Crosswalk of Principal Investigator Survey Items to Research Questions and Uses in Analysis

Survey Item	RQ 1a	RQ 1b	RQ 1c	RQ 1d	RQ 1e	RQ 2a	RQ 2d	RQ 3c	RQ 3d	Analysis[2]
A. Status of Principal Investigator and the Noyce Program										
Current status with the Noyce Program										A
Active award during 2009-2010/last year program had Noyce funding										A
Content area discipline of department										M
Types of certifications given by the teacher certification program										M
B. Noyce Program Goals, Activities, and Administration										
Goals of respondent's Noyce Program (scale)	•									D
Activities Noyce award funds entirely or partially			•	•						M,D
Additional activities that are associated with Noyce award										
Colloboration between faculty/staff, STEM departments, and/or K-12 districts/schools		•	•		•		•	•	•	M,D
C. Noyce Award and Recipient Information										
Types of recipients that were funded by repondent's Noyce Program		•								D
Types of activities that Noyce supported for master teaching fellows			•							D
Types of activities for interns			•							D,M
Recruitment and selection of Noyce recipients		•								D
Importance of various criteria in selecting successful applicants		•								D
Other scholarship or grant opportunities in IHE to support teacher prep activities										M
Did any Noyce candidates turn down Noyce award?										M
Were there have enough qualified applicants to use all available Noyce funds?										M
Reasons potential Noyce recipients decline a Noyce award										M
D. Noyce Recipients' Activities										
Educational activities available to Noyce recipients and other teacher candidates			•	•						M,D
Educational activities required for Noyce recipients and other teacher candidates			•	•						M,D
Had any Noyce recipients in program begun employment as K-12 teachers?										M,D
Activities available to Noyce recipients after teacher prep program				•				•		D
Type of teacher preparation program (model)										D
E. Relationship among the Teacher preparation program and High-Need Districts and Schools										
Number of districts and schools teacher preparation program has relationship with									•	D
High-need districts/schools teacher preparation program has relationship									•	D
F. Perceived Impacts of the Noyce Program										
Perceived changes to IHE as a result of receiving a Noyce award						•	•			D
Other changes as a result of receiving a Noyce award							•			D
Difficulties associates with implementation of Noyce Program elements						•				D
G. Additional Information										
Month and year repondent first become PI/Co-PI										M
Tenure status as PI/Co-PI of a Noyce award										M
Number of years the respondent was PI/Co-PI/ held faculty position at IHE										M
Number of years the respondent held a faculty or administrative position at IHE										M
Tenure status										M

[1]Research Questions Answered by STEM Faculty Survey

RQ1a: What are the goals and objectives of the Noyce awards?

RQ1b: What strategies do Noyce awardees use to recruit and select Noyce candidates?

RQ1c: What activities do teacher preparation programs that have Noyce awards use to prepare Noyce recipients to teach in general, and to teach in high-need schools, in particular?

RQ1d: What activities do teacher preparation programs that have Noyce awards use to support Noyce completers once they are teaching in high-need schools/districts?

RQ1e: What activities do teacher preparation programs that have Noyce awards use to introduce Noyce interns to teaching mathematics and science as a career option?

RQ2a: What effects do PIs and STEM faculty believe the Noyce award has had on recruitment of STEM teachers, in terms of quantity, quality, and diversity, the retention of those teachers? How do they perceive the burdens imposed by the Noyce award?

RQ2d: What are STEM departmental/faculty responsibilities for preparing K-12 mathematics and science teachers? What are STEM faculty/departments perceptions of the effects of the Noyce award on their departments?

RQ3c: What supports do Noyce recipients receive in their first few years of teaching?

RQ3d: d. How do the schools in which Noyce recipients teach work with Noyce IHEs?

[2]Analysis Notes

A: indicates that the variable from this item is used for administrative purposes (e.g., backgorund information, to drive skip patterns)

D: indicates that the variable from this item is used in descriptive analysis

P: indicates that the variable from this item is used as a predictor for relational/impact analysis

O: indicates that the variable from this item is used as an outcome

C: indicates that the variable from this item is used as a control variable

M: indicates that the variable from this item could be used to describe the teaching certification program but it is not tied to a particular research

Principal Investigator Survey Items

Dear [Respondent Name],

As a current or former Principal Investigator or Co-Principal Investigator of the **Robert Noyce Teacher Scholarship program** at [IHE], you are invited to participate in a short survey about your experiences.

This survey is being conducted by Abt Associates Inc., an independent social research firm, for the National Science Foundation (NSF) to gain a better understanding of how institutions of higher education are implementing activities funded through the Noyce Program, and how the program as a whole is attracting and retaining science and math teachers. It is part of a comprehensive evaluation, the results of which will be used to make recommendations regarding the Noyce Program.

OMB Clearance Number: XXXX-XXXX	Expiration Date: XX/XX/XXXX
Burden Disclosure Statement According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection is XXXX-XXXX. Public reporting burden for this collection of information is estimated to average 45 minutes, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.	

Confidentiality and Participation

Participation in the survey is voluntary and nonparticipation will have no impact on you or your institution. You may skip questions on the survey or discontinue participation at any time. Your responses to this survey will be protected under the Privacy Act. There is minimal risk of breach of confidentiality. Procedures are in place to minimize this risk. All information that would permit identification of an individual respondent will be held in strict confidence, will be used by only persons engaged in and for the purpose of the survey, and will not be disclosed or released to others for any purpose except as required by law. Your responses will be combined with about 125 others.

