

Evidence Quality and Reach Hub: Community of Practice on Developing a Conceptual Framework Centered on DEI

Session 3

March 8, 2023



Introduce Yourself!

- In the Chat, please share your name and institution.
- Which squirrel do you feel like today?



Virtual Meeting/Conference Recording Notice

The American Institutes for Research® (AIR®) allows recording of audio, visuals, participants, and other information sent, verbalized, or used 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 that 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.

AIR Inclusive Meeting Guidelines

Hosting and Participating in Meetings



ENGAGE EVERYONE



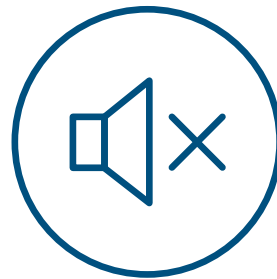
BE HEARD AND SEEN



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.

Agenda

1. Share and Reflect on Assignment 2
2. Specific Strategies to Integrate DEI Into K–12 STEM Research
3. Examples of Integrating DEI in Analysis and Dissemination
4. Breakout Activity: Troubleshooting Challenges in Integrating DEI
5. Closing Remarks

Working Assumptions



You are important to this change.



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 are encouraged!



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

Assignment 2: Recap and Reflection

Time: 10 minutes

Instructions:

- Reflect on the challenges you encountered while identifying strategies to incorporate DEI into your conceptual framework.
- Please use the “raise hand” feature or type your response in the chat.

Homework instructions:

- Using the Continuum for Improved Community Engagement, return to your conceptual framework and write one or two specific strategies (each) that you can do to incorporate DEI into your literature review, methodology, and data collection.
- Share these strategies in the Discussion forum in the shared learning space.

Specific Strategies to Integrate DEI Into K–12 STEM Research

Paula Dias

Reminder: Integrating DEI is a journey, not a checklist.



Key Questions:

Data Analysis Phase

- Who is included and excluded from analysis processes?
 - This phase is more than just informing about research outcomes; it involves facilitating a process to enable **meaningful participation** in reflecting on the findings.
 - Informing people, consulting them, and **creating space for them to shape interpretations or findings** are different processes with intentional results.

Source: Lokot, 2022.



Key Questions: Writing/Reporting Phase

- **What research products or deliverables will you develop, and whose interests and priorities are served by them?**
 - Academic publications, technical reports, policy briefs, presentations, infographics, videos.
- **When will the research results be shared?**
 - Academic/project timelines are not always aligned with community needs.
- **Who ultimately accesses data/reports/outputs?**
 - How will those most impacted by the research have access to the results?

Source: Lokot, 2022.



Key Questions: Writing/Reporting Phase

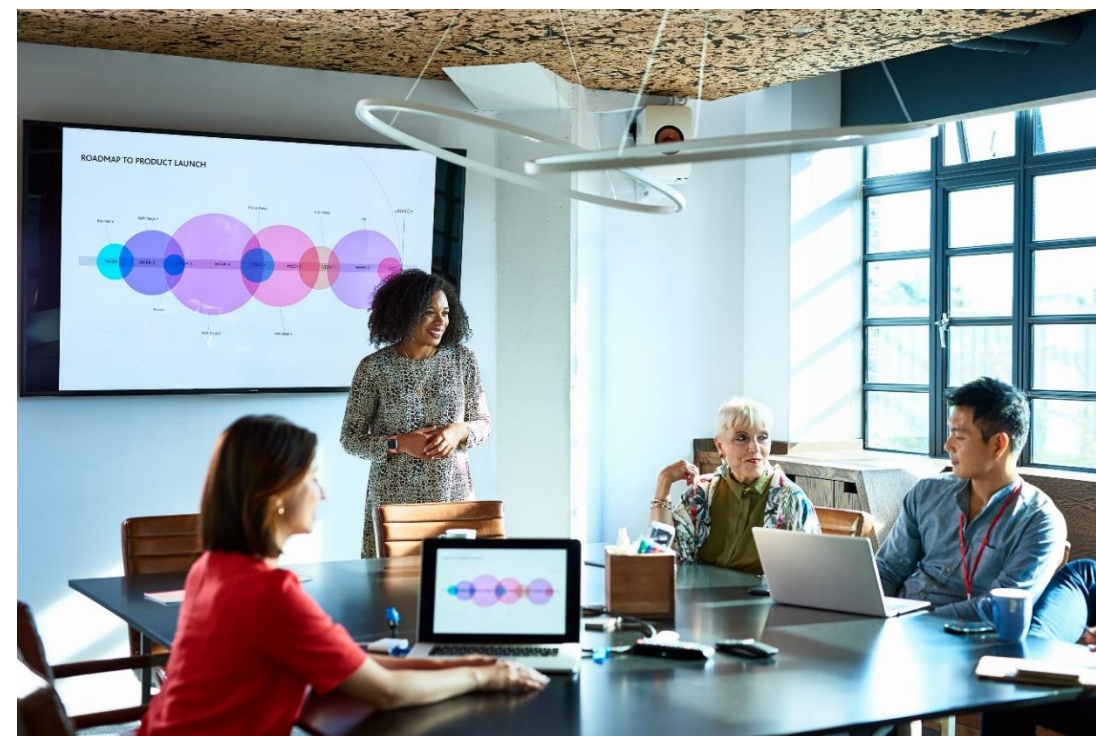
- **How are the populations we work with represented in the research?**
 - Occasionally we encounter problems with how issues are represented ethically by those outside the context, how stories are presented, how people's accounts are summarized and simplified.
 - Reporting is not only about language but also is about visuals.
- **What participant characteristics are included in the analysis?**
 - Are you disaggregating data to identify potential inequities?



