Attachment A

OMB # 3145-0199
Expires: x/xx/xx

Math and Science Partnership Program

Annual Survey for Partnership Projects

Sponsored by the
National Science Foundation

Conducted by
Westat
1650 Research Boulevard
Rockville, Maryland 20850

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Paperwork Reduction Act Notice. The Paperwork Reduction Act of 1995 says we must tell you why we are collecting this information, how we will use it and whether you have to give it to us. The reasons and purpose of this survey are described in the introduction and instructions for this survey and your response is voluntary. Failure to provide full and complete information, however, may reduce the possibility of NSF continuing support for the award or project subject to this monitoring survey. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The OMB control number for this survey is 3145-0199. The estimated average burden associated with this collection of information is 55 hours per response, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing the burden should be sent to Suzanne Plimpton, Reports Clearance Officer for OMB 3145-0199, NSF/DAAS, 4201Wilson Boulevard, Arlington, VA 22230.

Annual Survey for Partnership Projects for the [INSERT SCHOOL YEAR] school year

The National Science Foundation (NSF) is conducting an annual survey of its Math and Science Partnership (MSP) projects. The purpose is to assess the overall implementation of the MSP program and to monitor the progress of individual MSP grants.

INSTRUCTIONS FOR COMPLETING THE SURVEY

Before responding to the survey, it is recommended that you review the **Primer**, which can be accessed electronically by clicking on "Help" in the menu on the top of the page. The primer provides information about how to respond to individual collection items and navigate the online system.

You **MUST** begin this survey by completing the **Administrative Section**, which can be accessed by clicking on "Admin" in the menu on the top of the page. This section will allow you to create login names and passwords for all other system users.

As you are completing this survey, please click the Save & Continue button after you respond to each item. Once an item or section is saved, you may use the menu below or the Question Guides to return to an item and revise your response. If you exit the system without saving, you will lose any unsaved data.

To print and view completed sections of this survey, click on "Reports" in the menu on the top of the page.

Please complete each of the following sections of the Annual Survey for Partnership Projects as they pertain to your MSP. You must complete and submit this survey by November XX, 20XX. A check mark to the left of a section indicates that the section is complete.

MSP Project Scope	Lead Organization and Project Leadership	Partner Organizations	Project Evaluators
Partnership-Driven Activities	Institutional Change and Sustainability Activities	Evidence-based Design and Outcomes Activities	Teacher Quality, Quantity, and Diversity Activities
Challenging Courses and Curricula Activities: Mathematics[1]	Challenging Courses and Curricula Activities: Science[2]	RETA Involvement	
Report Status: **Not Complete**			

[1] To be completed by projects with a mathematics focus.

[2] To be completed by projects with a science focus.

Information about MSP Project Scope

This section collects information on the grade levels and subject area that your MSP is designed to address in each year of your MSP project.

1. **Use the table below to indicate the PreK-12 grade levels that your MSP is designed to address in <u>each</u> year of your project by subject focus:** *(check <u>all</u> cells that apply)*

[YEARS 6–8 ADDED IN 2008-09]
NOTE: Please complete the following table for the years in which your project has been funded by NSF. If your project is currently operating on your initial MSP grant from NSF, please complete the columns for years 1 through 5. Years 6, 7, and 8 are extension years and should only be completed if your project has received a one, two, or three-year extension from NSF. For example, if your project has completed its initial five-year grant and been awarded a two-year extension, please complete the columns for years 1 through 7.

Grade	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Math								
PreK								
K								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
Science								
PreK								
K								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

Information about the Lead Organization and Project Leadership

This section collects information about the lead organization for your MSP, which is defined as the lead fiscal agent.

1. **Lead organization name:**[3] _____

2. **Which of the following best describes this organization?** (*Check <u>one</u> response)*

   - ❑ Institution of Higher Education (IHE)
   - ❑ Higher education system/consortium
   - ❑ K-12 school district
   - ❑ County, regional or state educational agency
   - ❑ Non-profit private organization focused on K-12 math or science education
   - ❑ Other (specify): _____

3. **Provide the following contact information for the Principal Investigator:**[4]

   Name: _____

   Title: _____

   Street address: _____

   City: _____

   State: _____

   Zip code: _____

   Phone number: _____

   Fax number: _____

   E-mail: _____

   Web address: _____

[3] This item will be pre-filled in future years. The online system will allow for organization name change.