If you have questions about the study, please contact the Project Director at Abt Associates, Ellen Bobronnikov, by e-mailing NoyceEval@abtassoc.com or calling (617) 349-2718.   You may also contact Connie Kubo Della-Piana, the Program Evaluation Officer at the Division of Undergraduate Education within the National Science Foundation, by e-mailing cdellapi@nsf.gov.

Completing the Survey

Please use the survey's navigation buttons (<u>not</u> your browser buttons) to move through the questionnaire. You may exit the survey by closing your browser window and returning to the survey to finish at a later time; simply click the link below and you will return to the point where you left off.

We estimate that it will take approximately 30 minutes to complete the survey. If you need help accessing the survey or navigating the screens, you may contact Paul Schroeder, the survey director at Abt SRBI, at p.schroeder@srbi.com. Or, call us toll-free at 1-888 772-4269 between 9:00 a.m. and 9:00 p.m. EDT, and ask to speak to someone about Study XXXX.

Throughout this survey, key terms will be underlined and include definitions as you roll-over the text with your mouse. For a complete list of these key terms, click here. [Add Hyperlink to Glossary].

For answers to commonly asked questions about this study, click here [Add Hyperlink].

Consent

If you agree to participate in this study, please press "Next" to continue with the survey.

Programming Instructions:

- Programming instructions are indicated in blue text.

- Terms that require rollover definitions are highlighted in blue. See Glossary at end of survey for full list of definitions.

- A text box should appear whenever a respondent selects a response option with the text "Other (Specify)", "Other (Explain)" or something similar.

- Unless otherwise indicated, only one response is allowed per question.

- If response list includes "None of the above," only allow this to be checked if all the other items are unchecked.

A. Principal Investigator Information

A1. **During the most recently completed academic year (2009-2010)**, were you the Principal Investigator (PI) or Co-Principal Investigator (Co-PI) of an active award from the National Science Foundation's Noyce Program at [IHE] (i.e., award #[Insert the PI's specific award name and number])? (Check one)

☐₁ Yes [SKIP to A4]

☐₀ No [Ask A1a]

[Programming Instructions: This question is required. If A1=1, Timing phrase = "the most recently completed academic year (2009-2010)."]

A1a. Were you ever the PI or Co-PI of an active award from the National Science Foundation's Noyce Program at [IHE] (i.e., award #[Insert the PI's specific award name and number])? (Check one)

☐₁ Yes, **prior** to academic year 2009-2010.

☐₂ Yes, during the **current** academic year, 2010-2011.

☐₃ No

[Programming Instruction: If A1 = No, A1a is <u>required</u>.]

A2. Was there an active Noyce award at [IHE] during the most recently completed academic year (2009-2010)?

☐₁ Yes [Ask A2a]

☐₀ No [See Instructions below]

☐₉₈ Don't Know [See Instructions below]

[Programming Instructions:
- If A2 ≠ Yes and A1a=2 or 3, go to "thank-you script" at the end of the survey.
- If A2 ≠ Yes and A1a=1, SKIP to A3.]

A2a. Who was the Principal Investigator of the Noyce program at [IHE] during academic year (2009-2010)?

Name:	
Title:	
E-mail:	
Phone:	

☐98 Don't Know

[Programming Instruction: Go to "thank-you script" at the end of the survey and send auto-notification to Abt staff member who will verify/add new contact information from A2a and send a new survey to the correct PI.]

A3. What was the last academic year your program had Noyce funding?

The last year [IHE] received Noyce funding was during: [dropdown menu]
• 2008-2009
• 2007-2008
• 2006-2007
• 2005-2006
• 2004-2005
• 2003-2004
• 2002-2003
• Don't Know

[Programming Instruction: Continue with this survey; timing phrase = "the last academic year your program had Noyce funding ([A3])."]

A4. Which of the following disciplines listed below are most closely aligned with the content area of your department *during [Timing Phrase]*? (Select all that apply)

☐ Biological sciences
☐ Chemistry
☐ Computer science
☐ Education
☐ Engineering
☐ Geosciences/environmental sciences
☐ Mathematics
☐ Physics
☐ Mathematics Education (i.e. preparing K-12 math teachers)
☐ Science Education (i.e. preparing K-12 science teachers)
☐ Other (Specify)

A5. *During [Timing Phrase]*, for which of the following types of certifications did your teacher preparation program(s) prepare students generally and prepare Noyce recipients specifically?

(Select all that apply. If a certification type covers two of the grand bands below (e.g., certification for grades 3-7), please check both grade bands (e.g., "elementary" and "middle school").

		Teacher preparation program students	Noyce recipients
☐₁	Elementary school		
☐₂	Middle school		
☐₃	High School		

B. Goals, Activities, and Administration of the Noyce Award

This section asks questions about your Noyce award *during* [Timing Phrase].

B1. We are interested in learning more about the goals and objectives of your Noyce award, particularly with regard to changes for K-12 STEM teachers. Please indicate on a scale of 1 to 4 how important each of the potential goals below is to your Noyce award, with "1" signifying that the goal was very unimportant and "4" that it was very important.

