150	5.0	168	6.6
IHE education faculty (nontenure track)	27	2.4	36	2.1	71	2.6	74	2.5	51	2.0
Postdoctoral students	16	1.4	14	0.8	21	0.8	27	0.9	21	0.8
Other	37	3.3	64	3.8	240	8.8	131	4.4	211	8.3

Table A.2.1. Type of IHE faculty and administrators involved in the development/delivery of MSP activities: All projects—continued

Type of Individual	2007–08 (n = 136 IHEs)		2008–09 (n = 103 IHEs)		2009–10 (n = 93 IHEs)		2010–11 (n = 74 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,741	100.0	1,369	100.0	1,130	100.0	1,411	100.0
IHE STEM faculty (tenure track)	444	25.5	362	26.4	270	23.9	308	21.8
STEM undergraduate students	254	14.6	116	8.5	62	5.5	74	5.2
Preservice undergraduate and alternative certification students	53	3.0	33	2.4	35	3.1	11	0.8
Graduate students (including doctoral candidates)	194	11.1	180	13.1	135	11.9	181	12.8
IHE administrators	81	4.7	85	6.2	58	5.1	50	3.5
MSP liaison/coordinators	141	8.1	106	7.7	95	8.4	92	6.5
IHE education faculty (tenure track)	132	7.6	99	7.2	90	8.0	84	6.0
IHE STEM faculty (nontenure track)	132	7.6	113	8.3	75	6.6	76	5.4
K–12 teachers in residence	132	7.6	151	11.0	161	14.2	408	28.9
IHE education faculty (nontenure track)	56	3.2	36	2.6	29	2.6	27	1.9
Postdoctoral students	10	0.6	20	1.5	21	1.9	23	1.6
Other	112	6.4	68	5.0	99	8.8	77	5.5

NOTE: Numbers reported by IHE partners. Percents may not add to 100 because of rounding.

Table A.2.2. Characteristics of IHE faculty and administrators involved in the development/delivery of MSP activities: All projects

Characteristic	2002–03		2003–04		2004–05		2005–06		2006–07	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Overall	262	100.0	736	100.0	1,163	100.0	1,119	100.0	1,078	100.0
Gender										
Female	101	38.5	301	40.9	499	42.9	475	42.4	469	43.5
Male	161	61.5	435	59.1	639	54.9	601	53.7	561	52.0
Choose not to report[1]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not identified	0	0.0	0	0.0	25	2.1	43	3.8	48	4.5
Race										
White	244	93.1	652	88.6	988	85.0	944	84.4	893	82.8
Black or African American	4	1.5	33	4.5	59	5.1	46	4.1	47	4.4
Asian	9	3.4	30	4.1	44	3.8	47	4.2	54	5.0
American Indian or Alaskan Native	1	0.4	3	0.4	5	0.4	3	0.3	6	0.6
Native Hawaiian or Other Pacific Islander	0	0.0	5	0.7	4	0.3	3	0.3	3	0.3
More than one race	4	1.5	11	1.5	23	2.0	20	1.8	14	1.3
Choose not to report[1]	0	0.0	0	0.0	14	1.2	12	1.1	12	1.1
Not identified	0	0.0	2	0.3	26	2.2	44	3.9	49	4.5
Ethnicity										
Hispanic or Latino	20	7.6	108	14.7	133	11.4	129	11.5	120	11.1
Not Hispanic or Latino	242	92.4	626	85.1	990	85.1	932	83.3	898	83.3
Choose not to report[1]	0	0.0	0	0.0	14	1.2	14	1.3	11	1.0
Not identified	0	0.0	2	0.3	26	2.2	44	3.9	49	4.5

Table A.2.2. Characteristics of IHE faculty and administrators involved in the development/delivery of MSP activities: All projects—continued

Characteristic	2007–08		2008–09		2009–10		2010–11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Overall	756	100.0	545	100.0	500	100.0	474	100.0
Gender								
Female	343	45.4	229	42.0	213	42.6	202	42.6
Male	369	48.8	293	53.8	264	52.8	248	52.3
Choose not to report[1]	1	0.1	3	0.6	6	1.2	4	0.8
Not identified	43	5.7	20	3.7	17	3.4	20	4.2
Race								
White	621	82.1	457	83.9	397	79.4	387	81.6
Black or African American	34	4.5	23	4.2	29	5.8	19	4.0
Asian	36	4.8	21	3.9	26	5.2	26	5.5
American Indian or Alaskan Native	3	0.4	1	0.2	2	0.4	2	0.4
Native Hawaiian or Other Pacific Islander	1	0.1	1	0.2	2	0.4	1	0.2
More than one race	5	0.7	5	0.9	4	0.8	6	1.3
Choose not to report[1]	12	1.6	16	2.9	22	4.4	11	2.3
Not identified	44	5.8	21	3.9	18	3.6	22	4.6
Ethnicity								
Hispanic or Latino	74	9.8	38	7.0	26	5.2	17	3.6
Not Hispanic or Latino	624	82.5	467	85.7	432	86.4	424	89.5
Choose not to report[1]	14	1.9	19	3.5	24	4.8	12	2.5
Not identified	44	5.8	21	3.9	18	3.6	21	4.4

[1] "Choose not to report" is an option for IHE faculty and administrators taking the Annual Survey for IHE Institute Participants. It is not an option in the IHE Participant Survey for Comprehensive and Targeted project participants.

NOTE: Percents may not add to 100 because of rounding.

Table A.2.2a. Prior experience with K–12 education programs among IHE faculty and administrators involved in the development/delivery of MSP activities:[1] All projects

Prior education reform experience	2002–03 (n = 262 faculty/ administrators)		2003–04 (n = 736 faculty/ administrators)		2004–05 (n = 1,130 faculty/ administrators)		2005–06 (n = 1,063 faculty/ administrators)		2006–07 (n = 10,18 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Have prior experience with K–12 education programs	193	73.7	517	70.2	801	68.9	758	67.7	690	64.0
Have no prior experience with K–12 education programs	69	26.3	219	29.8	329	28.3	305	27.3	328	30.4

Table A.2.2a. Prior experience with K–12 education programs among IHE faculty and administrators involved in the development/delivery of MSP activities:[1] All projects—continued

Prior education reform experience	2007–08 (n = 708 faculty/ administrators)		2008–09 (n = 520 faculty/ administrators)		2009–10 (n = 476 faculty/ administrators)		2010–11 (n = 448 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Have prior experience with K–12 education programs	491	64.9	387	71.0	359	71.8	348	73.4
Have no prior experience with K–12 education programs	217	28.7	133	24.4	117	23.4	100	21.1

[1]This item applies only to first-time respondents in a given year.

Table A.2.3. Tenure status and faculty rank of IHE faculty and administrators involved in the development/delivery of MSP activities: All projects

Status and rank	2002–03 (n = 262 faculty/ administrators)		2003–04 (n = 736 faculty/ administrators)		2004–05 (n = 1,163 faculty/ administrators)		2005–06 (n = 1,119 faculty/ administrators)		2006–07 (n = 1,078 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Tenure status										
Tenured	122	46.6	388	52.7	588	50.6	576	51.5	565	52.4
On tenure track	41	15.6	131	17.8	185	15.9	172	15.4	157	14.6
Not on tenure track	36	13.7	89	12.1	157	13.5	154	13.8	153	14.2
Not applicable to my position/at my institution	63	24.0	128	17.4	233	20.0	217	19.4	203	18.8
Faculty rank										
Professor	58	22.1	186	25.3	297	25.5	283	25.3	268	24.9
Associate professor	46	17.6	156	21.2	230	19.8	220	19.7	231	21.4
Assistant professor	40	15.3	132	17.9	197	16.9	190	17.0	181	16.8
Other	35	13.4	61	8.3	139	12.0	160	14.3	130	12.1
Lecturer	16	6.1	27	3.7	38	3.3	35	3.1	41	3.8
Administrator with instructional and/or research responsibilities	20	7.6	58	7.9	86	7.4	84	7.5	81	7.5
Adjunct faculty	7	2.7	24	3.3	28	2.4	25	2.2	26	2.4
Instructor	12	4.6	42	5.7	61	5.2	58	5.2	61	5.7
Administrator without instructional and/or research responsibilities	19	7.3	34	4.6	50	4.3	37	3.3	37	3.4
Not applicable for my position	9	3.4	13	1.8	32	2.8	22	2.0	18	1.7
Not applicable at this institution	0	0.0	3	0.4	5	0.4	5	0.4	4	0.4

Table A.2.3. Tenure status and faculty rank of IHE faculty and administrators involved in the development/delivery of MSP activities: All projects—continued

Status and rank	2007–08 (n = 756 faculty/ administrators)		2008–09 (n = 545 faculty/ administrators)		2009–10 (n = 500 faculty/ administrators)		2010–11 (n = 474 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Tenure status								
Tenured	385	50.9	284	52.1	251	50.2	241	50.8
On tenure track	99	13.1	67	12.3	60	12.0	70	14.8
Not on tenure track	121	16.0	76	13.9	71	14.2	70	14.8
Not applicable to my position/at my institution	151	20.0	118	21.7	118	23.6	93	19.6
Faculty rank								
Professor	179	23.7	145	26.6	147	29.4	130	27.4
Associate professor	152	20.1	107	19.6	88	17.6	90	19.0
Assistant professor	124	16.4	74	13.6	65	13.0	80	16.9
Other	96	12.7	66	12.1	78	15.6	59	12.4
Lecturer	30	4.0	15	2.8	10	2.0	19	4.0
Administrator with instructional and/or research responsibilities	63	8.3	54	9.9	44	8.8	44	9.3
Adjunct faculty	27	3.6	12	2.2	12	2.4	15	3.2
Instructor	44	5.8	34	6.2	19	3.8	12	2.5
Administrator without instructional and/or research responsibilities	23	3.0	19	3.5	18	3.6	11	2.3
Not applicable for my position	14	1.9	16	2.9	16	3.2	10	2.1
Not applicable at this institution	4	0.5	3	0.6	3	0.6	4	0.8

NOTE: Percents may not add to 100 because of rounding.

Table A.2.4. Field of research and instruction for IHE faculty and administrators involved in the development/delivery of MSP activities: All projects

Field	2002–03 (n = 262 faculty/ administrators)		2003–04 (n = 736 faculty/ administrators)		2004–05 (n = 1,163 faculty/ administrators)		2005–06 (n = 1,119 faculty/ administrators)		2006–07 (n = 1,078 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Field of research										
Education	91	34.7	254	34.5	422	36.3	405	36.2	405	37.6
Mathematics	43	16.4	138	18.8	223	19.2	203	18.1	167	15.5
Biological sciences	26	9.9	82	11.1	101	8.7	115	10.3	124	11.5
Chemistry	18	6.9	52	7.1	72	6.2	77	6.9	80	7.4
Physics	16	6.1	27	3.7	39	3.4	37	3.3	35	3.2
Engineering	8	3.1	21	2.9	48	4.1	23	2.1	23	2.1
Geosciences	4	1.5	21	2.9	34	2.9	47	4.2	33	3.1
Astronomy	2	0.8	8	1.1	11	0.9	10	0.9	12	1.1
Computer science	1	0.4	6	0.8	7	0.6	7	0.6	7	0.6
Atmospheric sciences	1	0.4	1	0.1	3	0.3	3	0.3	7	0.6
Ocean sciences	1	0.4	1	0.1	6	0.5	7	0.6	7	0.6
Other	18	6.9	55	7.5	96	8.3	90	8.0	86	8.0
Not applicable	33	12.6	69	9.4	101	8.7	95	8.5	92	8.5
Field of instruction										
Mathematics	63	24.0	182	24.7	304	26.1	272	24.3	248	23.0
Education	67	25.6	172	23.4	304	26.1	281	25.1	267	24.8
Biological sciences	30	11.5	108	14.7	138	11.9	148	13.2	162	15.0
Chemistry	21	8.0	65	8.8	93	8.0	98	8.8	106	9.8
Physics	21	8.0	39	5.3	58	5.0	58	5.2	58	5.4
Geosciences	5	1.9	29	3.9	39	3.4	47	4.2	35	3.2
Engineering	8	3.1	24	3.3	52	4.5	33	2.9	36	3.3
Astronomy	2	0.8	7	1.0	12	1.0	11	1.0	9	0.8
Computer science	1	0.4	5	0.7	3	0.3	6	0.5	9	0.8
Atmospheric sciences	0	0.0	0	0.0	6	0.5	7	0.6	11	1.0
Ocean sciences	0	0.0	0	0.0	3	0.3	3	0.3	4	0.4
Other	17	6.5	45	6.1	65	5.6	75	6.7	65	6.0
Not applicable	27	10.3	59	8.0	86	7.4	80	7.1	68	6.3

Table A.2.4. Field of research and instruction for IHE faculty and administrators involved in the development/delivery of MSP activities: All projects—continued

Field	2007–08 (n = 756 faculty/ administrators)		2008–09 (n = 545 faculty/ administrators)		2009–10 (n = 500 faculty/ administrators)		2010–11 (n = 474 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Field of research								
Education	319	42.2	211	38.7	193	38.6	176	37.1
Mathematics	119	15.7	99	18.2	108	21.6	80	16.9
Biological sciences	80	10.6	51	9.4	41	8.2	43	9.1
Chemistry	35	4.6	26	4.8	22	4.4	20	4.2
Physics	20	2.6	23	4.2	14	2.8	19	4.0
Engineering	15	2.0	11	2.0	10	2.0	24	5.1
Geosciences	15	2.0	13	2.4	16	3.2	27	5.7
Astronomy	9	1.2	5	0.9	6	1.2	7	1.5
Computer science	5	0.7	1	0.2	1	0.2	1	0.2
Atmospheric sciences	6	0.8	1	0.2	2	0.4	3	0.6
Ocean sciences	3	0.4	5	0.9	3	0.6	5	1.1
Other	69	9.1	52	9.5	37	7.4	38	8.0
Not applicable	61	8.1	47	8.6	47	9.4	31	6.5
Field of instruction								
Mathematics	197	26.1	152	27.9	142	28.4	114	24.1
Education	212	28.0	149	27.3	139	27.8	128	27.0
Biological sciences	102	13.5	59	10.8	47	9.4	53	11.2
Chemistry	63	8.3	42	7.7	39	7.8	26	5.5
Physics	32	4.2	35	6.4	28	5.6	30	6.3
Geosciences	20	2.6	12	2.2	21	4.2	31	6.5
Engineering	22	2.9	12	2.2	12	2.4	23	4.9
Astronomy	8	1.1	4	0.7	1	0.2	6	1.3
Computer science	5	0.7	1	0.2	1	0.2	1	0.2
Atmospheric sciences	8	1.1	1	0.2	0	0.0	1	0.2
Ocean sciences	2	0.3	4	0.7	1	0.2	1	0.2
Other	42	5.6	35	6.4	27	5.4	26	5.5
Not applicable	43	5.7	39	7.2	42	8.4	34	7.2

NOTE: Percents may not add to 100 because of rounding.

Table A.2.5. Hours of involvement for IHE faculty and administrators involved in the development/delivery of MSP activities: All projects

Hours of involvement	2002–03 (n = 262 faculty/ administrators)		2003–04 (n = 736 faculty/ administrators)		2004–05 (n = 1,163 faculty/ administrators)		2005–06 (n = 1,119 faculty/ administrators)		2006–07 (n = 1,078 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than 20 hours	27	10.3	73	9.9	99	8.5	126	11.3	107	9.9
20 to 40 hours	36	13.7	96	13.0	131	11.3	135	12.1	137	12.7
41 to 80 hours	33	12.6	129	17.5	194	16.7	162	14.5	173	16.0
81 to 160 hours	54	20.6	141	19.2	203	17.5	205	18.3	206	19.1
161 to 200 hours	16	6.1	78	10.6	112	9.6	104	9.3	112	10.4
More than 200 hours	96	36.6	219	29.8	424	36.5	387	34.6	343	31.8

Table A.2.5. Hours of involvement for IHE faculty and administrators involved in the development/delivery of MSP activities: All projects—continued

Hours of involvement	2007–08 (n = 756 faculty/ administrators)		2008–09 (n = 545 faculty/ administrators)		2009–10 (n = 500 faculty/ administrators)		2010–11 (n = 474 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than 20 hours	87	11.5	65	11.9	52	10.4	48	10.1
20 to 40 hours	90	11.9	65	11.9	52	10.4	53	11.2
41 to 80 hours	127	16.8	92	16.9	87	17.4	84	17.7
81 to 160 hours	161	21.3	100	18.3	86	17.2	89	18.8
161 to 200 hours	69	9.1	43	7.9	58	11.6	37	7.8
More than 200 hours	222	29.4	180	33.0	165	33.0	163	34.4

NOTE: Percents may not add to 100 because of rounding.

Table A.2.6. Activities targeted to preservice students undertaken by IHE faculty and administrators: Comprehensive and Targeted projects

Activity	2002–03 (n = 199 faculty/ administrators)		2003–04 (n = 567 faculty/ administrators)		2004–05 (n = 840 faculty/ administrators)		2005–06 (n = 764 faculty/ administrators)		2006–07 (n = 690 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Creating opportunities for preservice students										
Participate in preservice recruitment activities	51	25.6	115	20.3	168	20.0	137	17.9	118	17.1
Provide preservice students with experience in K–12 classroom settings before formal student teaching	42	21.1	105	18.5	163	19.4	139	18.2	101	14.6
Provide preservice students with opportunities to participate in local school district inservice activities	28	14.1	73	12.9	118	14.0	94	12.3	80	11.6
Involve K–12 master teachers in preservice program	22	11.1	73	12.9	107	12.7	81	10.6	74	10.7
Participate in efforts to link the preservice process to national teacher certification activities	13	6.5	46	8.1	66	7.9	56	7.3	45	6.5
Mentor preservice students	51	25.6	142	25.0	199	23.7	165	21.6	147	21.3
Teaching or designing preservice courses										
Teach or co-teach a preservice STEM content course	48	24.1	119	21.0	175	20.8	150	19.6	161	23.3
Design preservice STEM courses specifically for elementary/middle/high school teacher certification programs	44	22.1	120	21.2	157	18.7	125	16.4	120	17.4
Develop an innovation as part of a traditional preservice course	47	23.6	126	22.2	170	20.2	140	18.3	128	18.6
Develop/revise preservice courses to align with national, state, and/or local standards	56	28.1	136	24.0	186	22.1	149	19.5	136	19.7

Table A.2.6. Activities targeted to preservice students undertaken by IHE faculty and administrators: Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 447 faculty/ administrators)		2008–09 (n = 283 faculty/ administrators)		2009–10 (n = 237 faculty/ administrators)		2010–11 (n = 240 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Creating opportunities for preservice students								
Participate in preservice recruitment activities	61	13.6	53	18.7	39	16.5	43	17.9
Provide preservice students with experience in K–12 classroom settings before formal student teaching	63	14.1	50	17.7	30	12.7	41	17.1
Provide preservice students with opportunities to participate in local school district inservice activities	56	12.5	37	13.1	22	9.3	30	12.5
Involve K–12 master teachers in preservice program	44	9.8	28	9.9	24	10.1	27	11.3
Participate in efforts to link the preservice process to national teacher certification activities	23	5.1	21	7.4	14	5.9	16	6.7
Mentor preservice students	89	19.9	73	25.8	50	21.1	59	24.6
Teaching or designing preservice courses								
Teach or co-teach a preservice STEM content course	93	20.8	69	24.4	56	23.6	62	25.8
Design preservice STEM courses specifically for elementary/middle/high school teacher certification programs	68	15.2	47	16.6	33	13.9	39	16.3
Develop an innovation as part of a traditional preservice course	61	13.6	46	16.3	26	11.0	43	17.9
Develop/revise preservice courses to align with national, state, and/or local standards	71	15.9	61	21.6	41	17.3	41	17.1

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year. Percents add to more than 100 because some respondents reported more than one activity.

Table A.2.7. Activities targeted to K–12 teachers undertaken by IHE faculty and administrators: Comprehensive and Targeted projects

Activity	2002–03 (n = 199 faculty/ administrators)		2003–04 (n = 567 faculty/ administrators)		2004–05 (n = 840 faculty/ administrators)		2005–06 (n = 764 faculty/ administrators)		2006–07 (n = 690 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Activities targeted to multiple K–12 teachers										
Conduct workshops/ institutes/ courses with K–12 teachers that increase general content and/or pedagogical knowledge	114	57.3	316	55.7	449	53.5	414	54.2	339	49.1
Conduct targeted workshops/ institutes/courses with K–12 teachers	79	39.7	180	31.7	258	30.7	255	33.4	188	27.2
Design STEM courses specifically for elementary/ middle/high school teacher certification programs	54	27.1	101	17.8	149	17.7	125	16.4	94	13.6
Establish/provide STEM learning communities/ study groups	44	22.1	106	18.7	180	21.4	158	20.7	132	19.1
Provide traditional STEM courses at alternative venues	9	4.5	35	6.2	59	7.0	65	8.5	32	4.6
Activities targeted to an individual K–12 teachers										
Support adjunct positions for K–12 master teachers at your IHE	21	10.6	60	10.6	83	9.9	52	6.8	44	6.4
Establish/provide externship opportunities for K–12 teachers	14	7.0	44	7.8	74	8.8	68	8.9	47	6.8
Remain “on call” for classroom teachers	97	48.7	242	42.7	360	42.9	337	44.1	280	40.6
Mentor a K–12 teacher in a shared discipline	35	17.6	103	18.2	154	18.3	135	17.7	111	16.1
Help K–12 schools utilize computer-communications technology for challenging course delivery	13	6.5	29	5.1	46	5.5	35	4.6	26	3.8
Help K–12 teachers utilize technology for course content innovation	55	27.6	133	23.5	203	24.2	183	24.0	163	23.6

Table A.2.7. Activities targeted to K–12 teachers undertaken by IHE faculty and administrators: Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 447 faculty/ administrators)		2008–09 (n = 283 faculty/ administrators)		2009–10 (n = 237 faculty/ administrators)		2010–11 (n = 240 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Activities targeted to multiple K–12 teachers								
Conduct workshops/institutes/courses with K–12 teachers that increase general content and/or pedagogical knowledge	196	43.8	130	45.9	98	41.4	119	49.6
Conduct targeted workshops/ institutes/courses with K–12 teachers	117	26.2	77	27.2	62	26.2	67	27.9
Design STEM courses specifically for elementary/ middle/high school teacher certification programs	53	11.9	30	10.6	26	11.0	47	19.6
Establish/provide STEM learning communities/ study groups	76	17.0	42	14.8	45	19.0	57	23.8
Provide traditional STEM courses at alternative venues	20	4.5	17	6.0	11	4.6	16	6.7
Activities targeted to an individual K–12 teachers								
Support adjunct positions for K–12 master teachers at your IHE	26	5.8	19	6.7	16	6.8	23	9.6
Establish/provide externship opportunities for K–12 teachers	22	4.9	17	6.0	11	4.6	17	7.1
Remain "on call" for classroom teachers	153	34.2	99	35.0	79	33.3	88	36.7
Mentor a K–12 teacher in a shared discipline	48	10.7	44	15.5	31	13.1	45	18.8
Help K–12 schools utilize computer-communications technology for challenging course delivery	21	4.7	11	3.9	9	3.8	10	4.2
Help K–12 teachers utilize technology for course content innovation	86	19.2	45	15.9	38	16.0	56	23.3

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year. Percents add to more than 100 because some respondents reported more than one activity.

Table A.2.8. Management/research activities undertaken by IHE faculty and administrators: Comprehensive and Targeted projects

Activity	2002–03 (n = 199 faculty/ administrators)		2003–04 (n = 567 faculty/ administrators)		2004–05 (n = 840 faculty/ administrators)		2005–06 (n = 764 faculty/ administrators)		2006–07 (n = 690 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Management										
Serve as a member of the partnership management structure	84	42.2	222	39.2	294	35.0	249	32.6	238	34.5
Help develop joint databases or facilitate data sharing between K–12 and IHE partners	39	19.6	99	17.5	115	13.7	109	14.3	95	13.8
Help create formal links between all MSP core partners	56	28.1	113	19.9	149	17.7	133	17.4	122	17.7
Help align teacher certification program requirements among partner IHEs	9	4.5	29	5.1	38	4.5	30	3.9	28	4.1
Participate in the development of policies to reward IHE disciplinary faculty for their involvement in K–12 education	13	6.5	40	7.1	78	9.3	70	9.2	63	9.1
Enlist support from STEM industry/business personnel who work in disciplinary fields related to your own	18	9.0	27	4.8	50	6.0	42	5.5	44	6.4
Research and evaluation										
Conduct research on teaching and learning in math and science	34	17.1	95	16.8	189	22.5	170	22.3	188	27.2
Attend national MSP conferences	48	24.1	98	17.3	136	16.2	111	14.5	108	15.7
Work on project-related evaluation activities or with RETA projects	42	21.1	108	19.0	157	18.7	135	17.7	119	17.2

Table A.2.8. Management/research activities undertaken by IHE faculty and administrators: Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 447 faculty/ administrators)		2008–09 (n = 283 faculty/ administrators)		2009–10 (n = 237 faculty/ administrators)		2010–11 (n = 240 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Management								
Serve as a member of the partnership management structure	147	32.9	115	40.6	91	38.4	100	41.7
Help develop joint databases or facilitate data sharing between K–12 and IHE partners	63	14.1	48	17.0	33	13.9	33	13.8
Help create formal links between all MSP core partners	75	16.8	57	20.1	42	17.7	59	24.6
Help align teacher certification program requirements among partner IHEs	18	4.0	9	3.2	4	1.7	4	1.7
Participate in the development of policies to reward IHE disciplinary faculty for their involvement in K–12 education	43	9.6	26	9.2	20	8.4	14	5.8
Enlist support from STEM industry/business personnel who work in disciplinary fields related to your own	30	6.7	18	6.4	10	4.2	20	8.3
Research and evaluation								
Conduct research on teaching and learning in math and science	148	33.1	95	33.6	71	30.0	83	34.6
Attend national MSP conferences	80	17.9	59	20.8	55	23.2	54	22.5
Work on project-related evaluation activities or with RETA projects	81	18.1	68	24.0	55	23.2	56	23.3

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year. Percents add to more than 100 because some respondents reported more than one activity.

