

# NISE Net Online Workshop

**Tools for Engaging Communities and Incorporating Diversity, Equity, Accessibility, and Inclusion (DEAI) Practices**

July 19, 2022



## Today's Presenters:

Ali Jackson, Sciencenter, Ithaca, NY

Peregrine Bratschi, Museum of Life and Science, Durham, NC

Cecilia Nguyen, Oregon Museum of Science and Industry (OMSI), Portland, OR

Amparo Leyman Pino, Yellow Cow Consulting, Berkeley, CA



## Welcome!

As we wait to get started with today's discussion, please:

**Introduce yourself!** Type your name, institution, and location into the [Chat Box](#)

**Questions?** Feel free to type your questions into the [Chat Box](#) at any time throughout the webinar or use the raise your hand function in the participants list and we'll unmute your microphone.

**Today's discussion will be recorded and shared on nisenet.org at: [nisenet.org/events/online-workshop](https://nisenet.org/events/online-workshop)**

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**Tuesday, August 2, 2022**

Webb Space Telescope First Images -  
How to Engage Audiences with New  
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**Tools for Engaging Communities and  
Incorporating Diversity, Equity,  
Accessibility, and Inclusion (DEAI) Practices**

# Presentation Overview

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- Welcome & Introductions
- Holding Space For Reflection
- PLC Partner Project—MLS Teen Advisory Board
- NISE Network DEAI Booklet: Tools for Engaging Communities and Incorporating Diversity, Equity, Accessibility, and Inclusion (DEAI) Practices
- Developing Action Plans with DEAI
- Wrap-up & Q & A

# Holding Space for Reflection



## Ivan Coyote, “Imagine A Pair of Boots”, from their collection of short stories entitled, A Slow Fix.

Imagine a pair of boots. A sturdy, well-made, kind of nondescript pair of boots. They are functional enough, but kind of plain. Imagine that you live in a country where every citizen is issued this one pair of boots at birth, and that there are no other footwear options permitted by law. If you grow out of or wear through the soles of these government-issued boots, you may trade them in for a new pair, always identical to your old ones. Imagine that everyone you know wears these very same boots without question or complaint.

Now imagine that your right foot is two sizes bigger than your left one. No matter what you do, one boot will chafe, and the other will slip, and both will cause blisters. When you mention your discomfort you are told that odd-sized boots are forbidden, because they cause confusion and excess paperwork. It is explained to you that this footwear system works perfectly for everyone else, and reminded that there are people in other countries who have no boots at all. You are beat up in grade three because none of the other kids have ever seen feet like yours. The teacher tells you that you should probably just learn to keep your boots on. Your parents blame each other. You end up wearing an extra sock on your small foot to compensate, and never go to swimming pools.

## Ivan Coyote, “Imagine A Pair of Boots”, from their collection of short stories entitled, A Slow Fix.

Your feet sweat profusely in the summer and you always undress in the dark. You hate your feet but need them to walk and stand up on. You hate your boots even more. You dream of things that look like sandals and moccasins, but you have no words for them. You learn things will be easier for you if you just never talk about your feet. One time on the bus, you spot a guy with the exact same limp as you, but you pretend not to see him. He watches you limp off at your bus stop and then looks the other way. You can't stop thinking about the man with the limp for weeks. You are nineteen years old and until that day on the bus you thought you were the only person in the country who couldn't fit into their boots.

# Conversational Prompts

- 1. What parts of this story resonate with your own personal or professional experiences?**
- 2. Does this story remind you of anything?**
- 3. How can storytelling support the DEAI work you're engaged in with your team and community?**



# Small Group Share Outs

# Conversational Prompts

- 1. What parts of this story resonate with your own personal or professional experiences?**
- 2. Does this story remind you of anything?**
- 3. How can storytelling support the DEAI work you're engaged in with your team and community?**