	Very Unimportant	Somewhat unimportant	Somewhat important	Very important
a. Increase the **number** of K-12 STEM teachers trained in your teacher preparation program	1	2	3	4
b. Increase the **quality** of K-12 STEM teachers trained in your teacher preparation program	1	2	3	4
c. Increase the number of K-12 STEM teachers in **high-need** schools or districts	1	2	3	4
d. Increase the number of K-12 STEM teachers from **under-represented minority** groups	1	2	3	4
e. Increase the number of **STEM undergraduates** who become K-12 STEM teachers	1	2	3	4
f. Increase the number of **freshman** and **sophomore** students in STEM departments who consider pursuing a career in STEM K-12 education	1	2	3	4
g. Increase the **quality** of K-12 STEM education in high-need schools or districts	1	2	3	4
h. Increase the amount of **professional support** provided to new STEM teachers	1	2	3	4
i. Develop or initiate a STEM teacher **induction** or **alternative certification** program (i.e., in which a prospective teacher begins teaching in a school prior to receiving full certification).	1	2	3	4
j. Strengthen the **relationship** between the teaching certification program and STEM departments	1	2	3	4
k. Initiate or develop **relationships with** high-need schools and districts	1	2	3	4
l. Other [Programming note: if R chooses "other," ask R to list up to 3 other goals and allow R to provide a response for each.] (Specify 1)	1	2	3	4
(Specify 2)	1	2	3	4
(Specify 3)	1	2	3	4

B2. Which of the following activities does your Noyce award fund either entirely or partly?
(Select all that apply)

		Yes	No	Don't Know
Administration Activities				
a.	Meetings among faculty from STEM and teacher education departments	☐1	☐0	☐98
b.	Meetings among faculty or staff involved in activities associates with Noyce award from your institution and K-12 school or district staff	☐1	☐0	☐98
c.	Salaries for faculty and staff who work on activities related to Noyce award	☐1	☐0	☐98
d.	Tracking recipients' progress	☐1	☐0	☐98
e.	Evaluation of the impacts of Noyce award.	☐1	☐0	☐98
f.	Dissemination about Noyce award	☐1	☐0	☐98
Activities for Noyce Recipients Enrolled in the Teacher Preparation or Internship Programs				
g.	Special **courses** or educational activities for Noyce recipients in teacher preparation programs	☐1	☐0	☐98
h.	Meetings among Noyce recipients in teacher preparation programs	☐1	☐0	☐98
i.	Activities associated with Noyce internship program designed to introduce students to K-12 STEM teaching as a career option	☐1	☐0	☐98
Activities for Former Noyce Recipients Who are Teaching in K-12 Schools				
j.	Support or mentoring of Noyce recipients beginning K-12 teaching	☐1	☐0	☐98
k.	Professional development activities for K-12 teachers in schools	☐1	☐0	☐98
l.	Meetings among Noyce recipients who are beginning K-12 teaching	☐1	☐0	☐98
m.	Courses or educational activities for Noyce recipients who are beginning K-12 teaching	☐1	☐0	☐98
n.	Mentoring for K-12 master teachers	☐1	☐0	☐98
Other Activities				
o.	Travel to meetings and conferences	☐1	☐0	☐98
p.	Other [Programming note: if R chooses "other," R may list up to 3 new activities and provide a response for each.] [Specify 1]	☐1	☐0	☐98
	[Specify 2]	☐1	☐0	☐98
	[Specify 3]	☐1	☐0	☐98

This section asks about the roles played by faculty or staff members from the <mark>teacher preparation program</mark>, <mark>STEM</mark> departments, and K-12 districts or schools in activities associated with the Noyce award. By "district or school staff" we mean: district administrators, principals, department chairs, instructional coaches or specialists, and teachers associated with your Noyce program or funding.

B3. Which of the following activities occur *as part of the Noyce award*, whether or not Noyce funding is used?

- ☐ Informational/management meetings about the Noyce award
- ☐ Disseminating information about Noyce award/advertising the award to students
- ☐ Managing the Noyce funds or leading activities associated with the Noyce award
- ☐ Developing or maintaining relationships among the staff involved in the Noyce award, teacher preparation program, and high-need districts or schools
- ☐ Selecting Noyce recipients
- ☐ Having a liaison between the Noyce award and another department or institution
- ☐ Teaching special courses or programs specifically for Noyce recipients
- ☐ Placing Noyce recipients in K-12 classrooms for field experiences
- ☐ Supervising Noyce recipients' classroom field experiences
- ☐ Helping Noyce recipients get certified
- ☐ Placing Noyce recipients in K-12 teaching positions
- ☐ Mentoring Noyce recipients during their first years of teaching
- ☐ Working with participants in the Noyce internship program in activities designed to introduce them to STEM teaching in K12 schools as a career option
- ☐ Attending Noyce conferences
- ☐ Other (Specify)

[Programming instruction: If "Other" is selected, display 3 separate text boxes for R to enter additional activities.]

B3a. Of the activities you just selected, please indicate whether faculty or staff from the teacher preparation program, the STEM department, the K-12 districts/schools or other groups collaborated in these activities during [Timing Phrase]. (Select all that apply).

[Programming instruction: Only display rows that correspond to items selected for B3.]

