

Appendix F

K-12 Principal Crosswalk and Survey

Crosswalk of K-12 Principal Items to Research Questions and Uses in Analysis

Survey Item	Research Questions ¹				Analysis ²
	RQ 2b	RQ 2c	RQ 3a	RQ 3c	
A. Background Information					
Current position					A
Number of years the respondent has held current position					M
Number of years the respondent has worked at current school					M
Respondent's familiarity with the Noyce program					M,A
Awareness of Noyce recipients working at school					M,A
Number of Noyce recipients working at school					M
B. Information about Your School					
Type of school			•		D
Grade levels offered at respondent's school			•		D
Number of teachers on respondent's school staff roster			•		D
Number of highly qualified teachers on respondent's school roster			•		D
Number of teachers/Noyce recipients teaching Math/Science/All subjects			•		A,D
Sum of teachers/Noyce recipients teaching Math/Science/All subjects who were highly qualified			•		D
Average turnover rate for math and science teachers in schools where Noyce recipients teach			•		D
Average student dropout rate in schools where Noyce recipients teach			•		D
C. Your School's Relationship with Institutions of Higher Education (IHEs)					
Formal or informal relationships with any IHEs				•	D
Type of activities that occurred through school's relationship with IHEs				•	D
School's relationship with the Noyce Programs at IHEs attended by Noyce teachers working at respondent's school				•	D
D. Noyce Teacher Qualifications/Performance					
Perceptions of the professional qualifications of Noyce recipients compared to other math and science teachers		•			D
E. Hiring Decisions for the Current Academic Year					
Hiring process at respondent's school					M
Outcome of this year's hiring process at respondent's school					M
Do you believe that the Noyce Program has helped increase the number of qualified math and/or science teachers available for the 2010-2011 year?	•	•			D
F: Benefits & Burdens of The Noyce Program					
Benefits/Burdens of the Noyce Program	•	•			D
Perceptions of Noyce teacher(s) at respondent's school		•			D

¹Research Questions Answered by K-12 Principal Survey

RQ2b: What are school principals' perceptions of benefits and burdens imposed by the Noyce award for their K-12 schools?

RQ2c: How do school principals perceive the qualifications and teaching performance of Noyce recipients?

RQ3a: What are the demographic characteristics of schools/districts at which Noyce recipients teach?

RQ3c: How do the schools in which Noyce recipients teach work with Noyce IHEs?

²Analysis Notes

Principal Survey Items

Dear [Respondent Name],

The [National Science Foundation \(NSF\)](#) is funding an evaluation of the **Robert Noyce Teacher Scholarship Program** and, as a principal of a school where at least one Noyce recipient is teaching, we would like to gather some information from you regarding your experiences.

This survey is being conducted by [Abt Associates Inc.](#), an independent social research firm, to gain a better understanding of the effectiveness of 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
<i>Burden Disclosure Statement</i> 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 20 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. 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. Reports will never identify respondents by name, and information from the study will only be reported in the aggregate at the program level, combined with about 125 other responses. Survey data files will be shared with the NSF at the end of the study, only after study team members have examined the data to be free of any information that could help identify you; your frank and open responses will help NSF make changes to improve the program to make it more effective. Hence, we encourage you to respond candidly about your experiences.

If you have questions about the study, please contact us at NoyceEval@abtassoc.com. You may also contact Joan Prival, the Lead Program Director of the Robert Noyce Teacher Scholarship Program, by e-mailing jprival@nsf.gov, or 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

[Programming instruction: Insert text from “Completing the Survey.doc”]

Consent

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

Programming Instructions:

- The text that is highlighted in yellow needs to be replaced.
- Programming instructions are indicated in blue text.
- Terms that require rollover definitions are highlighted in blue. See Glossary document for full list of definitions.
- A text box should appear whenever a respondent selects a response option with the text “Other (Please specify)”, “Other (Explain)” or something similar.
- Unless otherwise indicated, only one response is allowed per question.
- For questions that allow multiple responses, if “Don’t Know” or “Not Applicable” is checked, no other option may be selected.
- If response list includes “None of the above,” only allow this to be checked if all the other items are unchecked.
- We will send you a Glossary and FAQ document separately.

A. Background Information

A1. What was your position at [SCHOOL] during the most recently completed academic year (2009-2010)?

