

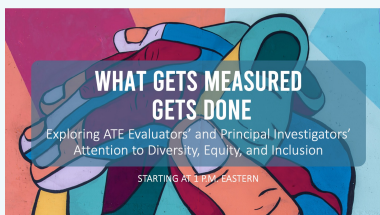
What Gets Measured Gets Done:

Exploring ATE Evaluator's and PI's Attention to Diversity, Equity, and Inclusion

5/19/21



Materials



Slides



Additional Resources



Recording



Introductions



Ayesha

Boyce



Tiffany

Smith



Emma

Leeburg



Behind the Scenes



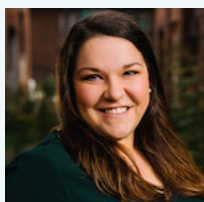
Lyssa
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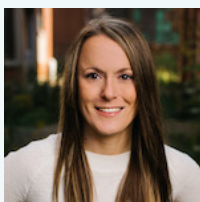
Megan
Zelinsky



Lori
Wingate



Ana
Councill



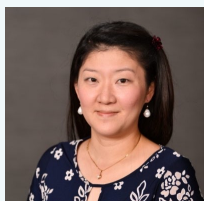
Kelly
Robertson



Valerie
Marshall



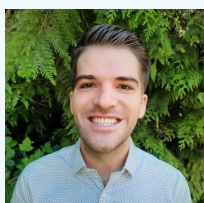
Special Thank You



Yi-Jenn
Wang



Candiya
Mann



Adam
McKee



Carolyn
Williams-
Noren





Advanced Technological Education Program

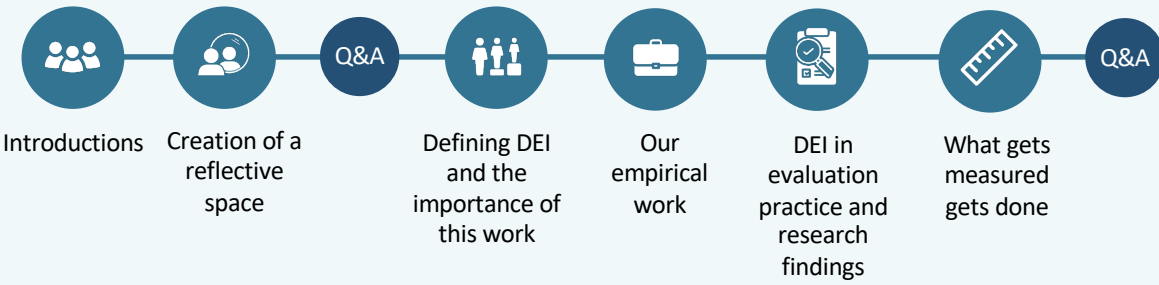
www.nsf.gov/ate



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Webinar Outline



Introductions



Introductions



Associate Professor, ASU

Ayesha

Boyce



Clinical Assistant Professor, UNCG

Tiffany

Smith

Participant Introductions



Location



Institution



Position

Type answers in chat box!



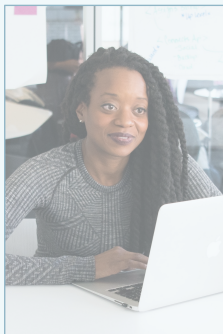


*"Reflective thinking is always more or less troublesome because it **involves overcoming the inertia that inclines one to accept suggestions at their face value**; it involves willingness to endure a condition of mental unrest and disturbance... judgment suspended during further inquiry... to maintain the state of doubt and to carry on systematic and protracted inquiry — these are the essentials of thinking."*
John Dewey, 2011, p. 13.

Grounding us in this time...



Creating a Reflective Space



What is happening in our practice?
Where are we headed, and why?



What is going well? What is not going well?



What could be improved or modified going forward?



Who gains and who loses, and by which mechanisms of power?



Reflective Practice

An iterative process of thinking and questioning, self and contextual awareness, focused on learning and improvement for both the evaluator and those involved in the evaluation.

Smith & Skolits, 2021, pp. 16-17

This webinar is an opportunity to (further) incorporate ourselves into the mirror of our evaluative practice.