	Faculty or staff from:				
	Teacher preparation program	**STEM department**	**K-12 districts or schools**	**Other**	**[Specify Other]**
Administration Activities					
a. Informational/management meetings about the Noyce award	☐	☐	☐	☐	
b. Disseminating information about Noyce award/advertising the award to students	☐	☐	☐	☐	
c. Managing the Noyce funds or leading activities associated with the Noyce award	☐	☐	☐	☐	
d. Developing or maintaining relationships among the staff involved in the Noyce award, teacher preparation program, and high-need districts or schools	☐	☐	☐	☐	
e. Selecting Noyce recipients	☐	☐	☐	☐	
f. Having a liaison between the Noyce award and another department or institution	☐	☐	☐	☐	
Activities for Noyce Recipients					
g. Teaching special courses or programs specifically for Noyce recipients	☐	☐	☐	☐	
h. Placing Noyce recipients in K-12 classrooms for field experiences	☐	☐	☐	☐	
i. Supervising Noyce recipients' classroom field experiences	☐	☐	☐	☐	
j. Helping Noyce recipients get certified	☐	☐	☐	☐	
k. Placing Noyce recipients in K-12 teaching positions	☐	☐	☐	☐	
l. Mentoring Noyce recipients during their first years of teaching	☐	☐	☐	☐	
m. Working with participants in the Noyce internship program in activities designed to introduce them to STEM teaching in K12 schools as a career option	☐	☐	☐	☐	
Other Activities					
n. Attending Noyce conferences	☐	☐	☐	☐	
o. (Other Specify 1)	☐	☐	☐	☐	
(Other Specify 2)	☐	☐	☐	☐	
(Other Specify 3)	☐	☐	☐	☐	

Did Faculty of Staff from **the Teacher preparation program** have any responsibilities for participating in activities involved with the Noyce Program during [Timing Phrase]?

☐₁ Yes (Specify)

☐₀ No

☐₉₈ Don't Know

Did Faculty of Staff from **the STEM department** have any responsibilities for participating in activities involved with the Noyce Program during [Timing Phrase]?

☐₁ Yes (Specify)

☐₀ No

☐₉₈ Don't Know

Did Faculty of Staff from **K-12 districts or schools** have any responsibilities for participating in activities involved with the Noyce Program during [Timing Phrase]?

☐₁ Yes (Specify)

☐₀ No

☐₉₈ Don't Know

C. Noyce Award and Recipient Information

C1. Who received stipend, scholarship, or fellowship support through your Noyce award during [Timing Phrase]?

☐ Freshman and sophomores (summer internships)

☐ STEM undergraduate majors in teacher preparation programs

☐ Post-baccalaureate students in teacher preparation programs

☐ Former STEM professionals in teacher preparation programs

☐ Post-baccalaureate students in teacher preparation programs

☐ Former STEM professionals in teacher preparation programs

☐ K-12 STEM teachers with Master's degrees preparing to become Master Teachers

☐ Other (Specify)

[Programming Instruction: Ask C2 and C3 ONLY if "K-12 STEM teachers with Master's degrees preparing to become Master Teachers" was checked for C1. Otherwise, SKIP to C4.]

C2. Which of the following activities did your Noyce award support for master teaching fellows [Timing Phrase]? (Select all that apply)

☐ Mentoring

☐ Peer tutoring

☐ Clinical experiences

☐ Research

☐ Professional Development

☐ Leadership opportunities

☐ Other (Specify)

C3. Which of the following activities for interns for freshmen and sophomores does your Noyce program include? (Select all that apply).

☐ Courses, seminars, or workshops introducing freshmen and/or sophomores to K-12 STEM teaching and education.

☐ Placements working with students in K-12 schools.

☐ Placements working with students in STEM activities outside of K-12 schools

☐ Placements in STEM research projects, laboratories, or companies

☐ Placements assisting staff in the [IHE] with administrative tasks (e.g., grading, inventory of lab supplies/materials)

☐ Other (Specify)

The following questions focus on how Noyce recipient candidates were recruited and, in turn, selected to be in your program during [Timing Phrase].

C4. From what sources did you recruit Noyce recipients? (Select all that apply)

☐ STEM undergraduate departments in four-year institutions of higher learning [IHEs]

☐ STEM undergraduate departments in two-year institutions of higher learning [IHEs] (i.e., community colleges)

☐ STEM-related industries

☐ Current teaching workforce

☐ Other (Please Specify)

C5. How important was each of the following criteria in selecting successful applicants for receiving Noyce awards?

		Very Unimportant	Somewhat unimportant	Somewhat important	Very important
a.	Grade point average in STEM content courses	1	2	3	4
b.	Overall grade point average	1	2	3	4
c.	Undergraduate degree in a STEM content area	1	2	3	4
d.	Completion of STEM prerequisite courses (prior to degree receipt)	1	2	3	4
e.	Recommendation from STEM faculty	1	2	3	4
f.	Other recommendations (from teacher preparation faculty or other sources)	1	2	3	4
g.	Expressed interest in STEM K-12 teaching in essays, interviews, etc.	1	2	3	4
h.	Prior classroom teaching experience	1	2	3	4
i.	Prior experience working in a STEM field	1	2	3	4
j.	Experience with high-need schools or districts	1	2	3	4
k.	Financial need	1	2	3	4
l.	Other [Programming Instruction: if R chooses "other," R may list up to 3 new criteria and provide a Likert response for each.] (Specify 1)	1	2	3	4
	(Specify 2)	1	2	3	4
	(Specify 3)	1	2	3	4

C6.   Are there other scholarship or grant opportunities in [IHE] that Noyce recipient candidates can receive to support their teacher preparation activities?

