

Evidence Quality and Reach Hub: How to Position Your Work for NSF DRK-12 STEM Education Research and Design Funding Opportunities

Session 1

March 19, 2024



Introductions

Time: 5 minutes

Instructions:

In the chat, please share your name and organization, and share what excites you about the work that you do.



Virtual Meeting/Conference Recording Notice

The American Institutes for Research® (AIR®) allows for the recording of audio, visuals, participants, and other information sent, verbalized, or utilized during business-related meetings. By joining a meeting, you automatically consent to such recordings. Any participant who prefers to participate via audio only should disable their video camera so only their audio will be captured. Video and/or audio recordings of any AIR session shall not be transmitted to an external third party without the permission of AIR.

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AIR Inclusive Meeting Guidelines

Hosting and Participating in Meetings



ENGAGE EVERYONE



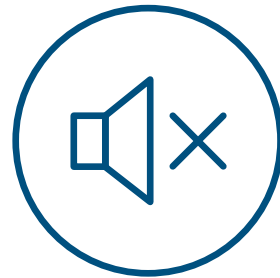
BE HEARD AND SEEN



ACKNOWLEDGE SPEAKER



MAXIMIZE MICROPHONES



MINIMIZE NOISE



MAXIMIZE VISUAL DISPLAYS

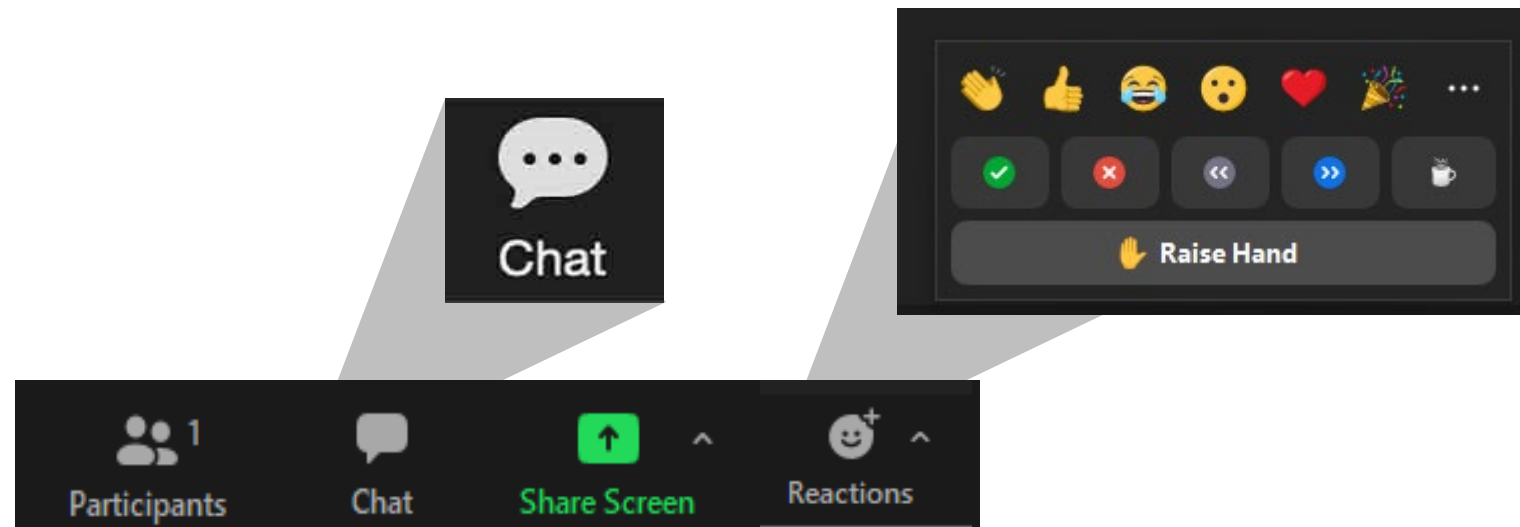
These guidelines are intended to improve the meeting experience for virtual participants, as well as people with hearing loss, visual impairment, and those for whom English is an additional language.