# NISE Network's Earth & Space Project-Based Professional Learning Community

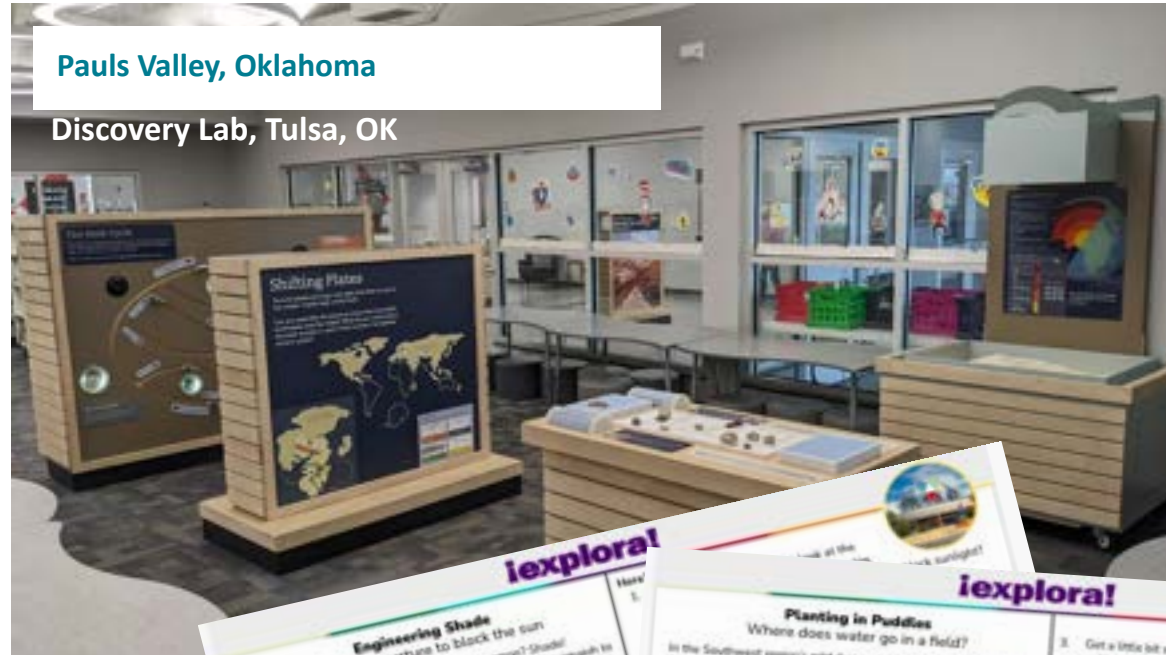
Focused on increasing the capacity of  
museums to make Earth & Space science  
more relevant and inclusive  
for local communities.



# National Community and Conversion, Local Impact



Arecibo Observatory, Arecibo, PR



Pauls Valley, Oklahoma

Discovery Lab, Tulsa, OK



Explora, Albuquerque, NM

# Examples of Project Inclusive and Relevance Themes

- Collaborating with experts
- Collaborating with community organizations
- Intentionally working with specific audiences
- Incorporating Indigenous ways of knowing & expertise
- Deaf/Hard of Hearing communities
- Blind/ Low Vision communities
- Schools / Teachers/ @ home learning
- Co-creation with minoritized and rural communities
- Non-English speaking communities
- *And more!*



The background is a complex collage. The left side features vibrant, swirling marbled patterns in shades of purple, blue, pink, and green, with some circular, bubble-like structures. The right side is a solid black field containing a stylized, multi-colored figure with long, thin, radiating limbs, resembling a star or a person in motion. The figure's head and upper body are composed of blue, purple, and yellow marbled patterns.

# Connecting Earth, Space, & US!

Relevancy and Inclusion  
in Earth & Space Science

DEAI in STEM and Beyond





# Youth Advisory Council

Group of 8-12 sixth graders from Brogden Middle School, in partnership with the Encore Afterschool program



# Youth Interns

2 high school students selected from a pool of applicants referred by our partners at the Durham Children's Initiative







# Play Testing

**Interns facilitated their program with the YAC -- The YAC evaluated**





Facilitation  
with visitors





Writing  
stories  
into  
the sky





Co-creation *is* DEAI in practice







# Key Takeaways

Bias isn't just  
individual,  
it is *systemic*

Fair compensation  
is an investment

Discomfort is  
essential  
to real change



**NISE Network Diversity, Equity, Accessibility, and Inclusion Booklet:**  
Tools for Engaging Communities and Incorporating  
DEAI Practices into Informal STEM Projects