Table A.2.9. MSP projects working with non-academic scientists, mathematicians, and engineers: All projects

Type of MSP activity	2003–04 (n = 34 projects)		2004–05 (n = 48 projects)		2005–06 (n = 47 projects)		2006–07 (n = 51 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Projects working with scientists	14	41.2	16	33.3	18	38.3	16	31.4
Projects working with engineers	5	14.7	7	14.6	8	17.0	8	15.7
Projects working with mathematicians	5	14.7	9	18.8	9	19.1	10	19.6

Table A.2.9. MSP projects working with non-academic scientists, mathematicians, and engineers: All projects—continued

Type of MSP activity	2007–08 (n = 50 projects)		2008–09 (n = 48 projects)		2009–10 (n = 44 projects)		2010–11 (n = 38 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Projects working with scientists	14	28.0	12	25.0	10	22.7	11	28.9
Projects working with engineers	3	6.0	3	6.3	4	9.1	3	7.9
Projects working with mathematicians	3	6.0	5	10.4	2	4.5	1	2.6

Table A.2.10. Type of non-academic scientists, mathematicians, and engineers involved in the development/delivery of MSP activities: All projects

Type of non-academic participant	2003–04 (n = 34 projects)		2004–05 (n = 48 projects)		2005–06 (n = 47 projects)		2006–07 (n = 51 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All non-academic scientists, mathematicians, and engineers	225	100.0	242	100.0	259	100.0	217	100.0
Scientists	147	65.3	173	71.5	193	74.5	158	72.8
Engineers	54	24.0	46	19.0	44	17.0	38	17.5
Mathematicians	24	10.7	23	9.5	22	8.5	21	9.7

Table A.2.10. Type of non-academic scientists, mathematicians, and engineers involved in the development/delivery of MSP activities: All projects—continued

Type of MSP activity	2007–08 (n = 50 projects)		2008–09 (n = 48 projects)		2009–10 (n = 44 projects)		2010–11 (n = 38 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All non-academic scientists, mathematicians, and engineers	116	100.0	121	100.0	60	100.0	81	100.0
Scientists	103	88.8	107	88.4	44	73.3	55	67.9
Engineers	7	6.0	6	5.0	10	16.7	18	22.2
Mathematicians	6	5.2	8	6.6	6	10.0	8	9.9

NOTE: Percents may not add to 100 because of rounding.

Table A.2.11. Type of K–12 participants involved in the development/delivery of MSP activities: All projects

Type of participant	2002–03 (n = 87 districts)		2003–04 (n = 263 districts)		2004–05 (n = 259 districts)		2005–06 (n = 280 districts)		2006–07 (n = 316 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 teachers and administrators	1,124	100.0	3,158	100.0	5,189	100.0	5,992	100.0	8,131	100.0
Teachers	663	59.0	2,240	70.9	4,221	81.3	5,051	84.3	6,985	85.9
Principals, vice principals, and assistant principals	202	18.0	357	11.3	330	6.4	280	4.7	374	4.6
District-level administrators/staff	107	9.5	257	8.1	223	4.3	220	3.7	233	2.9
Instructional coordinators and supervisors	114	10.1	223	7.1	197	3.8	247	4.1	279	3.4
Guidance counselors	14	1.2	24	0.8	30	0.6	54	0.9	49	0.6
Other	24	2.1	57	1.8	188	3.6	140	2.3	211	2.6

Table A.2.11. Type of K–12 participants involved in the development/delivery of MSP activities: All projects—continued

Type of participant	2007–08 (n = 248 districts)		2008–09 (n = 100 districts)		2009–10 (n = 70 districts)		2010–11 (n = 76 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 teachers and administrators	5,754	100.0	2,803	100.0	1,296	100.0	937	100.0
Teachers	4,726	82.1	2,362	84.3	965	74.5	687	73.3
Principals, vice principals, and assistant principals	436	7.6	193	6.9	149	11.5	112	12.0
District-level administrators/staff	189	3.3	67	2.4	47	3.6	37	3.9
Instructional coordinators and supervisors	204	3.5	46	1.6	26	2.0	24	2.6
Guidance counselors	55	1.0	18	0.6	8	0.6	6	0.6
Other	144	2.5	117	4.2	101	7.8	71	7.6

NOTE: Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because of rounding.

Table A.2.12. Characteristics of mathematics and science teachers in schools with MSP activities:[1] Comprehensive and Targeted projects

Teacher characteristic	2002–03 (n = 158 schools)			2003–04 (n = 707 schools)			2004–05 (n = 1,099 schools)		
	Number of mathematics/ science teachers in schools that met the criteria	Teachers participating in MSP[2]		Number of mathematics/ science teachers in schools that met the criteria	Teachers participating in MSP[2]		Number of schools working with MSP	Teachers participating in MSP[2]	
		Number	Percent		Number	Percent		Number	Percent
All teachers	5,223	2,087	100.0	13,888	5,743	100.0	18,988	7,031	100.0
Gender									
Male	1,002	401	19.2	3,223	1,195	20.8	3,758	1,636	23.3
Female	4,143	1,680	80.5	10,343	4,529	78.9	12,252	5,011	71.3
Not reported	78	6	0.3	322	19	0.3	3,178	384	5.5
Race/ethnicity									
White	4,021	1,515	72.6	8,182	3,230	56.2	9,554	3,307	47.0
Black or African American	573	320	15.3	1,125	489	8.5	1,492	605	8.6
Hispanic	511	224	10.7	3,497	1,691	29.4	2,806	1,555	22.1
Asian	24	11	0.5	178	64	1.1	272	108	1.5
American Indian or Alaska Native	4	1	0.0	60	9	0.2	74	16	0.2
Native Hawaiian or Other Pacific Islander	4	2	0.1	73	6	0.1	86	32	0.5
More than one race	0	0	0.0	11	0	0.0	37	2	0.0
Not reported	86	14	0.7	762	259	4.5	4,648	1,406	20.0

Table A.2.12. Characteristics of mathematics and science teachers in schools with MSP activities:[1] Comprehensive and Targeted projects—continued

Teacher characteristic	2005–06 (n = 1,301 schools			2006–07 (n = 1,502 schools)			2007–08 (n = 1,431 schools)		
	Number of mathematics/ science teachers in schools that met the criteria	Teachers participating in MSP[2]		Number of mathematics/ science teachers in schools that met the criteria	Teachers participating in MSP[2]		Number of schools working with MSP	Teachers participating in MSP[2]	
		Number	Percent		Number	Percent		Number	Percent
All teachers	23,766	10,099	100.0	29,552	11,498	100.0	29,684	7,441	100.0
Gender									
Male	4,674	1,772	17.5	4,961	1,679	14.6	4,739	1,134	15.2
Female	15,689	6,874	68.1	17,790	6,593	57.3	18,266	5,134	69.0
Not reported	3,403	1,453	14.4	6,801	3,226	28.1	6,679	1,173	15.8
Race/ethnicity									
White	11,676	4,120	40.8	13,523	3,635	31.6	14,052	2,724	36.6
Black or African American	3,272	2,151	21.3	3,379	2,178	18.9	3,546	2,177	29.3
Hispanic	3,318	1,155	11.4	3,880	1,168	10.2	2,334	469	6.3
Asian	342	132	1.3	314	94	0.8	319	119	1.6
American Indian or Alaska Native	126	9	0.1	110	10	0.1	53	10	0.1
Native Hawaiian or Other Pacific Islander	59	20	0.2	162	26	0.2	75	33	0.4
More than one race	35	15	0.1	67	15	0.1	11	6	0.1
Not reported	4,938	2,497	24.7	8,092	4,372	38.0	9,294	1,903	25.6

Table A.2.12. Characteristics of mathematics and science teachers in schools with MSP activities:[1] Comprehensive and Targeted projects—continued

Teacher characteristic	2008–09 (n = 852 schools)			2009–10 (n = 440 schools)			2010–11 (n = 383 schools)		
	Number of mathematics/ science teachers in schools that met the criteria	Teachers participating in MSP[2]		Number of mathematics/ science teachers in schools that met the criteria	Teachers participating in MSP[2]		Number of schools working with MSP	Teachers participating in MSP[2]	
		Number	Percent		Number	Percent		Number	Percent
All teachers	17,024	2,705	100.0	7,455	1,163	100.0	5,942	1,316	100.0
Gender									
Male	2,978	521	19.3	1,351	307	26.4	1,175	347	26.4
Female	11,223	1,942	71.8	5,546	846	72.7	3,944	902	68.5
Not reported	2,823	242	8.9	558	10	0.9	823	67	5.1
Race/ethnicity									
White	9,911	1,603	59.3	5,264	757	65.1	3,618	746	56.7
Black or African American	1,836	384	14.2	626	113	9.7	547	120	9.1
Hispanic	1,591	126	4.7	536	81	7.0	406	37	2.8
Asian	270	94	3.5	91	28	2.4	60	26	2.0
American Indian or Alaska Native	38	9	0.3	22	5	0.4	26	6	0.5
Native Hawaiian or Other Pacific Islander	87	2	0.1	18	0	0.0	1	0	0.0
More than one race	46	4	0.1	2	0	0.0	5	2	0.2
Not reported	3,245	483	17.9	896	179	15.4	1,279	379	28.8

[1] Only includes schools that met the criteria for significant MSP participation. Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

[2] Teachers were defined as "participating" if they participated in 30 or more hours of MSP-sponsored activities during a given school year.

NOTE: Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because of rounding.

Section A.3:
What MSP activities were targeted to IHE recipients?

Table A.3.1. MSP preservice recruitment and preparation activities targeted to IHE recipients: Comprehensive and Targeted projects

Activity	2003–04 (n = 34 projects)		2004–05 (n = 40 projects)		2005–06 (n = 39 projects)		2006–07 (n = 39 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Provide opportunities for preservice students to gain experience in K–12 classroom settings before formal student teaching	16	47.1	17	42.5	17	43.6	21	53.8
Involve IHE STEM faculty in preservice program	15	44.1	17	42.5	20	51.3	19	48.7
Create/provide opportunities for STEM undergraduate/graduate students to tutor K–20 students	14	41.2	17	42.5	18	46.2	16	41.0
Develop/revise preservice courses to align with national and/or state standards	14	41.2	21	52.5	21	53.8	20	51.3
Develop/revise preservice course content to align with local school district curricula	12	35.3	18	45.0	16	41.0	15	38.5
Design/offer preservice STEM content courses specifically for elementary/middle/high school teacher certification programs	12	35.3	18	45.0	20	51.3	22	56.4
Invite preservice students to take part in local school district inservice activities	11	32.4	18	45.0	14	35.9	14	35.9
Invite STEM undergraduate/graduate students to help at (or participate in) K–12 special events	10	29.4	18	45.0	18	46.2	15	38.5
Mentor preservice students	10	29.4	15	37.5	15	38.5	16	41.0
Involve K–12 master teachers in preservice program	9	26.5	15	37.5	13	33.3	15	38.5
Create/provide teaching assistant positions for STEM undergraduate/graduate students	7	20.6	12	30.0	11	28.2	13	33.3
Create/provide informative materials for potential STEM teaching candidates	7	20.6	14	35.0	15	38.5	14	35.9
Provide scholarships to undergraduate students	6	17.6	9	22.5	9	23.1	10	25.6
Establish/provide alternative certification programs	4	11.8	7	17.5	8	20.5	7	17.9
Conduct presentations at career fairs	4	11.8	7	17.5	9	23.1	10	25.6
Establish a regional plan for recruiting preservice students that encompasses multiple MSP partners	3	8.8	4	10.0	5	12.8	5	12.8
Establish and/or revise course articulation agreements between 4-year institutions and community colleges	2	5.9	5	12.5	10	25.6	9	23.1
Link the preservice process to national teacher certification activities	2	5.9	3	7.5	2	5.1	3	7.7

Table A.3.1. MSP preservice recruitment and preparation activities targeted to IHE recipients: Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 38 projects)		2008–09 (n = 31 projects)		2009–10 (n = 25 projects)		2010–11 (n = 23 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Provide opportunities for preservice students to gain experience in K–12 classroom settings before formal student teaching	12	31.6	6	19.4	7	28.0	7	30.4
Involve IHE STEM faculty in preservice program	14	36.8	7	22.6	6	24.0	9	39.1
Create/provide opportunities for STEM undergraduate/graduate students to tutor K–20 students	13	34.2	7	22.6	6	24.0	6	26.1
Develop/revise preservice courses to align with national and/or state standards	7	18.4	8	25.8	5	20.0	9	39.1
Develop/revise preservice course content to align with local school district curricula	7	18.4	5	16.1	4	16.0	5	21.7
Design/offer preservice STEM content courses specifically for elementary/middle/high school teacher certification programs	13	34.2	7	22.6	7	28.0	8	34.8
Invite preservice students to take part in local school district inservice activities	11	28.9	4	12.9	4	16.0	6	26.1
Invite STEM undergraduate/graduate students to help at (or participate in) K–12 special events	12	31.6	4	12.9	3	12.0	5	21.7
Mentor preservice students	11	28.9	4	12.9	5	20.0	6	26.1
Involve K–12 master teachers in preservice program	9	23.7	3	9.7	3	12.0	5	21.7
Create/provide teaching assistant positions for STEM undergraduate/graduate students	7	18.4	6	19.4	5	20.0	7	30.4
Create/provide informative materials for potential STEM teaching candidates	11	28.9	6	19.4	5	20.0	5	21.7
Provide scholarships to undergraduate students	6	15.8	5	16.1	3	12.0	7	30.4
Establish/provide alternative certification programs	5	13.2	3	9.7	5	20.0	6	26.1
Conduct presentations at career fairs	5	13.2	3	9.7	2	8.0	4	17.4
Establish a regional plan for recruiting preservice students that encompasses multiple MSP partners	1	2.6	0	0.0	0	0.0	0	0.0
Establish and/or revise course articulation agreements between 4-year institutions and community colleges	1	2.6	1	3.2	0	0.0	3	13.0
Link the preservice process to national teacher certification activities	2	5.3	2	6.5	0	0.0	0	0.0

Table A.3.2. Type of IHE individuals who received services: Comprehensive and Targeted projects

Type of individual	2002–03 (n = 51 IHEs)		2003–04 (n = 115 IHEs)		2004–05 (n = 134 IHEs)		2005–06 (n = 134 IHEs)		2006–07 (n = 136 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,793	100.0	6,188	100.0	7,430	100.0	5,195	100.0	9,971	100.0
Preservice undergraduate and alternative certification students	1,089	60.7	2,508	40.5	1,936	26.1	1,444	27.8	2,613	26.2
STEM undergraduate students	332	18.5	1,779	28.7	2,613	35.2	1,247	24.0	4,786	48.0
IHE STEM faculty (tenure track)	110	6.1	627	10.1	475	6.4	503	9.7	534	5.4
Graduate students (including doctoral candidates)	162	9.0	361	5.8	581	7.8	982	18.9	1,079	10.8
IHE administrators	37	2.1	261	4.2	110	1.5	75	1.4	113	1.1
IHE STEM faculty (nontenure track)	23	1.3	175	2.8	776	10.4	285	5.5	310	3.1
MSP liaison/ coordinators	6	0.3	165	2.7	56	0.8	42	0.8	10	0.1
IHE education faculty (tenure track)	10	0.6	157	2.5	112	1.5	105	2.0	75	0.8
K–12 teachers in residence	9	0.5	94	1.5	312	4.2	199	3.8	222	2.2
IHE education faculty (nontenure track)	4	0.2	30	0.5	40	0.5	69	1.3	47	0.5
Postdoctoral students	2	0.1	6	0.1	6	0.1	9	0.2	6	0.1
Other	9	0.5	25	0.4	413	5.6	235	4.5	176	1.8

Table A.3.2. Type of IHE individuals who received services: Comprehensive and Targeted projects—continued

Type of individual	2007–08 (n = 124 IHEs)		2008–09 (n = 87 IHEs)		2009–10 (n = 75 IHEs)		2010–11 (n = 59 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	6,247	100.0	4,117	100.0	1,834	100.0	1,894	100.0
Preservice undergraduate and alternative certification students	2,484	39.8	2,016	49.0	1,039	56.7	909	48.0
STEM undergraduate students	2,345	37.5	1,510	36.7	356	19.4	79	4.2
IHE STEM faculty (tenure track)	227	3.6	111	2.7	37	2.0	136	7.2
Graduate students (including doctoral candidates)	364	5.8	160	3.9	177	9.7	166	8.8
IHE administrators	163	2.6	51	1.2	28	1.5	19	1.0
IHE STEM faculty (nontenure track)	94	1.5	38	0.9	16	0.9	57	3.0
MSP liaison/ coordinators	192	3.1	24	0.6	9	0.5	11	0.6
IHE education faculty (tenure track)	40	0.6	25	0.6	15	0.8	10	0.5
K–12 teachers in residence	74	1.2	171	4.2	150	8.2	440	23.2
IHE education faculty (nontenure track)	112	1.8	4	0.1	4	0.2	7	0.4
Postdoctoral students	4	0.1	5	0.1	3	0.2	8	0.4
Other	148	2.4	2	0.0	0	0.0	52	2.7

NOTE: Percents may not add to 100 because of rounding.

Table A.3.3. Contributions to preservice courses in participating IHEs:[1] Comprehensive and Targeted projects

Type of MSP contribution	2002–03 (n = 12 IHEs)		2003–04 (n = 28 IHEs)		2004–05 (n = 41 IHEs)		2005–06 (n = 21 IHEs)		2006–07 (n = 22 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total new preservice courses	35	100.0	99	100.0	142	100.0	62	100.0	103	100.0
Developed a new course/ seminar	8	22.9	28	28.3	47	33.1	18	29.0	20	19.4
Modified or enhanced a preexisting course/ seminar	24	68.6	67	67.7	93	65.5	41	66.1	77	74.8
Other	3	8.6	4	4.0	4	2.8	3	4.8	6	5.8

Table A.3.3. Contributions to preservice courses in participating IHEs:[1] Comprehensive and Targeted projects—continued

Type of MSP contribution	2007–08 (n = 13 IHEs)		2008–09 (n = 10 IHEs)		2009–10 (n = 11 IHEs)		2010–11 (n = 13 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total new preservice courses	73	100.0	16	100.0	12	100.0	20	100.0
Developed a new course/ seminar	7	9.6	11	68.8	9	75.0	9	45.0
Modified or enhanced a preexisting course/ seminar	56	76.7	5	31.3	3	25.0	12	60.0
Other	10	13.7	1	6.3	0	0.0	1	5.0

[1]This item asked only when a course is supported by MSP for the first time.

NOTE: Percents may not add to 100 because of rounding. Details may not add to totals because some respondents reported more than one contribution.

Table A.3.4. Subject of new undergraduate and graduate preservice courses supported by MSP:[1] Comprehensive and Targeted projects

Level and subject	2002–03 (n = 12 IHEs)		2003–04 (n = 28 IHEs)		2004–05 (n = 41 IHEs)		2005–06 (n = 21 IHEs)		2006–07 (n = 22 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Undergraduate level, total	30	100.0	86	100.0	112	100.0	43	100.0	84	100.0
Mathematics	19	63.3	43	50.0	42	37.5	18	41.9	25	29.8
Education	13	43.3	15	17.4	16	14.3	7	16.3	17	20.2
Biological sciences	4	13.3	10	11.6	25	22.3	8	18.6	11	13.1
Physics	5	16.7	9	10.5	18	16.1	2	4.7	12	14.3
Chemistry	2	6.7	9	10.5	12	10.7	4	9.3	21	25.0
Geosciences	3	10.0	5	5.8	9	8.0	2	4.7	2	2.4
Computer science	1	3.3	3	3.5	3	2.7	0	0.0	0	0.0
Astronomy	3	10.0	0	0.0	3	2.7	0	0.0	2	2.4
Atmospheric sciences	0	0.0	3	3.5	5	4.5	0	0.0	0	0.0
Engineering	0	0.0	1	1.2	0	0.0	0	0.0	0	0.0
Ocean sciences	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	1	3.3	14	16.3	11	9.8	5	11.6	5	6.0
Graduate level, total	5	100.0	13	100.0	30	100.0	19	100.0	19	100.0
Education	2	40.0	9	69.2	13	43.3	9	47.4	3	15.8
Mathematics	3	60.0	6	46.2	13	43.3	8	42.1	11	57.9
Biological sciences	0	0.0	3	23.1	7	23.3	3	15.8	4	21.1
Chemistry	0	0.0	2	15.4	4	13.3	3	15.8	3	15.8
Physics	0	0.0	2	15.4	4	13.3	5	26.3	1	5.3
Atmospheric sciences	1	20.0	0	0.0	0	0.0	2	10.5	1	5.3
Computer science	0	0.0	1	7.7	3	10.0	0	0.0	0	0.0
Geosciences	1	20.0	0	0.0	2	6.7	3	15.8	2	10.5
Astronomy	0	0.0	0	0.0	1	3.3	2	10.5	0	0.0
Engineering	0	0.0	0	0.0	1	3.3	0	0.0	1	5.3
Ocean sciences	0	0.0	0	0.0	0	0.0	2	10.5	2	10.5
Other	0	0.0	3	23.1	1	3.3	0	0.0	2	10.5

Table A.3.4. Subject of new undergraduate and graduate preservice courses supported by MSP:[1] Comprehensive and Targeted projects—continued

Level and subject	2007–08 (n = 13 IHEs)		2008–09 (n = 10 IHEs)		2009–10 (n = 11 IHEs)		2010–11 (n = 13 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Undergraduate level, total	62	100.0	9	100.0	3	100.0	8	100.0
Mathematics	13	21.0	3	33.3	2	66.7	1	12.5
Education	15	24.2	2	22.2	0	0.0	3	37.5
Biological sciences	14	22.6	3	33.3	0	0.0	1	12.5
Physics	4	6.5	4	44.4	0	0.0	1	12.5
Chemistry	6	9.7	4	44.4	0	0.0	1	12.5
Geosciences	10	16.1	1	11.1	0	0.0	1	12.5
Computer science	0	0.0	0	0.0	0	0.0	0	0.0
Astronomy	0	0.0	1	11.1	0	0.0	0	0.0
Atmospheric sciences	1	1.6	0	0.0	0	0.0	0	0.0
Engineering	1	1.6	0	0.0	0	0.0	0	0.0
Ocean sciences	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	1	11.1	1	33.3	1	12.5
Graduate level, total	11	100.0	7	100.0	9	100.0	12	100.0
Education	5	45.5	2	28.6	4	44.4	1	8.3
Mathematics	5	45.5	6	85.7	4	44.4	7	58.3
Biological sciences	2	18.2	0	0.0	1	11.1	2	16.7
Chemistry	1	9.1	0	0.0	1	11.1	3	25.0
Physics	2	18.2	0	0.0	1	11.1	2	16.7
Atmospheric sciences	1	9.1	0	0.0	1	11.1	0	0.0
Computer science	0	0.0	0	0.0	0	0.0	0	0.0
Geosciences	1	9.1	0	0.0	1	11.1	1	8.3
Astronomy	0	0.0	0	0.0	0	0.0	0	0.0
Engineering	1	9.1	0	0.0	3	33.3	0	0.0
Ocean sciences	1	9.1	0	0.0	1	11.1	2	16.7
Other	0	0.0	0	0.0	0	0.0	1	8.3

[1]This item asked only when a course is supported by MSP for the first time.

NOTE: Details may not add to totals because some respondents reported more than one subject.

Table A.3.5. Status of undergraduate and graduate preservice courses supported by MSP: Comprehensive and Targeted projects

Level and status	2002–03 (n = 12 IHEs)		2003–04 (n = 37 IHEs)		2004–05 (n = 57 IHEs)		2005–06 (n = 58 IHEs)		2006–07 (n = 61 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All levels and statuses	35	100.0	134	100.0	277	100.0	339	100.0	430	100.0
Fully developed and offered	18	51.4	55	41.0	177	63.9	266	78.5	312	72.6
Fully developed, but not offered yet	2	5.7	18	13.4	14	5.1	33	9.7	48	11.2
Still under development	15	42.9	13	9.7	57	20.6	3	0.9	26	6.0
Course eliminated	0	0.0	0	0.0	4	1.4	8	2.4	7	1.6
Other	0	0.0	48	35.8	25	9.0	29	8.6	37	8.6
Undergraduate level	30	100.0	116	100.0	229	100.0	272	100.0	344	100.0
Fully developed and offered	16	53.3	46	39.7	149	65.1	223	82.0	253	73.5
Fully developed, but not offered yet	2	6.7	12	10.3	13	5.7	26	9.6	32	9.3
Still under development	12	40.0	11	9.5	43	18.8	3	1.1	25	7.3
Course eliminated	0	0.0	0	0.0	4	1.7	3	1.1	4	1.2
Other	0	0.0	47	40.5	20	8.7	17	6.3	30	8.7
Graduate level	5	100.0	18	100.0	48	100.0	67	100.0	86	100.0
Fully developed and offered	2	40.0	9	50.0	28	58.3	43	64.2	59	68.6
Fully developed, but not offered yet	0	0.0	6	33.3	1	2.1	7	10.4	16	18.6
Still under development	3	60.0	2	11.1	14	29.2	0	0.0	1	1.2
Course eliminated	0	0.0	0	0.0	0	0.0	5	7.5	3	3.5
Other	0	0.0	1	5.6	5	10.4	12	17.9	7	8.1

Table A.3.5. Status of undergraduate and graduate preservice courses supported by MSP: Comprehensive and Targeted projects—continued

Level and status	2007–08 (n = 62 IHEs)		2008–09 (n = 35 IHEs)		2009–10 (n = 35 IHEs)		2010–11 (n = 22 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All levels and statuses	511	100.0	364	100.0	261	100.0	98	100.0
Fully developed and offered	338	66.1	204	56.0	149	57.1	55	56.1
Fully developed, but not offered yet	81	15.9	94	25.8	42	16.1	24	24.5
Still under development	5	1.0	14	3.8	8	3.1	5	5.1
Course eliminated	18	3.5	12	3.3	11	4.2	5	5.1
Other	69	13.5	40	11.0	51	19.5	9	9.2
Undergraduate level	414	100.0	288	100.0	197	100.0	41	100.0
Fully developed and offered	294	71.0	176	61.1	117	59.4	24	58.5
Fully developed, but not offered yet	50	12.1	73	25.3	32	16.2	2	4.9
Still under development	5	1.2	8	2.8	8	4.1	3	7.3
Course eliminated	11	2.7	9	3.1	9	4.6	5	12.2
Other	54	13.0	22	7.6	31	15.7	7	17.1
Graduate level	97	100.0	76	100.0	64	100.0	57	100.0
Fully developed and offered	44	45.4	28	36.8	32	50.0	31	54.4
Fully developed, but not offered yet	31	32.0	21	27.6	10	15.6	22	38.6
Still under development	0	0.0	6	7.9	0	0.0	2	3.5
Course eliminated	7	7.2	3	3.9	2	3.1	0	0.0
Other	15	15.5	18	23.7	20	31.3	2	3.5

NOTE: Percents may not add to 100 because of rounding.