Developed by the Access AIR and AIR CREW Employee Resource Groups with support from the AIR Diversity and Inclusion Office.

How to Use Zoom

Click on the **Chat icon** to ask questions, share your thoughts and ideas when prompted, and let us know about any technical issues.

Click on **Reactions** to **Raise Hand** to ask a question during Q&A or to use one of the other reaction icons.



How to Use Zoom

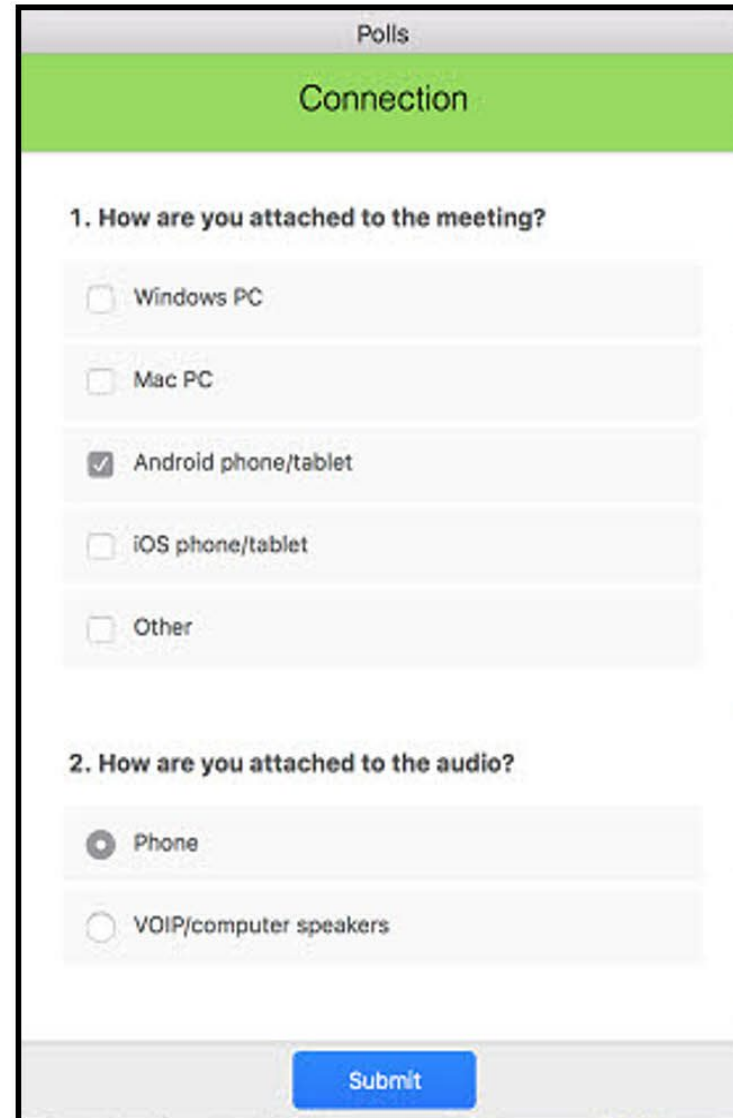
Please participate in **Zoom polls** when prompted.

The poll will appear on your screen. Respond to the question by selecting a response(s).

Then click **Submit**.

Results will be shared on screen.

Responses are **anonymous**.