[4] This is how this item will appear in the first year that a project completes this collection. In subsequent years, the text for this item will read as follows: "**Please review and update the following contact information for the Principal Investigator:**"

4. Provide the following contact information for the Project Director: [5]

Name: _____

Organization: _____

Title: _____

Street address: _____

City: _____

State: _____

Zip code: _____

Phone number: _____

Fax number: _____

E-mail: _____

Web address: _____

[5] This is how this item will appear in the first year that a project completes this collection. In subsequent years, the text for this item will read as follows: "**Please review and update the following contact information for the Project Director:**"

Information about Partner Organizations

This section collects information about <u>each</u> partner organization involved in the MSP project. In completing this section, be sure to provide information about <u>all</u> of the core and supporting partners that are affiliated with your MSP. Please note that information about the lead organization is collected in a separate section.

To add a partner organization, click on the *Add Partner Organization* button below.

Note—Question 1 of this section asks for the partner organization name. As you are entering the names of K-12 district and IHE partner organizations, it is highly recommended that you print out the completed administrative section and copy the names of the districts/IHEs exactly as they appear into the Question 1 text field. Each active district/IHE listed in the administrative section must be entered as a partner organization in this section.

To provide or update information on a partner organization listed below, click on the link in the matrix (in the column titled *Partner Organization Name*).

Partner Organization Name	Core/Supporting Partner	Contact	Information Complete?
(from Q1)	(from Q2)	(from Q4)	(yes or no)

If you have entered information on all partner organizations, please click the button to the right to submit this section and return to the survey menu.

1. **Partner organization name:**[6] _____

2. **Is this organization a core or supporting partner?** *(Check <u>one</u> response)*

   NOTE—Cohort 1 projects should use the definitions listed below for core and supporting partners to classify each of their partners—even though these definitions were introduced in Year 2 of the MSP program.

   - ❑ **Core partner** (i.e., a partner that shares responsibility *and* accountability for the MSP project. All core partner organizations ARE REQUIRED to provide evidence of their commitment to undergo the coordinated institutional change necessary to sustain the partnership effort beyond the funding period.)
   - ❑ **Supporting partner** (i.e., a partner that is not required to commit to the institutional change necessary to sustain project activities beyond the funding period, but is an important stakeholder/stakeholder organization in K-12 mathematics and science education.)

3. **Which of the following best describes this organization?** (*Check <u>one</u> response)*

   - ❑ Institution of Higher Education (IHE)
   - ❑ Higher education system/consortium
   - ❑ K-12 school district
   - ❑ County, regional or state education agency
   - ❑ Other government agency (i.e., non-education)
   - ❑ Business or industry organization
   - ❑ Community organization
   - ❑ Science center or museum
   - ❑ Disciplinary or professional society
   - ❑ Research laboratory
   - ❑ Dissemination or implementation center
   - ❑ Private foundation
   - ❑ Public or private organization (such as educational research organization, business roundtable or chamber of commerce)
   - ❑ Other (specify): _____

[6] This item will be pre-filled in future years. The online system will allow for organization name change.

4. **Provide the following information for the primary MSP contact at this partner organization:**

Name: _____

Title: _____

Street address: _____

City: _____

State: _____

Zip code: _____

Phone number: _____

Fax number: _____

E-mail: _____

Web address: _____

Information about Project Evaluators

This section collects information on <u>each</u> organization or consultant that is conducting an independent evaluation of the implementation and/or impact of your MSP.

To add an evaluator, click on the *Add Project Evaluator* button below.

To provide or update information on an evaluator listed below, click on the link in the matrix (in the column titled *Organization Name*).

Organization Name	Name of Primary Contact	Information Complete?
(from Q1)	(from Q1)	(yes or no)

If you have completed entering information on all evaluators, please click the button to the right to submit this section and return to the survey menu.

1. **Provide the following contact information for the organization or consultant that is conducting an independent evaluation of the implementation and/or impact of your MSP:**

Name of primary contact: _____

Organization: _____

Street address: _____

City: _____

State: _____

Zip code: _____

Phone number: _____

Fax number: _____

E-mail: _____

Web address: _____

2. **Which of the following best describes the organization to which this evaluator belongs?** (*Check <u>one</u> response)*

- ❑ IHE or higher education system that <u>is</u> a partner organization of this MSP
- ❑ IHE or higher education system that is <u>not</u> a partner organization of this MSP
- ❑ Private firm
- ❑ Non-profit organization
- ❑ Other (specify): _____
- ❑ Not applicable

3. **Describe any significant evaluation *activities* (e.g., data collection or analysis) that were conducted by this evaluator during the [INSERT SCHOOL YEAR] school year to assess the implementation and/or impact of your MSP.**

   NOTE—your response to this item should not exceed two paragraphs.