Source: Lokot, 2022.

Strategies to Integrate DEI Into Analysis

- **Intentionally involve communities in analysis and validation processes.**
 - For example, co-authorship, co-creation workshops, stakeholder review panels, validation workshops, and participatory analysis methods.
- **Contextualize data.**
 - Numbers, without context, take on the assumptions and bias of their audience.
- **Analyze and frame data with an equity lens.**
 - For example: subgroup analysis and contextualizing quantitative findings.



Source: Lokot, 2022.

Strategies to Integrate DEI Into Dissemination

- Develop dissemination products in formats that are culturally responsive and accessible for communities engaged in the research.
 - Policy briefs, videos, and websites.
- Ensure that dissemination products incorporate linguistic competence.
 - **For example:** in the language communities are most comfortable with and in plain language.
- State **positionalities of authors** in final research products.
- Work closely with co-authors and/or communications staff to ensure language and visual representations of communities **reflect their dignity** and reduce the reinforcement of power hierarchies.

“Is the language used as easy to understand as possible? Do people from different cultures, with different lived experiences, with different technical backgrounds understand the results of the research and the ‘so what’ of what it means?”

(Chicago Beyond, 2019)

Source: Lokot, 2022.

Questions



Examples of Integrating DEI Into Analysis and Dissemination

Marissa Spang

Ex. 1: Community-based Analysis & Dissemination with Indigenous Communities



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Collaborative Research: Research Culturally Based Citizen Science: Rebuilding Relationships to Place

- A collaborative research project between the American Indian Center of Chicago (AIC), Menominee Tribe of Wisconsin and Northwestern University.
- Employed a community-based design (CBD) to comprehensively engage community members in all aspects of the research, including, but not limited to, data analysis and dissemination.
- The majority of the research team was Indigenous and members of the AIC or Menominee tribal community.

Source: Bang, M., Medin, D., Washinawatok, K., and Chapman, S. (2010). Innovations in Culturally-based Science Education through Partnerships and Community. In M. Khine & I. Saleh (Eds.) *New Science of Learning: Cognition, Computers and Collaboration in Education*. New York: Springer.