# Diversity, Equity, Accessibility, and Inclusion (DEAI)

## Tools & Practices

- Defining Diversity, Equity, Accessibility, & Inclusion in Your Project
- Social Identity & Perspective
- Building Inclusive Teams
- Equity & Inclusion in Community Engagement
- Partnership Approaches & Strategies
- Culturally Responsive Programs
- Collaborative Content Development
- Multilingual Engagement
- Working with Indigenous Communities
- Inclusive Design





# Diversity, Equity, Accessibility, and Inclusion (DEAI) Tools

- Process approach
- There is no one “right” answer

## **Tools include:**

- Overview
- Let's Try This Activities
- Case Studies
- Discussion and Reflection Questions
- Curated Resource Lists



# Example Tool: Culturally Responsive Programs

### Culturally Responsive Programs

Building on assessment that identifies experiences and identities of learners

To make educational programs inclusive, it's important to recognize and respect learners' knowledge, experiences, cultural and other social identities, and worldviews. Asset-based approaches to learning focus on learners' cultural and personal resources as strengths rather than the information that learners lack knowledge or skill due to their different cultural and experiential backgrounds. For learning experiences to feel relevant to audiences and be truly engaging, there must be an opportunity to connect curriculum to lived experiences and cultural backgrounds.

### Culturally responsive pedagogical approaches

Researchers like Gloria Ladson-Billings, Geneva Gay, and Django Paris have generated frameworks for culturally relevant, culturally responsive, and culturally sustaining education. The body of literature is focused mostly on formal education, but can be applied to informal education. Below is a brief description of these three pedagogical frameworks, which are adaptable to the needs of your institution. The approaches are arranged by increasing depth of engagement with learners outside of white-dominated culture.

### Culturally Relevant Education

Culturally relevant teaching is a way for teachers to honor students' individuality, identity, personality, and ethnicity by using cultural differences to impart knowledge, skills, and attitudes.<sup>1</sup> A central idea, this is to do it by doing it.

### Culturally Responsive Education

Culturally responsive pedagogy uses BOP's student background and community cultural practices as resources to focus and explore using the cultural knowledge, prior experiences, frames of reference, and performance styles of students to make learning experiences more relevant to students by them.<sup>2</sup> (p. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 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## Overview



## Let's Try This

## Reflection Questions

- ### REFLECTION QUESTIONS

  - When you are planning, how do you make sure your program is relevant to your intended audience? How would you center the shared practices, languages, behaviors, and cultural ways of your audience?
  - What are some observations or examples that reflect your audience that you can work into the program? Examples (songs, materials, images, oral story experiences, significant dates).
  - How do you approach your program from asset-based practices and acknowledge community strengths and potential?
  - How can you incorporate opportunities for asset-based collaboration and critical engagement in the experiences you create?
- ### PROMPTING FOR REFLECTION

  - ¿Cómo está en la planeación, ¿cómo asegura que su programa sea relevante para la audiencia deseada? ¿Cómo puede centrar las prácticas, idiomas, comportamientos, y las experiencias culturales de los estudiantes?
  - ¿Cómo ve algunas observaciones o ejemplos que reflejan a su audiencia que pueden incluir en el programa? Por ejemplo: canciones, materiales, imágenes, experiencias de la vida real, aniversarios.
  - ¿Cómo puede abordar su programa desde una perspectiva basada en los recursos y conocimientos de los socios y las comunidades de la comunidad?
  - ¿Cómo puede incorporar oportunidades para la colaboración basada en los recursos y en un compromiso crítico en las experiencias que crea?