4. **Describe any noteworthy *findings* that this evaluator reported during the [INSERT SCHOOL YEAR] school year regarding the implementation and/or impact of your MSP.**

   NOTE—you may be asked by NSF at a later date to provide documentation supporting any quantitative or qualitative findings reported by your evaluator. Your response to this item should not exceed two paragraphs.

Information about *Partnership-Driven* Activities Conducted During the Previous School Year

This section collects information on the contributions of your partners—as well as steps taken by your MSP to establish and maintain your partnership during the previous school year.

1. **Indicate the number of non-academic individuals that <u>developed</u> and/or <u>delivered</u> MSP activities during the [INSERT SCHOOL YEAR] school year:** *(enter '0' where applicable)*

   NOTE—include individuals from <u>both</u> core and supporting partner organizations. Information on the contributions of IHE and K-12 partners is collected in a separate section.

	Number of non-academic individuals	**Which of the following organization types were these non-academic participants employed by or affiliated with?** *(check <u>all</u> that apply)*
Scientists		❑ A business or industry organization ❑ A science center or museum ❑ A disciplinary or professional society ❑ A research laboratory ❑ A private foundation ❑ A public employer ❑ Other (specify):
Mathematicians		❑ A business or industry organization ❑ A science center or museum ❑ A disciplinary or professional society ❑ A research laboratory ❑ A private foundation ❑ A public employer ❑ Other (specify):
Engineers		❑ A business or industry organization ❑ A science center or museum ❑ A disciplinary or professional society ❑ A research laboratory ❑ A private foundation ❑ A public employer ❑ Other (specify):
Other (specify):		❑ A business or industry organization ❑ A science center or museum ❑ A disciplinary or professional society ❑ A research laboratory ❑ A private foundation ❑ A public employer ❑ Other (specify):

2. **Describe any steps that were taken during the [INSERT SCHOOL YEAR] school year to recruit STEM faculty and other disciplinary experts for the MSP.**

NOTE—your response to this item should not exceed two paragraphs.

_____
_____
_____

3. **To what extent did <u>each</u> of the following hinder your efforts to engage or organize your partners during the [INSERT SCHOOL YEAR] school year?**[7]

NSF encourages candor in your response to this question. Valuable lessons learned on a project are often the result of unanticipated or unavoidable events. Describing your project's experiences in resolving these challenges will help NSF staff provide assistance to other projects that are having similar difficulties.

a. Lack of time or other resources among *IHE* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

b. Lack of time or other resources among *K-12* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

c. Lack of time or other resources among *other* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all
- ❑ Not applicable

d. Low levels of commitment or interest among *IHE* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

[7]NOTE: The following question should appear each time that respondents indicate "To a large extent" or "To a moderate extent:" **Why did this issue occur—and what steps were taken to overcome this challenge?** Text responses should be limited to 1-2 paragraphs.

e. Low levels of commitment or interest among *K-12* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

f. Low levels of commitment or interest among *other* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all
- ❑ Not applicable

g. Lack of flexibility among *IHE* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

h. Lack of flexibility among *K-12* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

i. Lack of flexibility among *other* partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all
- ❑ Not applicable

j. Conflicting goals or missions among all MSP partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

k. Unbalanced levels of authority and decision making ability among core MSP partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

l. Poor communication among all MSP partners *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

m. Other (specify): _____ *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

4. What lessons have you learned regarding efforts to engage partners that would be of use to other MSP projects?

NOTE—your response to this item should not exceed two paragraphs.

_____
_____
_____

Information about *Institutional Change and Sustainability* Activities Conducted During the Previous School Year

This section collects information on the efforts of your K-20 core partner organizations to redirect resources and design and implement new policies and practices to result in well-documented, inclusive and coordinated institutional change at both the college/university and the local school district levels.

1. **Describe any new practices or policies that your IHE partners implemented during the [INSERT SCHOOL YEAR] school year to reward IHE STEM faculty for (a) strengthening their own teaching practices or (b) participating in K-20 teacher preparation and professional development programs.**

   NOTE—your response should be limited to 1-2 summary paragraphs that include examples and indicate the scope of change (i.e., change occurred at one partner IHE, change occurred at all partner IHEs). As part of your response, you should also describe any impacts that can be directly or indirectly attributed to these new policies and practices (e.g., an increase in IHE STEM faculty participation in pre-service programs).