☐₁ Yes

☐₀ No [Skip to C7]

☐₉₈ Don't Know [Skip to C7]

C7.   What are the other scholarship or grant opportunities in [IHE] that Noyce recipient candidates can apply for to support their teacher preparation activities?

[Programming Instruction: Insert a text box with space for a large amount of text].

C8.   Did any Noyce candidates who were offered Noyce awards, turn them down?

☐₁ Yes

☐₀ No [Skip to D1]

☐₉₈ Don't Know [Skip to D1]

C9.   Did you have enough qualified applicants every semester to use all available Noyce funds?

☐₁ Yes

☐₀ No

☐₉₈ Don't Know

C10. To the extent of your knowledge, please check all of the reasons below that potential Noyce recipients declined a Noyce award offered to them. (Select all that apply)

☐ The funds were insufficient to cover their needs

☐ There were other scholarships available

☐ The funds were accompanied by too many requirements to fulfill

☐ The requirements of the funds would have made it take longer to complete the certification program

☐ The potential recipients did not want to commit to teaching

☐ The potential recipients did not want to commit to teaching in a high-need district

☐ Other (Specify)

☐ I do not know

D. Noyce Recipients' Activities

This section asks questions about the educational activities Noyce recipients participated in during [Timing Phrase].

D1.   Which of the following activities were available to Noyce recipients through [IHE]'s teacher preparation program during [Timing Phrase]? Which were also available to ALL students in the teacher preparation program? (Select one response per row)

| | | Available for… | | | |
		ALL Teacher Prep	Noyce Only	Not Available	Don't Know
a.	Courses in STEM content areas	☐1	☐2	☐0	☐98
b.	Courses on child or cognitive development	☐1	☐2	☐0	☐98
c.	Courses on teaching methods	☐1	☐2	☐0	☐98
d.	Courses on teaching STEM content areas	☐1	☐2	☐0	☐98
e.	Courses integrating teaching methods and STEM content	☐1	☐2	☐0	☐98
f.	Courses on learning in different cultures and/or teaching in high-need schools	☐1	☐2	☐0	☐98
g.	Opportunities to participate in STEM research	☐1	☐2	☐0	☐98
h.	Opportunities to do observations in K-12 STEM classrooms (this does not include teaching practicum)	☐1	☐2	☐0	☐98
i.	Student teaching or practicum in high-need schools	☐1	☐2	☐0	☐98
j.	Student teaching or practicum in ANY type of school (not specifically high-need)	☐1	☐2	☐0	☐98
k.	Other [Programming note: if R chooses "other," R may list up to 3 new activities and provide a response for each.] [Specify 1]	☐1	☐2	☐0	☐98
	[Specify 2]	☐1	☐2	☐0	☐98
	[Specify 2]	☐1	☐2	☐0	☐98

D1a. Of the activities that were available through [IHE]'s teacher preparation program, which were required? Were they required for all students in the teacher preparation program?

[Programming instruction: Only display rows that correspond to items in D1 with a response of 1 or 2.]

		Required for ALL Teacher Prep Students		Required for Noyce Recipients	
		Yes	No	Yes	No
a.	Courses in STEM content areas	☐₁	☐₀	☐₁	☐₀
b.	Courses on child or cognitive development	☐₁	☐₀	☐₁	☐₀
c.	Courses on teaching methods	☐₁	☐₀	☐₁	☐₀
d.	Courses on teaching STEM content areas	☐₁	☐₀	☐₁	☐₀
e.	Courses integrating teaching methods and STEM content	☐₁	☐₀	☐₁	☐₀
f.	Courses on learning in different cultures and/or teaching in high-need schools	☐₁	☐₀	☐₁	☐₀
g.	Opportunities to participate in STEM research	☐₁	☐₀	☐₁	☐₀
h.	Opportunities to do observations in K-12 STEM classrooms (this does not include teaching practicum)	☐₁	☐₀	☐₁	☐₀
i.	Student teaching or practicum in high-need schools	☐₁	☐₀	☐₁	☐₀
j.	Student teaching or practicum in ANY type of school (not specifically high-need)	☐₁	☐₀	☐₁	☐₀
k.	[Other Specify 1]	☐₁	☐₀	☐₁	☐₀
	[Other Specify 2]	☐₁	☐₀	☐₁	☐₀
	[Other Specify 3]	☐₁	☐₀	☐₁	☐₀

D2. As of [Timing Phrase], had any of the Noyce recipients in your program begun employment as STEM educators in K-12 in schools?

☐₁ Yes [Ask D3]
☐₀ No [SKIP to D4]
☐₉₈ Don't Know [SKIP to D4]

D3. We are interested in knowing which activities were available to Noyce recipients once they left their teacher preparation program and began their first three years of STEM K-12 teaching. These activities should exclude those solely available during teacher internships or "student teaching" ("practicum").

Which of the following activities were available to former Noyce recipients that are currently teaching? Where these activities available to ALL teachers who graduated from the teacher preparation program regardless of whether they received Noyce support?