Polis

Connection

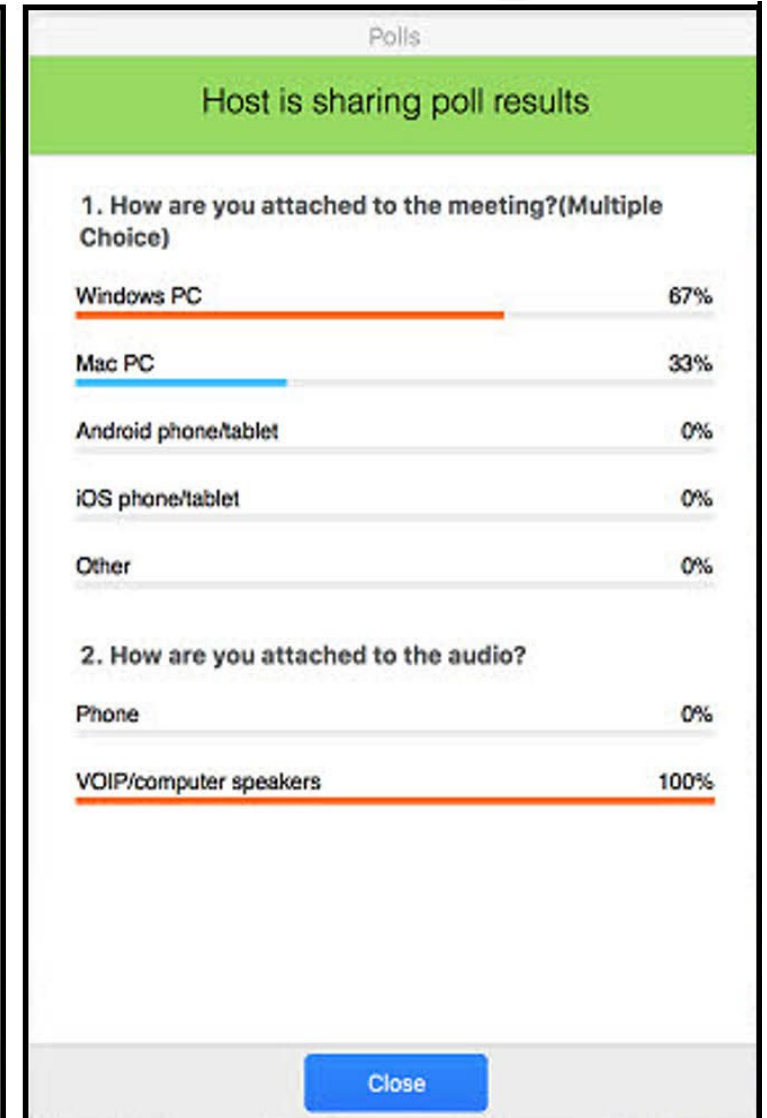
1. How are you attached to the meeting?

- Windows PC
- Mac PC
- Android phone/tablet
- iOS phone/tablet
- Other

2. How are you attached to the audio?

- Phone
- VOIP/computer speakers

Submit



Polis

Host is sharing poll results

1. How are you attached to the meeting?(Multiple Choice)

Windows PC	67%
Mac PC	33%
Android phone/tablet	0%
iOS phone/tablet	0%
Other	0%

2. How are you attached to the audio?

Phone	0%
VOIP/computer speakers	100%

Close

EQR Hub

The Evidence Quality and Reach (EQR) Hub will provide current and aspiring STEM education researchers **targeted learning opportunities regarding research methods, knowledge translation, and DEI**. The hub will develop and implement virtual webinars and workshops for researchers in the Discovery Research PK–12 (DRK–12) community, convene communities of practice, and engage in individualized consultations with DRK–12 projects.



This work is made possible by the National Science Foundation (NSF) under Grant No. 2101162.

Community of Practice (CoP) Sessions

Session 1: Understanding the DRK-12 Program and Solicitation

Session 2: Insights From Current and Past NSF Grantees From Minority Serving Institutions

Session 3: Positioning Yourself and Your Institution

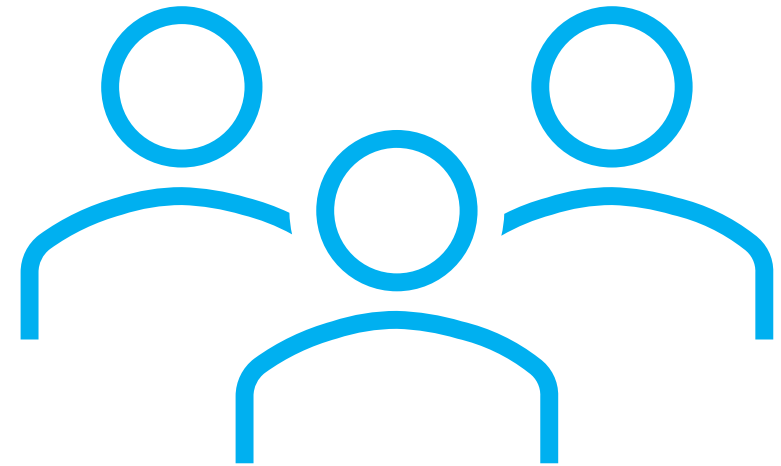
Session 4: Positioning Your Research for DRK-12