2. **Describe any new practices or policies that your IHE partners implemented during the [INSERT SCHOOL YEAR] school year to encourage IHE STEM faculty to take responsibility and accountability for MSP project goals** *(e.g., tie bonuses or tenure to achievement of MSP goals).*

   NOTE—your response should be limited to 1-2 summary paragraphs that include examples and indicate the scope of change (i.e., change occurred at one partner IHE, change occurred at all partner IHEs). As part of your response, you should also describe any impacts that can be directly or indirectly attributed to these new policies and practices.

3. **Describe any new practices or policies that your K-12 partners implemented during the [INSERT SCHOOL YEAR] school year to bring about institutional change** *(e.g., through the redirection of resources).*

   NOTE—your response should be limited to 1-2 summary paragraphs that include examples and indicate the scope of change (i.e., change occurred at one partner K-12 district, change occurred at all partner K-12 schools). As part of your response, you should also describe any impacts that can be directly or indirectly attributed to these new policies and practices.

4. **Describe any steps taken during the [INSERT SCHOOL YEAR] school year to encourage the long-term involvement and commitment of non-academic mathematicians, scientists and/or engineers to participate in the improvement of K-20 educational practices.**

   NOTE—your response should be limited to 1-2 summary paragraphs that include specific examples. As part of your response, you should also describe any impacts that can be directly or indirectly attributed to these new policies and practices (e.g., an increase in participation by non-academic scientists in K-12 classrooms).

5. Describe any steps taken during the [INSERT SCHOOL YEAR] school year to maximize the participation of parents and other community members in the improvement of K-20 educational practices.

NOTE—your response should be limited to 1-2 summary paragraphs that include specific examples. As part of your response, you should also describe any impacts that can be directly or indirectly attributed to these new policies and practices (e.g., an increase in participation by parents in K-12 classrooms).

Information about *Evidence-based Design and Outcomes* Activities Conducted During the Previous School Year

This section collects information on the efforts of your MSP to make use of data to inform the design and implementation of your project.

1. **Provide examples of how data that your project has collected about your own MSP informed the design or implementation of your project during the [INSERT SCHOOL YEAR] school year.**

   _____
   _____
   _____

2. **To what extent did each of the following hinder your efforts to make use of data to assess the implementation and impact of your MSP during the [INSERT SCHOOL YEAR] school year?** [8]

   NSF encourages candor in your response to this question. Valuable lessons learned on a project are often the result of unanticipated or unavoidable events. Describing your project's experiences in resolving these challenges will help NSF staff provide assistance to other projects that are having similar difficulties.

a. Obtaining data about *IHE faculty* who are participating in MSP-related activities *(check <u>one</u> response)* ❑ To a large extent ❑ To a moderate extent ❑ To a small extent ❑ Not at all ❑ Not applicable
b. Obtaining data about *teachers* who are participating in MSP-related activities *(check <u>one</u> response)* ❑ To a large extent ❑ To a moderate extent ❑ To a small extent ❑ Not at all ❑ Not applicable

[8] NOTE: the following question should appear each time that respondents indicate "To a large extent" or "To a moderate extent:" **Why did this issue occur—and what steps were taken to overcome this challenge?** Text responses should be limited to 1-2 paragraphs.

c. Obtaining data about *students* who are participating in MSP-related activities *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all
- ❑ Not applicable

d. Obtaining data about *K-12 schools* that are participating in MSP-related activities *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all
- ❑ Not applicable

e. Obtaining data about *K-12 districts* that are participating in MSP-related activities *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all
- ❑ Not applicable

f. Linking student achievement data to individual K-12 teachers *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all
- ❑ Not applicable

g. Lack of available funding at the project *or* partner level *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

h. Lack of available expertise at the project *or* partner level *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

i. Other (specify): _____ *(check <u>one</u> response)*

- ❑ To a large extent
- ❑ To a moderate extent
- ❑ To a small extent
- ❑ Not at all

3. What lessons have you learned regarding efforts to collect and use data that would be of value to other MSP projects?

NOTE—your response to this item should not exceed two paragraphs.

_____

_____

Information about *Teacher Quality, Quantity and Diversity* Activities Conducted During the Previous School Year

This section collects information on the efforts of your MSP to enhance and sustain the quality and diversity of K-12 teachers of mathematics and/or the sciences by increasing the diversity of the K-12 teacher workforce, recruiting qualified individuals to the teaching profession, influencing the teacher certification process, providing for the effective induction of new teachers, establishing policies and procedures that appropriately impact teacher qualification requirements and placement, and/or increasing teacher retention rates.

In completing this section, you will be asked to review a list of activities associated with teacher quality, quantity and diversity. You will then be asked to provide additional information for <u>each</u> activity on the list that your project was developing or delivering in the [INSERT SCHOOL YEAR] school year.