Table A.3.6. Characteristics of students enrolled in preservice courses supported by MSP: Comprehensive and Targeted projects

Student characteristic	2002–03 (n = 8 IHEs, 18 courses)		2003–04 (n = 23 IHEs, 55 courses)		2004–05 (n = 43 IHEs, 178 courses)		2005–06 (n = 53 IHEs, 267 courses)		2006–07 (n = 52 IHEs, 313 courses)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All students	1,017	100.0	2,119	100.0	15,484	100.0	21,114	100.0	22,933	100.0
Gender										
Male	67	6.6	204	9.6	4,107	26.5	5,024	23.8	5,297	23.1
Female	112	11.0	1,236	58.3	8,073	52.1	11,305	53.5	11,741	51.2
Not identified	838	82.4	679	32.0	3,304	21.3	4,785	22.7	5,895	25.7
Race/ethnicity										
White	55	5.4	1,069	50.4	9,986	64.5	12,636	59.8	13,138	57.3
Black or African American	4	0.4	92	4.3	690	4.5	871	4.1	856	3.7
Hispanic	68	6.7	135	6.4	801	5.2	1,199	5.7	1,244	5.4
Asian	0	0.0	15	0.7	287	1.9	344	1.6	496	2.2
American Indian or Alaska Native	0	0.0	2	0.1	22	0.1	70	0.3	69	0.3
Native Hawaiian or Other Pacific Islander	0	0.0	25	1.2	1	0.0	5	0.0	13	0.1
More than one race	0	0.0	1	0.0	1	0.0	11	0.1	67	0.3
Not identified	890	87.5	780	36.8	3,701	23.9	5,978	28.3	7,050	30.7

Table A.3.6. Characteristics of students enrolled in preservice courses supported by MSP: Comprehensive and Targeted projects—continued

Student characteristic	2007–08 (n = 49 IHEs, 340 courses)		2008–09 (n = 26 IHEs, 204 courses)		2009–10 (n = 25 IHEs, 149 courses)		2010–11 (n = 20 IHEs, 56 courses)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All students	27,104	100.0	24,895	100.0	19,811	100.0	5,607	100.0
Gender								
Male	5,616	20.7	5,030	20.2	6,586	33.2	629	11.2
Female	11,779	43.5	8,999	36.1	10,616	53.6	1,138	20.3
Not identified	9,709	35.8	10,866	43.6	2,609	13.2	3,840	68.5
Race/ethnicity								
White	11,653	43.0	10,317	41.4	11,004	55.5	812	14.5
Black or African American	965	3.6	723	2.9	1,001	5.1	64	1.1
Hispanic	1,587	5.9	1,716	6.9	2,109	10.6	84	1.5
Asian	415	1.5	341	1.4	369	1.9	34	0.6
American Indian or Alaska Native	51	0.2	31	0.1	44	0.2	3	0.1
Native Hawaiian or Other Pacific Islander	14	0.1	24	0.1	48	0.2	0	0.0
More than one race	5	0.0	240	1.0	415	2.1	34	0.6
Not identified	12,414	45.8	11,503	46.2	4,821	24.3	4,576	81.6

NOTE: Percents may not add to 100 because of rounding.

Section A.4:
What MSP activities were targeted to K–12 recipients?

Table A.4.1. MSP inservice retention/enhancement activities targeted to K–12 teachers: Comprehensive and Targeted Projects

Activity	2003–04 (n = 34 projects)		2004–05 (n = 40 projects)		2005–06 (n = 39 projects)		2006–07 (n = 39 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Conduct activities that develop and utilize teacher leaders	33	97.1	39	97.5	39	100.0	39	100.0
Conduct workshops/institutes/courses with K–12 teachers that increase general content and/or pedagogical knowledge	31	91.2	37	92.5	37	94.9	36	92.3
Provide administrative supports for K–12 teachers	29	85.3	34	85.0	34	87.2	33	84.6
Conduct targeted workshops/institutes/courses with K–12 teachers	25	73.5	30	75.0	29	74.4	32	82.1
Provide instructional materials for K–12 teachers	21	61.8	32	80.0	28	71.8	29	74.4
Provide a peer coaching network for STEM teachers	19	55.9	20	50.0	20	51.3	18	46.2
Provide individual supports for STEM teachers	19	55.9	22	55.0	21	53.8	24	61.5
Provide professional development for IHE STEM faculty to support new roles in K–12 education	19	55.9	27	67.5	29	74.4	25	64.1
Establish/provide STEM study groups	16	47.1	27	67.5	27	69.2	24	61.5
Design/offer STEM content courses specifically for elementary/middle/ high school teacher certification programs	10	29.4	13	32.5	17	43.6	15	38.5
Provide group induction supports for new STEM teachers	9	26.5	12	30.0	11	28.2	13	33.3
Establish/provide adjunct positions for K–12 master teachers at the partner IHEs	8	23.5	13	32.5	13	33.3	12	30.8
Provide externship opportunities for K–12 teachers	2	5.9	2	5.0	5	12.8	4	10.3

Table A.4.1. MSP inservice retention/enhancement activities targeted to K–12 teachers: Comprehensive and Targeted Projects—continued

Activity	2007–08 (n = 38 projects)		2008–09 (n = 31 projects)		2009–10 (n = 25 projects)		2010–11 (n = 23 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Conduct activities that develop and utilize teacher leaders	30	78.9	20	64.5	20	80.0	19	82.6
Conduct workshops/institutes/courses with K–12 teachers that increase general content and/or pedagogical knowledge	28	73.7	19	61.3	19	76.0	19	82.6
Provide administrative supports for K–12 teachers	24	63.2	16	51.6	14	56.0	15	65.2
Conduct targeted workshops/institutes/courses with K–12 teachers	24	63.2	17	54.8	16	64.0	16	69.6
Provide instructional materials for K–12 teachers	21	55.3	19	61.3	15	60.0	16	69.6
Provide a peer coaching network for STEM teachers	16	42.1	9	29.0	8	32.0	8	34.8
Provide individual supports for STEM teachers	14	36.8	10	32.3	8	32.0	11	47.8
Provide professional development for IHE STEM faculty to support new roles in K–12 education	16	42.1	4	12.9	5	20.0	8	34.8
Establish/provide STEM study groups	17	44.7	11	35.5	12	48.0	11	47.8
Design/offer STEM content courses specifically for elementary/middle/ high school teacher certification programs	14	36.8	8	25.8	8	32.0	9	39.1
Provide group induction supports for new STEM teachers	7	18.4	3	9.7	4	16.0	3	13.0
Establish/provide adjunct positions for K–12 master teachers at the partner IHEs	10	26.3	5	16.1	5	20.0	3	13.0
Provide externship opportunities for K–12 teachers	2	5.3	3	9.7	2	8.0	2	8.7

Table A.4.2. Strategies used by IHE faculty and administrators to engage K–12 students: Comprehensive and Targeted projects

Strategy	2002–03 (n = 199 faculty/ administrators)		2003–04 (n = 567 faculty/ administrators)		2004–05 (n = 840 faculty/ administrators)		2005–06 (n = 764 faculty/ administrators)		2006–07 (n = 690 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Aligning or revising K–12 curricula										
Align K–12 mathematics and science curricula to other courses/standards	80	40.2	170	30.0	230	27.4	200	26.2	142	20.6
Conduct a review of K–12 course curricula	53	26.6	120	21.2	154	18.3	131	17.1	101	14.6
Develop/redesign traditional STEM units or courses for in-depth immersion in a single topic	14	7.0	44	7.8	63	7.5	54	7.1	31	4.5
Activities targeted to K–12 students										
Participate in activities that motivate K–12 student participation in challenging mathematics and science courses	57	28.6	138	24.3	215	25.6	202	26.4	150	21.7
Work one on one with K–12 students	29	14.6	84	14.8	113	13.5	100	13.1	94	13.6
Participate in activities that encourage high school students to enroll in IHE courses	27	13.6	54	9.5	63	7.5	51	6.7	51	7.4

Table A.4.2. Strategies used by IHE faculty and administrators to engage K–12 students: Comprehensive and Targeted projects—continued

Strategy	2007–08 (n = 447 faculty/ administrators)		2008–09 (n = 283 faculty/ administrators)		2009–10 (n = 237 faculty/ administrators)		2010–11 (n = 240 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Aligning or revising K–12 curricula								
Align K–12 mathematics and science curricula to other courses/standards	85	19.0	62	21.9	41	17.3	46	19.2
Conduct a review of K–12 course curricula	54	12.1	46	16.3	36	15.2	41	17.1
Develop/redesign traditional STEM units or courses for in-depth immersion in a single topic	22	4.9	9	3.2	17	7.2	10	4.2
Activities targeted to K–12 students								
Participate in activities that motivate K–12 student participation in challenging mathematics and science courses	81	18.1	48	17.0	33	13.9	39	16.3
Work one on one with K–12 students	39	8.7	27	9.5	19	8.0	22	9.2
Participate in activities that encourage high school students to enroll in IHE courses	22	4.9	23	8.1	18	7.6	12	5.0

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year. Percents may not add to 100 because some respondents reported more than one strategy and some respondents did not report any of the strategies.

Table A.4.3. Strategies used to engage K–12 students in challenging mathematics courses:[1] Comprehensive and Targeted projects

Strategy	2003–04 (n = 29 projects)		2004–05 (n = 34 projects)		2005–06 (n = 33 projects)		2006–07 (n = 33 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Align challenging mathematics curricula to other courses/standards	22	75.9	27	79.4	25	75.8	25	75.8
Implement standards-based mathematics curricula	18	62.1	26	76.5	24	72.7	26	78.8
Emphasize the importance of K–12 gateway courses	16	55.2	18	52.9	17	51.5	16	48.5
Adopt, adapt, and/or implement evidence-based mathematics curricula	15	51.7	21	61.8	21	63.6	18	54.5
Support expert review of challenging mathematics course curricula	12	41.4	18	52.9	18	54.5	17	51.5
Utilize technology for content innovation	11	37.9	18	52.9	17	51.5	17	51.5
Offer activities that motivate K–12 student participation in challenging mathematics courses	10	34.5	11	32.4	15	45.5	13	39.4
Implement efforts to increase time spent on mathematics at elementary school level	8	27.6	7	20.6	9	27.3	8	24.2
Provide guidance counselors with professional development on challenging mathematics courses	7	24.1	10	29.4	6	18.2	8	24.2
Provide focused support/tutoring for K–12 students	7	24.1	10	29.4	12	36.4	10	30.3
Provide outreach on challenging mathematics courses to parents	5	17.2	9	26.5	13	39.4	12	36.4
Develop/redesign traditional mathematics units or courses for in-depth immersion in a single topic	4	13.8	3	8.8	3	9.1	4	12.1
Encourage high school student enrollment in IHE mathematics courses	3	10.3	9	26.5	10	30.3	9	27.3
Offer challenging mathematics courses via computer-communications technology	0	0.0	1	2.9	2	6.1	2	6.1
Provide traditional mathematics courses at alternative venues	0	0.0	2	5.9	3	9.1	1	3.0
Other	2	6.9	3	8.8	4	12.1	4	12.1

Table A.4.3. Strategies used to engage K–12 students in challenging mathematics courses:[1] Comprehensive and Targeted projects—continued

Strategy	2007–08 (n = 32 projects)		2008–09 (n = 23 projects)		2009–10 (n = 18 projects)		2010–11 (n = 12 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Align challenging mathematics curricula to other courses/standards	19	59.4	11	47.8	7	38.9	7	58.3
Implement standards-based mathematics curricula	19	59.4	9	39.1	6	33.3	3	25.0
Emphasize the importance of K–12 gateway courses	12	37.5	11	47.8	7	38.9	6	50.0
Adopt, adapt, and/or implement evidence-based mathematics curricula	10	31.3	3	13.0	2	11.1	3	25.0
Support expert review of challenging mathematics course curricula	11	34.4	5	21.7	5	27.8	4	33.3
Utilize technology for content innovation	15	46.9	7	30.4	4	22.2	2	16.7
Offer activities that motivate K–12 student participation in challenging mathematics courses	11	34.4	2	8.7	2	11.1	1	8.3
Implement efforts to increase time spent on mathematics at elementary school level	5	15.6	1	4.3	1	5.6	0	0.0
Provide guidance counselors with professional development on challenging mathematics courses	3	9.4	2	8.7	1	5.6	0	0.0
Provide focused support/tutoring for K–12 students	10	31.3	4	17.4	5	27.8	2	16.7
Provide outreach on challenging mathematics courses to parents	8	25.0	3	13.0	2	11.1	1	8.3
Develop/redesign traditional mathematics units or courses for in-depth immersion in a single topic	2	6.3	3	13.0	3	16.7	3	25.0
Encourage high school student enrollment in IHE mathematics courses	6	18.8	4	17.4	2	11.1	0	0.0
Offer challenging mathematics courses via computer-communications technology	1	3.1	0	0.0	0	0.0	2	16.7
Provide traditional mathematics courses at alternative venues	2	6.3	0	0.0	0	0.0	0	0.0
Other	4	12.5	4	17.4	3	16.7	1	8.3

[1]This item asked only of projects with a mathematics or mathematics/science focus.

Table A.4.4. Strategies used to engage K–12 students in challenging science courses:[1] Comprehensive and Targeted projects

Strategy	2003–04 (n = 21 projects)		2004–05 (n = 26 projects)		2005–06 (n = 25 projects)		2006–07 (n = 25 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Align challenging science curricula to other courses/standards	14	66.7	19	73.1	19	76.0	21	84.0
Implement standards-based science curricula	14	66.7	18	69.2	19	76.0	19	76.0
Adopt, adapt, and/or implement evidence-based science curricula	10	47.6	14	53.8	14	56.0	15	60.0
Support expert review of challenging science course curricula	9	42.9	11	42.3	11	44.0	9	36.0
Offer activities that motivate K–12 student participation in challenging science courses	7	33.3	11	42.3	11	44.0	10	40.0
Implement efforts to increase time spent on science at elementary school level	6	28.6	8	30.8	8	32.0	9	36.0
Emphasize the importance of K–12 gateway courses	5	23.8	8	30.8	8	32.0	8	32.0
Utilize technology for content innovation	4	19.0	9	34.6	10	40.0	11	44.0
Provide focused support/tutoring for K–12 students	4	19.0	6	23.1	9	36.0	9	36.0
Provide guidance counselors with professional development on challenging science courses	4	19.0	6	23.1	4	16.0	5	20.0
Encourage high school student enrollment in IHE science courses	2	9.5	4	15.4	6	24.0	6	24.0
Provide outreach on challenging science courses to parents	2	9.5	4	15.4	6	24.0	6	24.0
Offer challenging science courses via computer-communications technology	1	4.8	1	3.8	2	8.0	2	8.0
Develop/redesign traditional science units or courses for in-depth immersion in a single topic	1	4.8	1	3.8	4	16.0	5	20.0
Provide traditional science courses at alternative venues	0	0.0	1	3.8	1	4.0	0	0.0
Other	3	14.3	4	15.4	7	28.0	6	24.0

Table A.4.4. Strategies used to engage K–12 students in challenging science courses:[1] Comprehensive and Targeted projects—continued

Strategy	2007–08 (n = 24 projects)		2008–09 (n = 21 projects)		2009–10 (n = 17 projects)		2010–11 (n = 14 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Align challenging science curricula to other courses/standards	14	58.3	6	28.6	6	35.3	8	57.1
Implement standards-based science curricula	16	66.7	6	28.6	3	17.6	4	28.6
Adopt, adapt, and/or implement evidence-based science curricula	11	45.8	5	23.8	2	11.8	4	28.6
Support expert review of challenging science course curricula	8	33.3	2	9.5	3	17.6	5	35.7
Offer activities that motivate K–12 student participation in challenging science courses	7	29.2	5	23.8	2	11.8	1	7.1
Implement efforts to increase time spent on science at elementary school level	8	33.3	5	23.8	2	11.8	2	14.3
Emphasize the importance of K–12 gateway courses	5	20.8	5	23.8	5	29.4	4	28.6
Utilize technology for content innovation	9	37.5	7	33.3	3	17.6	3	21.4
Provide focused support/tutoring for K–12 students	4	16.7	2	9.5	2	11.8	1	7.1
Provide guidance counselors with professional development on challenging science courses	2	8.3	1	4.8	1	5.9	0	0.0
Encourage high school student enrollment in IHE science courses	1	4.2	1	4.8	2	11.8	1	7.1
Provide outreach on challenging science courses to parents	4	16.7	2	9.5	2	11.8	0	0.0
Offer challenging science courses via computer-communications technology	1	4.2	0	0.0	0	0.0	0	0.0
Develop/redesign traditional science units or courses for in-depth immersion in a single topic	2	8.3	3	14.3	2	11.8	2	14.3
Provide traditional science courses at alternative venues	1	4.2	1	4.8	2	11.8	1	7.1
Other	4	16.7	4	19.0	2	11.8	1	7.1

[1]This item asked only of projects with a science or mathematics/science focus.

Table A.4.5. Amount of MSP professional development received by K–12 teachers: Comprehensive and Targeted projects

School level and amount of MSP PD	2002–03 (n = 167 districts)		2003–04 (n = 397 districts)		2004–05 (n = 442 districts)		2005–06 (n = 582 districts)		2006–07 (n = 722 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 teachers	3,115	100.0	17,103	100.0	28,547	100.0	31,977	100.0	30,534	100.0
1–80 hours	2,662	85.5	15,533	90.8	26,733	93.6	29,549	92.4	28,523	93.4
81–160 hours	390	12.5	1,155	6.8	1,657	5.8	1,378	4.3	1,326	4.3
161 or more hours	63	2.0	415	2.4	428	1.5	468	1.5	692	2.3
Elementary school teachers	1,445	100.0	10,311	100.0	17,818	100.0	21,271	100.0	19,858	100.0
1–80 hours	1,149	79.5	9,604	93.1	17,221	96.6	20,580	96.8	19,297	97.2
81–160 hours	271	18.8	634	6.1	720	4.0	535	2.5	499	2.5
161 or more hours	25	1.7	73	0.7	89	0.5	139	0.7	62	0.3
Middle school mathematics teachers	430	100.0	2,262	100.0	3,172	100.0	3,682	100.0	3,642	100.0
1–80 hours	385	89.5	2,039	90.1	2,811	88.6	3,230	87.7	3,306	90.8
81–160 hours	45	10.5	136	6.0	221	7.0	276	7.5	198	5.4
161 or more hours	0	0.0	87	3.8	146	4.6	133	3.6	139	3.8
Middle school science teachers	134	100.0	1,163	100.0	2,185	100.0	2,196	100.0	2,388	100.0
1–80 hours	116	86.6	1,002	86.2	1,908	87.3	1,669	76.0	2,009	84.1
81–160 hours	18	13.4	111	9.5	203	9.3	205	9.3	210	8.8
161 or more hours	0	0.0	50	4.3	89	4.1	105	4.8	169	7.1
High school mathematics teachers	682	100.0	1,981	100.0	2,971	100.0	3,143	100.0	2,558	100.0
1–80 hours	627	91.9	1,727	87.2	2,688	90.5	2,831	90.1	2,254	88.1
81–160 hours	43	6.3	162	8.2	223	7.5	218	6.9	160	6.3
161 or more hours	12	1.8	92	4.6	82	2.8	54	1.7	144	5.6
High school science teachers	424	100.0	1,386	100.0	2,401	100.0	1,685	100.0	2,088	100.0
1–80 hours	385	90.8	1,161	83.8	2,105	87.7	1,239	73.5	1,657	79.4
81–160 hours	13	3.1	112	8.1	290	12.1	144	8.5	259	12.4
161 or more hours	26	6.1	113	8.2	22	0.9	37	2.2	178	8.5

Table A.4.5. Amount of MSP professional development received by K–12 teachers: Comprehensive and Targeted projects—continued

School level and amount of MSP PD	2007–08 (n = 555 districts)		2008–09 (n = 152 districts)		2009–10 (n = 129 districts)		2010–11 (n = 151 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 teachers	19,100	100.0	8,953	100.0	6,306	100.0	4,438	100.0
1–80 hours	17,208	90.1	8,207	91.7	5,858	92.9	3,842	86.6
81–160 hours	841	4.4	531	5.9	305	4.8	325	7.3
161 or more hours	354	1.9	203	2.3	143	2.3	254	5.7
Elementary school teachers	12,441	100.0	6,211	100.0	4,304	100.0	2,923	100.0
1–80 hours	11,755	94.5	5,856	94.3	4,089	95.0	2,674	91.5
81–160 hours	284	2.3	267	4.3	115	2.7	119	4.1
161 or more hours	117	0.9	88	1.4	100	2.3	128	4.4
Middle school mathematics teachers	2,015	100.0	924	100.0	721	100.0	478	100.0
1–80 hours	1,690	83.9	826	89.4	667	92.5	388	81.2
81–160 hours	136	6.7	75	8.1	45	6.2	40	8.4
161 or more hours	62	3.1	20	2.2	9	1.2	50	10.5
Middle school science teachers	1,506	100.0	475	100.0	371	100.0	290	100.0
1–80 hours	1,256	83.4	408	85.9	348	93.8	194	66.9
81–160 hours	111	7.4	47	9.9	22	5.9	75	25.9
161 or more hours	24	1.6	15	3.2	1	0.3	13	4.5
High school mathematics teachers	1,887	100.0	864	100.0	658	100.0	504	100.0
1–80 hours	1,521	80.6	721	83.4	543	82.5	410	81.3
81–160 hours	164	8.7	90	10.4	95	14.4	74	14.7
161 or more hours	130	6.9	51	5.9	20	3.0	20	4.0
High school science teachers	1,251	100.0	479	100.0	252	100.0	243	100.0
1–80 hours	986	78.8	396	82.7	211	83.7	176	72.4
81–160 hours	146	11.7	52	10.9	28	11.1	17	7.0
161 or more hours	21	1.7	29	6.1	13	5.2	43	17.7

NOTE: Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because hours for some teachers were reported as unknown or because of rounding.

Table A.4.6. Amount of MSP professional development received by K–12 administrators: Comprehensive and Targeted projects

School level and amount of MSP PD	2002–03 (n = 39 districts)		2003–04 (n = 192 districts)		2004–05 (n = 209 districts)		2005–06 (n = 206 districts)		2006–07 (n = 214 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 administrators	202	100.0	1,667	100.0	1,736	100.0	1,909	100.0	1,699	100.0
1–80 hours	197	97.5	1,635	98.1	1,714	98.7	1,831	95.9	1,641	96.6
81–160 hours	5	2.5	31	1.9	35	2.0	72	3.8	36	2.1
161 or more hours	0	0.0	1	0.1	0	0.0	0	0.0	19	1.1
Elementary school administrators	87	100.0	948	100.0	984	100.0	1,117	100.0	970	100.0
1–80 hours	85	97.7	937	98.8	970	98.6	1,072	96.0	945	97.4
81–160 hours	2	2.3	11	1.2	17	1.7	45	4.0	17	1.8
161 or more hours	0	0.0	0	0.0	0	0.0	0	0.0	6	0.6
Middle school administrators	30	100.0	396	100.0	413	100.0	485	100.0	444	100.0
1–80 hours	29	96.7	383	96.7	403	97.6	462	95.3	430	96.8
81–160 hours	1	3.3	12	3.0	12	2.9	23	4.7	8	1.8
161 or more hours	0	0.0	1	0.3	0	0.0	0	0.0	7	1.6
High school administrators	85	100.0	323	100.0	339	100.0	307	100.0	285	100.0
1–80 hours	83	97.6	315	97.5	341	100.6	297	96.7	266	93.3
81–160 hours	2	2.4	8	2.5	6	1.8	4	1.3	11	3.9
161 or more hours	0	0.0	0	0.0	0	0.0	0	0.0	6	2.1

Table A.4.6. Amount of MSP professional development received by K–12 administrators: Comprehensive and Targeted projects—continued

School level and amount of MSP PD	2007–08 (n = 185 districts)		2008–09 (n = 69 districts)		2009–10 (n = 65 districts)		2010–11 (n = 38 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 administrators	1,674	100.0	670	100.0	575	100.0	365	100.0
1–80 hours	1,603	95.8	644	96.1	571	99.3	356	97.5
81–160 hours	16	1.0	11	1.6	3	0.5	3	0.8
161 or more hours	6	0.4	2	0.3	1	0.2	3	0.8
Elementary school administrators	1,003	100.0	472	100.0	379	100.0	255	100.0
1–80 hours	971	96.8	453	96.0	375	98.9	253	99.2
81–160 hours	9	0.9	10	2.1	3	0.8	2	0.8
161 or more hours	0	0.0	1	0.2	1	0.3	0	0.0
Middle school administrators	353	100.0	129	100.0	123	100.0	94	100.0
1–80 hours	334	94.6	124	96.1	123	100.0	87	92.6
81–160 hours	3	0.8	1	0.8	0	0.0	1	1.1
161 or more hours	3	0.8	1	0.8	0	0.0	3	3.2
High school administrators	318	100.0	69	100.0	73	100.0	16	100.0
1–80 hours	298	93.7	67	97.1	73	100.0	16	100.0
81–160 hours	4	1.3	0	0.0	0	0.0	0	0.0
161 or more hours	3	0.9	0	0.0	0	0.0	0	0.0

NOTE: Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because hours for some administrators were reported as unknown, some projects were able to report some of the details but reported the total as unknown, or because of rounding.