- ₁ Principal
- ₂ Vice Principal
- ₃ Other (Please specify your title)
- ₉₆ I was not working at [SCHOOL] during academic year 2009-2010

[Programming instruction: If A1 = 96, SKIP to A3. This question is required. If R tries to move to the next question without answering A1, display text: "This question is required. If you were not the Principal or Vice Principal at [SCHOOL] during academic year 2009-2010, please select "other" and specify your title. If you are still unsure how to answer this question based on your unique circumstances, please contact us at NoyceEval@abtassoc.com. Thank you."]

A2a. In which academic year did you first start working in this position at [SCHOOL]?

I started working in this position at [SCHOOL] during academic year... [dropdown menu]
• 2009-2010
• 2008-2009
• 2007-2008
• [Programming Instruction: List academic years going back to 1989-1990]
• Before 1989-1990

A2b. In which academic year did you first start working at [SCHOOL] in any position?

I started working at [SCHOOL] during academic year... [dropdown menu]
• 2009-2010
• 2008-2009
• 2007-2008
• [Programming Instruction: List academic years going back to 1989-1990]
• Before 1989-1990

[Programming Instructions: After A2b, SKIP to A4. Keep questions A2 and A3 on the same screen. If A2a < A2b, display the following text with a text box: "According to the responses to the above questions, the year you started working in this position at [SCHOOL] is before the year you started working at [SCHOOL]."]

A3. Most of this survey focuses on the 2009-2010 academic year. Since this is your first year working at [SCHOOL], please provide us with the name and contact information for last year’s principal, or another [SCHOOL] employee who could answer questions about the school and its faculty during the last academic year (2009-2010).

Name:	
Title:	
E-mail:	
Phone:	

₉₈ Don’t Know / Prefer not to answer

[Programming instruction: SKIP to “Thank You Script” at the end of the survey and send auto-notification to NoyceEval@abtassoc.com with responses to A1-A3; a new survey will be sent to the correct K-12 Administrator for this school. Survey status = ineligible respondent]

A4. The **Robert Noyce Teacher Scholarship Program**, funded by the National Science Foundation (NSF), awards grants to institutions to provide scholarships and stipends 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. Are you familiar with the Noyce Program?

₁ Yes, I am familiar with the Noyce Program.

₀ No, I have never heard of it

[Programming Instruction: Please keep A5, A6 and A6a on the same screen.]

A5. According to NSF records, the following Noyce recipients worked for [SCHOOL] during the **2008-2009** academic year. Please tell us if each of the following teachers **also** worked at this school during the most recently completed academic year (**2009-2010**)? Add a “Not sure/ Don’t Know” option

[TEACHER 1] ₁ Yes ₀ No

[TEACHER 2] ₁ Yes ₀ No

[TEACHER 3] ₁ Yes ₀ No

... ₁ Yes ₀ No

[Programming note: Replace TEACHER 1, 2, 3... with the names of all teachers in our sample who are connected with this school. If there is only one such teacher, please adjust the text accordingly.]

Please Note: These teachers will be referred to as “Noyce teachers” throughout this survey.

A6. Are you aware of any other Noyce teachers who worked for [SCHOOL] last year – i.e., during the most recently completed academic year (2009-2010)?

₁ Yes [Ask A6a]

₀ No [Skip to Programming Instruction below]

A6a. In total, how many Noyce teachers are you aware of that worked for your school during the 2009-2010 academic year?

[RANGE= 0-100]

[Programming Instruction: If the sum of A5 = 0 and QA6=0, go to closing screen that says: "For this evaluation, we are interested in speaking with principals in schools where Noyce teachers taught during the most recently completed academic year (2009-2010). Thank you for your time." Survey status = ineligible school. Include a back button on this "thank you" page so R has the option of revising their response to A6a and finishing the survey.]

B. Information about Your School

B1. Which of the following best describes the school type for [SCHOOL]? (Check one)

- ₁ Regular public school
- ₂ Charter school
- ₃ Magnet school
- ₄ Private school
- ₉₅ Other (Please describe)

Programming instructions: If this question is left blank, please display the following soft prompt: "Please try to provide a response for this question. If you are unsure which option best describes your school, please select "Other" and explain. Thank you!"