1. **Using the table below, identify the pre-service recruitment and preparation activities and the in-service retention/enhancement activities that were under development or delivered by your MSP during the [INSERT SCHOOL YEAR] school year.[9]**

Pre-Service Recruitment	Activity in place during the [INSERT SCHOOL YEAR] school year?[10]
a) Provide scholarships to undergraduate students (e.g., to encourage STEM and minority undergraduates to pursue educational careers)	No
b) Create/provide teaching assistant positions for STEM undergraduate/graduate students (e.g., to allow STEM undergraduates to experience formal instruction and to encourage teaching as a career)	No
c) Create/provide opportunities for STEM undergraduate/graduate students to tutor K-20 students (e.g., undergraduate peer tutoring; tutoring in K-12 schools to allow STEM undergraduates to experience formal instruction and to encourage teaching as a career)	No, but activity is under consideration for future years
d) Invite STEM undergraduate/graduate students to help at (or participate in) K-12 special events (e.g., Invention Conventions; Lego Logo Fairs; Science Nights)	No
e) Establish/provide alternative certification programs (e.g., to encourage STEM undergraduates/career changers to pursue educational careers)	No
f) Conduct presentations at career fairs (e.g., to encourage high school students, community college students, or career changers to consider educational careers)	Yes
g) Create/provide informative materials for potential STEM teaching candidates (e.g., promotional video; promotional brochure)	No
h) Establish and/or revise course articulation agreements between 4 year institutions and community colleges (e.g., common course numbering to ease the 2 year to 4 year institution transfer)	No
i) Establish a regional plan for recruiting pre-service students that encompasses multiple MSP partners (e.g., coordinate regional participation in recruitment)	No, but activity is under consideration for future years
j) Other (specify):	

[9] NOTE: The right hand column has been filled in to illustrate a completed table.

[10] NOTE: Response options include: Yes (activity was under development or delivered); No, but activity is under consideration for future years; No.

Pre-Service Preparation	**Activity in place during the [INSERT SCHOOL YEAR] school year?**
a) Develop/revise pre-service courses to align with national and/or state standards	Yes
b) Develop/revise pre-service course content to align with local school district curricula	No
c) Provide opportunities for pre-service students to gain experience in K-12 classroom settings before formal student teaching (e.g., an internship experience; teaching at a summer STEM camp; shadowing; tutoring)	No
d) Involve IHE STEM faculty in pre-service program (e.g., co-teach a pre-service course with education faculty; co-teach a pre-service course with a K-12 master teacher; develop an inquiry lesson for a traditional pre-service course)	No, but activity is under consideration for future years
e) Involve K-12 master teachers in pre-service program (e.g., co-teach a pre-service course as an adjunct along side education faculty; co-teach a pre-service course with STEM faculty)	No
f) Design/offer pre-service STEM content courses specifically for elementary/middle/high school teacher certification programs	No
g) Link the pre-service process to national teacher certification activities (e.g., the National Board Certification process)	No
h) Invite pre-service students to take part in local school district in-service activities (e.g., in-service summer institutes or ongoing LEA professional development)	No
i) Mentor pre-service students	No
j) Other (specify):	
In-Service Retention/Enhancement	**Activity in place during the [INSERT SCHOOL YEAR] school year?**
a) Provide group induction supports for *new* STEM teachers (e.g., a highly structured and sustained group induction process to support beginning teachers)	No
b) Conduct workshops/institutes/courses with K-12 teachers that increase general content and/or pedagogical knowledge (e.g., summer science institutes; workshops on cognitive science and its impact on instruction; weekend professional development seminars)	No, but activity is under consideration for future years
c) Conduct targeted workshops/institutes/courses with K-12 teachers (e.g., conduct a summer science institute that is specifically linked to the curriculum/text used at partner schools)	No
d) Design/offer STEM content courses specifically for elementary/middle/high school teacher certification programs	No
e) Conduct activities that develop and utilize teacher leaders	Yes

f) Provide a peer coaching network for STEM teachers (e.g., emphasis upon experienced and veteran teachers, as well as beginning teachers)	No
g) Provide individual supports for STEM teachers (e.g., provide a mentor for each beginning STEM teacher; IHE faculty "on-call" for classroom teachers, discipline-based e-mentoring)	No
h) Provide administrative supports for K-12 teachers (e.g., release time for professional development; substitute teacher support; financial support for professional meetings; scheduling aid for special projects/field trips)	No
i) Establish/provide STEM study groups (e.g., lesson study groups; discipline dialogues)	No
j) Provide instructional materials for K-12 teachers	No
k) Provide externship opportunities for K-12 teachers (e.g., teachers spend a year, semester, or summer working with a MSP business/industry partner related to their discipline)	Yes
l) Establish/provide adjunct positions for K-12 master teachers at the partner IHEs	No
m) Provide professional development for IHE STEM faculty to support new roles in K-12 education	No
n) Other (specify):	

A "*Yes*" on the preceding table has generated this list of teacher quality, quantity and diversity activities. Select an activity from the list below to provide further information about that activity. Each of the listed activities must be selected to complete this section.