## Resources

### Related resources on culturally responsive education and programs

- Read "What Does Asset-Based (CIB) Learning Look Like?" by Ray Miller Burke and Christine Ramirez. To learn more about how to implement an asset-based approach to inclusive learning practices: <https://www.ciblearning.org/asset-based-learning>
- Explore Asset-Based Community Development (ABCD) as an approach to sustainable community-driven development. ABCD focuses on how communities can drive the development process from identifying needs to building wealth, after acknowledging assets: <http://www.abcdcommunitydevelopment.org/>
- Read about the framework research supporting culturally responsive education in the paper "Whose Culture Has Capital? A Critical Race Theory Discussion of Community Cultural Wealth" by Dr. Tara L. Carter published in *Research & Development*. <https://www.researchanddevelopment.org/whose-culture-has-capital/>
- Participate in Culturally Sustaining Pedagogy by Project WEIRD. This learning module is part of a complete online professional development curriculum available free of charge: <https://www.culturallysustaining.org/learning-module>
- Read "Let's Try This: Culturally Sustaining Pedagogy for Culturally Relevant Pedagogy" by Gloria Ladson-Billings, published in *Harvard Education Review* through Harvard Education.
- Read the WEIRD "Culturally Relevant and Culturally Responsive: Two Frameworks for the Future Learning" by Gloria Ladson-Billings, *Research and Development*. <https://www.researchanddevelopment.org/culturally-relevant-and-culturally-responsive/>
- Learn about family resources and support through the helpful *Harvard Education Review*, which provides an easy-to-use resource to help better understand family decision language, as printed in the *Journal of Family Research*. <https://www.familyresearch.org/>

## Example DEAI Tool:

# Equity & Inclusion in Community Engagement

Building trust, deepening relationships, and creating sustainable change



# Equity & Inclusion in Community Engagement

## Increasing Level of Community-Driven Involvement

TRANSACTIONAL ENGAGEMENT	TRANSITIONAL ENGAGEMENT		TRANSFORMATIONAL ENGAGEMENT	
<b>Outreach</b>  Some community organization involvement  Communication flows from one to the other, to inform  Provides community with information and experiences  Entities co-exist  Outcomes: establish communication channels and venues for outreach	<b>Consulting</b>  More community involvement  Communication more back and forth, answer seeking  Feedback from the community  Entities share information  Outcomes: develops connections	<b>Involving</b>  Better community involvement  Communication flow both ways, participatory  Community involved on issues, topics, format and content  Entities cooperate  Outcomes: Visibility of partnership, established modes of cooperation	<b>Collaborating</b>  Community involvement  Bi-directional communication flow  Community is integrated in each aspect of the project from development to implementation  Outcomes: partnership and relationship building, trust building	<b>Sharing Leadership</b>  Strong multidirectional relationships  Final decision making is community level  Strong partnership structures  Outcome: Deeper community sense of belonging and ownership over the experiences and learning

Less shared leadership

\*Adapted from the International Association for Public Participation

More shared leadership

## Equity & Inclusion in Community Engagement

# Examples of Community Engagement Work Activity

Think about where you most often fall on this spectrum and think about examples in your work and how this affects your DEAI practice.

<b>Outreach</b> <i>Example:</i> <i>Family Science Events at Local Schools</i>	<b>Consulting</b> <i>Example:</i> <i>Getting student input on traveling exhibits</i>	<b>Involving</b> <i>Example:</i> <i>Prototyping with visitors and the community</i>	<b>Collaborating</b> <i>Example:</i> <i>Development team creating shared goals and funding with partner organizations</i>	<b>Sharing Leadership</b> <i>Example:</i> <i>Museum &amp; Head Start Partnership: teacher training and family engagement events</i>
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## Equity & Inclusion in Community Engagement

# Reflection Questions

1. How can you authentically involve community participants in planning, implementing, and sustaining the program?
2. What does your end product look like, and what strategies do you have in mind to make visible the voices of the community and program participants?
3. How would you make sure that the exchange between individuals and organizations are and feel fair and just?
4. How are you building trust with your partners and community members?



MANOS A LA OBRA!  
LET'S START THE WORK!