Reflective Practice Requires



Active Listening



Evaluative &
Critical Thinking



Authentic & Effective
Communication



Intentionality



Self &
Contextual Awareness



Articulating
Positionality & Values



Interest in
Taking Action



Mindset toward
Change & Growth



Your Reflections Today

1. Who are you as an evaluator and how do you incorporate DEI into your evaluation efforts?
2. What does your practice look like? How are peoples' voices incorporated?
3. What is going well in your practice, around DEI?
4. What could be going better?
5. Within your context, who gains and who loses? By which mechanisms of power?
6. What do diversity, equity, and inclusion look like, and how could they be further envisioned, in your own evaluation projects?
7. What can be done to improve your evaluation practice moving forward?

Iterative Nature of this Work

Reflective practice is an iterative and constant process.

So too is the practice of **humility**.

And **cultural responsiveness**.



Bonus Question(s)

How will you incorporate deliberate, intentional reflection, into your practice and the practices of the programs you evaluate?

What data sources can provide evidence about and increase the richness of your practices related to diversity, equity, and inclusion issues?

How can you capture both process and product?

Questions



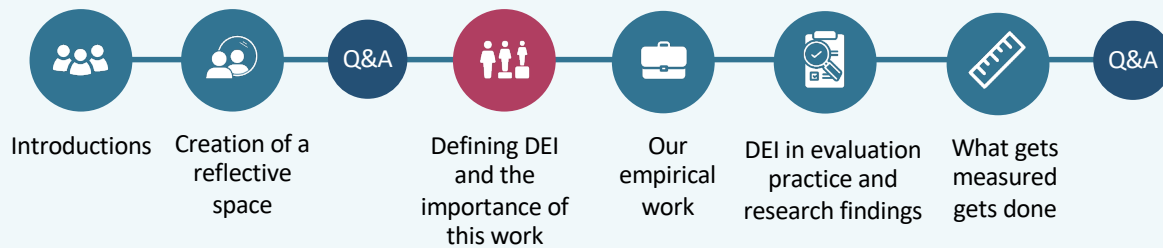
Ayesha



Tiffany

Use chat window

Webinar Outline





Chat Question:

What comes to mind when you think about...

Diversity?

Answer in
chat box!



Chat Question:

What comes to mind when you think about...

Equity?

Answer in
chat box!





Chat Question:

What comes to mind when you think about...

Inclusion?

Answer in
chat box!



Defining Diversity

Variety in traditional sociodemographic markers such as class, gender, and race, as well as other ways people are different from one another.

Differences among individuals, including demographic differences such as gender, race, ethnicity, and country of origin (NAS, 2018).



Defining **Equity**

Parity in program access, participation, and accomplishment for all program participants, especially those least well-served in the context (Greene, Boyce, & Ahn, 2011).

Fair distribution of opportunities to participate and succeed in education for all students (NAS, 2018).



Defining **Inclusion**

Fostering an environment in which participants are (and feel) embraced, included, valued.

Processes through which all students are made to feel welcome and are treated as motivated learners (NAS, 2018).

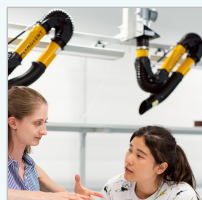
The world is becoming increasingly small, and the need to communicate and serve diverse contexts and communities is growing larger.



Context & Importance of This Work



URM and
STEM Fields



Broadening
Participation in STEM



NSF
Commitments



ATE
Context

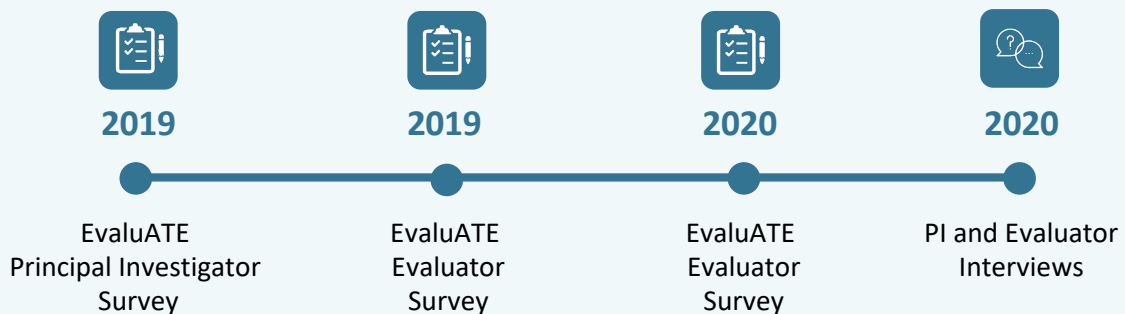


Current Research Questions

1. How are ATE external evaluators and principal investigators (PIs) defining and measuring diversity, equity, and inclusion (DEI) in their project and evaluation practices?
2. To what extent do definitions align with the NAS definitions?