Community of Practice Process and Expectations

During the live sessions, learners will receive direct instruction from experts and participate in breakout activities and group discussions.

Between sessions, learners will engage in peer learning through asynchronous discussions.

Learners are expected to **attend all sessions.**



Working Assumptions



You are important to this process.



Everyone has wisdom; **we need your voice!**



Assume positive intent. **This is a safe space of mutual learning.** It is also a continual process.



These may be sensitive topics—patience and empathy are important.

Norms



Active listening and engagement. **Participate and share your ideas!**



Questions or comments? Use the “Raise Hand” feature.



Cameras on: Encouraged!



Audio: Mute and unmute. Be mindful of background noise.

Meet the Presenters



Dr. Danielle Ferguson

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Agenda and Overview

Danielle Ferguson

Session 1 Agenda

1. Purpose of the Community of Practice (CoP)
2. Overview of the DRK–12 Program
3. Discussion About Concerns or Barriers When Applying for DRK–12 Funding
4. Next Steps and Resources

Session 1 Objectives

By participating in this session, attendees will:

- build awareness of the DRK–12 program, and
- explore alignment of proposal ideas with the latest DRK–12 solicitation with peers.

NSF's DRK-12 Program

DRK-12 program is the *only* NSF program that supports applied research and development at the PK-12 level in all areas of formal STEM education. In this way, the program is foundational to NSF's ability to achieve its goals regarding postsecondary education and workforce development.

The program invests in projects with the potential to immediately address longstanding challenges, inequities, and opportunities in formal education. It also invests in proposals that anticipate and then provide the foundation for formal PK-12 STEM education as it could be in future decades.

Discovery Research PK–12 (DRK–12)

DRK–12 Program Goal: Catalyze research and development that enhances all PK–12 teachers' and students' opportunities to engage in high-quality learning experiences related to the sciences, technology, engineering, and mathematics (STEM).

Objectives

1. Build knowledge about how to develop PK–12 students' and teachers' STEM content knowledge, practices, and skills.
2. Support collaborative partnerships among STEM education researchers and STEM education practitioners and school leaders.
3. Build the field of STEM education by supporting knowledge synthesis and the development of novel and robust assessments of teacher and student learning, engagement, and skills.

Outcomes can include promising, evidence-based products and methods that can be used by others to support the success of all teachers and all students (e.g., curriculum, teaching and research tools, models of collaboration).

DRK-12 Program Structures

Strand

Teaching

Learning

Project Type

Exploratory

Design & Development

Impact

Implementation & Improvement

Measurement & Assessment

Synthesis

Partnership Development

Workshop/Conferences

Funding Level

I: \$450,000, 3 years

II: \$3,000,000, 4 years

III: \$5,000,000, 5 years

Synthesis: \$600,000, 3 years

Partnership Development: Up to \$100,000, 1 year

Workshop/Conferences: Up to \$200,000, 1 year

Questions



Discussion

Danielle Ferguson

Poll: NSF Grants

Time: 2 minutes

Instructions: Answer the poll question.

Have you applied for and secured an NSF grant?

- I've never applied for an NSF grant.
- I've applied for but never won an NSF grant.
- I've applied for and won an NSF grant.
- Not sure



Breakout Activity

Time: 12 minutes

Instructions:

In your breakout room:

1. Share in 1 to 2 sentences the project you would like to propose. If you do not have a project in mind, please adapt an existing project for this exercise.
2. Review the solicitation and identify which strand the project would fit and identify the project type.