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*Amparo Leyman Pino, M. Ed.*  
*Education Consultant*

# DEAI WORK IS A JOURNEY

*It has several entry  
points*





# STOP START CONTINUE

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*Short-term actions that will keep the  
motivation growing, small wins*

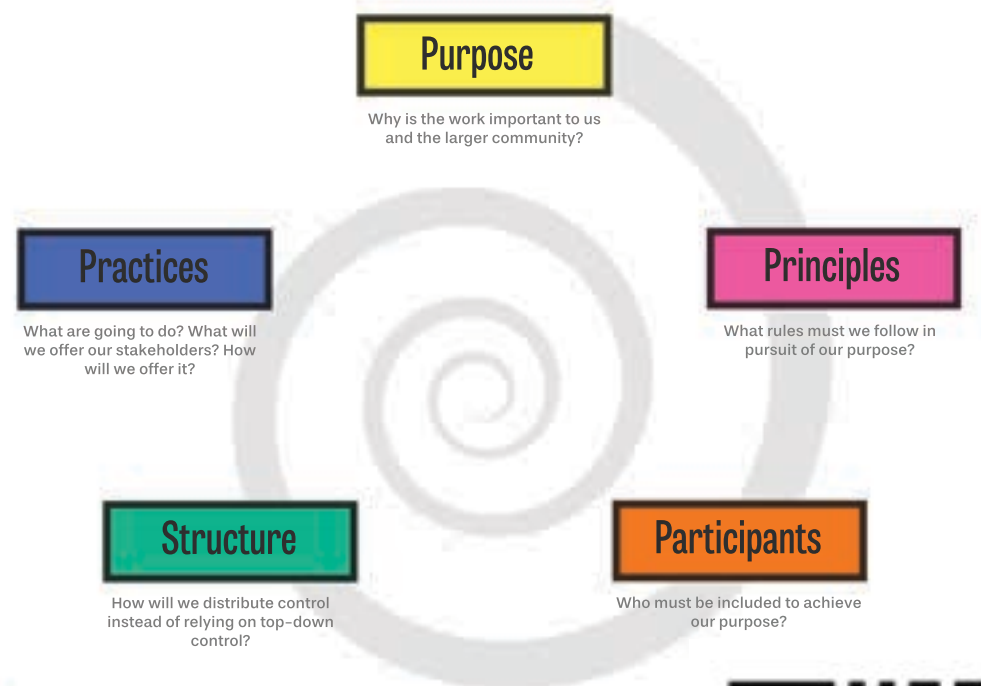
# BUILD A COALITION

*Find like-minded, passionate  
colleagues to work with,  
create a ripple effect*





## Purpose To Practice



**The Liberators** Developed by Keith McCandless & Henri Lipmanowicz ([liberatingstructures.com](http://liberatingstructures.com))