Table A.4.7. Characteristics of K–12 students in schools that met the criteria:[1] Comprehensive and Targeted projects

Student characteristic	2002–03 (n = 156 schools)		2003–04 (n = 719 schools)		2004–05 (n = 1,232 schools)		2005–06 (n = 1,587 schools)		2006–07 (n = 1,715 schools)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	87,598	100.0	454,231	100.0	749,275	100.0	984,512	100.0	1,055,245	100.0
Gender										
Male	43,989	50.2	228,122	50.2	362,914	48.4	488,026	49.6	511,950	48.5
Female	42,738	48.8	219,152	48.2	348,645	46.5	467,717	47.5	488,411	46.3
Not reported	871	1.0	6,957	1.5	37,716	5.0	28,911	2.9	54,884	5.2
Race/ethnicity										
White	44,919	51.3	171,943	37.9	274,966	36.7	358,199	36.4	436,501	41.4
Black or African American	17,350	19.8	57,031	12.6	126,812	16.9	181,658	18.5	206,743	19.6
Hispanic	22,545	25.7	189,832	41.8	240,347	32.1	286,416	29.1	283,338	26.9
Asian	1,340	1.5	16,806	3.7	22,582	3.0	30,980	3.1	33,459	3.2
American Indian or Alaska Native	448	0.5	5,706	1.3	6,982	0.9	7,256	0.7	7,257	0.7
Native Hawaiian or Other Pacific Islander	0	0.0	2,011	0.4	1,571	0.2	2,917	0.3	2,229	0.2
More than one race	50	0.1	643	0.1	2,728	0.4	5,296	0.5	9,430	0.9
Not reported	946	1.1	10,259	2.3	72,254	9.6	110,163	11.2	76,949	7.3

Table A.4.7. Characteristics of K–12 students in schools that met the criteria:[1] Comprehensive and Targeted projects—continued

Student characteristic	2007–08 (n = 1,665 schools)		2008–09 (n = 967 schools)		2009–10 (n = 477 schools)		2010–11 (n = 405 schools)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	973,024	100.0	583,435	100.0	268,683	100.0	240,177	100.0
Gender								
Male	443,782	45.6	278,198	47.7	123,147	45.8	109,783	45.7
Female	423,323	43.5	266,072	45.6	116,562	43.4	104,750	43.6
Not reported	105,919	10.9	39,165	6.7	28,974	10.8	25,644	10.7
Race/ethnicity								
White	380,427	39.1	244,067	41.8	93,150	34.7	63,950	26.6
Black or African American	199,185	20.5	123,762	21.2	54,111	20.1	53,273	22.2
Hispanic	217,892	22.4	151,281	25.9	63,499	23.6	56,973	23.7
Asian	34,375	3.5	22,358	3.8	16,995	6.3	14,603	6.1
American Indian or Alaska Native	6,147	0.6	3,344	0.6	2,816	1.0	1,070	0.4
Native Hawaiian or Other Pacific Islander	2,048	0.2	1,247	0.2	533	0.2	962	0.4
More than one race	9,645	1.0	5,000	0.9	934	0.3	2,412	1.0
Not reported	123,321	12.7	32,373	5.5	36,645	13.6	46,934	19.5

[1] Only includes schools that met the criteria for significant MSP participation. Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

NOTE: Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because of rounding.

Table A.4.8. Availability of Level 1 Math in middle schools:[1] Comprehensive and Targeted projects

Course	2004–05 (n = 344 schools)				2005–06 (n = 490 schools)				2006–07 (n = 547 schools)				2007–08 (n = 549 schools)			
	Schools offering Level 1 Math		Schools offering Level 1 Math that provided enrollment/ passage data		Schools offering Level 1 Math		Schools offering Level 1 Math that provided enrollment/ passage data		Schools offering Level 1 Math		Schools offering Level 1 Math that provided enrollment/ passage data		Schools offering Level 1 Math		Schools offering Level 1 Math that provided enrollment/ passage data	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Level 1 Math....	211	61.3	138	65.4	361	73.7	312	86.4	398	72.8	344	86.4	354	64.5	244	68.9

Table A.4.8. Availability of Level 1 Math in middle schools:[1] Comprehensive and Targeted projects—continued

Course	2008–09 (n = 421 schools)				2009–10 (n = 205 schools)				2010–11 (n = 138 schools)			
	Schools offering Level 1 Math		Schools offering Level 1 Math that provided enrollment/ passage data		Schools offering Level 1 Math		Schools offering Level 1 Math that provided enrollment/ passage data		Schools offering Level 1 Math		Schools offering Level 1 Math that provided enrollment/ passage data	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Level 1 Math....	211	50.1	132	62.6	103	50.2	63	61.2	76	55.1	51	67.1

[1] Only includes schools that met the criteria for significant MSP participation. Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

NOTE: Includes information only for middle schools participating in Comprehensive and Targeted MSP projects with a mathematics or mathematics/science focus. Prior to 2004–05, the survey asked only whether the school could provide data for a course, not whether a course was offered. Excludes SCALE due to incomplete K–12 district data.

Table A.4.9. Math courses offered at high schools:[1] Comprehensive and Targeted projects

Course	2004–05 (n = 244 schools)				2005–06 (n = 321 schools)				2006–07 (n = 355 schools)				2007–08 (n = 354 schools)			
	Schools offering the course		Schools offering the course that provided enrollment/ passage data		Schools offering the course		Schools offering the course that provided enrollment/ passage data		Schools offering the course		Schools offering the course that provided enrollment/ passage data		Schools offering the course		Schools offering the course that provided enrollment/ passage data	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Level 1 Math....	238	97.5	212	89.1	311	96.9	280	90.0	334	94.1	304	91.0	322	91.0	239	74.2
Level 2 Math....	220	90.2	199	90.5	294	91.6	264	89.8	322	90.7	289	89.8	315	89.0	231	73.3
Level 3 Math....	219	89.8	201	91.8	296	92.2	268	90.5	323	91.0	291	90.1	307	86.7	225	73.3
Level 4 Math....	208	85.2	192	92.3	237	73.8	212	89.5	273	76.9	242	88.6	298	84.2	221	74.2
Level 5 Math....	84	34.4	72	85.7	123	38.3	101	82.1	151	42.5	124	82.1	165	46.6	106	64.2
AP Calculus (AB)	123	50.4	112	91.1	167	52.0	146	87.4	192	54.1	166	86.5	187	52.8	131	70.1
AP Calculus (BC).....	22	9.0	21	95.5	53	16.5	35	66.0	66	18.6	43	65.2	81	22.9	43	53.1
AP Statistics	40	16.4	38	95.0	90	28.0	72	80.0	102	28.7	81	79.4	106	29.9	64	60.4

Table A.4.9. Math courses offered at high schools:[1] Comprehensive and Targeted projects—continued

Course	2008–09 (n = 272 schools)				2009–10 (n = 129 schools)				2010–11 (n = 88 schools)			
	Schools offering the course		Schools offering the course that provided enrollment/passage data		Schools offering the course		Schools offering the course that provided enrollment/passage data		Schools offering the course		Schools offering the course that provided enrollment/passage data	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Level 1 Math....	250	91.9	166	66.4	118	91.5	66	55.9	85	96.6	54	63.5
Level 2 Math....	245	90.1	161	65.7	116	89.9	64	55.2	83	94.3	53	63.9
Level 3 Math....	239	87.9	158	66.1	112	86.8	61	54.5	83	94.3	54	65.1
Level 4 Math....	221	81.3	144	65.2	97	75.2	50	51.5	73	83.0	46	63.0
Level 5 Math....	118	43.4	68	57.6	47	36.4	28	59.6	26	29.5	14	53.8
AP Calculus (AB)	137	50.4	88	64.2	33	25.6	24	72.7	48	54.5	27	56.3
AP Calculus (BC).....	76	27.9	29	38.2	20	15.5	12	60.0	18	20.5	10	55.6
AP Statistics	90	33.1	44	48.9	15	11.6	8	53.3	18	20.5	11	61.1

[1] Only includes schools that met the criteria for significant MSP participation. Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

NOTE: Includes information only for high schools participating in Comprehensive and Targeted MSP projects with a mathematics or mathematics/science focus. For the purposes of this table, high schools are defined as schools serving at least 11th and 12th grade students. Prior to 2004–05, the survey asked only whether the school could provide data for a course, not whether a course was offered. Excludes SCALE due to incomplete K–12 district data.

Table A.4.9a. Science courses offered at high schools:[1] Comprehensive and Targeted projects

Course	2004–05 (n = 232 schools)				2005–06 (n = 293 schools)				2006–07 (n = 327 schools)				2007–08 (n = 319 schools)			
	Schools offering the course		Schools offering the course that provided enrollment/ passage data		Schools offering the course		Schools offering the course that provided enrollment/ passage data		Schools offering the course		Schools offering the course that provided enrollment/ passage data		Schools offering the course		Schools offering the course that provided enrollment/ passage data	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Biology 1st Year	218	94.0	200	91.7	271	92.5	248	91.5	304	93.0	285	93.8	292	91.5	217	74.3
Chemistry 1st Year	212	91.4	194	91.5	266	90.8	245	92.1	292	89.3	274	93.8	286	89.7	212	74.1
Physics 1st Year	198	85.3	182	91.9	243	82.9	222	91.4	268	82.0	250	93.3	258	80.9	192	74.4
Earth Science	130	56.0	115	88.5	164	56.0	142	86.6	148	45.3	131	88.5	149	46.7	90	60.4
Integrated Science	150	64.7	133	88.7	161	54.9	140	87.0	172	52.6	158	91.9	165	51.7	109	66.1
AP/IB Biology	95	40.9	91	95.8	138	47.1	120	87.0	160	48.9	146	91.3	167	52.4	116	69.5
AP/IB Chemistry	86	37.1	64	74.4	121	41.3	103	85.1	132	40.4	117	88.6	126	39.5	86	68.3
AP/IB Physics	77	33.2	61	79.2	107	36.5	90	84.1	113	34.6	98	86.7	123	38.6	82	66.7

Table A.4.9a. Science courses offered at high schools:[1] Comprehensive and Targeted projects—continued

Course	2008–09 (n = 231 schools)				2009–10 (n = 106 schools)				2010–11 (n = 84 schools)			
	Schools offering the course		Schools offering the course that provided enrollment/passage data		Schools offering the course		Schools offering the course that provided enrollment/passage data		Schools offering the course		Schools offering the course that provided enrollment/passage data	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Biology 1st Year	209	90.5	133	63.6	104	98.1	52	50.0	82	97.6	56	68.3
Chemistry 1st Year	204	88.3	128	62.7	104	98.1	52	50.0	82	97.6	56	68.3
Physics 1st Year	178	77.1	104	58.4	104	98.1	53	51.0	77	91.7	54	70.1
Earth Science	105	45.5	51	48.6	55	51.9	27	49.1	45	53.6	25	55.6
Integrated Science	131	56.7	69	52.7	33	31.1	24	72.7	38	45.2	21	55.3
AP/IB Biology	107	46.3	66	61.7	56	52.8	33	58.9	49	58.3	35	71.4
AP/IB Chemistry	99	42.9	57	57.6	50	47.2	26	52.0	38	45.2	26	68.4
AP/IB Physics	80	34.6	43	53.8	35	33.0	24	68.6	31	36.9	21	67.7

[1] Only includes schools that met the criteria for significant MSP participation. Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

NOTE: Includes information only for high schools participating in Comprehensive and Targeted MSP projects with a science or mathematics/science focus. For the purposes of this table, high schools are defined as schools serving at least 11th and 12th grade students. Prior to 2004–05, the survey asked only whether the school could provide data for a course, not whether a course was offered. Excludes SCALE due to incomplete K–12 district data.

Table A.4.10. Schools participating in projects with a mathematics or mathematics/science focus that met Adequate Yearly Progress for mathematics: Comprehensive and Targeted projects

AYP	2007–08 (n = 1,649 schools)				2008–09 (n = 1,208 schools)			
	Schools that provided data on AYP for mathematics		Schools providing data that met AYP for mathematics		Schools that provided data on AYP for mathematics		Schools providing data that met AYP for mathematics	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AYP for mathematics	1,480	89.8	1,105	74.7	717	59.4	538	75.0

Table A.4.10. Schools participating in projects with a mathematics or mathematics/science focus that met Adequate Yearly Progress for mathematics: Comprehensive and Targeted projects—continued

AYP	2009–10 (n = 669 schools)				2010–11 (n = 278 schools)			
	Schools that provided data on AYP for mathematics		Schools providing data that met AYP for mathematics		Schools that provided data on AYP for mathematics		Schools providing data that met AYP for mathematics	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AYP for mathematics	392	58.6	271	69.1	259	93.2	152	58.7

[1] This table includes those schools that 1) met the criteria for significant participation in the MSP program, and 2) participated in a project with a mathematics or mathematics/science focus. Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

NOTE: AYP data were collected starting with 2007–08 collection year. Excludes SCALE due to incomplete K–12 district data.

Section A.5:
What challenges did MSP projects face?

Table A.5.1. Factors that hindered projects' partnership efforts to a moderate or large extent: All projects

Factor	2003–04 (n = 34 projects)		2004–05 (n = 48 projects)		2005–06 (n = 47 projects)		2006–07 (n = 51 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Lack of time or other resources among K–12 partners	16	47.1	22	45.8	14	29.8	22	43.1
Lack of time or other resources among IHE partners	14	41.2	21	43.8	15	31.9	20	39.2
Low levels of commitment or interest among IHE partners	9	26.5	5	10.4	6	12.8	6	11.8
Lack of flexibility among IHE partners	7	20.6	9	18.8	6	12.8	9	17.6
Lack of flexibility among K–12 partners	7	20.6	15	31.3	12	25.5	12	23.5
Poor communication among all MSP partners	7	20.6	6	12.5	4	8.5	4	7.8
Conflicting goals or missions among all MSP partners	5	14.7	5	10.4	7	14.9	5	9.8
Low levels of commitment or interest among other partners	3	8.8	1	2.1	0	0.0	0	0.0
Low levels of commitment or interest among K–12 partners	4	11.8	8	16.7	7	14.9	7	13.7
Unbalanced levels of authority and decision-making ability among partners	3	8.8	9	18.8	6	12.8	6	11.8
Lack of time or other resources among other partners	2	5.9	2	4.2	3	6.4	5	9.8
Lack of flexibility among other partners	1	2.9	0	0.0	0	0.0	0	0.0
Personnel turnover within K–12 partner organization[1]	0	0.0	3	6.3	3	6.4	5	9.8
Personnel turnover within other organization[1]	0	0.0	0	0.0	1	2.1	0	0.0

Table A.5.1. Factors that hindered projects' partnership efforts to a moderate or large extent: All projects—continued

Factor	2007–08 (n = 50 projects)		2008–09 (n = 48 projects)		2009–10 (n = 44 projects)		2010–11 (n = 38 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Lack of time or other resources among K–12 partners	15	30.0	14	29.2	13	29.5	14	36.8
Lack of time or other resources among IHE partners	12	24.0	13	27.1	7	15.9	9	23.7
Low levels of commitment or interest among IHE partners	4	8.0	4	8.3	5	11.4	3	7.9
Lack of flexibility among IHE partners	6	12.0	4	8.3	5	11.4	2	5.3
Lack of flexibility among K–12 partners	12	24.0	9	18.8	3	6.8	2	5.3
Poor communication among all MSP partners	5	10.0	5	10.4	3	6.8	2	5.3
Conflicting goals or missions among all MSP partners	6	12.0	8	16.7	4	9.1	2	5.3
Low levels of commitment or interest among other partners	0	0.0	3	6.3	3	6.8	0	0.0
Low levels of commitment or interest among K–12 partners	9	18.0	8	16.7	8	18.2	4	10.5
Unbalanced levels of authority and decision-making ability among partners	4	8.0	5	10.4	3	6.8	3	7.9
Lack of time or other resources among other partners	4	8.0	0	0.0	2	4.5	1	2.6
Lack of flexibility among other partners	0	0.0	0	0.0	0	0.0	0	0.0
Personnel turnover within K–12 partner organization[1]	4	8.0	4	8.3	4	9.1	5	13.2
Personnel turnover within other organization[1]	0	0.0	0	0.0	0	0.0	1	2.6

[1]This item only applies to Institute partnerships (n= 12 projects).

Table A.5.2. Factors that hindered projects' ability to use data to assess implementation and impact to a moderate or large extent: All projects

Factor	2003–04 (n = 34 projects)		2004–05 (n = 48 projects)		2005–06 (n = 47 projects)		2006–07 (n = 51 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Obtaining data about IHE faculty who are participating in MSP-related activities	4	11.8	4	8.3	4	8.5	1	2.0
Obtaining data about teachers who are participating in MSP-related activities	13	38.2	16	33.3	12	25.5	8	15.7
Obtaining data about students who are participating in MSP-related activities[1]	15	44.1	14	35.0	11	28.2	11	28.2
Obtaining data about students of teachers enrolled in your MSP Institute[2]	0	0.0	2	4.2	1	2.1	2	3.9
Obtaining data about K–12 schools that are participating in MSP-related activities	7	20.6	9	18.8	7	14.9	6	11.8
Obtaining data about K–12 districts that are participating in MSP-related activities	3	8.8	6	12.5	4	8.5	4	7.8
Linking student achievement data to individual K–12 teachers	22	64.7	28	58.3	27	57.4	25	49.0
Lack of available funding at the project or partner level	8	23.5	9	18.8	5	10.6	5	9.8
Lack of available expertise at the project or partner level	7	20.6	3	6.3	4	8.5	2	3.9
Other	4	11.8	5	10.4	4	8.5	5	9.8

Table A.5.2. Factors that hindered projects' ability to use data to assess implementation and impact to a moderate or large extent: All projects—continued

Factor	2007–08 (n = 50 projects)		2008–09 (n = 47 projects)		2009–10 (n = 44 projects)		2010–11 (n = 38 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Obtaining data about IHE faculty who are participating in MSP-related activities	0	0.0	0	0.0	2	4.5	0	0.0
Obtaining data about teachers who are participating in MSP-related activities	9	18.0	3	6.4	1	2.3	7	18.4
Obtaining data about students who are participating in MSP-related activities[1]	7	18.4	6	19.4	5	19.2	3	13.0
Obtaining data about students of teachers enrolled in your MSP Institute[2]	3	6.0	5	10.6	3	6.8	3	7.9
Obtaining data about K–12 schools that are participating in MSP-related activities	7	14.0	8	17.0	6	13.6	4	10.5
Obtaining data about K–12 districts that are participating in MSP-related activities	5	10.0	4	8.5	5	11.4	0	0.0
Linking student achievement data to individual K–12 teachers	23	46.0	18	38.3	18	40.9	9	23.7
Lack of available funding at the project or partner level	5	10.0	8	17.0	6	13.6	4	10.5
Lack of available expertise at the project or partner level	5	10.0	5	10.6	5	11.4	3	7.9
Other	3	6.0	2	4.3	1	2.3	2	5.3

[1]This item only applies to Comprehensive and Targeted partnerships (n= 39 projects).

[2]This item only applies to Institute partnerships (n= 12 projects).

Section A.6:
Annual cumulative unduplicated counts

Table A.6.1. Project type, subject focus, and grade spans of MSP projects: Annual cumulative unduplicated counts, all projects

Project characteristic	2003–04 (n = 34 projects)		2004–05 (n = 48 projects)		2005–06 (n = 48 projects)		2006–07 (n = 52 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Project type								
Targeted	23	67.6	28	58.3	28	58.3	28	53.8
Comprehensive	11	32.4	12	25.0	12	25.0	12	23.1
Institute	0	0.0	8	16.7	8	16.7	12	23.1
Subject focus								
Mathematics	13	38.2	20	41.7	20	41.7	21	40.4
Science	5	14.7	8	16.7	8	16.7	11	21.2
Mathematics and science	16	47.1	20	41.7	20	41.7	20	38.5
Targeted grade levels								
Pre-kindergarten	10	29.4	12	25.0	12	25.0	13	25.0
Kindergarten	19	55.9	23	47.9	23	47.9	23	44.2
1st	19	55.9	23	47.9	23	47.9	23	44.2
2nd	19	55.9	23	47.9	23	47.9	23	44.2
3rd	20	58.8	24	50.0	24	50.0	25	48.1
4th	23	67.6	27	56.3	27	56.3	29	55.8
5th	25	73.5	32	66.7	33	68.8	34	65.4
6th	30	88.2	42	87.5	42	87.5	44	84.6
7th	32	94.1	43	89.6	43	89.6	45	86.5
8th	32	94.1	43	89.6	43	89.6	45	86.5
9th	27	79.4	38	79.2	38	79.2	40	76.9
10th	27	79.4	36	75.0	36	75.0	38	73.1
11th	25	73.5	34	70.8	34	70.8	36	69.2
12th	25	73.5	34	70.8	34	70.8	36	69.2

Table A.6.1. Project type, subject focus, and grade spans of MSP projects: Annual cumulative unduplicated counts, all projects—continued

Project characteristic	2007–08 (n = 52 projects)		2008–09 (n = 64 projects)		2009–10 (n = 71 projects)		2010–11 (n = 79 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Project type								
Targeted	28	53.8	36	56.3	36	50.7	44	55.7
Comprehensive	12	23.1	12	18.8	12	16.9	12	15.2
Institute	12	23.1	16	25.0	23	32.4	23	29.1
Subject focus								
Mathematics	21	40.4	25	39.1	28	39.4	30	38.0
Science	11	21.2	18	28.1	20	28.2	25	31.6
Mathematics and science	20	38.5	21	32.8	23	32.4	24	30.4
Targeted grade levels								
Pre-kindergarten	14	26.9	14	21.9	15	21.1	15	19.0
Kindergarten	23	44.2	26	40.6	29	40.8	29	36.7
1st	23	44.2	26	40.6	29	40.8	29	36.7
2nd	24	46.2	27	42.2	30	42.3	30	38.0
3rd	26	50.0	28	43.8	31	43.7	33	41.8
4th	29	55.8	32	50.0	35	49.3	39	49.4
5th	34	65.4	38	59.4	42	59.2	47	59.5
6th	44	84.6	53	82.8	58	81.7	65	82.3
7th	45	86.5	55	85.9	60	84.5	66	83.5
8th	45	86.5	56	87.5	61	85.9	67	84.8
9th	40	76.9	50	78.1	55	77.5	59	74.7
10th	38	73.1	47	73.4	52	73.2	53	67.1
11th	36	69.2	46	71.9	51	71.8	52	65.8
12th	36	69.2	46	71.9	51	71.8	52	65.8

NOTE: Percents for project type and subject focus may not add to 100 because of rounding.

Table A.6.2. Lead organizations: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Type of organization	2003–04 (n = 34 projects)		2004–05 (n = 40 projects)		2005–06 (n = 40 projects)		2006–07 (n = 40 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Institution of higher education (IHE)	22	64.7	28	70.0	28	70.0	28	70.0
Higher education system/ consortium	3	8.8	4	10.0	4	10.0	4	10.0
Nonprofit organizations focused on K–12 mathematics/science education	3	8.8	3	7.5	3	7.5	3	7.5
K–12 school district	2	5.9	2	5.0	2	5.0	2	5.0
County, regional, or state education agency	2	5.9	2	5.0	2	5.0	2	5.0
Other	2	5.9	2	5.0	2	5.0	2	5.0

Table A.6.2. Lead organizations: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Type of organization	2007–08 (n = 40 projects)		2008–09 (n = 48 projects)		2009–10 (n = 48 projects)		2010–11 (n = 56 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Institution of higher education (IHE)	28	70.0	37	77.1	37	77.1	45	80.4
Higher education system/ consortium	4	10.0	4	8.3	4	8.3	4	7.1
Nonprofit organizations focused on K–12 mathematics/science education	3	7.5	3	6.3	3	6.3	3	5.4
K–12 school district	2	5.0	2	4.2	2	4.2	2	3.6
County, regional, or state education agency	2	5.0	2	4.2	2	4.2	2	3.6
Other	2	5.0	2	4.2	2	4.2	2	3.6

NOTE: Percents may not add to 100 because of rounding.

