

**Attachment 3d:
K-12 District and School Leaders
Focus Group Protocol**

Noyce Program Evaluation Focus Group Protocol: K-12 District and School Leaders

OBJECTIVES:

The purpose of this inquiry is to obtain insights from K-12 District and School leaders, such as Noyce Mentor Teachers, Principals, or Assistant Principals, regarding their involvement with Noyce teachers, Noyce STEM teacher preparation/leadership programs, and their coordination with higher education institutions that have Noyce STEM teacher preparation/leadership programs. The questions also address the K-12 perspective on the Noyce Program's perceived impact, effectiveness, and impressions of Noyce Program scholars and fellows.

FACILITATOR SCRIPT:

INTRODUCTION

- Hello, my name is **[NAME OF FACILITATOR]** and I will be facilitating this confidential focus group today.
- I am an independent evaluation and research consultant. I work for WhitworthKee Consulting. We are partnering with the National Science Foundation to evaluate the Robert Noyce Teacher Scholarship Program and identify areas that are working well and opportunities for growth.
- NSF has contracted the WKC Evaluation Team as a third-party evaluator so that the Noyce community can express their true perceptions and experiences with Noyce without having personal information tied to responses.
- Joining us today is my colleague **[NAME OF CO-FACILITATOR/NOTETAKER]** who will function in the background to take notes and observe the session. They will remain in the background without video but may also ask follow-up questions.
- As you may know, the focus groups were organized by your role or position within the Noyce Program when possible. This is the *K-12 district/school leaders'* focus group.
- The purpose of this focus group is to discuss your perceptions of the impact of the Noyce Program, how well the Program has worked, and how the Program has changed over time. We will also discuss the factors related to the Program's success and perceptions of those

invested in the STEM education community. There are no right or wrong answers, and please be straightforward with your responses. You may not have experience with or know the answer to every question. Because Noyce projects and roles can vary, please feel free to share with us if you don't know the answer to the question or it doesn't apply to you. This focus group will last no more than 60 minutes.

- You can skip any question that you do not want to answer, and you can stop participating in this focus group at any time. Your participation in this focus group will not impact you or your school's involvement with the Noyce Program either now or in the future.

CONFIDENTIALITY

Your answers in today's focus group will remain private. The WKC Evaluation Team will not connect your name or any personal details to your responses. The results will be summarized to reflect the overall group's perspectives. The results will be summarized to reflect the overall group's perspectives. Before sharing the information with external parties (e.g., NSF, NSF's website, reports to Congress, Noyce events, other conferences, publication audiences, or other professional communities), the team will make sure that any identifying details are removed.

We would like to record this focus group session so that we can ensure that we have time to think deeply about your responses. To maintain data security, the recording will be stored in a password-protected cloud-based drive. It will not be shared with anyone except the researchers working on the Noyce Program evaluation. Please verbally acknowledge your consent to recording by saying, "I agree." **[FACILITATOR NOTE: MAKE SURE TO RECEIVE A VERBAL "I AGREE" FROM ALL FOCUS GROUP PARTICIPANTS. MAKE NOTE OF PARTICIPANT CONSENT (YES/NO) IN THE TRACKER.]**

Do you have any questions before we get started?

[IF YES, PLEASE ANSWER ANY QUESTIONS AS BEST YOU CAN. IF YOU ARE UNABLE TO ANSWER A QUESTION, PLEASE REACH OUT TO THE PROJECT LEAD OR CO-LEAD]

[IF NO, BEGIN THE FOCUS GROUP QUESTIONS]

FOCUS GROUP QUESTIONS

[FACILITATOR NOTE: START RECORDING IF PARTICIPANT CONSENTED; IF THEY DID NOT, BOTH THE INTERVIEWER AND NOTETAKER WILL TAKE NOTES TO CAPTURE AS MUCH DATA AS POSSIBLE] I'm going to start the recording now.

Background

[INFORMATION ON NAME, CURRENT ROLE, AND SCHOOL WITH WHICH EACH PARTICIPANT IS AFFILIATED WILL BE CAPTURED FROM THE DEMOGRAPHIC QUESTIONNAIRE - SHARE THE RESPONDENTS' DEMOGRAPHIC QUESTIONNAIRE ANSWERS AND VERIFY THEY ARE CORRECT.

IF ANY INFORMATION IS INCORRECT, PLEASE NOTE THE RESPONDENT'S CORRECTED INFORMATION AND GIVE THE UPDATED INFORMATION TO THE PROJECT LEAD OR CO-LEAD]

FACILITATOR SCRIPT: In this section, we will discuss a little about your involvement and experiences with the Noyce Program.

Projects funded by the Noyce Program may be called different names at different schools or institutions. Noyce Program projects focus on supporting STEM (Science, Technology, Engineering, and Mathematics) teacher education/leadership and often pair STEM education students with local K-12 schools. If you first learned about this evaluation by a professor or faculty member forwarding you an email, your current or most recent work with that professor may have been part of a Noyce project.

Does everyone have a sense of which specific activities at your school or within your work we're talking about when we say Noyce? **[WAIT FOR CONFIRMATION FROM EACH PARTICIPANT. PROVIDE EXAMPLES OR PROBE FURTHER IF PARTICIPANTS ARE NOT SURE.]**

1. How would you describe your current involvement with the Noyce Program? What role do you have as a district or school leader?