# ACTION PLAN

.....  
*From “Liberating Structures”*

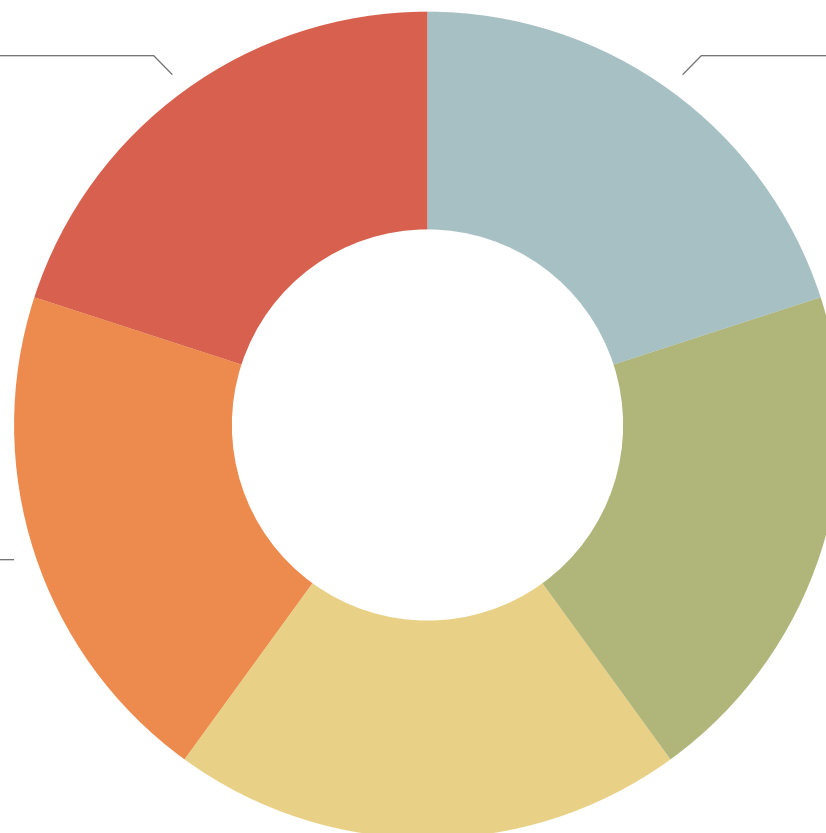


Strategy

*Define DEAI  
HR Practices*

Content

*Culturally responsive  
programming*



Partnerships

*Bringing your  
programs to the  
community*

Access

*Bilingualism*

*Inclusive Design*

Staff

*Training*

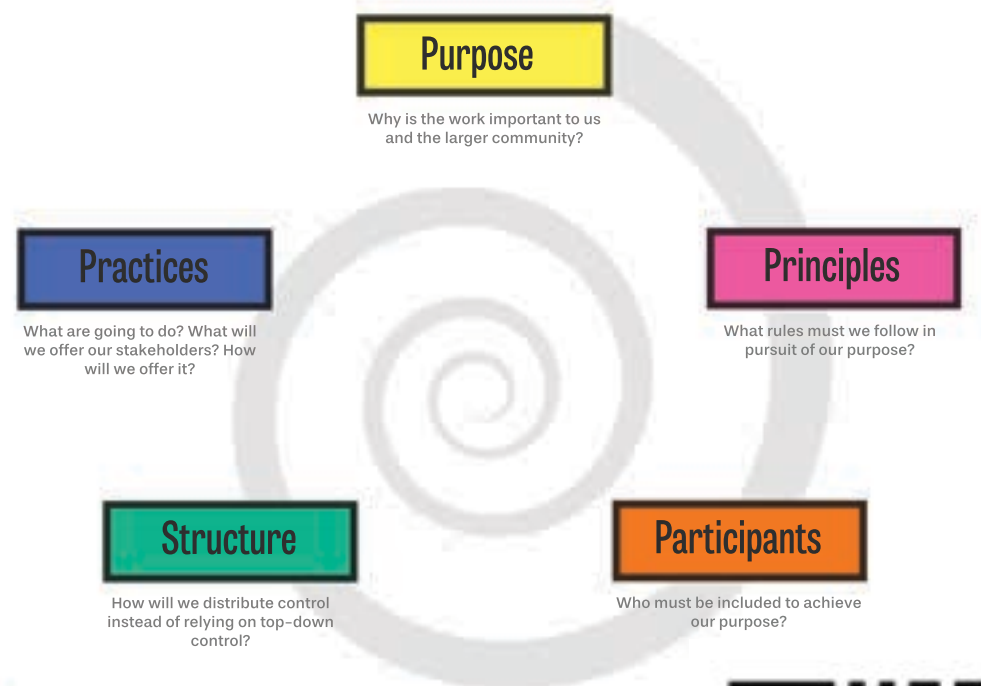
*Build inclusive teams*

# THE FIVE AREAS

.....  
*Of the DiverSci Framework*



## Purpose To Practice



The Liberators

Developed by Keith McCandless & Henri Lipmanowicz (liberatingstructures.com)