Teacher Quality, Quantity and Diversity Activities	Completed?
Pre-Service Recruitment Activities	
f) Conduct presentations at career fairs	
Pre-Service Preparation Activities	
a) Develop/revise pre-service courses to align with national and/or state standards	
In-Service Retention/Enhancement Activities	
e) Conduct activities that develop and utilize teacher leaders	
k) Provide externship opportunities for K-12 teachers	

Complete the following items for the in-service enhancement activity you selected: *Provide externship opportunities for K-12 teachers*[11]

1. **Provide a brief description (i.e., 250 words or less) about the purpose, scope and intensity of this activity.[12]**

   NOTE—if you have separate activities for math and science, please describe each one separately. This response will help NSF staff—and representatives from other MSPs—understand the overall approach and intended outcome of this activity.

2. **What steps were taken to design and/or implement this activity during the [INSERT SCHOOL YEAR] school year?**

   NOTE—if you have separate activities for math and science, please describe each one separately. If applicable, your response to this item should include information that can be used to quantify your level of effort for the previous school year (e.g., number of workshops held, number of K-12 teachers served, number of MSP-supported scholarships awarded).

3. **Which of the following MSP participants were responsible for designing and/or delivering this activity during the [INSERT SCHOOL YEAR] school year?** *(check all that apply)*

   NOTE—only check individuals responsible for designing or delivering this activity. Do NOT check individuals who were recipients of this activity.

   - ❑ IHE STEM faculty
   - ❑ IHE education faculty
   - ❑ IHE administrators (e.g., deans, department chairs)
   - ❑ Graduate students (including doctoral candidates)
   - ❑ Postdoctoral students
   - ❑ STEM undergraduate students
   - ❑ Pre-service undergraduate students
   - ❑ K-12 district and/or school-level administrators/staff
   - ❑ K-12 teachers
   - ❑ K-12 instructional coordinators and supervisors (e.g., curriculum specialists)
   - ❑ K-12 guidance counselors
   - ❑ Non-academic mathematicians
   - ❑ Non-academic scientists
   - ❑ Non-academic engineers
   - ❑ Other (specify): _____

4. **What is the focus of this activity?** *(check all that apply)*

   NOTE—check "None of the above" if none of the following options apply to this activity.

   - ❑ Mathematics
   - ❑ Science
   - ❑ Technology
   - ❑ Engineering

   - ❑ Content
   - ❑ Pedagogy
   - ❑ Leadership

   - ❑ Elementary
   - ❑ Middle
   - ❑ High

[11] The following is an example of the item set that would appear if the respondent selected the in-service enhancement activity: *Provide externship opportunities for K-12 teachers* from the list of activities in place.

[12] This is how this item will appear the first year an activity is developed or delivered. In subsequent years, the item will ask for the respondent to review and modify the text provided from the previous year.

- ❑ None of the above

Information about *Mathematics Challenging Courses and Curricula* Activities Conducted During the Previous School Year[13]

This section collects information on the efforts of your MSP to ensure that the K-12 students in your participating school districts are prepared for, have access to and are encouraged to participate in and succeed in challenging mathematics courses and curricula.

In completing this section, you will be asked to review a list of activities associated with mathematics challenging courses and curricula. You will then be asked to provide additional information for <u>each</u> activity on the list that your project was developing or delivering in the previous school year.

[13] To be completed by projects with a mathematics focus.

1. **Using the table below, identify the challenging courses and curricula activities that were under development or delivered by your MSP during the [INSERT SCHOOL YEAR] school year.[14]**