[BACKGROUND]

- a. **Probe:** How long have you been collaborating with a college or university as part of their Noyce project to support STEM teachers and teacher leaders? **[BACKGROUND]**

STEM Teacher Preparation Field

2. From your perspective, what specific parts of the STEM teacher preparation field do you think should be emphasized and funded? **[1A]**
 - a. **Probe:** What are some of the challenges in preparing, recruiting, and retaining STEM teachers? **[1A]**
 - b. **Probe:** In what way do any of the challenges or funding opportunities you mentioned impact your district or school? **[1A]**

FACILITATOR SCRIPT: Now I'm going to transition to talking specifically about the Noyce Program. As you may know, the Noyce Program provides funding to higher education institutions via (a) scholarships, (b) stipends, and (c) other means of programmatic support to recruit and prepare science, technology, engineering, and mathematics (STEM) majors and other professionals to become K-12 teachers and teacher leaders.

3. If the Noyce Program could fund anything (the sky is the limit), what would you suggest that NSF fund to recruit, prepare, and retain STEM teachers and teacher leaders in high-need school districts? **[1]**
 - a. **Probe:** Can you identify specific areas within STEM education that are currently underserved or overlooked that could benefit from additional funding? **[1A]**
 - b. **Probe:** Are there specific populations of individuals in STEM education that are currently underserved or overlooked that you think could benefit from additional funding?
 - c. **Probe:** How could the Noyce Program be expanded to further support the professional development of STEM teachers and teacher leaders? **[1A]**
4. What entities related to the Noyce Program does your district or school collaborate with to support teacher preparation and teacher leadership development? **[IF NEEDED: NON-PROFIT PARTNERS THAT PROVIDED PROFESSIONAL DEVELOPMENT, INTERNSHIPS, RESEARCH EXPERIENCES; OTHER INSTITUTIONS; OTHER**

DEPARTMENTS; LOCAL SCHOOL DISTRICTS; ETC.] What role do they have? **[2A]**

- a. **Probe:** Which entities are missing from your existing partnerships that would help support your district or school's participation in the Noyce Program? **[2A]**
 - b. **Probe:** What, if any, field experiences does your school or district provide for Noyce scholars/fellows? **[IF NEEDED: STUDENT TEACHING, CO-TEACHING, APPRENTICE TEACHING, ETC.]**
5. Why does your district or school participate in the Noyce Program? For example, what factors exist within society, the larger field, at the institution level, etc., that influence the school's participation? **[2A]**
6. What are some specific challenges or complexities that you have encountered during your district or school's involvement with the Noyce Program? For example, what challenges or complexities exist within society, the larger field, at the institution level, etc., that make participation challenging? **[1C, 3, 3B, 3C, 3D]**
7. What do you think could be learned from the Noyce Program and applied to other similar STEM teacher preparation and teacher leader initiatives? **[1D]**

Perceptions of the Noyce Program

FACILITATOR SCRIPT: In this next set of questions, we would like to explore your perceptions about the Noyce Program overall and its impact as well as any gaps in its reach.

8. What is your overall perception of the Noyce Program? **[2A]**
 - a. **Probe:** What is your perception of current Noyce scholars and fellows? **[2B]**
 - b. **Probe:** What is your perception of former Noyce scholars and fellows? **[2C]**

FACILITATOR SCRIPT: The Noyce Program addresses the critical need for recruiting, preparing, and retaining highly effective elementary and

secondary mathematics and science teachers and teacher leaders who persist as classroom teachers in high-need school districts.

[FACILITATOR NOTE: READ DEFINITION VERBATIM AND PROVIDE TEXT IN CHAT OR PAPER.] Per the Higher Education Act of 1965, a high-need school district is defined as having at least one school that **meets at least one of the following criteria:**

- a. not less than 20% of the children served by the agency are from low-income families;
- b. serves at least 10,000 children from low-income families;
- c. is eligible for funding under the Small, Rural School Achievement Program under 20 U.S.C. 7345(b); **or**
- d. is eligible for funding under the Rural and Low-Income School Program under 20 U.S.C. 7351(b); **and,**

Meets one of the following criteria:

- a. has a high percentage of teachers not teaching in the academic subject areas or grade levels in which the teachers were trained to teach; **or**
- b. has a high teacher turnover rate or a high percentage of teachers with emergency, provisional, or temporary certification or licensure.

9. In this definition, what are your thoughts on the way the term "high-need school district" is described? Do you think the definition supports the Noyce Program's goals of reaching high-need K-12 students? If yes, why? If not, why not? **[2A]**

- a. **Probe [IF PARTICIPANT(S) INDICATE(S) THE DEFINITION SHOULD BE DIFFERENT]:** What alternative definition would you recommend to further help the Noyce Program reach high-need K-12 students? **[2A]**
- b. **Probe:** What are your perspectives on how Noyce scholars and fellows can teach in a school that is not high-need (but may reside in a district that is high-need by definition) to fulfill their program requirements?

10. What is your perception of the impact of the Noyce Program (i.e., after implementation)? For example, how does the Noyce Program

address STEM teacher shortages and/or retaining STEM teachers in high-need schools? **[2D]**

- a. **Probe:** What factors contribute to your perception of the impact of the Program?
- b. **Probe:** What are the gaps in the Noyce Program's reach and impact to addressing the critical need for recruiting, preparing, and retaining highly effective STEM teachers and teacher leaders in high-need school districts.)? **[2D]**

Wrap Up

11. As we wrap up our time together, would you like to share any lessons learned during your involvement with the Noyce Program or any growth opportunities that could help improve the Program? **[5]**

FACILITATOR SCRIPT: Thank you for your time and for sharing your experiences and perceptions. This will be extremely helpful for NSF as they identify areas in Noyce that are working well and opportunities for growth. As I mentioned at the beginning of our focus group, all information that you provided will remain confidential, and any identifying details will be removed before any information is shared with external parties. Finally, all of the recordings will only be made accessible to the WKC Evaluation Team.