# ACTION PLAN

.....  
*From “Liberating Structures”*

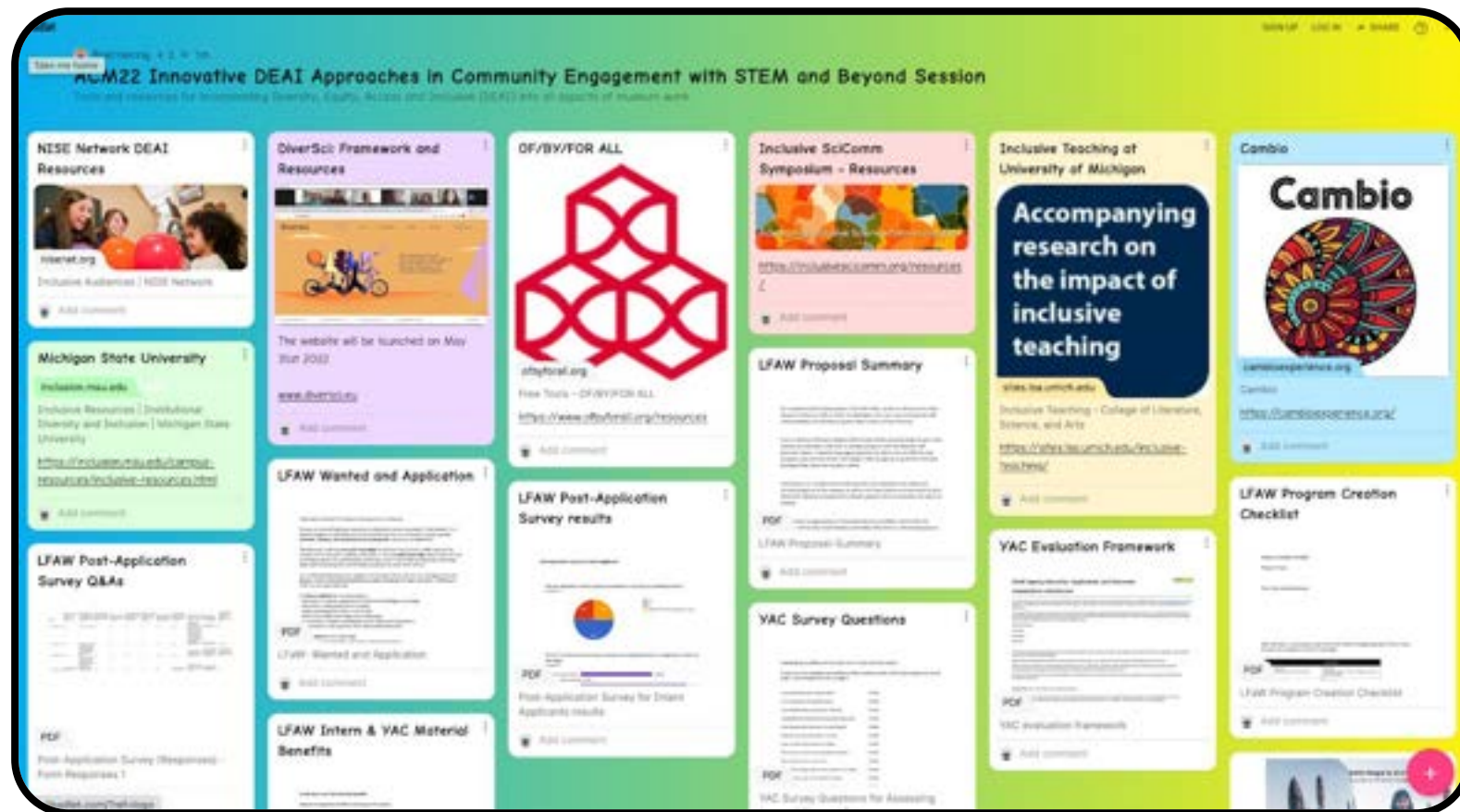


# THANK YOU

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# Padlet Resources



<https://padlet.com/ACM22DEAISession/>



# Future Online Workshops

**Tuesday, August 2, 2022**

Webb Space Telescope First Images -  
How to Engage Audiences with New  
Discoveries

**Coming in fall 2022**

(Date TBA)

**2023 and 2024 Solar Eclipses**

resources: <https://www.nisenet.org/solareclipse>

**Learn more at [nisenet.org/events](https://www.nisenet.org/events)**



# Get Involved

Learn more and access the  
NISE Network's online digital resources  
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# Thank You



**Q&A**



# Questions from You!

Many of you asked about...

- Practical strategies for implementing DEAI best practices, and how to implement on a limited to non-existent budget for DEAI initiatives
- Tools and tips for engaging staff at all levels
- Specific stories of community engagement, both successful and unsuccessful collaborations/projects
- How to reach out/extend invitations to communities that are out of your typical demographic (how to be respectful as the “outsider”)