Mathematics Challenging Courses and Curricula Activities	Activity in place during the [INSERT SCHOOL YEAR] school year?[15]
a) Align challenging mathematics curricula to other courses/standards (e.g., align to state standards; align to IHE expectations; articulate K-8 curricula with high school curricula)	No
b) Support expert review of challenging mathematics course curricula (e.g., mathematicians update curriculum based on current research; IHE mathematics faculty review curriculum for content accuracy)	Yes
c) Adopt, adapt, and/or implement evidence-based mathematics curricula	No
d) Implement standards-based mathematics curricula	No
e) Emphasize the importance of K-12 gateway courses (e.g., reduce sections of 8th grade general math in favor of increased sections of algebra; promote pathway towards 12th grade calculus)	No
f) Utilize technology for content innovation (e.g., introduce mathematical modeling; create access to digital images in online libraries)	No
g) Offer challenging mathematics courses via computer-communications technology (e.g., offer distance learning opportunities; offer Advanced Placement (AP) courses taught by IHE faculty via video-conferencing)	No
h) Provide traditional mathematics courses at alternative venues (e.g., students take credit bearing courses at a local museum or university)	Yes
i) Develop/re-design traditional mathematics units or courses for in-depth immersion in a single topic (e.g., restructure school schedules and classroom time to allow for concentration on a single topic)	No
j) Offer activities that motivate K-12 student participation in challenging mathematics courses (e.g., establish a mathematics student club; inaugurate Career Awareness days)	No, but activity is under consideration for future year
k) Encourage high school student enrollment in IHE mathematics courses	No
l) Provide focused support/tutoring for K-12 students (e.g., provide students with extended learning opportunities; create a tutoring center to work with low performing students)	No
m) Implement efforts to increase time spent on mathematics at elementary school level	No
n) Provide guidance counselors with professional development on challenging mathematics courses	No
o) Provide outreach on challenging mathematics courses to parents	No

[14] NOTE: The right hand column has been filled in to illustrate a completed table.

[15] NOTE: Response options include: Yes (activity was under development or delivered); No, but activity is under consideration for future years; No. The system is designed to mirror the functionality of the USP collection—i.e., additional information would be requested for all activities for which the response was "Yes."

p) Other (specify):	

A "*Yes*" on the preceding table has generated this list of challenging courses and curricula activities. Select an activity from the list below to provide further information about that activity. Each of the listed activities must be selected to complete this section.

Mathematics Challenging Courses and Curricula Activities	Completed?
b) Support expert review of challenging mathematics course curricula	
h) Provide traditional mathematics courses at alternative venues	

Complete the following items for the activity you selected: *Support expert review of challenging mathematics course curricula*[16]

1. **Provide a brief description (i.e., 250 words or less) about the purpose, scope and intensity of the activity.**[17]

   NOTE—this is a one-time response that will help NSF staff—and representatives from other MSPs—understand the overall approach and intended outcome of this activity.

2. **What steps were taken to design and/or implement this activity during the [INSERT SCHOOL YEAR] school year?**

   NOTE—if applicable, your response to this item should include information that can be used to quantify your level of effort for the previous school year (e.g., number of guidance counselors receiving professional development).

3. **Which of the following MSP participants were responsible for designing and/or providing this activity during the [INSERT SCHOOL YEAR] school year?** *(check <u>all</u> that apply)*

   NOTE—only check individuals responsible for designing or delivering this activity. Do NOT check individuals who were recipients of this activity.

   - ❑ IHE STEM faculty
   - ❑ IHE education faculty
   - ❑ IHE administrators (e.g., deans, department chairs)
   - ❑ Graduate students (including doctoral candidates)
   - ❑ Postdoctoral students
   - ❑ STEM undergraduate students
   - ❑ Pre-service undergraduate students
   - ❑ K-12 district and/or school-level administrators/staff
   - ❑ K-12 teachers
   - ❑ K-12 instructional coordinators and supervisors (e.g., curriculum specialists)
   - ❑ K-12 guidance counselors
   - ❑ Non-academic mathematicians
   - ❑ Non-academic scientists
   - ❑ Non-academic engineers
   - ❑ Other (specify): _____

4. **What was the school-level focus of this activity?** *(check <u>all</u> that apply)*

   - ❑ Elementary
   - ❑ Middle
   - ❑ High

[16] The following is an example of the item set that would appear if the respondent selected the activity: *Support expert review of challenging course curricula* from the list of activities in place.

[17] This is how this item will appear the first year an activity is developed or delivered. In subsequent years, the item will ask for the respondent to review and modify the text provided from the previous year.

Information about *Science Challenging Courses and Curricula* Activities Conducted During the Previous School Year[18]

This section collects information on the efforts of your MSP to ensure that the K-12 students in your participating school districts are prepared for, have access to and are encouraged to participate in and succeed in challenging science courses and curricula.

In completing this section, you will be asked to review a list of activities associated with science challenging courses and curricula. You will then be asked to provide additional information for <u>each</u> activity on the list that your project was developing or delivering in the previous school year.

[18] To be completed by projects with a science focus.