B2. What grade level(s) were offered at your school during the most recently completed academic year (2009-2010)? I would keep this in a list format

- | | | | |
|---|---|---|---|
| <input type="checkbox"/> ₁ Prekindergarten | <input type="checkbox"/> ₅ 3rd | <input type="checkbox"/> ₉ 7th | <input type="checkbox"/> ₁₃ 11th |
| <input type="checkbox"/> ₂ Kindergarten | <input type="checkbox"/> ₆ 4th | <input type="checkbox"/> ₁₀ 8th | <input type="checkbox"/> ₁₄ 12th |
| <input type="checkbox"/> ₃ 1 st | <input type="checkbox"/> ₇ 5th | <input type="checkbox"/> ₁₁ 9th | <input type="checkbox"/> ₁₅ Other (e.g. in a GED/Alternative High School) (Please specify) |
| <input type="checkbox"/> ₄ 2 nd | <input type="checkbox"/> ₈ 6th | <input type="checkbox"/> ₁₂ 10th | |

Programming instructions: If this question is left blank, please display the following soft prompt: "Please indicate which grade levels were offered at your school during academic year 2009-2010. If you are not sure how to answer this question, please select "Other" and explain. Thank you!"

Unless otherwise indicated, when answering the following questions, please think about all the teachers working for [SCHOOL] during the most recently completed academic year (2009-2010), regardless of whether they received support from the Noyce Program.

B3. How many teachers were on your school's staff roster (across all grades and subject areas) during the 2009-2010 academic year?

₉₈ Don't Know

[Programming Instructions:

- Required question.
- RANGE= 0-1000
- If B3 < A6a, display the following error message, but still allow R to continue: "Earlier you noted that there were a total of [A6a] Noyce teachers working at your school during 2009-2010. The total number of teachers entered for the current question must be greater than or equal to this number. Please adjust your response."
- Zero is not a valid response. Text: "Zero is not a valid response. If your school was not operating during the 2009-2010 academic year, please e-mail NoyceEval@abtassoc.com
- If response = Don't Know or Missing, display text: "Information on staff counts is necessary in order to answer several of the following questions accurately. Please locate this information, as well as the total number of mathematics and science teachers, before continuing with the survey. If you are unable to do this, and cannot come up with a good estimate, you may select "Don't Know" and click "next" to continue." If response still = "Don't Know," skip to B5.]

B4. In the previous question, you indicated that your school had a total of [RESPONSE TO B3] teachers on its staff during the most recently completed academic year (2009-2010). How many of these teachers were "highly qualified", as defined by NCLB?

₉₈ Don't Know

[RANGE= 0-1000]

[Programming Instructions: If B4 > B3, prompt for clarification. If B3 = "Don't Know," skip this question.]

- B5. Focusing specifically on teachers who were responsible for teaching mathematics and/or science, how many of the following types of teachers were on your school’s staff during the 2009-2010 academic year?

Each teacher should only be counted in one row. If there are no teachers in a particular category, enter zero.

[Programming Instructions: When this question first appears on the screen, just display the first column of the matrix and the question presented above. After the respondent clicks the “next” button, display the following question and the rest of the matrix.]

To the best of your knowledge, how many of these teachers received support from the Noyce Program?

	Among all math/science teachers [B5_ALL]	Among Noyce Teachers only [B5_NOYCE]
A. Classroom teachers who teach all subjects (e.g., elementary grade teachers who teach mathematics and science)		
B. Teachers who are primarily responsible for teaching Mathematics only		
C. Teachers who are primarily responsible for teaching Science only		
D. Teachers who are primarily responsible for teaching both Mathematics and Science, and generally do not teach other subjects.		
TOTAL	[Auto Sum]	[Auto Sum]

[RANGE= 0-200 for each]

[Programming Instructions:

- If any cell in the first column is left blank, display the following text: “Please enter a response in all 4 cells; if there are no teachers in a particular category, enter a zero.” If cells are still left blank, display the following text: “Responses to this question are necessary in order to answer several of the following questions accurately. Please try to locate this information before continuing with the survey. If you are still unable to enter this information, leave the cell(s) missing and click “next” to continue with the survey.”
- If total number of teachers at school is greater than the response to B3, display text: “Previously, you indicated that there were [B3 response] teachers on your school’s staff roster during the 2009-2010 academic year. However, more than [B3 response] teachers are referenced in this question. Please adjust your responses to this question, or you may click NEXT to continue.”
- For any single row, if the number of Noyce teachers is greater than total number of teachers, display text” “For each row, the number of Noyce Teachers should be less than or equal to the total number of teachers. Please revise, or you may click NEXT to continue.”
- If the total number of Noyce teachers does not match total calculated from questions A5 and A6, display text: “According to responses you gave earlier in the survey, you are aware of [A6a] Noyce teachers that worked for your school during the 2009-2010 academic year. However, [Sum of B5, column 2] Noyce teachers are referenced below. Please revise or click NEXT to continue.”

[Programming Instruction: If Sum of B5_ALL rows B+C+D = Zero, or any of these cells = DK or Missing, SKIP to Question B8.]

The next two questions refer to teachers in your school who only teach math and/or science (and generally do not teach other subjects). You previously indicated that there were [SUM OF B5_ALL rows B+C+D] such teachers at your school during the most recently completed academic year (2009-2010).

B6. Of the [SUM OF B5_ALL rows B+C+D] teachers who **only taught math and/or science** during the 2009-2010 academic year, how many were “**highly qualified**” as defined by NCLB?

₉₈ Don't Know

[RANGE= 0-200]

[Programming Instructions: If B6 > SUM OF B5_ALL rows B+C+D , prompt for clarification: “In the previous question, you indicated that there were [SUM OF B5_ALL rows B+C+D] teachers in your school who only taught math and/or science during academic year 2009-2010. Please enter a number that is less than or equal to [SUM OF B5_ALL rows B+C+D] or revise your responses to the previous question.”]

B7. Of the [SUM OF B5_ALL rows B+C+D] teachers who **only taught math and/or science** during the 2009-2010 academic year, how many did not return during the 2010-2011 academic year?

₉₈ Don't Know

[Programming Instructions: If B7 > SUM OF B5_ALL rows B+C+D , prompt for clarification: “In a previous question, you indicated that there were [SUM OF B5_ALL rows B+C+D] teachers in your school who only taught math and/or science during academic year 2009-2010. Please enter a number that is less than or equal to [SUM OF B5_ALL rows B+C+D].”]

B8. What was the **overall student mobility rate** from 2009-2010 to 2010-2011 at your school?

 %

₉₈ Don't Know

[Programming Instructions: Valid values: 0-100%: “Please enter a response between 0 and 100.”]

C. Your School's Relationship with Institutions of Higher Education (IHEs)

C1. During the most recently completed academic year (2009-2010), did your school have either formal or informal relationships with any institutions of higher education (IHE)? This relationship might involve selecting student teachers and/or prospective teacher candidates from a specific IHE; teacher participation in in-service courses or workshops offered by the IHE; or student participation in mentorship or enrichment programs hosted by the IHE.

- ₁ Yes
₀ No [[Skip to Question D1](#)]
₉₈ Don't Know [[Skip to Question D1](#)]

C2. Please indicate which types of activities occurred through your school's relationship with these institutions of higher education (IHEs). (check all that apply)

- ₁ My school recruited student teachers from one or more of the IHEs
₁ Student teachers from one or more of the IHEs completed student teaching at my school
₁ My school interviewed prospective teacher candidates from one or more of the IHEs
₁ Teachers at my school participated in teacher in-service courses or workshops offered by one or more of the IHEs (either at my school or at the IHE)
₁ IHE faculty/staff and/or students hosted mentorship programs for students from my school
₁ My school sent students on campus visits to local IHEs (i.e., as prospective students as participants in enrichment activities, etc.)
₁ My school sent students to local IHEs to take mathematics and/or science courses
₁ Other (Please Specify)
₁ Don't know

Programming instruction: Please select at least one response below. If your school did not have a relationship with any IHE's, please press the "Back" button and revise your response to the previous question. If the type of activities that did occur are not listed below, please select "other" and describe the activities."

C3. Which of the following activities best describes your school's relationship with the Noyce Programs at IHEs attended by Noyce teachers who work in your school? (check all that apply)

- _1 Someone from my school attends annual meetings with Noyce Program administrators
- _1 Someone from my school communicates via email/phone with Noyce Program administrators
- _1 No one at my school is involved with the Noyce Program
- _1 Other (Please Specify)
- _1 Don't know

[Programming Instruction: If "Don't Know" or "No one at my school is involved with the Noyce Program" is checked, no other option may be selected.]