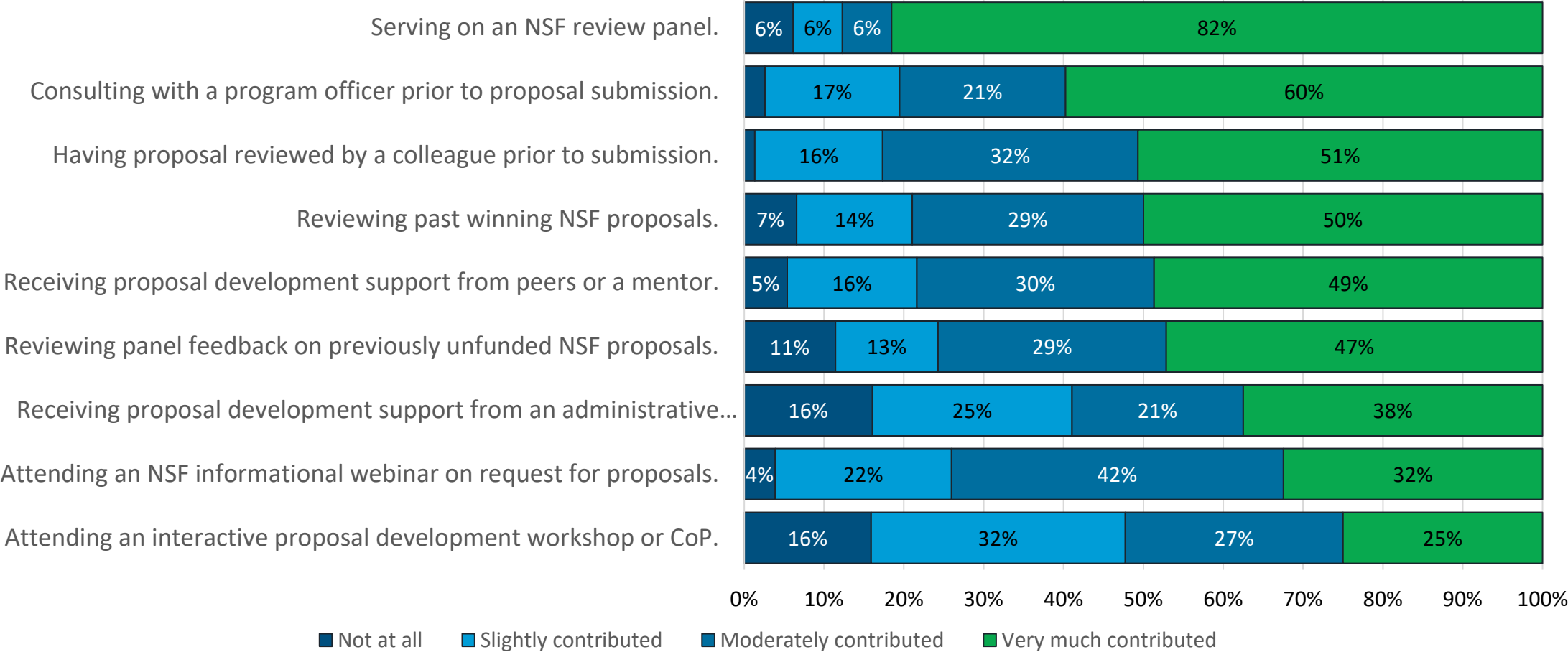


Whole Group Discussion

1. What questions do you have about how to map your proposed idea to the DRK-12 solicitation?
2. When you think about writing the proposal for this idea, what is one challenge that you think you will face (e.g., understanding the solicitation, securing partners)?



What Current DRK-12 Grantees Say...



Note. Item descriptions have been simplified for the visual. In total, 97 NSF DRK-12 active grantees participated in the survey in fall 2023. Item nonresponse ranged from 20 to 53.