Table A.6.3. MSP partner organizations: Annual cumulative unduplicated counts, all projects

Type of partner and organization	2003–04 (n = 34 projects)		2004–05 (n = 48 projects)		2005–06 (n = 48 projects)		2006–07 (n = 52 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All partners	633	100.0	842	100.0	10,93	100.0	14,04	100.0
IHE and K–12 partners								
Institution of higher education (IHE)[1]	113	17.9	162	19.2	165	15.1	175	12.5
K–12 school district/ consortium or individual school[2]	417	65.9	559	66.4	803	73.5	1,087	77.4
Other core partner								
County, regional, or state education agency	9	1.4	17	2.0	20	1.8	24	1.7
Public or private organization	4	0.6	5	0.6	5	0.5	5	0.4
Science center or museum	1	0.2	1	0.1	1	0.1	1	0.1
Research laboratory	1	0.2	1	0.1	1	0.1	1	0.1
Other	7	1.1	9	1.1	9	0.8	9	0.6
Other supporting partner								
Public or private organization	16	2.5	21	2.5	21	1.9	21	1.5
County, regional, or state education agency	13	2.1	14	1.7	14	1.3	18	1.3
Science center or museum	13	2.1	13	1.5	14	1.3	14	1.0
Business or industry organization	12	1.9	13	1.5	13	1.2	13	0.9
Disciplinary or professional society	6	0.9	6	0.7	6	0.5	8	0.6
Dissemination or implementation center	5	0.8	5	0.6	5	0.5	5	0.4
Research laboratory	4	0.6	4	0.5	4	0.4	5	0.4
Community organization	3	0.5	3	0.4	3	0.3	3	0.2
Other noneducation government agency	2	0.3	2	0.2	2	0.2	3	0.2
Private foundation	2	0.3	2	0.2	2	0.2	3	0.2
Other	5	0.8	5	0.6	5	0.5	9	0.6

Table A.6.3. MSP partner organizations: Annual cumulative unduplicated counts, all projects—continued

Type of partner and organization	2007–08 (n = 52 projects)		2008–09 (n = 64 projects)		2009–10 (n = 71 projects)		2010–11 (n = 79 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All partners	1,562	100.0	1,776	100.0	1,925	100.0	2,050	100.0
IHE and K–12 partners								
Institution of higher education (IHE)[1]	180	11.5	214	12.0	235	12.2	253	12.3
K–12 school district/ consortium or individual school[2]	1,239	79.3	1,369	77.1	1,481	76.9	1,569	76.5
Other core partner								
County, regional, or state education agency	24	1.5	26	1.5	26	1.4	28	1.4
Public or private organization	5	0.3	6	0.3	6	0.3	7	0.3
Science center or museum	1	0.1	1	0.1	1	0.1	2	0.1
Research laboratory	1	0.1	1	0.1	1	0.1	1	0.0
Other	9	0.6	11	0.6	11	0.6	12	0.6
Other supporting partner								
Public or private organization	21	1.3	24	1.4	27	1.4	30	1.5
County, regional, or state education agency	19	1.2	40	2.3	42	2.2	44	2.1
Science center or museum	14	0.9	16	0.9	17	0.9	18	0.9
Business or industry organization	13	0.8	21	1.2	26	1.4	30	1.5
Disciplinary or professional society	8	0.5	13	0.7	14	0.7	14	0.7
Dissemination or implementation center	5	0.3	6	0.3	6	0.3	6	0.3
Research laboratory	5	0.3	6	0.3	8	0.4	8	0.4
Community organization	3	0.2	3	0.2	3	0.2	5	0.2
Other noneducation government agency	3	0.2	5	0.3	5	0.3	5	0.2
Private foundation	3	0.2	3	0.2	3	0.2	3	0.1
Other	9	0.6	11	0.6	13	0.7	15	0.7

[1] Four IHE partners were excluded from this table because they were not degree-granting institutions.

[2] Some Institute projects partnered with individual schools.

NOTE: Percents may not add to 100 because of rounding.

Table A.6.4. Carnegie Classification of MSP IHE partners: Annual cumulative unduplicated counts, all projects

2005 Carnegie Classification	2003–04 (n = 34 IHEs)		2004–05 (n = 48 IHEs)		2005–06 (n = 48 IHEs)		2006–07 (n = 52 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Doctoral-granting institutions								
Research Universities (very high research activity)	20	17.7	35	21.6	35	21.2	39	22.3
Research Universities (high research activity)	6	5.3	12	7.4	12	7.3	13	7.4
Doctoral/Research Universities	10	8.8	14	8.6	14	8.5	14	8.0
Master's colleges and universities								
Master's Colleges and Universities (larger programs)	25	22.1	32	19.8	33	20.0	35	20.0
Master's Colleges and Universities (medium programs)	5	4.4	7	4.3	7	4.2	7	4.0
Master's Colleges and Universities (smaller programs)	4	3.5	4	2.5	4	2.4	4	2.3
Baccalaureate colleges								
Baccalaureate Colleges, Arts & Sciences	9	8.0	13	8.0	13	7.9	13	7.4
Baccalaureate Colleges, Diverse Fields	18	15.9	18	11.1	18	10.9	19	10.9
Baccalaureate/Associate's Colleges	0	0.0	0	0.0	0	0.0	0	0.0
Associate's colleges								
Public Urban-serving Multicampus	3	2.7	8	4.9	10	6.1	10	5.7
Public Urban-serving Single Campus	1	0.9	1	0.6	1	0.6	1	0.6
Public Suburban-serving Multicampus	2	1.8	2	1.2	2	1.2	3	1.7
Public Suburban-serving Single Campus	1	0.9	1	0.6	1	0.6	1	0.6
Public Rural-serving Large	4	3.5	6	3.7	6	3.6	6	3.4
Public Rural-serving Medium	2	1.8	3	1.9	3	1.8	3	1.7
Public Rural-serving Small	0	0.0	1	0.6	1	0.6	1	0.6
Medical schools and medical centers	2	1.8	4	2.5	4	2.4	4	2.3
Tribal colleges and universities	1	0.9	1	0.6	1	0.6	2	1.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0

Table A.6.4. Carnegie Classification of MSP IHE partners: Annual cumulative unduplicated counts, all projects—continued

2005 Carnegie Classification	2007–08 (n = 52 IHEs)		2008–09 (n = 64 IHEs)		2009–10 (n = 71 IHEs)		2010–11 (n = 79 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Doctoral-granting institutions								
Research Universities (very high research activity)	39	21.7	48	22.4	56	23.8	65	25.7
Research Universities (high research activity)	14	7.8	23	10.7	28	11.9	32	12.6
Doctoral/Research Universities	14	7.8	16	7.5	17	7.2	18	7.1
Master's colleges and universities								
Master's Colleges and Universities (larger programs)	38	21.1	44	20.6	48	20.4	52	20.6
Master's Colleges and Universities (medium programs)	8	4.4	10	4.7	11	4.7	11	4.3
Master's Colleges and Universities (smaller programs)	4	2.2	4	1.9	5	2.1	5	2.0
Baccalaureate colleges								
Baccalaureate Colleges, Arts & Sciences	13	7.2	13	6.1	13	5.5	13	5.1
Baccalaureate Colleges, Diverse Fields	19	10.6	19	8.9	19	8.1	19	7.5
Baccalaureate/Associate's Colleges	0	0.0	1	0.5	1	0.4	1	0.4
Associate's colleges								
Public Urban-serving Multicampus	10	5.6	11	5.1	11	4.7	11	4.3
Public Urban-serving Single Campus	1	0.6	1	0.5	1	0.4	1	0.4
Public Suburban-serving Multicampus	3	1.7	3	1.4	4	1.7	4	1.6
Public Suburban-serving Single Campus	1	0.6	2	0.9	2	0.9	2	0.8
Public Rural-serving Large	6	3.3	6	2.8	6	2.6	6	2.4
Public Rural-serving Medium	3	1.7	3	1.4	3	1.3	3	1.2
Public Rural-serving Small	1	0.6	1	0.5	1	0.4	1	0.4
Medical schools and medical centers	4	2.2	4	1.9	4	1.7	4	1.6
Tribal colleges and universities	2	1.1	2	0.9	2	0.9	2	0.8
Unknown	0	0.0	3	1.4	3	1.3	3	1.2

NOTE: 2003–04 IHE partners were recategorized according to their 2005 Carnegie classifications. Four IHE partners were excluded from this table because they were not degree-granting institutions. Percents may not add to 100 because of rounding.

SOURCE: http://www.carnegiefoundation.org/classifications/index.asp?key=809.

Table A.6.5. Metropolitan status of K–12 district partners: Annual cumulative unduplicated counts, all projects

Metropolitan status	2003–04 (n = 34 districts)		2004–05 (n = 47 districts)		2005–06 (n = 47 districts)		2006–07 (n = 50 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
City								
City, Large	17	4.1	27	4.8	46	5.7	67	6.2
City, Midsize	17	4.1	24	4.3	37	4.6	49	4.5
City, Small	31	7.4	39	7.0	57	7.1	72	6.6
Suburb								
Suburb, Large	121	29.0	165	29.5	226	28.1	283	26.0
Suburb, Midsize	4	1.0	8	1.4	17	2.1	33	3.0
Suburb, Small	4	1.0	5	0.9	13	1.6	22	2.0
Town								
Town, Fringe	18	4.3	23	4.1	30	3.7	38	3.5
Town, Distant	29	7.0	34	6.1	42	5.2	55	5.1
Town, Remote	25	6.0	36	6.4	47	5.9	64	5.9
Rural								
Rural, Fringe	63	15.1	68	12.2	90	11.2	115	10.6
Rural, Distant	42	10.1	53	9.5	76	9.5	118	10.9
Rural, Remote	31	7.4	50	8.9	82	10.2	118	10.9
Not a public school district	11	2.6	20	3.6	33	4.1	46	4.2
Not available	4	1.0	7	1.3	7	0.9	7	0.6

Table A.6.5. Metropolitan status of K–12 district partners: Annual cumulative unduplicated counts, all projects—continued

Metropolitan status	2007–08 (n = 50 districts)		2008–09 (n = 62 districts)		2009–10 (n = 69 districts)		2010–11 (n = 77 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
City								
City, Large	77	6.2	81	5.9	87	5.9	87	5.5
City, Midsize	65	5.2	70	5.1	80	5.4	80	5.1
City, Small	81	6.5	93	6.8	100	6.8	100	6.4
Suburb								
Suburb, Large	315	25.4	319	23.3	343	23.2	343	21.9
Suburb, Midsize	37	3.0	40	2.9	42	2.8	42	2.7
Suburb, Small	23	1.9	23	1.7	24	1.6	24	1.5
Town								
Town, Fringe	44	3.6	51	3.7	59	4.0	59	3.8
Town, Distant	59	4.8	69	5.0	74	5.0	74	4.7
Town, Remote	74	6.0	95	6.9	100	6.8	100	6.4
Rural								
Rural, Fringe	123	9.9	134	9.8	146	9.9	146	9.3
Rural, Distant	133	10.7	163	11.9	180	12.2	180	11.5
Rural, Remote	132	10.7	153	11.2	167	11.3	167	10.6
Not a public school district	68	5.5	70	5.1	71	4.8	71	4.5
Not available	8	0.6	8	0.6	8	0.5	8	0.5

NOTE: Percents may not add to 100 because of rounding.

SOURCE: National Center for Education Statistics, Common Core of Data.

Table A.6.6. K–12 schools that worked with MSP projects in any capacity: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

School level	2002–03		2003–04		2004–05		2005–06		2006–07		2007–08		2008–09		2009–10		2010–11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All school levels																		
Total	1,067	100.0	3,537	100.0	3,953	100.0	4,626	100.0	5,195	100.0	5,563	100.0	5,961	100.0	6,130	100.0	6,379	100.0
Average	59.3	NA	107.2	NA	104.0	NA	121.7	NA	136.7	NA	146.4	NA	132.5	NA	133.3	NA	116.0	NA
Median	31.5	NA	53.0	NA	55.0	NA	75.5	NA	91.5	NA	94.0	NA	80.0	NA	86.5	NA	58.0	NA
Elementary schools																		
Total	600	56.2	2,018	57.1	2,185	55.3	2,370	51.2	2,448	47.1	2,515	45.2	2,687	45.1	2,750	44.9	2,817	44.2
Average	54.5	NA	80.7	NA	72.8	NA	79.0	NA	79.0	NA	78.6	NA	72.6	NA	74.3	NA	62.6	NA
Median	31.0	NA	54.0	NA	43.5	NA	48.0	NA	55.0	NA	53.5	NA	48.0	NA	54.0	NA	31.0	NA
Middle schools																		
Total	201	18.8	813	23.0	930	23.5	1,195	25.8	1,418	27.3	1,566	28.2	1,669	28.0	1,727	28.2	1,839	28.8
Average	13.4	NA	25.4	NA	25.8	NA	33.2	NA	39.4	NA	43.5	NA	41.7	NA	42.1	NA	36.1	NA
Median	8.0	NA	19.5	NA	19.0	NA	21.5	NA	23.0	NA	24.5	NA	24.5	NA	24.0	NA	22.0	NA
High schools																		
Total	260	24.4	688	19.5	827	20.9	1,068	23.1	1,352	26.0	1,515	27.2	1,642	27.5	1,682	27.4	1,758	27.6
Average	17.3	NA	23.7	NA	23.6	NA	30.5	NA	38.6	NA	43.3	NA	39.1	NA	39.1	NA	36.6	NA
Median	13.0	NA	14.0	NA	15.0	NA	17.0	NA	18.0	NA	21.0	NA	20.0	NA	20.0	NA	20.0	NA
Ungraded schools																		
Total	6	0.6	28	0.8	40	1.0	45	1.0	51	1.0	55	1.0	60	1.0	73	1.2	74	1.2
Average	3.0	NA	3.5	NA	4.0	NA	3.8	NA	3.9	NA	4.2	NA	3.8	NA	4.6	NA	4.4	NA
Median	3.0	NA	2.5	NA	3.5	NA	3.5	NA	3.0	NA	3.0	NA	2.0	NA	2.0	NA	2.0	NA

NA = Not applicable.

NOTE: Averages indicate the average number of schools per project. Medians indicate the median number of schools across all projects. Excludes SCALE due to incomplete K–12 district data. Percents may not round to 100 because of rounding.

Table A.6.7. K–12 schools that met the criteria for significant MSP participation *in at least one collection year*:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Criterion	2002–03		2003–04		2004–05		2005–06		2006–07	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schools that met *any* of the criteria in any year	159	100.0	732	100.0	1,289	100.0	1,817	100.0	2,071	100.0
Schools that met the criterion in at least one collection year										
30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a school year	66	41.5	655	89.5	1,119	86.8	1,592	87.6	1,718	83.0
30 percent of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a school year	103	64.8	238	32.5	444	34.4	593	32.6	772	37.3
30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during a school year	91	57.2	131	17.9	174	13.5	200	11.0	338	16.3

Table A.6.7. K–12 schools that met the criteria for significant MSP participation *in at least one collection year*:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Criterion	2007–08		2008–09		2009–10		2010–11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schools that met *any* of the criteria in any year	2,240	100.0	2,352	100.0	2,424	100.0	2,569	100.0
Schools that met the criterion in at least one collection year								
30 percent of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a school year	1,842	82.2	1,955	83.1	2,022	83.4	2,151	83.7
30 percent of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a school year	1,024	45.7	1,031	43.8	1,047	43.2	1,086	42.3
30 percent of targeted students participated in an MSP-sponsored academic enrichment activity during a school year	359	16.0	364	15.5	377	15.6	421	16.4

[1] Schools met the criteria for significant participation in the MSP program if they met *any* of the following conditions: (a) 30 percent or more of targeted teachers participated in 30 or more hours of MSP-sponsored activities during a single school year; (b) 30 percent or more of targeted students were engaged in a challenging mathematics or science curriculum that was initiated or revised with MSP support during a single school year; or (c) 30 percent or more of targeted students participated in a MSP-supported academic enrichment activity during a single school year.

Table A.6.8. Characteristics of IHE faculty and administrators involved in the development/delivery of MSP activities: Annual cumulative unduplicated counts, all projects

Characteristic	2002–03		2003–04		2004–05		2005–06		2006–07	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Overall	262	100.0	768	100.0	1,326	100.0	1,607	100.0	1,875	100.0
Gender										
Female	101	38.5	313	40.8	561	42.3	686	42.7	804	42.9
Male	161	61.5	455	59.2	740	55.8	863	53.7	990	52.8
Choose not to report[1]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not identified	0	0.0	0	0.0	25	1.9	58	3.6	81	4.3
Race										
White	244	93.1	682	88.8	1,130	85.2	1,345	83.7	1,552	82.8
Black or African American	4	1.5	34	4.4	66	5.0	74	4.6	85	4.5
Asian	9	3.4	31	4.0	53	4.0	71	4.4	91	4.9
American Indian or Alaskan Native	1	0.4	3	0.4	5	0.4	6	0.4	10	0.5
Native Hawaiian or Other Pacific Islander	0	0.0	5	0.7	5	0.4	5	0.3	6	0.3
More than one race	4	1.5	11	1.4	26	2.0	29	1.8	31	1.7
Choose not to report[1]	0	0.0	0	0.0	14	1.1	17	1.1	17	0.9
Not identified	0	0.0	2	0.3	27	2.0	60	3.7	83	4.4
Ethnicity										
Hispanic or Latino	20	7.6	109	14.2	154	11.6	175	10.9	195	10.4
Not Hispanic or Latino	242	92.4	657	85.5	1131	85.3	1356	84.4	1580	84.3
Choose not to report[1]	0	0.0	0	0.0	14	1.1	16	1.0	17	0.9
Not identified	0	0.0	2	0.3	27	2.0	60	3.7	83	4.4
Prior experience with K–12 education programs										
Have prior experience	193	73.7	539	70.2	907	68.4	1068	66.5	1209	64.5

Table A.6.8. Characteristics of IHE faculty and administrators involved in the development/delivery of MSP activities: Annual cumulative unduplicated counts, all projects—continued

Characteristic	2007–08		2008–09		2009–10		2010–11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Overall	2,007	100.0	2,205	100.0	2,402	100.0	2,582	100.0
Gender								
Female	858	42.8	933	42.3	1,011	42.1	1,095	42.4
Male	1,048	52.2	1,161	52.7	1,266	52.7	1,349	52.2
Choose not to report[1]	1	0.0	3	0.1	7	0.3	7	0.3
Not identified	100	5.0	108	4.9	118	4.9	131	5.1
Race								
White	1,643	81.9	1,803	81.8	1,943	80.9	2,088	80.9
Black or African American	93	4.6	104	4.7	118	4.9	123	4.8
Asian	102	5.1	107	4.9	124	5.2	135	5.2
American Indian or Alaskan Native	10	0.5	11	0.5	12	0.5	13	0.5
Native Hawaiian or Other Pacific Islander	6	0.3	7	0.3	7	0.3	7	0.3
More than one race	31	1.5	34	1.5	36	1.5	39	1.5
Choose not to report[1]	20	1.0	29	1.3	42	1.7	43	1.7
Not identified	102	5.1	110	5.0	120	5.0	134	5.2
Ethnicity								
Hispanic or Latino	198	9.9	208	9.4	215	9.0	224	8.7
Not Hispanic or Latino	1,686	84.0	1,856	84.2	2,023	84.2	2,180	84.4
Choose not to report[1]	21	1.0	31	1.4	44	1.8	45	1.7
Not identified	102	5.1	110	5.0	120	5.0	133	5.2
Prior experience with K–12 education programs								
Have prior experience	1,276	63.6	1427	64.7	1,558	64.9	1,685	65.3

[1] "Choose not to report" is an option for IHE faculty and administrators taking the Annual Survey for IHE Institute Participants. It is not an option in the IHE Participant Survey for Comprehensive and Targeted project participants.

NOTE: Percents may not add to 100 because of rounding.

Table A.6.9. Tenure status and faculty rank of IHE faculty and administrators involved in the development/delivery of MSP activities: Annual cumulative unduplicated counts, all projects

Status and rank	2002–03 (n = 262 faculty/ administrators)		2003–04 (n = 768 faculty/ administrators)		2004–05 (n = 1,326 faculty/ administrators)		2005–06 (n = 1,607 faculty/ administrators)		2006–07 (n = 1,875 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Tenure status										
Tenured	122	46.6	401	52.2	669	50.5	800	49.8	920	49.1
On tenure track	41	15.6	140	18.2	239	18.0	308	19.2	376	20.1
Not on tenure track	36	13.7	97	12.6	177	13.3	228	14.2	285	15.2
Not applicable to my position/at my institution	63	24.0	133	17.3	265	20.0	338	21.0	411	21.9
Faculty rank										
Professor	58	22.1	192	25.0	343	25.9	402	25.0	457	24.4
Associate professor	46	17.6	164	21.4	286	21.6	350	21.8	430	22.9
Assistant professor	40	15.3	140	18.2	250	18.9	322	20.0	395	21.1
Other	35	13.4	67	8.7	159	12.0	229	14.3	275	14.7
Lecturer	16	6.1	32	4.2	48	3.6	60	3.7	76	4.1
Administrator with instructional and/or research responsibilities	20	7.6	61	7.9	110	8.3	145	9.0	165	8.8
Adjunct faculty	7	2.7	24	3.1	36	2.7	42	2.6	58	3.1
Instructor	12	4.6	45	5.9	76	5.7	93	5.8	121	6.5
Administrator without instructional and/or research responsibilities	19	7.3	36	4.7	60	4.5	70	4.4	80	4.3
Not applicable for my position	9	3.4	15	2.0	38	2.9	46	2.9	52	2.8
Not applicable at this institution	0	0.0	3	0.4	6	0.5	9	0.6	10	0.5

Table A.6.9. Tenure status and faculty rank of IHE faculty and administrators involved in the development/delivery of MSP activities: Annual cumulative unduplicated counts, all projects—continued

Status and rank	2007–08 (n = 2,007 faculty/ administrators)		2008–09 (n = 2,205 faculty/ administrators)		2009–10 (n = 2,402 faculty/ administrators)		2010–11 (n = 2,582 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Tenure status								
Tenured	981	48.9	1,090	49.4	1,178	49.0	1,265	49.0
On tenure track	415	20.7	449	20.4	480	20.0	518	20.1
Not on tenure track	312	15.5	335	15.2	365	15.2	398	15.4
Not applicable to my position/at my institution	446	22.2	494	22.4	548	22.8	584	22.6
Faculty rank								
Professor	485	24.2	534	24.2	589	24.5	631	24.4
Associate professor	460	22.9	507	23.0	549	22.9	594	23.0
Assistant professor	437	21.8	471	21.4	501	20.9	547	21.2
Other	305	15.2	334	15.1	370	15.4	391	15.1
Lecturer	86	4.3	88	4.0	94	3.9	106	4.1
Administrator with instructional and/or research responsibilities	180	9.0	204	9.3	215	9.0	230	8.9
Adjunct faculty	72	3.6	77	3.5	85	3.5	95	3.7
Instructor	132	6.6	143	6.5	151	6.3	157	6.1
Administrator without instructional and/or research responsibilities	84	4.2	91	4.1	99	4.1	103	4.0
Not applicable for my position	56	2.8	62	2.8	70	2.9	72	2.8
Not applicable at this institution	11	0.5	12	0.5	14	0.6	16	0.6

NOTE: Percents may add to more than 100 because some respondents reported more than one response over time.

Table A.6.10. Field of research and instruction for IHE faculty and administrators involved in the development/delivery of MSP activities: Annual cumulative unduplicated counts, all projects

Field	2002–03 (n = 262 faculty/ administrators)		2003–04 (n = 768 faculty/ administrators)		2004–05 (n = 1,326 faculty/ administrators)		2005–06 (n = 1,607 faculty/ administrators)		2006–07 (n = 1,875 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Field of research										
Education	91	34.7	268	34.9	486	36.7	590	36.7	698	37.2
Mathematics	43	16.4	146	19.0	252	19.0	300	18.7	330	17.6
Biological sciences	26	9.9	91	11.8	126	9.5	172	10.7	222	11.8
Chemistry	18	6.9	54	7.0	89	6.7	111	6.9	135	7.2
Physics	16	6.1	29	3.8	49	3.7	62	3.9	71	3.8
Engineering	8	3.1	24	3.1	54	4.1	62	3.9	65	3.5
Geosciences	4	1.5	21	2.7	42	3.2	62	3.9	69	3.7
Astronomy	2	0.8	8	1.0	16	1.2	19	1.2	22	1.2
Computer science	1	0.4	6	0.8	10	0.8	12	0.7	16	0.9
Atmospheric sciences	1	0.4	2	0.3	5	0.4	6	0.4	10	0.5
Ocean sciences	1	0.4	1	0.1	6	0.5	8	0.5	8	0.4
Other	18	6.9	59	7.7	115	8.7	143	8.9	166	8.9
Not applicable	33	12.6	75	9.8	130	9.8	158	9.8	189	10.1
Field of instruction										
Mathematics	63	24.0	193	25.1	341	25.7	398	24.8	441	23.5
Education	67	25.6	185	24.1	355	26.8	428	26.6	506	27.0
Biological sciences	30	11.5	114	14.8	166	12.5	215	13.4	275	14.7
Chemistry	21	8.0	68	8.9	111	8.4	138	8.6	171	9.1
Physics	21	8.0	42	5.5	71	5.4	88	5.5	100	5.3
Geosciences	5	1.9	29	3.8	52	3.9	68	4.2	77	4.1
Engineering	8	3.1	27	3.5	57	4.3	68	4.2	73	3.9
Astronomy	2	0.8	7	0.9	15	1.1	19	1.2	21	1.1
Computer science	1	0.4	5	0.7	6	0.5	9	0.6	14	0.7
Atmospheric sciences	0	0.0	0	0.0	6	0.5	8	0.5	13	0.7
Ocean sciences	0	0.0	0	0.0	3	0.2	4	0.2	6	0.3
Other	17	6.5	49	6.4	80	6.0	108	6.7	129	6.9
Not applicable	27	10.3	64	8.3	109	8.2	135	8.4	156	8.3

Table A.6.10. Field of research and instruction for IHE faculty and administrators involved in the development/delivery of MSP activities: Annual cumulative unduplicated counts, all projects—continued

Field	2007–08 (n = 2,007 faculty/ administrators)		2008–09 (n =2,205 faculty/ administrators)		2009–10 (n = 2,402 faculty/ administrators)		2010–11 (n = 2,582 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Field of research								
Education	759	37.8	837	38.0	906	37.7	971	37.6
Mathematics	346	17.2	379	17.2	422	17.6	445	17.2
Biological sciences	242	12.1	269	12.2	287	11.9	304	11.8
Chemistry	143	7.1	153	6.9	159	6.6	168	6.5
Physics	79	3.9	87	3.9	93	3.9	103	4.0
Engineering	67	3.3	71	3.2	77	3.2	92	3.6
Geosciences	72	3.6	79	3.6	89	3.7	104	4.0
Astronomy	22	1.1	23	1.0	27	1.1	32	1.2
Computer science	19	0.9	19	0.9	20	0.8	21	0.8
Atmospheric sciences	13	0.6	13	0.6	15	0.6	17	0.7
Ocean sciences	8	0.4	10	0.5	10	0.4	13	0.5
Other	181	9.0	199	9.0	217	9.0	232	9.0
Not applicable	202	10.1	216	9.8	238	9.9	252	9.8
Field of instruction								
Mathematics	472	23.5	515	23.4	575	23.9	611	23.7
Education	551	27.5	613	27.8	659	27.4	709	27.5
Biological sciences	295	14.7	324	14.7	345	14.4	368	14.3
Chemistry	187	9.3	199	9.0	210	8.7	223	8.6
Physics	107	5.3	124	5.6	137	5.7	150	5.8
Geosciences	79	3.9	83	3.8	97	4.0	112	4.3
Engineering	76	3.8	80	3.6	86	3.6	100	3.9
Astronomy	21	1.0	21	1.0	22	0.9	26	1.0
Computer science	16	0.8	16	0.7	17	0.7	18	0.7
Atmospheric sciences	16	0.8	16	0.7	16	0.7	17	0.7
Ocean sciences	6	0.3	8	0.4	8	0.3	8	0.3
Other	142	7.1	159	7.2	172	7.2	185	7.2
Not applicable	162	8.1	174	7.9	192	8.0	206	8.0

NOTE: Percents may add to more than 100 because some respondents reported more than one response over time.