D. Noyce Teacher Qualifications/Performance

D1. Thinking about the most recently completed academic year (2009-2010), how would you describe the professional qualifications of Noyce teachers in your school *to teach your school's student body*, compared to other teachers responsible for teaching mathematics and science content?

		Noyce teachers are...			Lack Sufficient Information to Answer
		Less Qualified	Equally Qualified	Better Qualified	
a.	Understanding of mathematics/science concepts	1	2	3	98
b.	Demonstrated ability to foster an engaging classroom environment	1	2	3	98
c.	Demonstrated ability to ask questions that enhance students' understanding/problem-solving for mathematics/science concepts	1	2	3	98
d.	Demonstrated ability to implement or use diverse teaching methods to get concepts across to a diverse student body	1	2	3	98
e.	Demonstrated ability to successfully engage in leadership roles	1	2	3	98

Programming instructions: If any of these rows are not answered, display the following soft prompt: "Please try to provide a response for each item below. If you don't feel you've had enough exposure to the Noyce teachers in your school regarding a particular item, please select "lack sufficient information to answer this question" Thank you!"

E. Hiring Decisions for the Current Academic Year (2010-2011)

In answering the following questions, please think about the hiring decisions your school made to prepare for the current academic year (2010-11).

E1. Please indicate how the hiring process works at your school. (Check all that apply)

- _1 Candidates apply to my district office and the district office funnels eligible candidates' applications to my school
- _1 Candidates apply directly to my school
- _1 We were not hiring new teachers [\[SKIP to E4\]](#)
- _1 Other (Please Describe)

[\[Programming Instruction: If "We were not hiring new teachers" is checked, no other option may be selected. \]](#)

E2. Were you able to hire qualified **mathematics** teachers to fill empty positions at your school?

- _1 Yes
- _0 No
- _96 N/A - my school did not have any openings for mathematics teachers this year

E3. Were you able to hire enough qualified **science** teachers to fill empty positions at your school?

- _1 Yes
- _0 No
- _96 N/A - my school did not have any openings for science teachers this year

[\[Programming Note: If E2 and E3 = NA, SKIP to Section F. \]](#)

E4. Do you believe the Noyce Program helped increase the number of qualified mathematics and/or science teachers available to the district for the 2010-11 academic year?

- _1 Yes
- _0 No
- _98 Don't Know

F: Benefits & Burdens of the Noyce Program

F1. Thinking about the Noyce teachers at your school, please rate your agreement with the following statements about the Noyce Program at the Institution(s) of Higher Education (IHEs) this/these Noyce teacher(s) attended:

	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Applicable	Don't Know
a. The Noyce Program has strengthened my school's relationship with the IHEs attended by my Noyce teachers.	1	2	3	4	96	98
b. My school's relationship with the Noyce Program presents an additional administrative burden.	1	2	3	4	96	98
c. The administrative work required by the Noyce Program is worthwhile given the benefits my school receives from our relationship.	1	2	3	4	96	98
d. The Noyce Program has helped to increase the number of qualified mathematics and science teachers at my school.	1	2	3	4	96	98
e. The Noyce Program has helped to increase the quality of mathematics and science courses taught at my school.	1	2	3	4	96	98
f. I would hire another candidate from the Noyce Program.	1	2	3	4	96	98
g. I would hire another candidate from the Institution(s) of Higher Education (IHEs) attended by my Noyce teacher(s) <i>regardless of whether they are part of the Noyce Program.</i>	1	2	3	4	96	98

Programming instructions: If any of these rows are not answered, or more than 3 are "Don't Know," display the following soft prompt: "Please try to provide a response for each item below. If the item does not apply to you/your school, select 'Not Applicable.' Thank you!"

F2. Please describe, in no more the 250 words, your perceptions of Noyce teacher(s) at your school.

Thank you for taking the time to respond to this survey! Your responses will help the National Science Foundation support teacher preparation in the future.

[Programming instruction: Once R submits responses, send them a thank you e-mail/confirmation that responses have been submitted.]