Methodology: Data Collection





Methodology: Data Analysis



Quantitative Survey Data
Using Descriptive Statistics



Qualitative Survey
ATLAS.ti in Process of
Thematic Analysis



Inductive Thematic
Analysis for Interviews
(Current)



DEI in Evaluation Practice & Research Findings

- Overview research findings
- Provide practical examples

DIVERSITY

Poll Question

Which of the following demonstrates a good way to examine and measure diversity?

- A** “Notes regarding the composition of groups of students interviewed about their experience of the advanced technology.”
- B** “This is the focus of the [name redacted] University so the ATE classes were designed to be a general education course that would be available to the entire campus.”
- C** “Demographic data on student & faculty participants in ATE activities.”

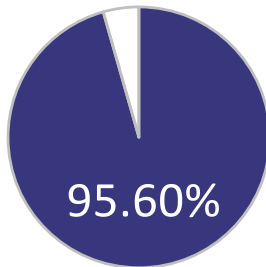
Answer in
poll!



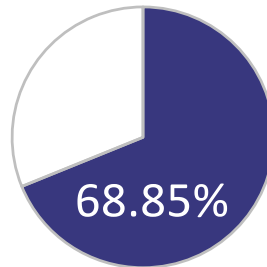


Diversity: Research Findings

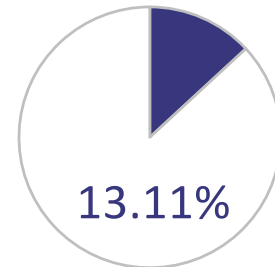
A few findings



Most participants reported that they collect data on diversity as a part of the evaluation of their ATE project



Participants who noted that they collected data on diversity overwhelmingly reported that they collect demographic information to address this topic

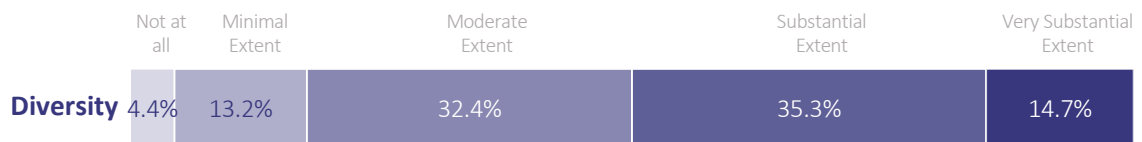


Participants sometimes explained specific project activities, the most common one being specific enrollment activities



Diversity: Research Findings

Evaluators: To what extent does the evaluation of this ATE project gather evidence related to diversity, equity, and inclusion?





How to Measure Diversity



Diversity: Example Evaluation Questions

1. How and in what ways is project leadership attending to diversity? What opportunities and barriers exist? How might progress toward diversity be improved?
2. To what extent has this project increased diversity of participants?



Diversity: Example Indicators



Leadership/
Representation



Initial URM
& %



Change in
URM



Total # of
Participants



Retention
Rates



National
Demographics/
Representation



Demographics



Diversity: Example Indicators



Demographics

- LGBTQ+ identities
- Disability status and physical accessibility needs
- Racial and ethnic identities
- Religious groups
- Learning and mental accessibility needs
- Gender identity
- Age
- Nationality
- School attended/no schooling
- Country/countries lived in
- Social/economic status



Diversity: Example Data Collection Methods



Surveys



Focus Groups &
Interviews



Institutional or
Administrative
Data



Program
Documentation

EQUITY



Poll Question

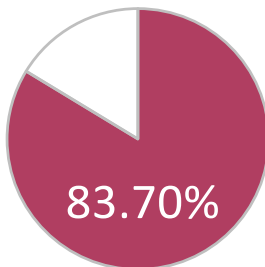
Which of the following demonstrates a good way to examine and measure equity?

- A "All materials that relate to the program are vetted by the college for equity."
- B "Expansion of program to under-served populations. Specifically, females and people of color in STEM."
- C "Increasing participation of autistic students in STEM/ATE programs."

Answer in poll!