Table A.6.11. IHE faculty and administrators involved in activities targeted to preservice students: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Activity	2002–03 (n = 199 faculty/ administrators)		2003–04 (n = 596 faculty/ administrators)		2004–05 (n = 991 faculty/ administrators)		2005–06 (n = 1,178 faculty/ administrators)		2006–07 (n = 1,323 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Creating opportunities for preservice students										
Participate in preservice recruitment activities	51	25.6	127	21.3	234	23.6	298	25.3	342	25.9
Provide preservice students with experience in K–12 classroom settings before formal student teaching	42	21.1	117	19.6	229	23.1	284	24.1	322	24.3
Provide preservice students with opportunities to participate in local school district inservice activities	28	14.1	82	13.8	171	17.3	214	18.2	255	19.3
Involve K–12 master teachers in preservice program	22	11.1	84	14.1	160	16.1	202	17.1	237	17.9
Participate in efforts to link the preservice process to national teacher certification activities	13	6.5	54	9.1	103	10.4	140	11.9	161	12.2
Mentor preservice students	51	25.6	154	25.8	273	27.5	340	28.9	393	29.7
Teaching or designing preservice courses										
Teach or co-teach a preservice STEM content course	48	24.1	139	23.3	258	26.0	326	27.7	393	29.7
Design preservice STEM courses specifically for elementary/middle/high school teacher certification programs	44	22.1	141	23.7	235	23.7	286	24.3	329	24.9
Develop an innovation as part of a traditional preservice course	47	23.6	146	24.5	255	25.7	316	26.8	377	28.5
Develop/revise preservice courses to align with national, state, and/or local standards	56	28.1	164	27.5	277	28.0	340	28.9	392	29.6

Table A.6.11. IHE faculty and administrators involved in activities targeted to preservice students: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 1,398 faculty/ administrators)		2008–09 (n = 1,499 faculty/ administrators)		2009–10 (n = 1,575 faculty/ administrators)		2010–11 (n = 1,693 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Creating opportunities for preservice students								
Participate in preservice recruitment activities	363	26.0	397	26.5	413	26.2	440	26.0
Provide preservice students with experience in K–12 classroom settings before formal student teaching	340	24.3	367	24.5	377	23.9	402	23.7
Provide preservice students with opportunities to participate in local school district inservice activities	271	19.4	292	19.5	300	19.0	321	19.0
Involve K–12 master teachers in preservice program	251	18.0	263	17.5	273	17.3	288	17.0
Participate in efforts to link the preservice process to national teacher certification activities	172	12.3	190	12.7	197	12.5	205	12.1
Mentor preservice students	419	30.0	457	30.5	472	30.0	507	29.9
Teaching or designing preservice courses								
Teach or co-teach a preservice STEM content course	418	29.9	454	30.3	475	30.2	509	30.1
Design preservice STEM courses specifically for elementary/middle/high school teacher certification programs	346	24.7	377	25.2	391	24.8	417	24.6
Develop an innovation as part of a traditional preservice course	393	28.1	418	27.9	430	27.3	458	27.1
Develop/revise preservice courses to align with national, state, and/or local standards	408	29.2	442	29.5	458	29.1	478	28.2

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP in a given school year. Percents add to more than 100 because some respondents reported more than one activity.

Table A.6.12. IHE faculty and administrators involved in activities targeted to K–12 teachers: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Activity	2002–03 (n = 199 faculty/ administrators)		2003–04 (n = 596 faculty/ administrators)		2004–05 (n = 991 faculty/ administrators)		2005–06 (n = 1,178 faculty/ administrators)		2006–07 (n = 1,323 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Activities targeted to multiple K–12 teachers										
Conduct workshops/institutes/ courses with K–12 teachers that increase general content and/or pedagogical knowledge	114	57.3	342	57.4	601	60.6	741	62.9	836	63.2
Conduct targeted workshops/ institutes/courses with K–12 teachers	79	39.7	208	34.9	368	37.1	490	41.6	559	42.3
Design STEM courses specifically for elementary/ middle/high school teacher certification programs	54	27.1	130	21.8	237	23.9	305	25.9	350	26.5
Establish/provide STEM learning communities/study groups	44	22.1	127	21.3	250	25.2	327	27.8	379	28.6
Provide traditional STEM courses at alternative venues	9	4.5	37	6.2	84	8.5	130	11.0	145	11.0
Activities targeted to an individual K–12 teachers										
Support adjunct positions for K–12 master teachers at your IHE	21	10.6	67	11.2	128	12.9	154	13.1	174	13.2
Establish/provide externship opportunities for K–12 teachers	14	7.0	49	8.2	112	11.3	159	13.5	183	13.8
Remain “on call” for classroom teachers	97	48.7	262	44.0	461	46.5	581	49.3	660	49.9
Mentor a K–12 teacher in a shared discipline	35	17.6	113	19.0	215	21.7	283	24.0	332	25.1
Help K–12 schools utilize computer-communications technology for challenging course delivery	13	6.5	36	6.0	77	7.8	99	8.4	114	8.6
Help K–12 teachers utilize technology for course content innovation	55	27.6	149	25.0	283	28.6	380	32.3	456	34.5

Table A.6.12. IHE faculty and administrators involved in activities targeted to K–12 teachers: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 1,398 faculty/ administrators)		2008–09 (n = 1,499 faculty/ administrators)		2009–10 (n = 1,575 faculty/ administrators)		2010–11 (n = 1,693 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Activities targeted to multiple K–12 teachers								
Conduct workshops/institutes/ courses with K–12 teachers that increase general content and/or pedagogical knowledge	877	62.7	936	62.4	974	61.8	1,046	61.8
Conduct targeted workshops/ institutes/courses with K–12 teachers	594	42.5	636	42.4	664	42.2	714	42.2
Design STEM courses specifically for elementary/ middle/high school teacher certification programs	372	26.6	390	26.0	403	25.6	437	25.8
Establish/provide STEM learning communities/study groups	407	29.1	431	28.8	458	29.1	499	29.5
Provide traditional STEM courses at alternative venues	158	11.3	170	11.3	174	11.0	184	10.9
Activities targeted to an individual K–12 teachers								
Support adjunct positions for K–12 master teachers at your IHE	186	13.3	199	13.3	207	13.1	222	13.1
Establish/provide externship opportunities for K–12 teachers	195	13.9	209	13.9	216	13.7	227	13.4
Remain “on call” for classroom teachers	702	50.2	751	50.1	780	49.5	833	49.2
Mentor a K–12 teacher in a shared discipline	349	25.0	383	25.6	398	25.3	429	25.3
Help K–12 schools utilize computer-communications technology for challenging course delivery	126	9.0	136	9.1	140	8.9	149	8.8
Help K–12 teachers utilize technology for course content innovation	483	34.5	508	33.9	528	33.5	570	33.7

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year. Percents add to more than 100 because some respondents reported more than one activity.

Table A.6.13. IHE faculty and administrators involved in management/research activities: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Activity	2002–03 (n = 199 faculty/ administrators)		2003–04 (n = 596 faculty/ administrators)		2004–05 (n = 991 faculty/ administrators)		2005–06 (n = 1,178 faculty/ administrators)		2006–07 (n = 1,323 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Management										
Serve as a member of the partnership management structure	84	42.2	229	38.4	372	37.5	438	37.2	485	36.7
Help develop joint databases or facilitate data sharing between K–12 and IHE partners	39	19.6	103	17.3	166	16.8	207	17.6	244	18.4
Help create formal links between all MSP core partners	56	28.1	123	20.6	213	21.5	263	22.3	309	23.4
Help align teacher certification program requirements among partner IHEs	9	4.5	31	5.2	63	6.4	81	6.9	92	7.0
Participate in the development of policies to reward IHE disciplinary faculty for their involvement in K–12 education	13	6.5	44	7.4	102	10.3	136	11.5	159	12.0
Enlist support from STEM industry/business personnel who work in disciplinary fields related to your own	18	9.0	31	5.2	68	6.9	91	7.7	116	8.8
Research and evaluation										
Conduct research on teaching and learning in math and science	34	17.1	102	17.1	238	24.0	322	27.3	399	30.2
Attend national MSP conferences	48	24.1	104	17.4	180	18.2	217	18.4	257	19.4
Work on project-related evaluation activities or with RETA projects	42	21.1	114	19.1	211	21.3	263	22.3	304	23.0

Table A.6.13. IHE faculty and administrators involved in management/research activities: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 1,398 faculty/ administrators)		2008–09 (n = 1,499 faculty/ administrators)		2009–10 (n = 1,575 faculty/ administrators)		2010–11 (n = 1,693 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Management								
Serve as a member of the partnership management structure	503	36.0	552	36.8	578	36.7	629	37.2
Help develop joint databases or facilitate data sharing between K–12 and IHE partners	265	19.0	289	19.3	302	19.2	319	18.8
Help create formal links between all MSP core partners	327	23.4	353	23.5	369	23.4	407	24.0
Help align teacher certification program requirements among partner IHEs	100	7.2	105	7.0	108	6.9	111	6.6
Participate in the development of policies to reward IHE disciplinary faculty for their involvement in K–12 education	167	11.9	177	11.8	188	11.9	197	11.6
Enlist support from STEM industry/business personnel who work in disciplinary fields related to your own	126	9.0	133	8.9	136	8.6	151	8.9
Research and evaluation								
Conduct research on teaching and learning in math and science	450	32.2	496	33.1	522	33.1	570	33.7
Attend national MSP conferences	282	20.2	306	20.4	324	20.6	351	20.7
Work on project-related evaluation activities or with RETA projects	327	23.4	360	24.0	377	23.9	409	24.2

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year. Percents add to more than 100 because some respondents reported more than one activity.

Table A.6.14. MSP preservice recruitment and preparation activities targeted to IHE recipients: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Activity	2003–04 (n = 34 projects)		2004–05 (n = 40 projects)		2005–06 (n = 40 projects)		2006–07 (n = 40 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Provide opportunities for preservice students to gain experience in K–12 classroom settings before formal student teaching	16	47.1	20	50.0	22	55.0	26	65.0
Involve IHE STEM faculty in preservice program	15	44.1	19	47.5	22	55.0	24	60.0
Create/provide opportunities for STEM undergraduate/graduate students to tutor K–20 students	14	41.2	18	45.0	22	55.0	23	57.5
Develop/revise preservice courses to align with national and/or state standards	14	41.2	22	55.0	26	65.0	27	67.5
Develop/revise preservice course content to align with local school district curricula	12	35.3	20	50.0	20	50.0	21	52.5
Design/offer preservice STEM content courses specifically for elementary/middle/high school teacher certification programs	12	35.3	19	47.5	23	57.5	25	62.5
Invite preservice students to take part in local school district inservice activities	11	32.4	20	50.0	20	50.0	21	52.5
Invite STEM undergraduate/graduate students to help at (or participate in) K–12 special events	10	29.4	19	47.5	23	57.5	23	57.5
Mentor preservice students	10	29.4	18	45.0	20	50.0	22	55.0
Involve K–12 master teachers in preservice program	9	26.5	16	40.0	17	42.5	18	45.0
Create/provide teaching assistant positions for STEM undergraduate/graduate students	7	20.6	13	32.5	15	37.5	18	45.0
Create/provide informative materials for potential STEM teaching candidates	7	20.6	15	37.5	18	45.0	19	47.5
Provide scholarships to undergraduate students	6	17.6	9	22.5	10	25.0	12	30.0
Establish/provide alternative certification programs	4	11.8	8	20.0	9	22.5	10	25.0
Conduct presentations at career fairs	4	11.8	8	20.0	12	30.0	13	32.5
Establish a regional plan for recruiting preservice students that encompasses multiple MSP partners	3	8.8	5	12.5	7	17.5	9	22.5
Establish and/or revise course articulation agreements between 4-year institutions and community colleges	2	5.9	5	12.5	10	25.0	11	27.5
Link the preservice process to national teacher certification activities	2	5.9	3	7.5	3	7.5	5	12.5

Table A.6.14. MSP preservice recruitment and preparation activities targeted to IHE recipients: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 40 projects)		2008–09 (n = 48 projects)		2009–10 (n = 48 projects)		2010–11 (n = 56 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Provide opportunities for preservice students to gain experience in K–12 classroom settings before formal student teaching	26	65.0	26	54.2	27	56.3	31	55.4
Involve IHE STEM faculty in preservice program	24	60.0	24	50.0	25	52.1	29	51.8
Create/provide opportunities for STEM undergraduate/graduate students to tutor K–20 students	24	60.0	26	54.2	27	56.3	29	51.8
Develop/revise preservice courses to align with national and/or state standards	27	67.5	29	60.4	29	60.4	33	58.9
Develop/revise preservice course content to align with local school district curricula	21	52.5	21	43.8	21	43.8	24	42.9
Design/offer preservice STEM content courses specifically for elementary/middle/high school teacher certification programs	25	62.5	25	52.1	26	54.2	31	55.4
Invite preservice students to take part in local school district inservice activities	23	57.5	23	47.9	24	50.0	27	48.2
Invite STEM undergraduate/graduate students to help at (or participate in) K–12 special events	24	60.0	24	50.0	25	52.1	28	50.0
Mentor preservice students	23	57.5	23	47.9	24	50.0	27	48.2
Involve K–12 master teachers in preservice program	18	45.0	18	37.5	18	37.5	21	37.5
Create/provide teaching assistant positions for STEM undergraduate/graduate students	18	45.0	19	39.6	19	39.6	24	42.9
Create/provide informative materials for potential STEM teaching candidates	19	47.5	20	41.7	21	43.8	23	41.1
Provide scholarships to undergraduate students	12	30.0	15	31.3	15	31.3	18	32.1
Establish/provide alternative certification programs	10	25.0	10	20.8	11	22.9	14	25.0
Conduct presentations at career fairs	14	35.0	14	29.2	14	29.2	17	30.4
Establish a regional plan for recruiting preservice students that encompasses multiple MSP partners	9	22.5	9	18.8	9	18.8	9	16.1
Establish and/or revise course articulation agreements between 4-year institutions and community colleges	11	27.5	12	25.0	12	25.0	14	25.0
Link the preservice process to national teacher certification activities	6	15.0	8	16.7	8	16.7	8	14.3

Table A.6.15. Contributions to preservice courses in participating IHEs: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Type of MSP contribution	2002–03 (n = 12 IHEs)		2003–04 (n = 37 IHEs)		2004–05 (n = 57 IHEs)		2005–06 (n = 58 IHEs)		2006–07 (n = 63 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total new preservice courses	35	100.0	134	100.0	276	100.0	338	100.0	441	100.0
Developed a new course/ seminar	8	22.9	36	26.9	83	30.1	101	29.9	121	27.4
Modified or enhanced a preexisting course/ seminar	24	68.6	91	67.9	184	66.7	225	66.6	302	68.5
Other	3	8.6	7	5.2	11	4.0	14	4.1	20	4.5

Table A.6.15. Contributions to preservice courses in participating IHEs: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Type of MSP contribution	2007–08 (n = 64 IHEs)		2008–09 (n = 69 IHEs)		2009–10 (n = 72 IHEs)		2010–11 (n = 78 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total new preservice courses	514	100.0	530	100.0	542	100.0	562	100.0
Developed a new course/ seminar	128	24.9	139	26.2	148	27.3	157	27.9
Modified or enhanced a preexisting course/ seminar	358	69.6	363	68.5	366	67.5	378	67.3
Other	30	5.8	31	5.8	31	5.7	32	5.7

NOTE: Percents may not add to 100 because of rounding. Details may not add to totals because some respondents reported more than one contribution.

Table A.6.16. Subject of new undergraduate and graduate preservice courses supported by MSP: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Level and subject	2002–03 (n = 12 IHEs)		2003–04 (n = 37 IHEs)		2004–05 (n = 57 IHEs)		2005–06 (n = 58 IHEs)		2006–07 (n = 63 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Undergraduate level, total	30	100.0	116	100.0	228	100.0	271	100.0	355	100.0
Mathematics	19	63.3	62	53.4	104	45.6	122	45.0	147	41.4
Education	13	43.3	28	24.1	44	19.3	51	18.8	68	19.2
Biological sciences	4	13.3	14	12.1	39	17.1	47	17.3	58	16.3
Physics	5	16.7	14	12.1	32	14.0	34	12.5	46	13.0
Chemistry	2	6.7	11	9.5	23	10.1	27	10.0	48	13.5
Geosciences	3	10.0	8	6.9	17	7.5	19	7.0	21	5.9
Computer science	1	3.3	4	3.4	7	3.1	7	2.6	7	2.0
Astronomy	3	10.0	3	2.6	6	2.6	6	2.2	8	2.3
Atmospheric sciences	0	0.0	3	2.6	8	3.5	8	3.0	8	2.3
Engineering	0	0.0	1	0.9	1	0.4	1	0.4	1	0.3
Ocean sciences	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	1	3.3	15	12.9	26	11.4	31	11.4	36	10.1
Graduate level, total	5	100.0	18	100.0	48	100.0	67	100.0	86	100.0
Education	2	40.0	11	61.1	24	50.0	33	49.3	36	41.9
Mathematics	3	60.0	9	50.0	22	45.8	30	44.8	41	47.7
Biological sciences	0	0.0	3	16.7	10	20.8	13	19.4	17	19.8
Chemistry	0	0.0	2	11.1	6	12.5	9	13.4	12	14.0
Physics	0	0.0	2	11.1	6	12.5	11	16.4	12	14.0
Atmospheric sciences	1	20.0	1	5.6	1	2.1	3	4.5	4	4.7
Computer science	0	0.0	1	5.6	4	8.3	4	6.0	4	4.7
Geosciences	1	20.0	1	5.6	3	6.3	6	9.0	8	9.3
Astronomy	0	0.0	0	0.0	1	2.1	3	4.5	3	3.5
Engineering	0	0.0	0	0.0	1	2.1	1	1.5	2	2.3
Ocean sciences	0	0.0	0	0.0	0	0.0	2	3.0	4	4.7
Other	0	0.0	3	16.7	4	8.3	4	6.0	6	7.0

Table A.6.16. Subject of new undergraduate and graduate preservice courses supported by MSP: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Level and subject	2007–08 (n = 64 IHEs)		2008–09 (n = 69 IHEs)		2009–10 (n = 72 IHEs)		2010–11 (n = 78 IHEs)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Undergraduate level, total	417	100.0	426	100.0	429	100.0	437	100.0
Mathematics	160	38.4	163	38.3	165	38.5	166	38.0
Education	83	19.9	85	20.0	85	19.8	88	20.1
Biological sciences	72	17.3	75	17.6	75	17.5	76	17.4
Physics	50	12.0	54	12.7	54	12.6	55	12.6
Chemistry	54	12.9	58	13.6	58	13.5	59	13.5
Geosciences	31	7.4	32	7.5	32	7.5	33	7.6
Computer science	7	1.7	7	1.6	7	1.6	7	1.6
Astronomy	8	1.9	9	2.1	9	2.1	9	2.1
Atmospheric sciences	9	2.2	9	2.1	9	2.1	9	2.1
Engineering	2	0.5	2	0.5	2	0.5	2	0.5
Ocean sciences	0	0.0	0	0.0	0	0.0	0	0.0
Other	36	8.6	37	8.7	38	8.9	39	8.9
Graduate level, total	97	100.0	104	100.0	113	100.0	125	100.0
Education	41	42.3	43	41.3	47	41.6	48	38.4
Mathematics	46	47.4	52	50.0	56	49.6	63	50.4
Biological sciences	19	19.6	19	18.3	20	17.7	22	17.6
Chemistry	13	13.4	13	12.5	14	12.4	17	13.6
Physics	14	14.4	14	13.5	15	13.3	17	13.6
Atmospheric sciences	5	5.2	5	4.8	6	5.3	6	4.8
Computer science	4	4.1	4	3.8	4	3.5	4	3.2
Geosciences	9	9.3	9	8.7	10	8.8	11	8.8
Astronomy	3	3.1	3	2.9	3	2.7	3	2.4
Engineering	3	3.1	3	2.9	6	5.3	6	4.8
Ocean sciences	5	5.2	5	4.8	6	5.3	8	6.4
Other	6	6.2	6	5.8	6	5.3	7	5.6

NOTE: Details may not add to totals because some respondents reported more than one subject.

Table A.6.17. MSP inservice retention/enhancement activities targeted to K–12 teachers: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Activity	2003–04 (n = 34 projects)		2004–05 (n = 40 projects)		2005–06 (n = 40 projects)		2006–07 (n = 40 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Conduct activities that develop and utilize teacher leaders	33	97.1	39	97.5	40	100.0	40	100.0
Conduct workshops/institutes/courses with K–12 teachers that increase general content and/or pedagogical knowledge	31	91.2	37	92.5	39	97.5	39	97.5
Provide administrative supports for K–12 teachers	29	85.3	34	85.0	36	90.0	36	90.0
Conduct targeted workshops/institutes/courses with K–12 teachers	25	73.5	32	80.0	34	85.0	36	90.0
Provide instructional materials for K–12 teachers	21	61.8	32	80.0	32	80.0	34	85.0
Provide a peer coaching network for STEM teachers	19	55.9	24	60.0	27	67.5	29	72.5
Provide individual supports for STEM teachers	19	55.9	24	60.0	25	62.5	27	67.5
Provide professional development for IHE STEM faculty to support new roles in K–12 education	19	55.9	27	67.5	30	75.0	30	75.0
Establish/provide STEM study groups	16	47.1	28	70.0	30	75.0	30	75.0
Design/offer STEM content courses specifically for elementary/middle/ high school teacher certification programs	10	29.4	15	37.5	18	45.0	19	47.5
Provide group induction supports for new STEM teachers	9	26.5	12	30.0	14	35.0	17	42.5
Establish/provide adjunct positions for K–12 master teachers at the partner IHEs	8	23.5	14	35.0	15	37.5	15	37.5
Provide externship opportunities for K–12 teachers	2	5.9	2	5.0	5	12.5	5	12.5

Table A.6.17. MSP inservice retention/enhancement activities targeted to K–12 teachers: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Activity	2007–08 (n = 40 projects)		2008–09 (n = 48 projects)		2009–10 (n = 48 projects)		2010–11 (n = 56 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Conduct activities that develop and utilize teacher leaders	40	100.0	44	91.7	46	95.8	53	94.6
Conduct workshops/institutes/courses with K–12 teachers that increase general content and/or pedagogical knowledge	39	97.5	45	93.8	47	97.9	54	96.4
Provide administrative supports for K–12 teachers	36	90.0	39	81.3	40	83.3	47	83.9
Conduct targeted workshops/institutes/courses with K–12 teachers	38	95.0	40	83.3	43	89.6	49	87.5
Provide instructional materials for K–12 teachers	35	87.5	40	83.3	42	87.5	48	85.7
Provide a peer coaching network for STEM teachers	33	82.5	34	70.8	36	75.0	38	67.9
Provide individual supports for STEM teachers	27	67.5	32	66.7	34	70.8	38	67.9
Provide professional development for IHE STEM faculty to support new roles in K–12 education	31	77.5	31	64.6	31	64.6	37	66.1
Establish/provide STEM study groups	31	77.5	33	68.8	35	72.9	40	71.4
Design/offer STEM content courses specifically for elementary/middle/ high school teacher certification programs	21	52.5	23	47.9	24	50.0	29	51.8
Provide group induction supports for new STEM teachers	17	42.5	17	35.4	18	37.5	19	33.9
Establish/provide adjunct positions for K–12 master teachers at the partner IHEs	16	40.0	16	33.3	17	35.4	18	32.1
Provide externship opportunities for K–12 teachers	5	12.5	7	14.6	7	14.6	7	12.5

Table A.6.18. Strategies used by IHE faculty and administrators to engage K–12 students: Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Strategy	2002–03 (n = 199 faculty/ administrators)		2003–04 (n = 596 faculty/ administrators)		2004–05 (n = 991 faculty/ administrators)		2005–06 (n = 1,178 faculty/ administrators)		2006–07 (n = 1,323 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Aligning or revising K–12 curricula										
Align K–12 mathematics and science curricula to other courses/standards	80	40.2	198	33.2	345	34.8	438	37.2	486	36.7
Conduct a review of K–12 course curricula	53	26.6	146	24.5	250	25.2	318	27.0	356	26.9
Develop/redesign traditional STEM units or courses for in-depth immersion in a single topic	14	7.0	53	8.9	103	10.4	142	12.1	157	11.9
Activities targeted to K–12 students										
Participate in activities that motivate K–12 student participation in challenging mathematics and science courses	57	28.6	160	26.8	298	30.1	398	33.8	461	34.8
Work one on one with K–12 students	29	14.6	95	15.9	170	17.2	227	19.3	279	21.1
Participate in activities that encourage high school students to enroll in IHE courses	27	13.6	65	10.9	112	11.3	144	12.2	171	12.9

Table A.6.18. Strategies used by IHE faculty and administrators to engage K–12 students: Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Strategy	2007–08 (n = 1,398 faculty/ administrators)		2008–09 (n = 1,499 faculty/ administrators)		2009–10 (n = 1,575 faculty/ administrators)		2010–11 (n = 1,693 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Aligning or revising K–12 curricula								
Align K–12 mathematics and science curricula to other courses/standards	517	37.0	547	36.5	571	36.3	606	35.8
Conduct a review of K–12 course curricula	376	26.9	405	27.0	424	26.9	457	27.0
Develop/redesign traditional STEM units or courses for in-depth immersion in a single topic	170	12.2	175	11.7	190	12.1	199	11.8
Activities targeted to K–12 students								
Participate in activities that motivate K–12 student participation in challenging mathematics and science courses	487	34.8	515	34.4	531	33.7	557	32.9
Work one on one–12 students	303	21.7	318	21.2	330	21.0	347	20.5
Participate in activities that encourage high school students to enroll in IHE courses	184	13.2	204	13.6	216	13.7	222	13.1

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year. Percents may not add to 100 because some respondents reported more than one strategy and some respondents did not report any of the strategies.