		Available for…			
		ALL Teacher Prep Graduates	*Former Noyce Only*	**Not Available**	**Don't Know**
a.	Mentoring by experienced STEM teachers in their school	☐1	☐2	☐0	☐98
b.	Mentoring by teacher certification faculty	☐1	☐2	☐0	☐98
c.	Mentoring by STEM Faculty	☐1	☐2	☐0	☐98
d.	Courses on teaching methods	☐1	☐2	☐0	☐98
e.	Courses in STEM content areas	☐1	☐2	☐0	☐98
f.	Courses on teaching STEM content areas	☐1	☐2	☐0	☐98
g.	Workshops on teaching or STEM content areas (including summer retreats and professional development)	☐1	☐2	☐0	☐98
h.	Meetings among Noyce recipients	☐1	☐2	☐0	☐98
i.	Online networking between teachers	☐1	☐2	☐0	☐98
j.	Other [Programming note: if R chooses "other," R may list up to 3 new activities and provide a response for each.] [Specify 1]	☐1	☐2	☐0	☐98
	[Specify 2]	☐1	☐2	☐0	☐98
	[Specify 3]	☐1	☐2	☐0	☐98

D3a.   During what years were these supports available to Noyce teachers?

[Programming instruction: Only display rows that correspond to items in D3 with a response of 1 or 2.]

		Year 1	Year 2	Year 3+	DK
a.	Mentoring by experienced STEM teachers in their school	☐1	☐2	☐0	☐98
b.	Mentoring by teacher certification faculty	☐1	☐2	☐0	☐98
c.	Mentoring by STEM Faculty	☐1	☐2	☐0	☐98
d.	Courses on teaching methods	☐1	☐2	☐0	☐98
e.	Courses in STEM content areas	☐1	☐2	☐0	☐98
f.	Courses on teaching STEM content areas	☐1	☐2	☐0	☐98
g.	Workshops on teaching or STEM content areas (including summer retreats and professional development)	☐1	☐2	☐0	☐98
h.	Meetings among Noyce recipients	☐1	☐2	☐0	☐98
i.	Online networking between teachers	☐1	☐2	☐0	☐98
j.	[Other Specify 1]	☐1	☐2	☐0	☐98
	[Other Specify 2]	☐1	☐2	☐0	☐98
	[Other Specify 3]	☐1	☐2	☐0	☐98

D4.   Which of the following statements best describes the way that Noyce recipients progressed through the teacher preparation program?

☐1   The program followed a cohort model, grouping together pre-service teachers at the same level to take a common set of courses and/or participate in a common set of learning activities together.

☐2   The program did not follow a cohort model; individual pre-service teachers determined their own progression through courses and requirements.

☐3   Both models were options that were available to pre-service teachers.

☐98 Don't Know

E. Relationship among the Teacher preparation program and High-Need Districts and Schools

The following questions ask about relationships among your <mark>teaching preparation program</mark>, districts, and schools, *during [Timing Phrase]*.

E1.   With approximately how many districts and schools did your teaching certification program have a working relationship? A "working relationship" could include (but is not limited to) districts and schools in which: your students had internships, practicum, or student teaching placements; or your faculty provided professional development either in-service or at your institution of higher education. Only include districts for which you are partnering with the entire district, not just a single school with the district.

a. **Districts** [dropdown menu]	b. **Schools** [dropdown menu]
• None	• None
• 1 District	• 1 School
• 2 Districts	• 2 Schools
• [Programming instruction: List individual #s through 20]	• [Programming instruction: List individual #s through 20]
• More than 20	• More than 20
• Don't Know	• Don't Know

[Programming note: If R chooses "none" for both Districts and Schools, skip to Section F. if "more than 20" is chosen, ask: "Approximately how many?" and include a text box.]

E2.   Of the districts and/or schools with which your teaching certification program had a working relationship, how many were <mark>high need districts</mark> and schools?

a. **Districts** [dropdown menu]	b. **Schools** [dropdown menu]
• None	• None
• 1 District	• 1 School
• 2 Districts	• 2 Schools
• [Programming instruction: List individual #s through 20]	• [Programming instruction: List individual #s through 20]
• More than 20	• More than 20
• Don't Know	• Don't Know

[Programming note: If R chooses "none" for both Districts and Schools, skip to Section F. if "more than 20" is chosen, ask: "Approximately how many?" and include a text box.]

F. Perceived Impacts of the Noyce Award

F1.   Please review the list below and indicate, whether or not you agree with each statement about how [IHE] may have changed as a result (either directly or indirectly) of receiving a Noyce award. When answering the questions, please consider all of the years that your institution has received Noyce funding up through [Timing Phrase].

	As a result of receiving a Noyce award at our institution…	Agree	Disagree	Don't know
a.	The number of teacher certification candidates with strong backgrounds in STEM fields has increased.	1	2	98
b.	A greater proportion of teacher certification candidates are from STEM undergraduate programs.	1	2	98
c.	A greater proportion of teacher certification candidates are recruited from STEM fields of employment.	1	2	98
d.	A greater proportion of undergraduates from STEM departments are becoming K-12 STEM teachers.	1	2	98
e.	The diversity of K-12 STEM teachers trained in our teacher preparation program has increased.	1	2	98
f.	The quality of candidates recruited to be K-12 STEM teachers has increased.	1	2	98
g.	New K-12 STEM teachers trained in our institution begin teaching with more skills and preparation than they did before Noyce funding began.	1	2	98
h.	STEM Faculty members are more involved in recruiting STEM K-12 teaching candidates.	1	2	98
i.	STEM Faculty members are more involved in training STEM K-12 teachers.	1	2	98
j.	STEM content has been strengthened in STEM K-12 teacher certification courses.	1	2	98
k.	Noyce recipients are more prepared to meet the needs of students in high-need schools than most new STEM teachers.	1	2	98
l.	The number of courses that combine STEM content and teacher education content has increased.	1	2	98
m.	The number of activities that combine STEM content and teacher education content has increased.	1	2	98
n	The number of meetings between faculty from STEM and teacher education departments has increased	1	2	98