Next Steps

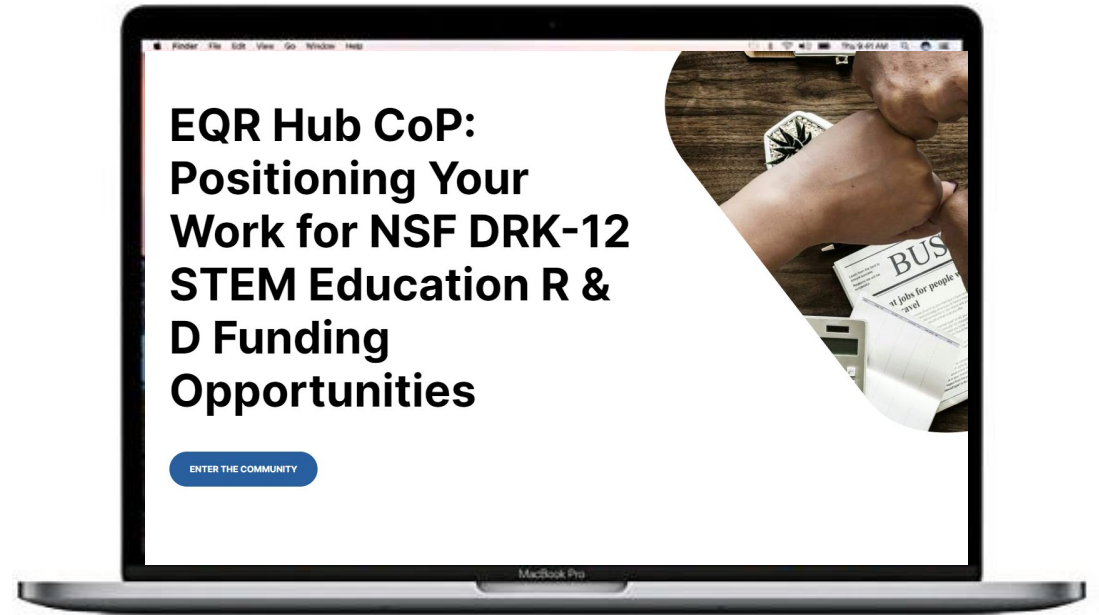
Susan Brown

Intersessional Activity

Time: Complete prior to Session 2.

Instructions: Independently or with a partner, complete the *Reflection and Gap Analysis Template*. The purpose of this activity is to review the DRK–12 solicitation and to identify some key areas that you think you would need support to develop your proposal.

In the next session, you will hear from current and past DRK–12 grantees from MSIs about their experiences applying for NSF funding.



[CoP Learning Space](#)