Equity: Research Finding

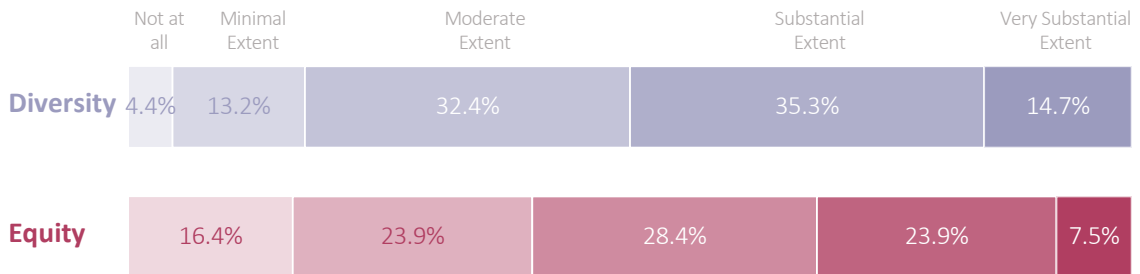


noted that they collected data on equity in the evaluation of their ATE project.



Equity: Research Findings

Evaluators: To what extent does the evaluation of this ATE project gather evidence related to diversity, equity, and inclusion?



Equity: Research Findings



Program Documentation



Surveys



Demographic Information



Focus Groups & Interviews



Recruitment



Marketing & Outreach



Population served



How to Measure Equity



Equity: Example Evaluation Questions

1. How and in what ways are project leadership attending to equity? What opportunities and barriers exist? How might they be improved?
2. What is the quality of the program design, content, and pedagogy, as designed for various and diverse learners in the context?
3. To what extent is the project differentiating instruction based on need?
4. How and in what ways is the project ensuring that various populations have access to resources?
5. Are key project components operating effectively? What is working well and for whom?



Equity: Example Indicators



External factors/threats



Support in place (access)



Diversification of services



Trainings offered and taken



Compensation



Criteria for selection



Recruitment vs selection rates



Retention (disaggregated)



Disciplinary actions



Curriculum



Equity: Example Indicators



GPA



Mentoring type and amount



Satisfaction



% resource based on need



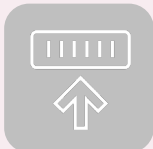
Attendance



Recruitment



Equity: Example Indicators



GPA



Mentoring type and amount



Satisfaction



% resource based on need



Event Attendance



Recruitment

- LGBTQ+ identities
- Disability status and physical accessibility needs
- Racial and ethnic identities
- Religious groups



Equity: Example Data Collection Methods



Surveys



Focus Groups & Interviews



Institutional or Administrative Data



Program Documentation



Observational Data

INCLUSION

Poll Question

Which of the following demonstrates a good way to examine and measure inclusion?

- A** “Questions relating to actions and outcomes related to making more people feel included, particularly by knowing what options are available to them and being able to see themselves in the roles they are learning about.”
- B** “Survey responses related to a sense of belonging in program settings.”
- C** “We really aren't collecting much other than demographic data.”

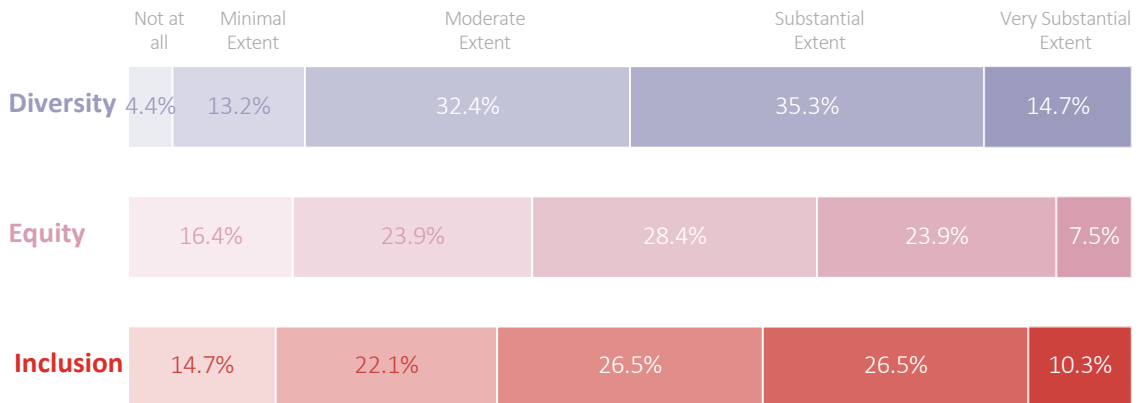
**Answer in
poll!**



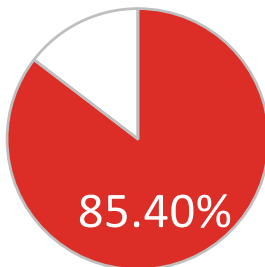


Inclusion: Research Findings

Evaluators: To what extent does the evaluation of this ATE project gather evidence related to diversity, equity, and inclusion?