As a result of receiving a Noyce award at our institution…	Agree	Disagree	Don't know
o. The number of meetings between faculty or staff from teacher education departments and K-12 schools or districts has increased.	1	2	DK
p. STEM undergraduates have more opportunities to be introduced to K-12 STEM teaching as a career early in their college experiences.	1	2	DK
q. STEM K-12 teachers in-training have more opportunities to participate in research.	1	2	DK
r. Collegial networks or support among Noyce recipients' teaching in K-12 schools has increased	1	2	DK
s. The level of mentoring by IHE faculty available to Noyce recipients teaching STEM courses in K-12 schools has increased.	1	2	DK

F2. Are there any other ways that your students, departments, teacher preparation program, or institution have changed as a result of receiving a Noyce award? If there are, please describe in the space below.

[Programming Instruction: Insert a text box with space for a large amount of text].

F3. To what extent, if at all, did you encounter difficulty in implementing the following activities associated with the Noyce award during [Timing Phrase]?

		No difficulty	Slight difficulty	Moderate difficulty	Great difficulty	Not Applicable
a.	Progress monitoring of Noyce recipients.	1	2	3	4	96
b.	Other administrative or management responsibilities related to managing the Noyce Program or funds.	1	2	3	4	96
c.	Developing professional connections between STEM and teacher preparation programs.	1	2	3	4	96
d.	Recruiting STEM Faculty members to be actively involved in the Noyce Program.	1	2	3	4	96
e.	Developing relationships among the Noyce Program and/or teacher certification departments and high-need K-12 districts or schools.	1	2	3	4	96
f.	Providing educational activities that are directed specifically to Noyce recipients.	1	2	3	4	96
g.	Providing internships and/or student teaching opportunities for Noyce recipients in high-need school or districts.	1	2	3	4	96
i.	Providing support or mentoring to post-graduate Noyce recipients teaching in schools.	1	2	3	4	96
h.	Providing ongoing professional development for Noyce recipients during their first few years of teaching (e.g., in meetings, seminars, retreats, workshops, or webinars).	1	2	3	4	96
j.	Other [Programming Instruction: if R chooses "other," R may list up to 3 new program elements and provide a response for each.] [Specify 1]	1	2	3	4	96
	[Specify 2]	1	2	3	4	96
	[Specify 3]	1	2	3	4	96

[Programming Instruction: Rollover definition for "Not Applicable": This program element was not part of our Noyce Program]

G. Additional Information

G1. When did you first become the Principal Investigator or Co-Principal Investigator for the Noyce Program at [IHE]?

> _ _ (mm) / _ _ _ _ (yyyy)

G2. Which of the following best describes your tenure as a Principal Investigator or Co-Principal Investigator of an active Noyce award at [IHE]?

☐₁ I was a Principal Investigator or Co-Principal Investigator of a Noyce award that ended prior to the start of academic year 2009-2010.

☐₂ I ended my role as the Principal Investigator or Co-Principal Investigator of the Noyce award prior to academic year 2009-2010.

☐₉₅ Other (Explain)

G3a. **Excluding** the current 2010-2011 academic year, for how many years have you held a faculty or administrative position at [IHE]?

I have been teaching here for a total of: [dropdown]
• 1 year (2009-2010 was my 1st year as a faculty member at this institution)
• 2 years (2009-2010 was my 2nd year as a faculty member at this institution)
• 3 years (2009-2010 was my 3rd year as a faculty member at this institution)
• 4 years
• [Programming Instruction: List individual years through 20]
• Over 20 years

☐₉₆ 2010-2011 is my first year as a faculty member at [IHE].

☐₉₇ I have never held a faculty or administrative position at [IHE].

[If Timing phrase="the last academic year your program had Noyce funding," ask G3b.]

G3b.   Prior to and including [Timing Phrase] (i.e., academic year [A3]), for how many years had you held a faculty position at [IHE]?

I had been teaching at [IHE] for a total of: [dropdown]
• 1 year ([A3] was my 1st year as a faculty member at this institution)
• 2 years ([A3] was my 2nd year as a faculty member at this institution)
• 3 years
• [Programming Instruction: List individual years through 20]
• Over 20 years

If A3=Don't Know, G3b should read as follows:

G3b.   Prior to and including [Timing Phrase], for how many years had you held a faculty position at [IHE]?

I had been teaching at [IHE] for a total of: [dropdown]
• 1 year ([Timing Phrase] was my 1st year as a faculty member at this institution)
• 2 years ([Timing Phrase] was my 2nd year as a faculty member at this institution)
• 3 years
• [Programming Instruction: List individual years through 20]
• Over 20 years

G4.   What was your Tenure Status *during [Timing Phrase]*?

