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

Survey Item	Research Questions[1]				Analysis[2]
	RQ 2c	RQ 3a	RQ 3d	RQ 5d	
A. Background Information					
Current position					M
Number of years the respondent has held current position					M
Number of years the respondent has worked at current school					M,A
Respondent's familiarity with the Noyce program					M
Awareness of Noyce recipients working at school					M
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 qualified teachers on respondent's school roster		•			D
Number of teachers/Noyce recipients teaching Math/Science/All subjects		•			D
Sum of teachers/Noyce recipients teaching Math/Science/All subjects who were highly qualified		•			D
Teacher attrition rate		•			D
Student attrition rate		•			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 Teachers Qualifications/Performance					
Perceptions of the qualifications of Noyce recipients	•				D
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
E: Benefits & Burdens of The Noyce Program					
Benefits/Burdens of the Noyce Program	•				D
Perceptions of Noyce teacher(s) at respondent's school	•				D

[1]Research Questions Answered by STEM Faculty Survey

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?

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

RQ5d: How do the Noyce awards affect teacher effectiveness, as measured by certification tests and principal assessment?

[2]Analysis Notes

A: indicates that the variable from this item is used for administrative purposes (e.g., background 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 question

K-12 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 love 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.

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 500 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 20 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 document 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. Background Information

A1. Are you the principal at [SCHOOL]? If not, what is your official title?

☐₁ Yes

☐₀ No (Specify title: _____)

A2. For how many academic years have you held this position at [SCHOOL]?

I have held this position for a total of: [dropdown menu]
•   Less than 1 year (2010-2011 is my 1st year in this position)
•   1 year (2009-2010 was my 1st year in this position)
•   2 years
•   3 years
•   [Programming Instruction: List individual years through 20]
•   Over 20 years

A3. For how many academic years have you worked at [SCHOOL] in any position?

I have worked at [SCHOOL] for a total of: [dropdown menu]
•   Less than 1 year (2010-2011 is my 1st year working for this school)
•   1 year (2009-2010 was my 1st year working for this school)
•   2 years
•   3 years
•   [Programming Instruction: List individual years through 20]
•   Over 20 years

[Programming Instructions:
- If A2 > A3, display the following text with a text box: "You have indicated that you've held your current position longer than you have worked at this school. Please explain, or adjust your responses to this and/or the previous questions."
- If A3="Less than 1 year", ask A3a; otherwise, SKIP to A4.
- If A2 = "Less than 1 year" or blank and A3 is left blank, ask: "Were you working at [SCHOOL] during academic year 2009-2010?" If response = "Yes," SKIP to A4. If response = "No" or no answer is given, ask A3a, but change wording to "Since you were not working for [SCHOOL] during this year".]

A3a. 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

[Programming instruction: SKIP 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 A2c and send a new survey to the correct K-12 Administrator for this school.]

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. How familiar are you with the Noyce Program?

- ☐₁ I have never heard of it
- ☐₂ I am aware of it, but I know little about it.
- ☐₃ I am familiar with the Noyce Program, but I have not been involved with it.
- ☐₄ I used to be involved with the Noyce Program, but I was not involved in it during the most recently completed academic year (2009-2010).
- ☐₅ I was involved with the Noyce Program during the most recently completed academic year (2009-2010).

[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 [SCHOOL] during the most recently completed academic year (**2009-2010**)?

[TEACHER 1]	☐₁ Yes	☐₀ No
[TEACHER 2]	☐₁ Yes	☐₀ No
[TEACHER 3]	☐₁ Yes	☐₀ No
…	☐₁ Yes	☐₀ No

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

A6. Are you aware of any <u>other</u> Noyce teachers who worked at [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 worked for your school during the 2009-2010 academic year? Please include 2009-2010 Noyce teachers listed in question A5.

[   ]

[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."]

B. Information about Your School

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

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)

B2.   What grade level(s) were offered at your school during the most recently completed academic year (2009-2010)?

☐₁ Kindergarten	☐₅ 4th	☐₉ 8th	☐₁₃ 12th
☐₂ 1st	☐₆ 5th	☐₁₀ 9th	☐₁₄ Other (e.g. in a GED/Alternative High School)
☐₃ 2nd	☐₇ 6th	☐₁₁ 10th	
☐₄ 3rd	☐₈ 7th	☐₁₂ 11th	

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. If no response is given, display text: "This is a required question; please try to obtain this information before continuing with this survey. If you are unable to provide a response, please select 'Don't Know.'"
- Zero is not a valid response.
- If B3 = Don't Know or blank, request that respondent locate this information, as well as the total number of mathematics and science teachers, before continuing.
- If a numeric response is not given for B3, skip to B5.]