Table A.6.19. Strategies used to engage K–12 students in challenging mathematics courses:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Strategy	2003–04 (n = 29 projects)		2004–05 (n = 34 projects)		2005–06 (n = 34 projects)		2006–07 (n = 34 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Align challenging mathematics curricula to other courses/standards	22	75.9	27	79.4	27	79.4	27	79.4
Implement standards-based mathematics curricula	18	62.1	26	76.5	27	79.4	28	82.4
Emphasize the importance of K–12 gateway courses	16	55.2	20	58.8	21	61.8	22	64.7
Adopt, adapt, and/or implement evidence-based mathematics curricula	15	51.7	21	61.8	24	70.6	24	70.6
Support expert review of challenging mathematics course curricula	12	41.4	18	52.9	21	61.8	22	64.7
Utilize technology for content innovation	11	37.9	18	52.9	19	55.9	20	58.8
Offer activities that motivate K–12 student participation in challenging mathematics courses	10	34.5	13	38.2	17	50.0	18	52.9
Implement efforts to increase time spent on mathematics at elementary school level	8	27.6	9	26.5	12	35.3	12	35.3
Provide guidance counselors with professional development on challenging mathematics courses	7	24.1	10	29.4	11	32.4	13	38.2
Provide focused support/tutoring for K–12 students	7	24.1	11	32.4	14	41.2	14	41.2
Provide outreach on challenging mathematics courses to parents	5	17.2	9	26.5	14	41.2	15	44.1
Develop/redesign traditional mathematics units or courses for in-depth immersion in a single topic	4	13.8	5	14.7	6	17.6	7	20.6
Encourage high school student enrollment in IHE mathematics courses	3	10.3	9	26.5	13	38.2	16	47.1
Offer challenging mathematics courses via computer-communications technology	0	0.0	1	2.9	2	5.9	3	8.8
Provide traditional mathematics courses at alternative venues	0	0.0	2	5.9	3	8.8	3	8.8
Other	2	6.9	3	8.8	4	11.8	4	11.8

Table A.6.19. Strategies used to engage K–12 students in challenging mathematics courses:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Strategy	2007–08 (n = 34 projects)		2008–09 (n = 37 projects)		2009–10 (n = 37 projects)		2010–11 (n = 40 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Align challenging mathematics curricula to other courses/standards	27	79.4	29	78.4	30	81.1	31	77.5
Implement standards-based mathematics curricula	28	82.4	28	75.7	29	78.4	29	72.5
Emphasize the importance of K–12 gateway courses	22	64.7	25	67.6	25	67.6	26	65.0
Adopt, adapt, and/or implement evidence-based mathematics curricula	24	70.6	25	67.6	25	67.6	26	65.0
Support expert review of challenging mathematics course curricula	22	64.7	23	62.2	23	62.2	24	60.0
Utilize technology for content innovation	22	64.7	23	62.2	24	64.9	25	62.5
Offer activities that motivate K–12 student participation in challenging mathematics courses	18	52.9	18	48.6	18	48.6	18	45.0
Implement efforts to increase time spent on mathematics at elementary school level	12	35.3	12	32.4	12	32.4	12	30.0
Provide guidance counselors with professional development on challenging mathematics courses	13	38.2	13	35.1	13	35.1	13	32.5
Provide focused support/tutoring for K–12 students	16	47.1	16	43.2	17	45.9	17	42.5
Provide outreach on challenging mathematics courses to parents	15	44.1	15	40.5	15	40.5	15	37.5
Develop/redesign traditional mathematics units or courses for in-depth immersion in a single topic	7	20.6	8	21.6	9	24.3	9	22.5
Encourage high school student enrollment in IHE mathematics courses	16	47.1	16	43.2	16	43.2	16	40.0
Offer challenging mathematics courses via computer-communications technology	3	8.8	3	8.1	3	8.1	5	12.5
Provide traditional mathematics courses at alternative venues	4	11.8	4	10.8	4	10.8	4	10.0
Other	4	11.8	5	13.5	5	13.5	5	12.5

[1]This item asked only of projects with a mathematics or mathematics/science focus.

Table A.6.20. Strategies used to engage K–12 students in challenging science courses:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects

Strategy	2003–04 (n = 21 projects)		2004–05 (n = 26 projects)		2005–06 (n = 26 projects)		2006–07 (n = 26 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Align challenging science curricula to other courses/standards	14	66.7	19	73.1	22	84.6	22	84.6
Implement standards-based science curricula	14	66.7	18	69.2	21	80.8	21	80.8
Adopt, adapt, and/or implement evidence-based science curricula	10	47.6	15	57.7	18	69.2	18	69.2
Support expert review of challenging science course curricula	9	42.9	11	42.3	15	57.7	15	57.7
Offer activities that motivate K–12 student participation in challenging science courses	7	33.3	11	42.3	13	50.0	14	53.8
Implement efforts to increase time spent on science at elementary school level	6	28.6	8	30.8	9	34.6	10	38.5
Emphasize the importance of K–12 gateway courses	5	23.8	8	30.8	10	38.5	10	38.5
Utilize technology for content innovation	4	19.0	9	34.6	10	38.5	11	42.3
Provide focused support/tutoring for K–12 students	4	19.0	6	23.1	10	38.5	10	38.5
Provide guidance counselors with professional development on challenging science courses	4	19.0	6	23.1	7	26.9	8	30.8
Encourage high school student enrollment in IHE science courses	2	9.5	4	15.4	6	23.1	8	30.8
Provide outreach on challenging science courses to parents	2	9.5	4	15.4	7	26.9	8	30.8
Offer challenging science courses via computer-communications technology	1	4.8	1	3.8	2	7.7	4	15.4
Develop/redesign traditional science units or courses for in-depth immersion in a single topic	1	4.8	1	3.8	4	15.4	5	19.2
Provide traditional science courses at alternative venues	0	0.0	1	3.8	1	3.8	1	3.8
Other	3	14.3	4	15.4	8	30.8	8	30.8

Table A.6.20. Strategies used to engage K–12 students in challenging science courses:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

Strategy	2007–08 (n = 26 projects)		2008–09 (n = 32 projects)		2009–10 (n = 32 projects)		2010–11 (n = 38 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Align challenging science curricula to other courses/standards	22	84.6	24	75.0	24	75.0	29	76.3
Implement standards-based science curricula	21	80.8	21	65.6	23	71.9	26	68.4
Adopt, adapt, and/or implement evidence-based science curricula	18	69.2	19	59.4	19	59.4	22	57.9
Support expert review of challenging science course curricula	16	61.5	16	50.0	17	53.1	21	55.3
Offer activities that motivate K–12 student participation in challenging science courses	14	53.8	14	43.8	15	46.9	15	39.5
Implement efforts to increase time spent on science at elementary school level	10	38.5	11	34.4	11	34.4	13	34.2
Emphasize the importance of K–12 gateway courses	10	38.5	12	37.5	12	37.5	14	36.8
Utilize technology for content innovation	13	50.0	15	46.9	16	50.0	18	47.4
Provide focused support/tutoring for K–12 students	10	38.5	10	31.3	10	31.3	11	28.9
Provide guidance counselors with professional development on challenging science courses	8	30.8	8	25.0	8	25.0	8	21.1
Encourage high school student enrollment in IHE science courses	8	30.8	9	28.1	10	31.3	10	26.3
Provide outreach on challenging science courses to parents	8	30.8	8	25.0	8	25.0	8	21.1
Offer challenging science courses via computer-communications technology	4	15.4	4	12.5	4	12.5	4	10.5
Develop/redesign traditional science units or courses for in-depth immersion in a single topic	5	19.2	6	18.8	6	18.8	7	18.4
Provide traditional science courses at alternative venues	1	3.8	2	6.3	2	6.3	2	5.3
Other	8	30.8	8	25.0	8	25.0	9	23.7

[1]This item asked only of projects with a science or mathematics/science focus.

Table A.6.21. Amount of MSP professional development received by K–12 teachers:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects

School level and amount of MSP PD	2003–04 (n = 395 districts)		2004–05 (n = 470 districts)		2005–06 (n = 684 districts)		2006–07 (n = 933 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 teachers	17,897	100.0	52,166	100.0	99,208	100.0	149,013	100.0
1–80 hours	15,974	89.3	45,593	87.4	85,441	86.1	126,081	84.6
81–160 hours	1,406	7.9	4,331	8.3	8,118	8.2	13,292	8.9
161 or more hours	517	2.9	1,841	3.5	4,210	4.2	7,493	5.0
Elementary school teachers	10,766	100.0	31,855	100.0	61,377	100.0	93,236	100.0
1–80 hours	9,859	91.6	28,888	90.7	55,155	89.9	81,989	87.9
81–160 hours	784	7.3	2,300	7.2	4,540	7.4	7,313	7.8
161 or more hours	122	1.1	616	1.9	1,597	2.6	3,245	3.5
Middle school mathematics teachers	2,408	100.0	6,362	100.0	11,844	100.0	17,810	100.0
1–80 hours	2,129	88.4	5,338	83.9	9,717	82.0	14,391	80.8
81–160 hours	171	7.1	610	9.6	1,203	10.2	1,998	11.2
161 or more hours	108	4.5	392	6.2	846	7.1	1,338	7.5
Middle school science teachers	1,126	100.0	3,837	100.0	7,395	100.0	11,180	100.0
1–80 hours	945	83.9	3,203	83.5	5,882	79.5	8,666	77.5
81–160 hours	118	10.5	364	9.5	648	8.8	1,178	10.5
161 or more hours	63	5.6	269	7.0	621	8.4	981	8.8
High school mathematics teachers	2,112	100.0	5,779	100.0	10,859	100.0	15,665	100.0
1–80 hours	1,796	85.0	4,834	83.6	9,046	83.3	12,781	81.6
81–160 hours	203	9.6	611	10.6	1,095	10.1	1,717	11.0
161 or more hours	113	5.4	323	5.6	679	6.3	1,127	7.2
High school science teachers	1,485	100.0	4,333	100.0	7,733	100.0	11,122	100.0
1–80 hours	1,245	83.8	3,330	76.9	5,641	72.9	8,254	74.2
81–160 hours	130	8.8	446	10.3	632	8.2	1,086	9.8
161 or more hours	111	7.5	241	5.6	467	6.0	802	7.2

Table A.6.21. Amount of MSP professional development received by K–12 teachers:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

School level and amount of MSP PD	2007–08 (n = 1,066 districts)		2008–09 (n = 1,110 districts)		2009–10 (n = 1,131 districts)		2010–11 (n = 1,200 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 teachers	194,518	100.0	224,975	100.0	240,923	100.0	250,664	100.0
1–80 hours	162,676	83.6	185,972	82.7	196,791	81.7	203,153	81.0
81–160 hours	18,574	9.5	22,396	10.0	24,953	10.4	26,660	10.6
161 or more hours	10,765	5.5	13,844	6.2	16,203	6.7	17,856	7.1
Elementary school teachers	122,383	100.0	141,425	100.0	151,412	100.0	157,099	100.0
1–80 hours	106,385	86.9	121,484	85.9	128,743	85.0	132,471	84.3
81–160 hours	10,341	8.4	12,769	9.0	14,480	9.6	15,573	9.9
161 or more hours	4,954	4.0	6,456	4.6	7,473	4.9	8,339	5.3
Middle school mathematics teachers	23,591	100.0	27,531	100.0	29,565	100.0	31,092	100.0
1–80 hours	18,818	79.8	21,764	79.1	23,076	78.1	24,174	77.7
81–160 hours	2,739	11.6	3,229	11.7	3,508	11.9	3,685	11.9
161 or more hours	1,834	7.8	2,326	8.4	2,768	9.4	3,019	9.7
Middle school science teachers	14,436	100.0	16,382	100.0	17,352	100.0	17,873	100.0
1–80 hours	11,015	76.3	12,371	75.5	12,897	74.3	13,204	73.9
81–160 hours	1,650	11.4	1,903	11.6	2,068	11.9	2,187	12.2
161 or more hours	1,312	9.1	1,633	10.0	1,912	11.0	2,004	11.2
High school mathematics teachers	20,160	100.0	23,601	100.0	25,469	100.0	26,765	100.0
1–80 hours	16,130	80.0	18,587	78.8	19,707	77.4	20,545	76.8
81–160 hours	2,361	11.7	2,786	11.8	3,039	11.9	3,234	12.1
161 or more hours	1,579	7.8	1,996	8.5	2,359	9.3	2,607	9.7
High school science teachers	13,948	100.0	16,036	100.0	17,125	100.0	17,835	100.0
1–80 hours	10,328	74.0	11,766	73.4	12,368	72.2	12,759	71.5
81–160 hours	1,483	10.6	1,709	10.7	1,858	10.8	1,981	11.1
161 or more hours	1,086	7.8	1,433	8.9	1,691	9.9	1,887	10.6

[1] Cumulative counts of professional development recipients are reported annually by each participating district. This table includes data from each district's most recently submitted K–12 District Survey.

NOTE: Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because hours for some teachers were reported as unknown or because of rounding.

Table A.6.22. Amount of MSP professional development received by K–12 administrators:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects

School level and amount of MSP PD	2003–04 (n = 191 districts)		2004–05 (n = 265 districts)		2005–06 (n = 332 districts)		2006–07 (n = 358 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 administrators	1,723	100.0	4,147	100.0	8,253	100.0	11,612	100.0
1–80 hours	1,682	97.6	4,001	96.5	7,869	95.3	10,922	94.1
81–160 hours	40	2.3	131	3.2	338	4.1	577	5.0
161 or more hours	1	0.1	10	0.2	34	0.4	101	0.9
Elementary school administrators	981	100.0	2,356	100.0	4,693	100.0	6,491	100.0
1–80 hours	970	98.9	2,292	97.3	4,480	95.5	6,089	93.8
81–160 hours	14	1.4	66	2.8	202	4.3	353	5.4
161 or more hours	0	0.0	1	0.0	14	0.3	49	0.8
Middle school administrators	399	100.0	977	100.0	1,983	100.0	2,909	100.0
1–80 hours	381	95.5	925	94.7	1,874	94.5	2,732	93.9
81–160 hours	14	3.5	36	3.7	77	3.9	128	4.4
161 or more hours	1	0.3	8	0.8	17	0.9	37	1.3
High school administrators	343	100.0	814	100.0	1,577	100.0	2,212	100.0
1–80 hours	331	96.5	784	96.3	1,515	96.1	2,101	95.0
81–160 hours	12	3.5	29	3.6	59	3.7	96	4.3
161 or more hours	0	0.0	1	0.1	3	0.2	15	0.7

Table A.6.22. Amount of MSP professional development received by K–12 administrators:[1] Annual cumulative unduplicated counts, Comprehensive and Targeted projects—continued

School level and amount of MSP PD	2007–08 (n = 377 districts)		2008–09 (n = 382 districts)		2009–10 (n = 413 districts)		2010–11 (n = 437 districts)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All K–12 administrators	14,913	100.0	17,348	100.0	18,932	100.0	20,116	100.0
1–80 hours	13,876	93.0	15,942	91.9	17,218	90.9	18,122	90.1
81–160 hours	812	5.4	1,042	6.0	1,218	6.4	1,366	6.8
161 or more hours	209	1.4	283	1.6	351	1.9	418	2.1
Elementary school administrators	8,287	100.0	9,633	100.0	10,546	100.0	11,306	100.0
1–80 hours	7,679	92.7	8,816	91.5	9,531	90.4	10,102	89.4
81–160 hours	506	6.1	670	7.0	814	7.7	942	8.3
161 or more hours	101	1.2	146	1.5	200	1.9	261	2.3
Middle school administrators	3,750	100.0	4,401	100.0	4,839	100.0	5,186	100.0
1–80 hours	3,499	93.3	4,061	92.3	4,436	91.7	4,726	91.1
81–160 hours	169	4.5	209	4.7	232	4.8	251	4.8
161 or more hours	67	1.8	84	1.9	93	1.9	99	1.9
High school administrators	2,876	100.0	3,314	100.0	3,547	100.0	3,624	100.0
1–80 hours	2,698	93.8	3,065	92.5	3,251	91.7	3,294	90.9
81–160 hours	137	4.8	163	4.9	172	4.8	173	4.8
161 or more hours	41	1.4	53	1.6	58	1.6	58	1.6

[1] Cumulative counts of professional development recipients are reported annually by each participating district. This table includes data from each district's most recently submitted K–12 District Survey.

NOTE: Excludes SCALE due to incomplete K–12 district data. Percents may not add to 100 because hours for some administrators were reported as unknown, some projects were able to report some of the details but reported the total as unknown, or because of rounding.

Table A.6.23. Area of activities for IHE faculty and administrators involved in Institute projects: Annual cumulative unduplicated counts, Institute projects

Activity	2004–05 (n = 102 faculty/ administrators)		2005–06 (n = 116 faculty/ administrators)		2006–07 (n = 181 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent
Institute planning and development	85	83.3	95	81.9	138	76.2
Summer Institute activities	80	78.4	93	80.2	149	82.3
Academic year Institute activities	53	52.0	79	68.1	121	66.9
Management and/or other MSP-related activities	61	59.8	67	57.8	93	51.4

Table A.6.23. Area of activities for IHE faculty and administrators involved in Institute projects: Annual cumulative unduplicated counts, Institute projects—continued

Activity	2007–08 (n = 210 faculty/ administrators)		2008–09 (n = 267 faculty/ administrators)		2009–10 (n = 369 faculty/ administrators)		2010–11 (n = 416 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Institute planning and development	158	75.2	199	74.5	257	69.6	290	69.7
Summer Institute activities	178	84.8	216	80.9	300	81.3	337	81.0
Academic year Institute activities	151	71.9	177	66.3	231	62.6	267	64.2
Management and/or other MSP-related activities	102	48.6	131	49.1	172	46.6	194	46.6

Table A.6.24. Planning and development activities undertaken by IHE Institute faculty and administrators: Annual cumulative unduplicated counts, Institute projects

Activity	2004–05 (n = 93 faculty/ administrators)		2005–06 (n = 111 faculty/ administrators)		2006–07 (n = 172 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent
Collaborate with other IHE faculty to establish K–12 district needs, Institute mission, and goals	67	72.0	77	69.4	110	64.0
Collaborate with school district stakeholders to establish K–12 district needs, Institute mission, and goals	42	45.2	53	47.7	75	43.6
Conduct fact-finding activities to inform Institute curriculum development	41	44.1	50	45.0	69	40.1
Align Institute curricula with other courses/standards	56	60.2	63	56.8	94	54.7
Align curricula with recent research about mathematics and science pedagogical methods.	61	65.6	71	64.0	108	62.8
Link the Institute work to national teacher certification activities or advanced degree completion	46	49.5	54	48.6	76	44.2
Enlist expert individuals external to the MSP management to act as an advisory committee	28	30.1	30	27.0	44	25.6
Recruit graduate students to assist with Institute planning and instruction	29	31.2	38	34.2	55	32.0
Establish requirements for teacher leader participants	38	40.9	44	39.6	61	35.5
Conduct district/school/teacher recruiting activities	41	44.1	48	43.2	68	39.5
Select teacher leaders	27	29.0	34	30.6	51	29.7
Other	22	23.7	28	25.2	38	22.1

Table A.6.24. Planning and development activities undertaken by IHE Institute faculty and administrators: Annual cumulative unduplicated counts, Institute projects—continued

Activity	2007–08 (n = 198 faculty/ administrators)		2008–09 (n = 241 faculty/ administrators)		2009–10 (n = 326 faculty/ administrators)		2010–11 (n = 370 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collaborate with other IHE faculty to establish K–12 district needs, Institute mission, and goals	117	59.1	146	60.6	190	58.3	209	56.5
Collaborate with school district stakeholders to establish K–12 district needs, Institute mission, and goals	80	40.4	100	41.5	130	39.9	144	38.9
Conduct fact-finding activities to inform Institute curriculum development	83	41.9	99	41.1	127	39.0	142	38.4
Align Institute curricula with other courses/standards	109	55.1	132	54.8	168	51.5	191	51.6
Align curricula with recent research about mathematics and science pedagogical methods.	124	62.6	151	62.7	188	57.7	212	57.3
Link the Institute work to national teacher certification activities or advanced degree completion	84	42.4	103	42.7	130	39.9	143	38.6
Enlist expert individuals external to the MSP management to act as an advisory committee	50	25.3	64	26.6	82	25.2	96	25.9
Recruit graduate students to assist with Institute planning and instruction	68	34.3	80	33.2	104	31.9	115	31.1
Establish requirements for teacher leader participants	64	32.3	83	34.4	112	34.4	124	33.5
Conduct district/school/teacher recruiting activities	76	38.4	94	39.0	120	36.8	132	35.7
Select teacher leaders	57	28.8	74	30.7	99	30.4	110	29.7
Other	51	25.8	61	25.3	77	23.6	90	24.3

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year.

Table A.6.25. Summer activities undertaken by IHE Institute faculty and administrators: Annual cumulative unduplicated counts, Institute projects

Activity	2004–05 (n = 93 faculty/ administrators)		2005–06 (n = 111 faculty/ administrators)		2006–07 (n = 172 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent
Teach courses with K–12 teachers that increase mathematical or science content knowledge	57	61.3	69	62.2	99	57.6
Teach courses with K–12 teachers that increase pedagogical skills in mathematics and science	52	55.9	61	55.0	94	54.7
Teach targeted courses with K–12 teachers on mathematical or science content knowledge or pedagogical skills	20	21.5	27	24.3	39	22.7
Teach courses with K–12 teachers that improve leadership skills and strategies	29	31.2	35	31.5	55	32.0
Teach courses with K–12 teachers that increase abilities to develop new and challenging curriculum materials	42	45.2	56	50.5	86	50.0
Teach courses with K–12 teachers on working with adult learners	9	9.7	11	9.9	17	9.9
Teach courses with K–12 teachers that increase understanding of how to use technology for course content innovation	27	29.0	35	31.5	68	39.5
Teach courses with K–12 teachers using data and research to inform teaching	31	33.3	43	38.7	71	41.3
Teach courses for school administrators	6	6.5	9	8.1	15	8.7
Teach courses through distance learning	8	8.6	10	9.0	25	14.5
Team-teach courses with K–12 teachers	30	32.3	44	39.6	60	34.9
Provide mentoring for teacher leaders on professional development strategies and other leadership responsibilities	20	21.5	28	25.2	49	28.5
Involve graduate students in Institute course instruction	29	31.2	38	34.2	61	35.5
Direct or organize enrichment activities during summer Institute	22	23.7	33	29.7	54	31.4
Other	10	10.8	11	9.9	20	11.6

Table A.6.25. Summer activities undertaken by IHE Institute faculty and administrators: Annual cumulative unduplicated counts, Institute projects—continued

Activity	2007–08 (n = 198 faculty/ administrators)		2008–09 (n = 241 faculty/ administrators)		2009–10 (n = 326 faculty/ administrators)		2010–11 (n = 370 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Teach courses with K–12 teachers that increase mathematical or science content knowledge	120	60.6	142	58.9	186	57.1	220	59.5
Teach courses with K–12 teachers that increase pedagogical skills in mathematics and science	114	57.6	134	55.6	183	56.1	214	57.8
Teach targeted courses with K–12 teachers on mathematical or science content knowledge or pedagogical skills	49	24.7	65	27.0	87	26.7	107	28.9
Teach courses with K–12 teachers that improve leadership skills and strategies	67	33.8	78	32.4	106	32.5	123	33.2
Teach courses with K–12 teachers that increase abilities to develop new and challenging curriculum materials	105	53.0	127	52.7	158	48.5	182	49.2
Teach courses with K–12 teachers on working with adult learners	21	10.6	22	9.1	31	9.5	39	10.5
Teach courses with K–12 teachers that increase understanding of how to use technology for course content innovation	90	45.5	106	44.0	131	40.2	155	41.9
Teach courses with K–12 teachers using data and research to inform teaching	84	42.4	98	40.7	125	38.3	146	39.5
Teach courses for school administrators	18	9.1	18	7.5	22	6.7	24	6.5
Teach courses through distance learning	36	18.2	49	20.3	59	18.1	72	19.5
Team-teach courses with K–12 teachers	69	34.8	83	34.4	107	32.8	118	31.9
Provide mentoring for teacher leaders on professional development strategies and other leadership responsibilities	59	29.8	68	28.2	90	27.6	99	26.8
Involve graduate students in Institute course instruction	70	35.4	88	36.5	118	36.2	141	38.1
Direct or organize enrichment activities during summer Institute	74	37.4	84	34.9	109	33.4	121	32.7
Other	30	15.2	38	15.8	52	16.0	56	15.1

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year.