☐₁ Tenured
☐₂ Tenure-Track, Not-Tenured
☐₃ Not in a tenure-track position

Thank you for completing this survey!

Glossary

Throughout this survey, the following terms are used.

Alternative teacher certification program
In these programs, preparation for teaching is typically accelerated, to get individuals employed as full-time teachers as quickly as possible, and is followed by ongoing support to help the individual achieve full or regular certification/licensing.

Clinical Supervisor
A "clinical supervisor" is someone from your higher education institution who supervised your student teaching (practicum) experience.

Cooperating Teacher
A "cooperating teacher" is the teacher of record in the classroom where you completed student teaching (practicum).

Elementary school
Schools that offer any of grades K-4, and no grade higher than 8.

Ethnicity
A classification indicating general ethnic heritage based on self-identification, as in data collected by the U.S. Census Bureau. These categories are in accordance with the Office of Management and Budget standard classification scheme presented below:
- Hispanic or Latino—A person of Cuban, Mexican, Puerto Rican, Central or South American, or other Spanish culture or origin, regardless of race
- Not Hispanic or Latino—A person whose ethnicity is not Hispanic or Latino
- Not Reported—The data are unavailable or the participant has indicated that he or she does not want to provide this information.

High-Need District
A school district that serves an elementary or secondary school located in an area in which there is:

1. a high percentage of individuals from families with incomes below the poverty line;
2. a high percentage of secondary school teachers not teaching in the content area in which the teachers were trained to teach; or
3. a high teacher turnover rate.

High School
Schools that have at least one grade higher than 8 and no grade in K–6.

Intern
An undergraduate student (freshman or sophomore) who participated in a Noyce summer internship to introduce them to STEM K-12 education as a career option

K-12
This acronym refers to the grades kindergarten (K) through 12th grade (12). It indicates that an individual has experience working with students or teachers in one or more of these grade levels.

Major
A field of study in which an individual has taken substantial academic coursework at the postsecondary level, implying that the individual has substantial knowledge of the academic discipline or subject area.

Mentoring
When an individual serves as a student's counselor or advisor, especially in a direct, one-on-one setting

Middle school
Schools that have any of grades 5–8, and no grade lower than 5 and no grade higher than 8.

Noyce Program
The Robert Noyce Teacher Scholarship Program, funded by the National Science Foundation (NSF), awards grants to institutions to provide scholarships, stipends, fellowships, and internships to recruit and prepare talented Science, Technology, Engineering and Mathematics (STEM) professionals and students who commit to teaching in K-12 settings, particularly in high-need districts.

Practicum: see entry for **student teaching**.

Pre-Service
A "pre-service" is an individual enrolled in a post-baccalaureate teacher preparation program.

Race
A classification indicating general racial or ethnic heritage based on self-identification. The following descriptions should be used:

- American Indian or Alaska Native—A person having origins in any of the original peoples of North or South America (including Central America), and who maintains tribal affiliation or community attachment
- Asian—A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Indonesia, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- Black or African American—A person having origins in any of the black racial groups of Africa
- Native Hawaiian or Other Pacific Islander—A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands
- White—A person having origins in any of the original peoples of Europe, the Middle East, or North Africa
- Not Reported—The data are unavailable or the participant has indicated that he or she does not want to provide this information.

Robert Noyce Teacher Scholarship Program: see entry for **Noyce Program**.

STEM
This acronym "STEM," stands for **S**cience, **T**echnology, **E**ngineering and/or **M**athematics.

Stipend Recipient

An individual who:

- First began receiving Noyce funding as a post-baccalaureate (i.e., someone already holding a baccalaureate, master's, or doctoral degree);
- Is enrolled in a teacher preparation or teacher certification program;
- Has received Noyce funding during the current reporting period.

This includes career changers.

Student Teaching

"Student teaching," sometimes called "practicum teaching," is a period of apprenticeship during which you have responsibility for teaching and day-to-day instruction under supervision by a host/cooperating teacher.   You are not considered the "teacher-of-record," nor are you employed (paid) as a teacher-of-record. Student teaching generally occurs after you have completed coursework, fieldwork, or other teacher preparation activities.

Teaching certification

A license or certificate awarded to teachers by the state to teach in a public school. Types of certification include: regular or standard state certification or advanced professional certificate; probationary certificate issued to persons who satisfy all requirements except the completion of a probationary period; provisional certificate issued to persons who are still participating in what the state calls an "alternative certification program;" temporary certificate issued to persons who need some additional college coursework, student teaching, and/or passage of a test before regular certification can be obtained; and emergency certificate issued to persons with insufficient teacher preparation who must complete a regular certification program in order to continue teaching.

Teacher Preparation Program

A program designed to prepare college students or college graduates to obtain a license or certificate to teach in a public school. In a traditional program, coursework and pre-practicum field experiences are followed by supervised student teaching--also called a practicum--before an individual assumes full-time teaching responsibilities.   In alternative certification programs, preparation for teaching is typically accelerated, to get individuals employed as full-time teachers as quickly as possible, and is followed by ongoing support to help the individual achieve full or regular certification/licensing

Teacher-of-record

The teacher-of-record is the "official" teacher in charge of a classroom, not a student teacher.

Traditional teacher education program

In a traditional program, coursework and pre-practicum field experiences are followed by supervised student teaching--also called a practicum--before an individual assumes full-time teaching responsibilities.