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

[Programming Instructions:
- If B4 > B3, prompt for clarification.

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?

Of these teachers, how many were Noyce recipients?

	Teachers at Your School [B5_ALL]	Noyce Teachers at Your School [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]

[Programming Instructions:
- When this question first appears on the screen, just display the first column of the matrix. After numbers are entered for "all teachers," respondent should press the "next" or "continue" button and the text/cells for the rest of the matrix should be displayed.
- If first column is left blank request that respondent locate this information before continuing.
- Prompt for clarification if any of the following are true: (1) total number of teachers is greater or equal to response to B3, (2) total number of Noyce teachers is greater than total number of teachers for any category, or (3) total number of Noyce teachers does not match total calculated from questions A5 and A6.]

Questions B6 and B7 refer to teachers in your schools who only teach math and/or science (and generally do not teach other subjects). You previously indicated that there were [SUM OF B5_ALL B+C+D] such teachers at your school during the most recently completed academic year (2009-2010).

B6. Of the [SUM OF B5_ALL 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?

[   ]

[Programming Instructions: If B6 > B4_All total, prompt for clarification.

B7. Approximately, what was the overall teacher turnover rate from 2009-2010 to 2010-2011 among the [SUM OF B5_ALL B+C+D] teachers **who only taught math and/or science** during the 2009-2010 academic year?

[%]

[Programming Instructions: Valid values: 0-100%]

B8. What was the overall student dropout rate from 2009-10 to 2010-11 at your school?

[%]

[Programming Instructions: Valid values: 0-100%]

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]

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)

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 response option c is checked, no other option may be selected.]

D. Noyce Teachers 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…		
		Less Qualified than Other Teachers	Equally Qualified as Other Teachers	Better Qualified than Other Teachers	Lack Sufficient Information to Answer
a.	Understanding of mathematics/science concepts	1	2	3	NA
b.	Demonstrated ability to generalize skills in mathematics/science to real-life situations and other disciplines	1	2	3	NA
c.	Demonstrated ability to apply instructional strategies that are consistent with evidence-based best practices	1	2	3	NA
d.	Demonstrated ability to foster an engaging classroom environment	1	2	3	NA
e.					
f.	Demonstrated ability to ask questions that enhance students' understanding/problem-solving for mathematics/science concepts	1	2	3	NA
g.	Demonstrated ability to use professional development and other learning opportunities to hone teaching craft/develop professionally	1	2	3	NA
h.	Demonstrated ability to implement or deploy diverse teaching methods to get concepts across to a diverse student body	1	2	3	NA
i.	Willingness to take on leadership roles	1	2	3	NA
j.	Demonstrated ability to successfully engage in leadership	1	2	3	NA

Hiring Decision for the Current Academic Year (2010-11)

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

D4. 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

☐₁ Other (Please Describe)

[Programming Instruction: If response option 3 is checked, no other option may be selected.]

D5a. Were you able to hire an adequate number of qualified **mathematics** teachers to fill empty positions at your school?

☐₁ Yes

☐₂ No

☐₃ N/A - my school did not have any openings for mathematics teachers this year

D5b. Were you able to hire an adequate number of qualified **science** teachers to fill empty positions at your school?

☐₁ Yes

☐₂ No

☐₃ N/A - my school did not have any openings for science teachers this year

D6. Do you believe the Noyce Program helped increase the number of qualified mathematics and/or science teachers available for the 2010-11 academic year?

☐₁ Yes

☐₀ No

☐₉₈ Don't Know

E: Benefits & Burdens of the Noyce Program

E1.   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 pool 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) *regardless of whether they are part of the Noyce Program*	1	2	3	4	96	98

E2.   Please describe, in no more the 250 words, your perceptions of Noyce teacher(s) at your school.

Thank you for completing this survey!

Glossary

Throughout this survey, the following terms are used.

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.

Highly Qualified Teacher
As defined by the No Child Left Behind Act of 2001 (NCLB), A "Highly Qualified" Teacher is a teacher who is: fully certified and/or licensed by the state; holds at least a bachelor's degree from a four-year institution; and demonstrates competence in each core academic subject area in which the teacher teaches.

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

Overall student dropout rate
Overall student dropout rate refers to the percentage of students who were enrolled at your school during the 2008-2009 academic year who did NOT return for academic year 2009-2010 (excluding students who graduated or otherwise progressed to a grade level not taught in your school).

Overall teacher turnover rate
Overall teacher turnover rate refers to the percentage of mathematics and science teachers who taught at your school during the 2008-2009 academic year who did NOT return to teach at your school for academic year 2009-2010.

Robert Noyce Teacher Scholarship 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.