Table A.6.26. Academic year activities undertaken by IHE Institute faculty and administrators: Annual cumulative unduplicated counts, Institute projects

Activity	2004–05 (n = 93 faculty/ administrators)		2005–06 (n = 111 faculty/ administrators)		2006–07 (n = 172 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent
Conduct workshops/courses with K–12 teachers that increase content and/or pedagogical knowledge	26	28.0	47	42.3	70	40.7
Conduct targeted workshops/courses with K–12 teachers	10	10.8	22	19.8	31	18.0
Help K–12 teachers utilize technology for course content innovation	11	11.8	27	24.3	53	30.8
Facilitate online course(s) during the academic year for Institute participants	10	10.8	19	17.1	34	19.8
Establish/provide STEM in-person or online learning communities/study groups	12	12.9	25	22.5	43	25.0
Remain “on call” for classroom teachers	29	31.2	53	47.7	82	47.7
Provide mentoring during the academic year for teacher leaders related to their leadership responsibilities	18	19.4	26	23.4	39	22.7
Provide instruction during the academic year for teacher leaders related to their leadership responsibilities	9	9.7	19	17.1	27	15.7
Work with K–12 building staff to facilitate the work of the teacher leaders	10	10.8	22	19.8	33	19.2
Establish/provide externship opportunities for K–12 teachers	1	1.1	3	2.7	11	6.4
Support adjunct positions for K–12 master teachers at your IHE	6	6.5	9	8.1	18	10.5
Increase collaborative activities with regional school systems to improve K–12 instruction and learning	17	18.3	26	23.4	42	24.4
Strengthen your IHE’s preservice activities	22	23.7	34	30.6	44	25.6
Establish a new/modified degree or certification program at your IHE as a result or part of the Institute	18	19.4	27	24.3	39	22.7
Engage your department in activities to improve of K–12 instruction and learning	25	26.9	40	36.0	60	34.9
Other	3	3.2	9	8.1	12	7.0

Table A.6.26. Academic year activities undertaken by IHE Institute faculty and administrators: Annual cumulative unduplicated counts, Institute projects—continued

Activity	2007–08 (n = 198 faculty/ administrators)		2008–09 (n = 241 faculty/ administrators)		2009–10 (n = 326 faculty/ administrators)		2010–11 (n = 370 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Conduct workshops/courses with K–12 teachers that increase content and/or pedagogical knowledge	90	45.5	104	43.2	134	41.1	157	42.4
Conduct targeted workshops/courses with K–12 teachers	46	23.2	53	22.0	66	20.2	77	20.8
Help K–12 teachers utilize technology for course content innovation	72	36.4	86	35.7	101	31.0	121	32.7
Facilitate online course(s) during the academic year for Institute participants	50	25.3	56	23.2	72	22.1	85	23.0
Establish/provide STEM in-person or online learning communities/study groups	55	27.8	65	27.0	76	23.3	93	25.1
Remain “on call” for classroom teachers	101	51.0	115	47.7	147	45.1	166	44.9
Provide mentoring during the academic year for teacher leaders related to their leadership responsibilities	54	27.3	61	25.3	73	22.4	85	23.0
Provide instruction during the academic year for teacher leaders related to their leadership responsibilities	34	17.2	42	17.4	50	15.3	59	15.9
Work with K–12 building staff to facilitate the work of the teacher leaders	39	19.7	42	17.4	53	16.3	61	16.5
Establish/provide externship opportunities for K–12 teachers	21	10.6	24	10.0	30	9.2	31	8.4
Support adjunct positions for K–12 master teachers at your IHE	23	11.6	31	12.9	34	10.4	37	10.0
Increase collaborative activities with regional school systems to improve K–12 instruction and learning	51	25.8	56	23.2	74	22.7	84	22.7
Strengthen your IHE’s preservice activities	54	27.3	63	26.1	73	22.4	84	22.7
Establish a new/modified degree or certification program at your IHE as a result or part of the Institute	50	25.3	58	24.1	68	20.9	80	21.6
Engage your department in activities to improve of K–12 instruction and learning	73	36.9	89	36.9	112	34.4	128	34.6
Other	19	9.6	30	12.4	40	12.3	47	12.7

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year.

Table A.6.27. Management and other MSP-related activities undertaken by IHE Institute faculty and administrators: Annual cumulative unduplicated counts, Institute projects

Activity	2004–05 (n = 93 faculty/ administrators)		2005–06 (n = 111 faculty/ administrators)		2006–07 (n = 172 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent
Serve as a member of the partnership management structure	54	58.1	57	51.4	79	45.9
Help develop joint databases or facilitate data sharing between K–12 and IHE partners	8	8.6	15	13.5	23	13.4
Help create formal links between all MSP core partners	14	15.1	17	15.3	28	16.3
Help align teacher certification program requirements among partner IHEs	10	10.8	12	10.8	12	7.0
Participate in the development of policies to reward IHE disciplinary faculty for their involvement in K–12 education	6	6.5	9	8.1	16	9.3
Conduct research on teaching and learning in math and science	27	29.0	35	31.5	42	24.4
Attend national or regional conferences to disseminate information about your MSP or learn information that will strengthen your MSP	24	25.8	39	35.1	51	29.7
Work on project-related evaluation activities	35	37.6	38	34.2	54	31.4
Other	0	0.0	1	0.9	2	1.2

Table A.6.27. Management and other MSP-related activities undertaken by IHE Institute faculty and administrators: Annual cumulative unduplicated counts, Institute projects—continued

Activity	2007–08 (n = 198 faculty/ administrators)		2008–09 (n = 241 faculty/ administrators)		2009–10 (n = 326 faculty/ administrators)		2010–11 (n = 370 faculty/ administrators)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Serve as a member of the partnership management structure	88	44.4	108	44.8	143	43.9	157	42.4
Help develop joint databases or facilitate data sharing between K–12 and IHE partners	27	13.6	33	13.7	39	12.0	48	13.0
Help create formal links between all MSP core partners	32	16.2	42	17.4	52	16.0	57	15.4
Help align teacher certification program requirements among partner IHEs	13	6.6	15	6.2	19	5.8	24	6.5
Participate in the development of policies to reward IHE disciplinary faculty for their involvement in K–12 education	19	9.6	25	10.4	31	9.5	39	10.5
Conduct research on teaching and learning in math and science	48	24.2	60	24.9	77	23.6	87	23.5
Attend national or regional conferences to disseminate information about your MSP or learn information that will strengthen your MSP	57	28.8	72	29.9	92	28.2	100	27.0
Work on project-related evaluation activities	59	29.8	73	30.3	94	28.8	106	28.6
Other	4	2.0	7	2.9	10	3.1	14	3.8

NOTE: This table only includes information for IHE faculty and administrators who spent more than 40 hours on their own MSP during a given school year.

Table A.6.28. Primary method of delivery for Institute summer programs: Annual cumulative unduplicated counts, Institute projects

Component	2004–05 (n = 8 projects)		2005–06 (n = 8 projects)		2006–07 (n = 12 projects)	
	Number	Percent	Number	Percent	Number	Percent
Online courses	0	0.0	0	0.0	0	0.0
Residential program in one location	5	62.5	6	75.0	8	66.7
Residential program in multiple locations	0	0.0	0	0.0	0	0.0
Commuter program	2	25.0	2	25.0	4	33.3
Other	1	12.5	1	12.5	1	8.3

Table A.6.28. Primary method of delivery for Institute summer programs: Annual cumulative unduplicated counts, Institute projects—continued

Component	2007–08 (n = 12 projects)		2008–09 (n = 16 projects)		2009–10 (n = 23 projects)		2010–11 (n = 23 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Online courses	0	0.0	0	0.0	0	0.0	0	0.0
Residential program in one location	9	75.0	9	56.3	11	47.8	13	56.5
Residential program in multiple locations	0	0.0	3	18.8	4	17.4	5	21.7
Commuter program	5	41.7	7	43.8	12	52.2	12	52.2
Other	1	8.3	2	12.5	2	8.7	2	8.7

NOTE: Percents may not add to more than 100 because respondents reported more than one response over time.

Table A.6.29. Summer Institute activities targeted to K–12 teachers and administrators: Annual cumulative unduplicated counts, Institute projects

Activity	2004–05 (n = 8 projects)		2005–06 (n = 8 projects)		2006–07 (n = 12 projects)	
	Number	Percent	Number	Percent	Number	Percent
Conduct courses with K–12 teachers that increase mathematical or science content knowledge	8	100.0	8	100.0	12	100.0
Conduct courses with K–12 teachers that increase pedagogical knowledge	6	75.0	7	87.5	10	83.3
Conduct targeted courses with K–12 teachers on mathematical or science content knowledge or pedagogical skills	2	25.0	3	37.5	4	33.3
Conduct courses with K–12 teachers that improve leadership skills and strategies	6	75.0	6	75.0	10	83.3
Conduct courses with K–12 teachers that increase abilities to develop new and challenging curriculum materials	5	62.5	6	75.0	9	75.0
Conduct courses with K–12 teachers that increase understanding of how to use technology for course content innovation	6	75.0	7	87.5	10	83.3
Conduct courses with K–12 teachers that increase their ability to use assessment data to inform their teaching	1	12.5	3	37.5	4	33.3
Conduct courses with K–12 teachers that increase their ability to use research to inform their teaching	6	75.0	6	75.0	8	66.7
Conduct courses for school administrators	3	37.5	4	50.0	4	33.3
Provide opportunities for participants to earn a master's, other advanced degree/certification, or graduate credits upon completion of the Institute	7	87.5	8	100.0	12	100.0
Provide seminars by and access to content experts, practitioners, and leading researchers in math and/or science during the summer institute	4	50.0	6	75.0	10	83.3
Teach courses through distance learning	0	0.0	2	25.0	2	16.7
Provide courses that include instruction by fellow K–12 teachers	6	75.0	6	75.0	9	75.0
Involve graduate students in Institute course instruction	4	50.0	5	62.5	9	75.0
Provide enrichment activities during summer	6	75.0	6	75.0	9	75.0
Provide an opportunity for teachers to take on organizational and leadership roles in summer Institutes	2	25.0	3	37.5	5	41.7
Provide opportunities for participants to get hands-on experiences during the summer Institute	4	50.0	4	50.0	5	41.7
Require teachers to complete an evidence-based project, using knowledge from the institutes in their own classrooms	1	12.5	3	37.5	5	41.7
Provide opportunities during the summer Institute for teachers and administrators to meet together (with or without university faculty) and discuss strategies for school-based leadership and develop a plan for how teacher leaders will impact teachers at their school	4	50.0	4	50.0	6	50.0
Provide curriculum resources to teacher participants during the Institute	7	87.5	8	100.0	11	91.7
Other	0	0.0	0	0.0	1	8.3

Table A.6.29. Summer Institute activities targeted to K–12 teachers and administrators: Annual cumulative unduplicated counts, Institute projects—continued

Activity	2007–08 (n = 12 projects)		2008–09 (n = 16 projects)		2009–10 (n = 23 projects)		2010–11 (n = 23 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Conduct courses with K–12 teachers that increase mathematical or science content knowledge	12	100.0	16	100.0	23	100.0	23	100.0
Conduct courses with K–12 teachers that increase pedagogical knowledge	10	83.3	14	87.5	20	87.0	21	91.3
Conduct targeted courses with K–12 teachers on mathematical or science content knowledge or pedagogical skills	4	33.3	7	43.8	9	39.1	10	43.5
Conduct courses with K–12 teachers that improve leadership skills and strategies	10	83.3	12	75.0	17	73.9	19	82.6
Conduct courses with K–12 teachers that increase abilities to develop new and challenging curriculum materials	9	75.0	12	75.0	17	73.9	17	73.9
Conduct courses with K–12 teachers that increase understanding of how to use technology for course content innovation	10	83.3	12	75.0	16	69.6	18	78.3
Conduct courses with K–12 teachers that increase their ability to use assessment data to inform their teaching	4	33.3	5	31.3	11	47.8	13	56.5
Conduct courses with K–12 teachers that increase their ability to use research to inform their teaching	10	83.3	12	75.0	16	69.6	18	78.3
Conduct courses for school administrators	4	33.3	4	25.0	8	34.8	8	34.8
Provide opportunities for participants to earn a master's, other advanced degree/certification, or graduate credits upon completion of the Institute	12	100.0	16	100.0	23	100.0	23	100.0
Provide seminars by and access to content experts, practitioners, and leading researchers in math and/or science during the summer institute	10	83.3	14	87.5	16	69.6	18	78.3
Teach courses through distance learning	2	16.7	3	18.8	3	13.0	5	21.7
Provide courses that include instruction by fellow K–12 teachers	11	91.7	11	68.8	17	73.9	19	82.6
Involve graduate students in Institute course instruction	9	75.0	10	62.5	14	60.9	16	69.6
Provide enrichment activities during summer	9	75.0	13	81.3	17	73.9	17	73.9
Provide an opportunity for teachers to take on organizational and leadership roles in summer Institutes	7	58.3	9	56.3	11	47.8	12	52.2
Provide opportunities for participants to get hands-on experiences during the summer Institute	7	58.3	9	56.3	11	47.8	13	56.5
Require teachers to complete an evidence-based project, using knowledge from the institutes in their own classrooms	6	50.0	8	50.0	12	52.2	12	52.2
Provide opportunities during the summer Institute for teachers and administrators to meet together (with or without university faculty) and discuss strategies for school-based leadership and develop a plan for how teacher leaders will impact teachers at their school	7	58.3	8	50.0	14	60.9	15	65.2
Provide curriculum resources to teacher participants during the Institute	11	91.7	13	81.3	19	82.6	19	82.6
Other	2	16.7	2	12.5	3	13.0	4	17.4

Table A.6.30. Institutes' academic year activities targeted to K–12 teachers and administrators: Annual cumulative unduplicated counts, Institute projects

Activity	2004–05 (n = 8 projects)		2005–06 (n = 8 projects)		2006–07 (n = 12 projects)	
	Number	Percent	Number	Percent	Number	Percent
Conduct workshops/courses with K–12 teachers that increase content and/or pedagogical knowledge	5	62.5	6	75.0	9	75.0
Conduct targeted workshops/courses with K–12 teachers	1	12.5	3	37.5	3	25.0
Conduct workshops/courses with K–12 teachers on utilizing technology for course content innovation	3	37.5	4	50.0	8	66.7
Organize and/or provide site-specific workshops/courses relevant for partner K–12 school districts	1	12.5	2	25.0	3	25.0
Conduct courses with K–12 teachers that increases their ability to use assessment data to inform their teaching	2	25.0	4	50.0	6	50.0
Conduct courses with K–12 teachers that increase their ability to use research to inform their teaching	4	50.0	7	87.5	9	75.0
Facilitate online workshops and/or courses during the academic year for Institute participants	2	25.0	4	50.0	7	58.3
Establish/provide adjunct positions for K–12 teacher leaders at the partner IHEs	1	12.5	1	12.5	3	25.0
Provide externship opportunities for K–12 teachers	0	0.0	0	0.0	0	0.0
Provide preservice professional development opportunities	2	25.0	2	25.0	3	25.0
Provide curriculum resources to teacher participants after completion of the Institute	3	37.5	6	75.0	8	66.7
Establish/provide STEM in-person or online learning communities/study groups	1	12.5	3	37.5	9	75.0
Have IHE faculty remain "on call" for classroom teachers	4	50.0	7	87.5	10	83.3
Provide mentoring and instruction on professional development strategies and other leadership responsibilities	3	37.5	6	75.0	10	83.3
Provide access to a network of regional professional development groups made up of IHE faculty members, as well as teachers, where they are able to build on the summer Institute activities	0	0.0	1	12.5	5	41.7
Establish regular, organized meetings of teacher leaders within K–12 districts during the academic year	2	25.0	4	50.0	7	58.3
Work with K–12 building staff to facilitate the work of the teacher leaders	2	25.0	6	75.0	8	66.7
Increase collaborative activities between IHE faculty and regional school systems to improve K–12 instruction and learning	3	37.5	5	62.5	6	50.0
Establish new/modified degree or certification program at your IHE partners as a result or part of the Institute	5	62.5	6	75.0	9	75.0
Encourage IHE partners to make improvements of K–12 instruction and learning a core portion of their departmental responsibilities	1	12.5	1	12.5	4	33.3
Other	1	12.5	1	12.5	2	16.7

Table A.6.30. Institutes' academic year activities targeted to K–12 teachers and administrators: Annual cumulative unduplicated counts, Institute projects

Activity	2007–08 (n = 12 projects)		2008–09 (n = 16 projects)		2009–10 (n = 23 projects)		2010–11 (n = 23 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Conduct workshops/courses with K–12 teachers that increase content and/or pedagogical knowledge	11	91.7	15	93.8	18	78.3	20	87.0
Conduct targeted workshops/courses with K–12 teachers	4	33.3	7	43.8	8	34.8	9	39.1
Conduct workshops/courses with K–12 teachers on utilizing technology for course content innovation	9	75.0	10	62.5	12	52.2	13	56.5
Organize and/or provide site-specific workshops/courses relevant for partner K–12 school districts	6	50.0	8	50.0	8	34.8	11	47.8
Conduct courses with K–12 teachers that increases their ability to use assessment data to inform their teaching	8	66.7	10	62.5	14	60.9	14	60.9
Conduct courses with K–12 teachers that increase their ability to use research to inform their teaching	11	91.7	14	87.5	18	78.3	18	78.3
Facilitate online workshops and/or courses during the academic year for Institute participants	7	58.3	9	56.3	10	43.5	13	56.5
Establish/provide adjunct positions for K–12 teacher leaders at the partner IHEs	5	41.7	7	43.8	7	30.4	8	34.8
Provide externship opportunities for K–12 teachers	0	0.0	0	0.0	2	8.7	4	17.4
Provide preservice professional development opportunities	4	33.3	4	25.0	4	17.4	4	17.4
Provide curriculum resources to teacher participants after completion of the Institute	9	75.0	11	68.8	14	60.9	17	73.9
Establish/provide STEM in-person or online learning communities/study groups	9	75.0	13	81.3	15	65.2	16	69.6
Have IHE faculty remain "on call" for classroom teachers	10	83.3	13	81.3	17	73.9	18	78.3
Provide mentoring and instruction on professional development strategies and other leadership responsibilities	12	100.0	14	87.5	17	73.9	22	95.7
Provide access to a network of regional professional development groups made up of IHE faculty members, as well as teachers, where they are able to build on the summer Institute activities	8	66.7	10	62.5	11	47.8	11	47.8
Establish regular, organized meetings of teacher leaders within K–12 districts during the academic year	9	75.0	12	75.0	14	60.9	16	69.6
Work with K–12 building staff to facilitate the work of the teacher leaders	9	75.0	11	68.8	13	56.5	18	78.3
Increase collaborative activities between IHE faculty and regional school systems to improve K–12 instruction and learning	6	50.0	9	56.3	12	52.2	14	60.9
Establish new/modified degree or certification program at your IHE partners as a result or part of the Institute	9	75.0	10	62.5	12	52.2	15	65.2
Encourage IHE partners to make improvements of K–12 instruction and learning a core portion of their departmental responsibilities	5	41.7	6	37.5	9	39.1	9	39.1
Other	2	16.7	2	12.5	3	13.0	3	13.0

Table A.6.31. Institutes' primary professional development foci for teacher leaders: Annual cumulative unduplicated counts, Institute projects

Primary focus	2004–05 (n = 8 projects)		2005–06 (n = 8 projects)		2006–07 (n = 12 projects)	
	Number	Percent	Number	Percent	Number	Percent
Building depth within one or more disciplines or subdisciplines in mathematics or the sciences	8	100.0	8	100.0	12	100.0
Exploring newer or cross-disciplinary themes at the research frontiers of mathematics, the sciences, and/or engineering	1	12.5	2	25.0	4	33.3
Developing strategies to cultivate student enthusiasm and interest in science and/or mathematics	3	37.5	4	50.0	7	58.3
Developing leadership skills	8	100.0	8	100.0	12	100.0
Developing strategies for making curricula more challenging	4	50.0	6	75.0	11	91.7
Implementing teaching methods that reflect contemporary research findings on effective classroom practice and the science of learning	8	100.0	8	100.0	12	100.0
Other	1	12.5	1	12.5	2	16.7

Table A.6.31. Institutes' primary professional development foci for teacher leaders: Annual cumulative unduplicated counts, Institute projects—continued

Primary focus	2007–08 (n = 12 projects)		2008–09 (n = 16 projects)		2009–10 (n = 23 projects)		2010–11 (n = 23 projects)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Building depth within one or more disciplines or subdisciplines in mathematics or the sciences	12	100.0	16	100.0	23	100.0	23	100.0
Exploring newer or cross-disciplinary themes at the research frontiers of mathematics, the sciences, and/or engineering	4	33.3	6	37.5	8	34.8	9	39.1
Developing strategies to cultivate student enthusiasm and interest in science and/or mathematics	9	75.0	12	75.0	18	78.3	18	78.3
Developing leadership skills	12	100.0	16	100.0	23	100.0	23	100.0
Developing strategies for making curricula more challenging	11	91.7	11	68.8	15	65.2	20	87.0
Implementing teaching methods that reflect contemporary research findings on effective classroom practice and the science of learning	12	100.0	16	100.0	22	95.7	22	95.7
Other	2	16.7	4	25.0	5	21.7	5	21.7

Table A.6.32. Institutes' criteria for selecting teacher leaders: Annual cumulative unduplicated counts, Institute projects

Criterion	2004–05 (n = 8 projects)						2005–06 (n = 8 projects)					
	Required criterion at some point over time		Preferred criterion but never required		Never a criterion		Required criterion at some point over time		Preferred criterion but never required		Never a criterion	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Minimum number of years of experience	2	25.0	4	50.0	2	25.0	4	50.0	5	62.5	2	25.0
Credentials	4	50.0	1	12.5	3	37.5	6	75.0	4	50.0	3	37.5
Degree attainment	4	50.0	2	25.0	2	25.0	6	75.0	2	25.0	3	37.5
Demographic characteristics of school	0	0.0	3	37.5	5	62.5	1	12.5	3	37.5	5	62.5
Level taught	4	50.0	3	37.5	1	12.5	5	62.5	3	37.5	2	25.0
Geographical location	7	87.5	1	12.5	0	0.0	8	100.0	1	12.5	1	12.5
Other	2	25.0	2	25.0	0	0.0	2	25.0	3	37.5	0	0.0

Table A.6.32. Institutes' criteria for selecting teacher leaders: Annual cumulative unduplicated counts, Institute projects—continued

Criterion	2006–07 (n = 12 projects)						2007–08 (n = 12 projects)					
	Required criterion at some point over time		Preferred criterion but never required		Never a criterion		Required criterion at some point over time		Preferred criterion but never required		Never a criterion	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Minimum number of years of experience	5	41.7	6	50.0	6	50.0	7	58.3	7	58.3	6	50.0
Credentials	9	75.0	5	41.7	5	41.7	9	75.0	6	50.0	5	41.7
Degree attainment	9	75.0	2	16.7	5	41.7	10	83.3	4	33.3	5	41.7
Demographic characteristics of school	3	25.0	3	25.0	8	66.7	3	25.0	5	41.7	8	66.7
Level taught	9	75.0	4	33.3	3	25.0	10	83.3	5	41.7	3	25.0
Geographical location	11	91.7	2	16.7	3	25.0	11	91.7	3	25.0	3	25.0
Other	4	33.3	5	41.7	0	0.0	4	33.3	5	41.7	0	0.0

Table A.6.32. Institutes' criteria for selecting teacher leaders: Annual cumulative unduplicated counts, Institute projects—continued

Criterion	2008–09 (n = 16 projects)						2009–10 (n = 23 projects)					
	Required criterion at some point over time		Preferred criterion but never required		Never a criterion		Required criterion at some point over time		Preferred criterion but never required		Never a criterion	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Minimum number of years of experience	9	56.3	9	56.3	7	43.8	12	52.2	15	65.2	9	39.1
Credentials	13	81.3	7	43.8	6	37.5	18	78.3	12	52.2	7	30.4
Degree attainment	13	81.3	4	25.0	9	56.3	18	78.3	8	34.8	10	43.5
Demographic characteristics of school	4	25.0	7	43.8	11	68.8	5	21.7	12	52.2	16	69.6
Level taught	14	87.5	8	50.0	3	18.8	19	82.6	9	39.1	4	17.4
Geographical location	13	81.3	5	31.3	5	31.3	19	82.6	5	21.7	8	34.8
Other	7	43.8	6	37.5	0	0.0	10	43.5	6	26.1	0	0.0

Table A.6.32. Institutes' criteria for selecting teacher leaders: Annual cumulative unduplicated counts, Institute projects—continued

Criterion	2010–11 (n = 23 projects)					
	Required criterion at some point over time		Preferred criterion but never required		Never a criterion	
	Number	Percent	Number	Percent	Number	Percent
Minimum number of years of experience	12	52.2	17	73.9	10	43.5
Credentials	19	82.6	13	56.5	10	43.5
Degree attainment	18	78.3	9	39.1	13	56.5
Demographic characteristics of school	6	26.1	12	52.2	18	78.3
Level taught	20	87.0	11	47.8	4	17.4
Geographical location	20	87.0	5	21.7	9	39.1
Other	10	43.5	6	26.1	0	0.0