Ex. 1: Community-based Analysis & Dissemination with Indigenous Communities



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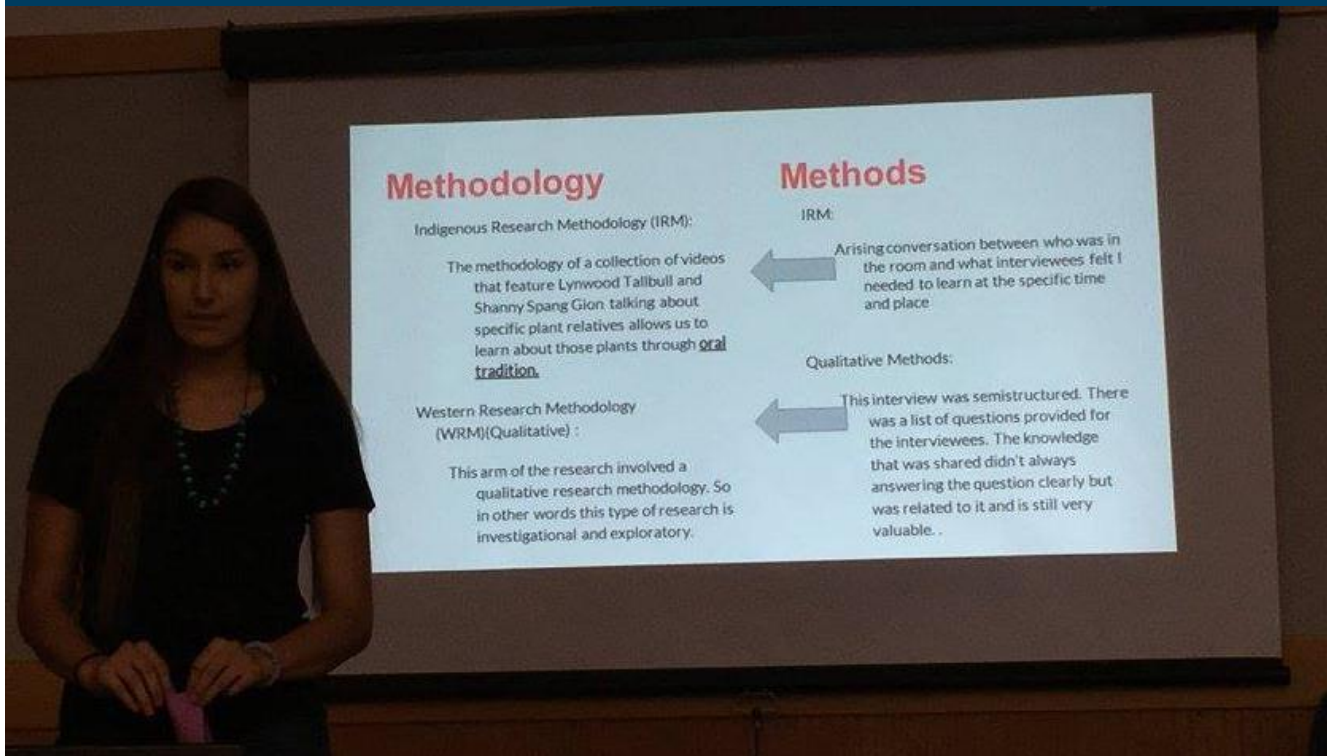
Collaborative Research: Research Culturally Based Citizen Science: Rebuilding Relationships to Place

- Data analysis was conducted via team-based settings with community members and research staff for:
 - POV camera data from family forest walks
 - Transcripts of CBD design meetings (grounded-coding analysis)
- Dissemination included the co-authoring of multiple peer-reviewed research journals with community members.
- Lastly, the project resulted in two community members being accepted into a PhD program, another in a Master's program, and several others who continued their formal undergraduate education.

Source: Bang, M., Medin, D., Washinawatok, K., and Chapman, S. (2010). Innovations in Culturally-based Science Education through Partnerships and Community. In M. Khine & I. Saleh (Eds.) *New Science of Learning: Cognition, Computers and Collaboration in Education*. New York: Springer.

Example 2a: Research Design, Analysis, and Dissemination by Indigenous Youth

Land-based science learning on the Northern Cheyenne Reservation (Montana)



- Native youth built their own inquiry, conducted an investigation, and analyzed their sources using a synthesized approach of Indigenous and Western research methodologies.
- They also disseminated their research at a community symposium of tribal leaders and family members.

Source: Spang, M. (2017). *For us, by us: Indigenous land-based science learning* [Master's thesis, University of Washington].

Example 2b: Dissemination via Indigenous Youth Digital Story



- **Centered and uplifted youth voice.** Youth were the narrators and experts of their own STEM learning experiences and identities in a land-based science learning program.
- **Positioned youth as active meaning-makers** of their Indigenous and Western STEM learning.
- Digital stories can be told collectively or individually.

Source: Spang, M. (2017). *For us, by us: Indigenous land-based science learning* [Master's thesis, University of Washington].

Example 3: Dissemination—Co-Presenting at Local Conferences

Veronica Miller & Wilfred Ferris (Arapaho Schools), & Dr. Joseph Wilson, AIR

Wyoming Indian Elementary Computer Science Collaborative

- This collaborative is a research–practice partnership among AIR, Arapahoe School, Fort Washakie School, Wyoming Indian Schools, Wyoming Department of Education, and BootUp PD.
- **Dissemination:** AIR and Arapahoe School leaders co-presented at the Wyoming Department of Education's annual American Indian Education Conference to share their work.
- **Session title:** *Teaching Indian Studies Through Computer Science*, Veronica Miller and Wilfred Ferris (Arapahoe Schools) and Dr. Joseph Wilson (AIR).