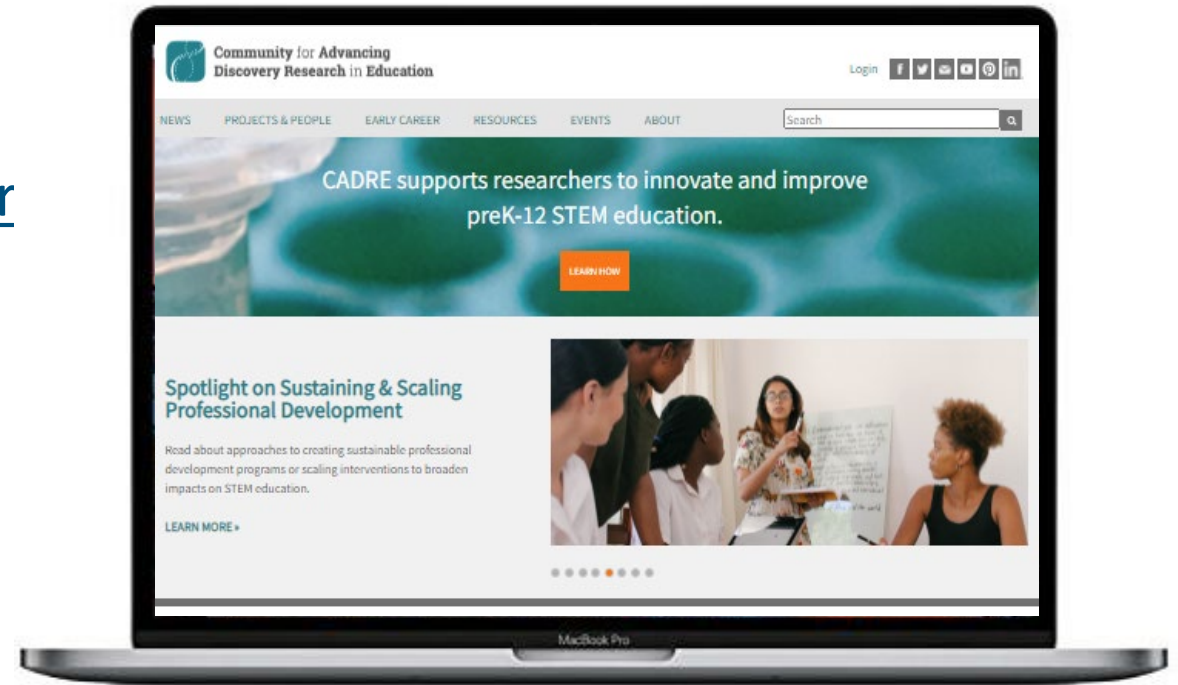
CADRE Resources

Uncovering the Hidden Curriculum of DRK–12 Video Series:

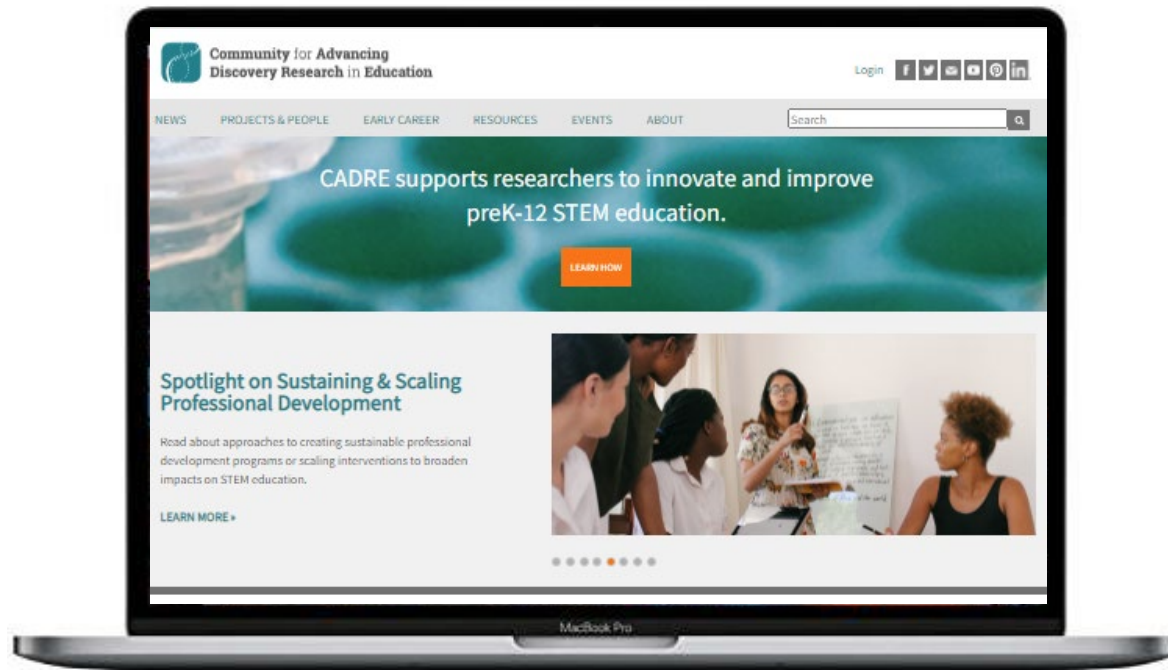
https://www.youtube.com/playlist?list=PLFesrj2Sg4Fj30T6J_1gsftzbIpUQAGN4

NSF Proposal Toolkit:

<https://cadrek12.org/resources/nsf-proposal-writing-resources>



Stay Connected



Visit the CADRE resources
<https://cadrek12.org/resources>

and EQR Hub page
<http://cadrek12.org/eqr-hub>



Thanks for attending!

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