1. **Using the table below, identify the challenging courses and curricula activities that were under development or delivered by your MSP during the [INSERT SCHOOL YEAR] school year.[19]**

Science Challenging Courses and Curricula Activities	Activity in place during the [INSERT SCHOOL YEAR] school year?[20]
a) Align challenging science curricula to other courses/standards (e.g., align to state standards; align to IHE expectations; articulate K-8 curricula with high school curricula)	No
b) Support expert review of challenging science course curricula (e.g., scientists update curriculum based on current research; IHE science faculty review curriculum for content accuracy)	No
c) Adopt, adapt, and/or implement evidence-based science curricula	No
d) Implement standards-based science curricula	No
e) Emphasize the importance of K-12 gateway courses (e.g., promote pathway towards AP science course taking)	Yes
f) Utilize technology for content innovation (e.g., use technology for online experiments; create access to digital images in online libraries)	No
g) Offer challenging science courses via computer-communications technology (e.g., offer distance learning opportunities; offer Advanced Placement (AP) courses taught by IHE faculty via video-conferencing)	Yes
h) Provide traditional science courses at alternative venues (e.g., students take credit bearing courses at a local science museum or university)	Yes
i) Develop/re-design traditional science units or courses for in-depth immersion in a single topic (e.g., restructure school schedules and classroom time to allow for concentration on a single topic)	No
j) Offer activities that motivate K-12 student participation in challenging science courses (e.g., invite scientists to sponsor a hands-on event at a K-12 school; establish a science student club; inaugurate Career Awareness days)	No, but activity is under consideration for future year
k) Encourage high school student enrollment in IHE science courses	No
l) Provide focused support/tutoring for K-12 students (e.g., provide students with extended learning opportunities; create tutoring center to work with low performing students)	No
m) Implement efforts to increase time spent on science at elementary school level	No
n) Provide guidance counselors with professional development on challenging science courses	No
o) Provide outreach on challenging science courses to parents	No
p) Other (specify):	

[19] NOTE: The right hand column has been filled in to illustrate a completed table.

[20] NOTE: Response options include: Yes (activity was under development or delivered); No, but activity is under consideration for future years; No. The system is designed to mirror the functionality of the USP collection—i.e., additional information would be requested for all activities for which the response was "Yes."

A "*Yes*" on the preceding table has generated this list of challenging courses and curricula activities. Select an activity from the list below to provide further information about that activity. Each of the listed activities must be selected to complete this section.

Science Challenging Courses and Curricula Activities	Completed?
e) Emphasize the importance of K-12 gateway courses	
g) Offer challenging science courses via computer-communications technology	
h) Provide traditional science courses at alternative venues	

Complete the following items for the activity you selected: *Emphasize the importance of K-12 gateway courses*[21]

1. **Provide a brief description (i.e., 250 words or less) about the purpose, scope and intensity of the activity.[22]**

   NOTE—this is a one-time response that will help NSF staff—and representatives from other MSPs—understand the overall approach and intended outcome of this activity.

2. **What steps were taken to design and/or implement this activity during the [INSERT SCHOOL YEAR] school year?**

   NOTE—if applicable, your response to this item should include information that can be used to quantify your level of effort for the previous school year (e.g., number of guidance counselors receiving professional development).

3. **Which of the following MSP participants were responsible for designing and/or providing this activity during the [INSERT SCHOOL YEAR] school year?** *(check all that apply)*

   NOTE—only check individuals responsible for designing or delivering this activity. Do NOT check individuals who were recipients of this activity.

   - ❑ IHE STEM faculty
   - ❑ IHE education faculty
   - ❑ IHE administrators (e.g., deans, department chairs)
   - ❑ Graduate students (including doctoral candidates)
   - ❑ Postdoctoral students
   - ❑ STEM undergraduate students
   - ❑ Pre-service undergraduate students
   - ❑ K-12 district and/or school-level administrators/staff
   - ❑ K-12 teachers
   - ❑ K-12 instructional coordinators and supervisors (e.g., curriculum specialists)
   - ❑ K-12 guidance counselors
   - ❑ Non-academic mathematicians
   - ❑ Non-academic scientists
   - ❑ Non-academic engineers
   - ❑ Other (specify): _____

4. **What was the school-level focus of this activity?** *(check all that apply)*

   - ❑ Elementary
   - ❑ Middle
   - ❑ High

[21] The following is an example of the item set that would appear if the respondent selected the activity: *Emphasize the importance of K-12 gateway courses* from the list of activities in place.

[22] This is how this item will appear the first year an activity is developed or delivered. In subsequent years, the item will ask for the respondent to review and modify the text provided from the previous year.