Questions



Breakout Activity

Troubleshooting Challenges in Integrating DEI

Varsha Ranjit

Activity: Troubleshooting Challenges in Integrating DEI

Time: 20 minutes

Instructions: Join your preferred breakout room. Then, consider the following questions:

- **Breakout Room 1 (Varsha):** What challenges and questions remain about integrating DEI into conceptual frameworks and research in general?
 - What are the expectations of compensation or incentives?
- **Breakout Room 2 (Paula):** What are some potential ways to integrate DEI into analysis?
 - How would you incorporate community members' inputs into data analysis?
- **Breakout Room 3 (Marissa):** What are some potential ways to integrate DEI into dissemination?
 - How would you identify dissemination channels?
 - How would you select the messages to share?

Activity Debrief

The facilitator will share key takeaways from breakout group discussions.

Please also type your responses into the chat.

Questions

- **Breakout Room 1 (Varsha):** What challenges and questions remain about integrating DEI into conceptual frameworks and research in general?
- **Breakout Room 2 (Paula):** What are some potential ways to integrate DEI into analysis?
- **Breakout Room 3 (Marissa):** What are some potential ways to integrate DEI into dissemination?





Questions



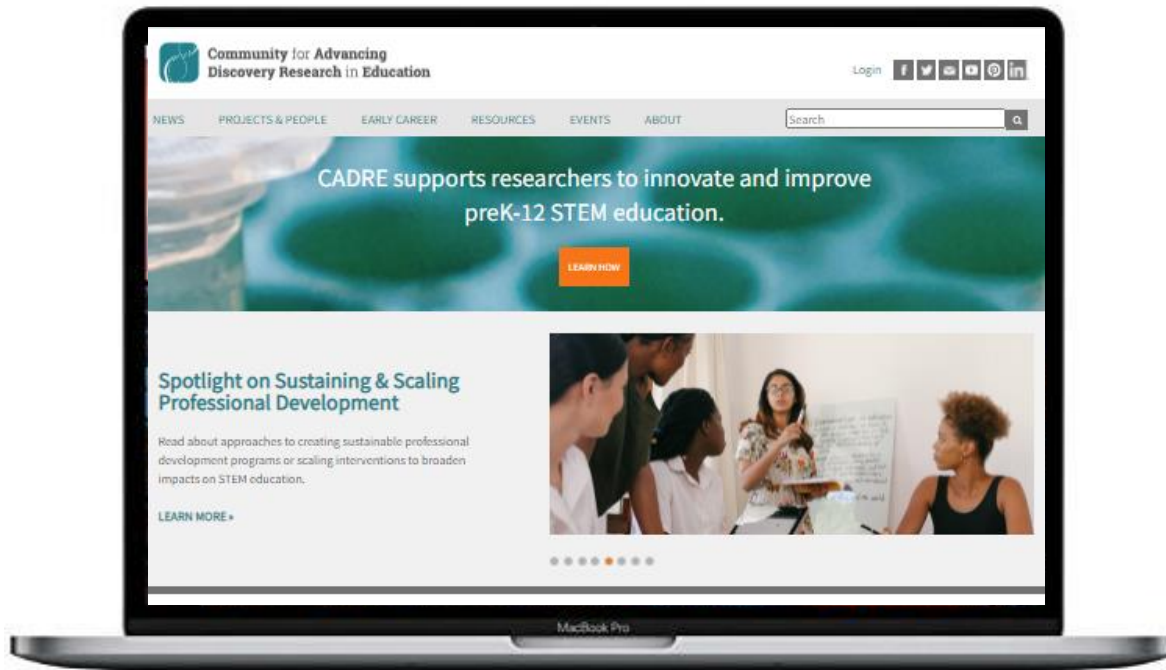
Closing Remarks

Keep in Touch



- The [CoP learning space](#) will remain open until **July 30, 2023**.
- A **contact list for CoP participants** is available under Session 3 in the [CoP learning space](#).
- **One-on-one coaching** also is available. Contact cfelicio@air.org for information.

Stay Connected



Visit the CADRE website

<http://cadrek12.org/>

and EQR Hub page

<http://cadrek12.org/eqr-hub>

Feedback

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<https://www.surveymonkey.com/r/JJGYZKK>



Thanks for attending!

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