Inclusion: Research Finding



participants reported having collected data on inclusion in their evaluations of ATE projects.



Inclusion: Research Finding



Program
Documentation



Surveys



Demographic
Information



Focus Groups &
Interviews



Recruitment



Marketing &
Outreach



Population
served



How to Measure Inclusion



Inclusion: Example Evaluation Questions

1. How and in what ways are project leadership attending to inclusion and cultural issues across components? What opportunities and barriers exist? How might they be improved?
2. What is the project culture and climate? What are participant experiences and sense of belonging? Are there differences in experience across groups?



Inclusion: Example Indicators



Support in place (access)



Curriculum



Leadership



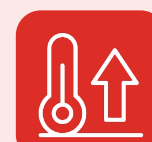
Programmatic training



Project goals



Stakeholder voice/lived experience/authenticity



Climate



Satisfaction



Participant experience



Attendance



Inclusion: Example Indicators



Support in place (access)



Curriculum



Leadership



Programmatic training



Project goals



Stakeholder voice/lived experience/authenticity



Climate



Satisfaction



Participant experience



Attendance



Inclusion: Example Indicators



Climate

- Sense of belonging
- Understanding of role/responsibility
- Self-efficacy
- Relationship with leadership
- STEM identity



Inclusion: Example Data Collection Methods



Surveys



Focus Groups & Interviews



Program Documentation



Observational Data



Poll Question

Within your own context what will be the most difficult to measure?

Answer in poll!





Chat Questions

Within your own context what will be the most difficult to measure?

Follow-up questions

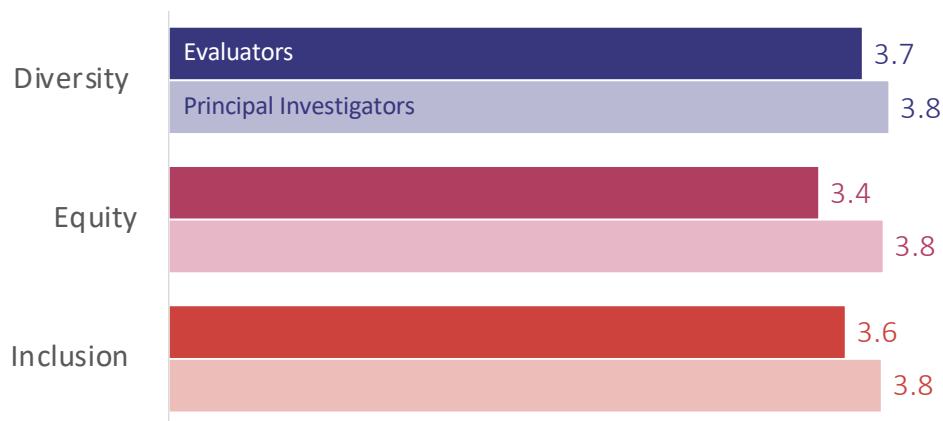
- 1 Why did you choose that answer?
- 2 What makes it difficult?

Answer in chat box!



Project Engagement in DEI

Comparative descriptive statistics for the extent to which evaluators and PIs believe their projects engage in Diversity, Equity, and Inclusion (range 1–5).





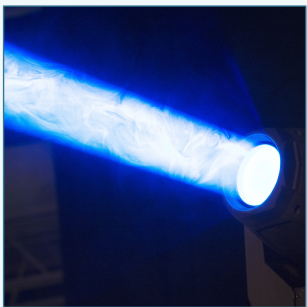
Chat Question

What efforts does your program make toward DEI?

Answer in
chat box!



What gets measured gets done



Diversity traditionally gets the spotlight and is measured. How can we place the spotlight on equity and inclusion?



How can we build capacity for focusing on and measuring equitable and inclusive practices in our programs?



Importance of informal and formal engagement with DEI



Chat Question

How could you further integrate reflection activities to understand the incorporation of DEI in your program's efforts?

Answer in chat box!



What gets measured gets done



Need for reflective practice



Measures are only as descriptive as the activity they are designed to focus on



What activities are your programs engaged in that can contribute to your "measurement" of DEI efforts/outcomes?

Questions



Ayesha



Tiffany

Use chat window 



May 25

WEBCCHAT





Post Webinar Survey

