

BUILDING CAPACITY

FOR INCLUSIVE INFORMAL STEM LEARNING OPPORTUNITIES FOR PEOPLE WITH AUTISM SPECTRUM DISORDER (YEAR 1)

Project Partners: Judy Koke (PI, ILI), Dr. Christopher Smith (co-PI, SARRC), Dr. Jeremy Babendure (Co-PI, SciTech), Dr. Monae Verbeke (Research Lead, ILI), Kelsey Schimmel (Clinical Consultant, SARRC), Megan Mann (Subject Matter Expert, SAARC), Ashley Johns (Research Associate, SARRC), Nicole Claudio (Research Assistant, ILI)

MOTIVATIONS

The Institute for Learning Innovation (ILI), in partnership with SciTech Institute and the Southwest Autism Research & Resource Center (SARRC) are partnering with the Arizona Museum of Natural History, i.d.e.a. Museum, Pueblo Grande Museum and Arizona Science Center to foster engagement in science, technology, engineering and mathematics (STEM) learning and social interaction for individuals with autism spectrum disorder (ASD).

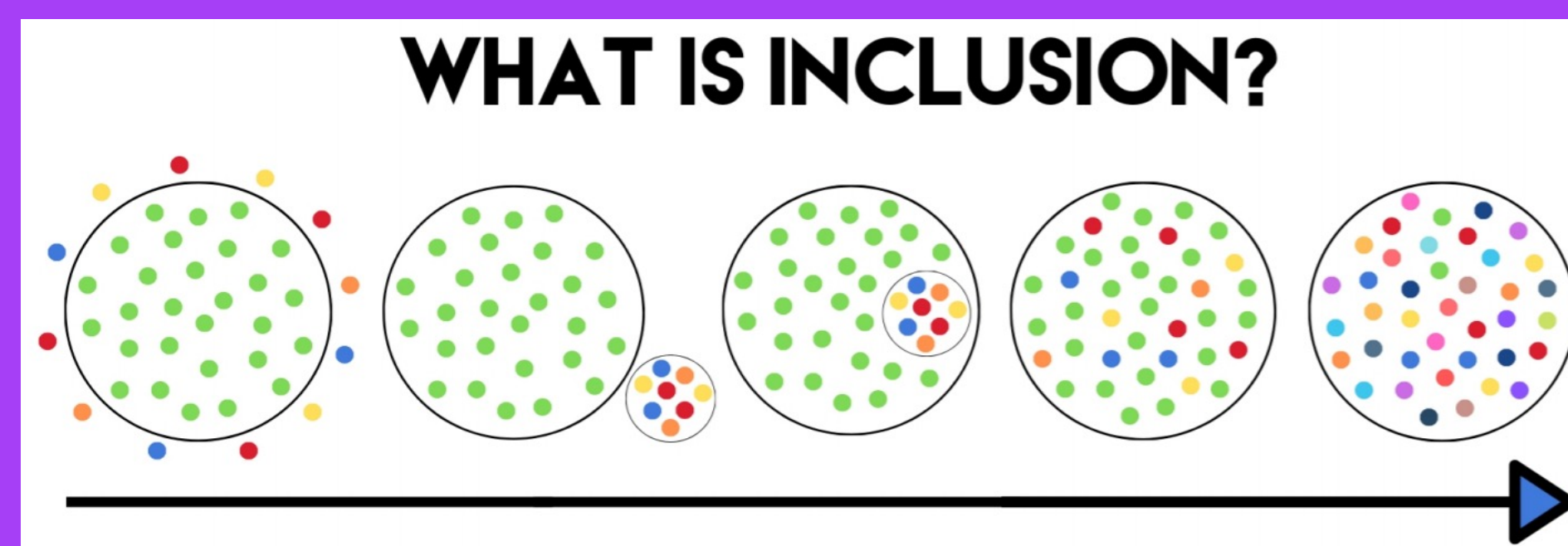
To accomplish the project's goals, custom professional development education and evidenced-based programming is being developed for practitioners working in informal STEM learning institutions such as museums, science and nature centers, zoos, and aquariums. The first phase, running through February 2023, is part of a (hopefully!) three-phase, decade long longitudinal study.

OBJECTIVES

- 1 Increase inclusion of ASD individuals in Informal Science Education in science museum environments by supporting staff development.
- 2 Understand the professional development required to support the integration of inclusive STEM learning activities in museums
- 3 Understand how to support ASD individual's skill development, confidence, and motivation needed to engage in STEM activities

INCLUSION

We knew that we needed to have a shared understanding of inclusion. We needed a model that included the continuum of inclusion exists in museum programs, activities, and events.



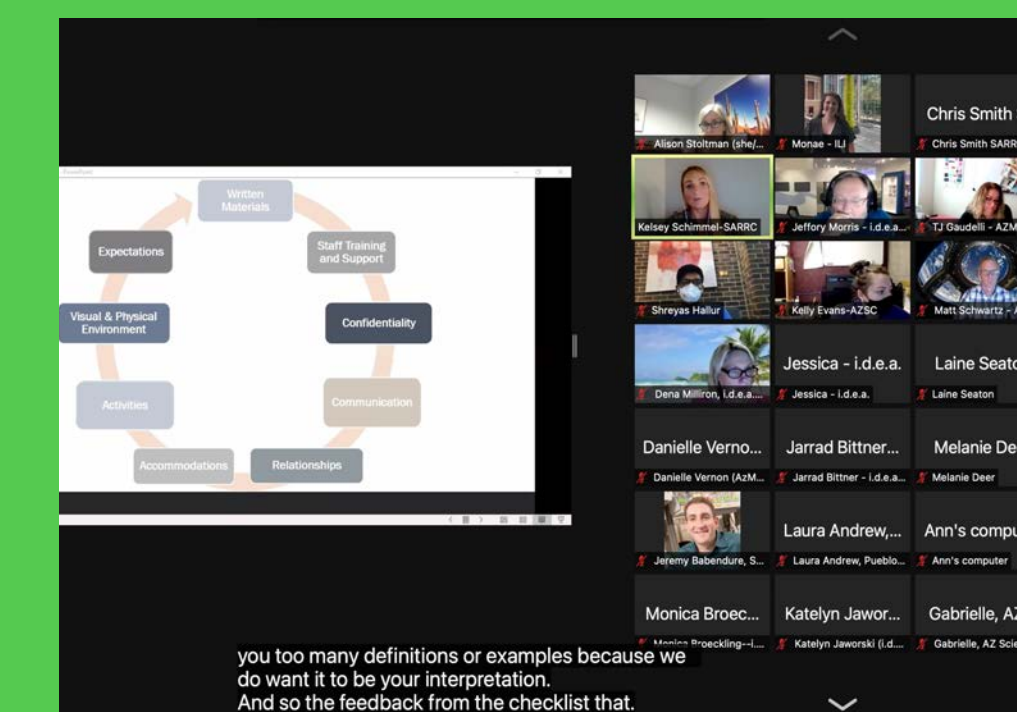
Inclusion is the process and practice of improving the terms for individuals and groups to participate in educational, economic, social, political, and cultural life. Providing individuals and groups at a disadvantage the **access, opportunity, and resources** needed to participate fully and to have a standard of living that is considered a norm for the society, community, or institution they are a participant of. Inclusion continues to evolve within our local and global community, and is not a destination.

ACTIVITIES

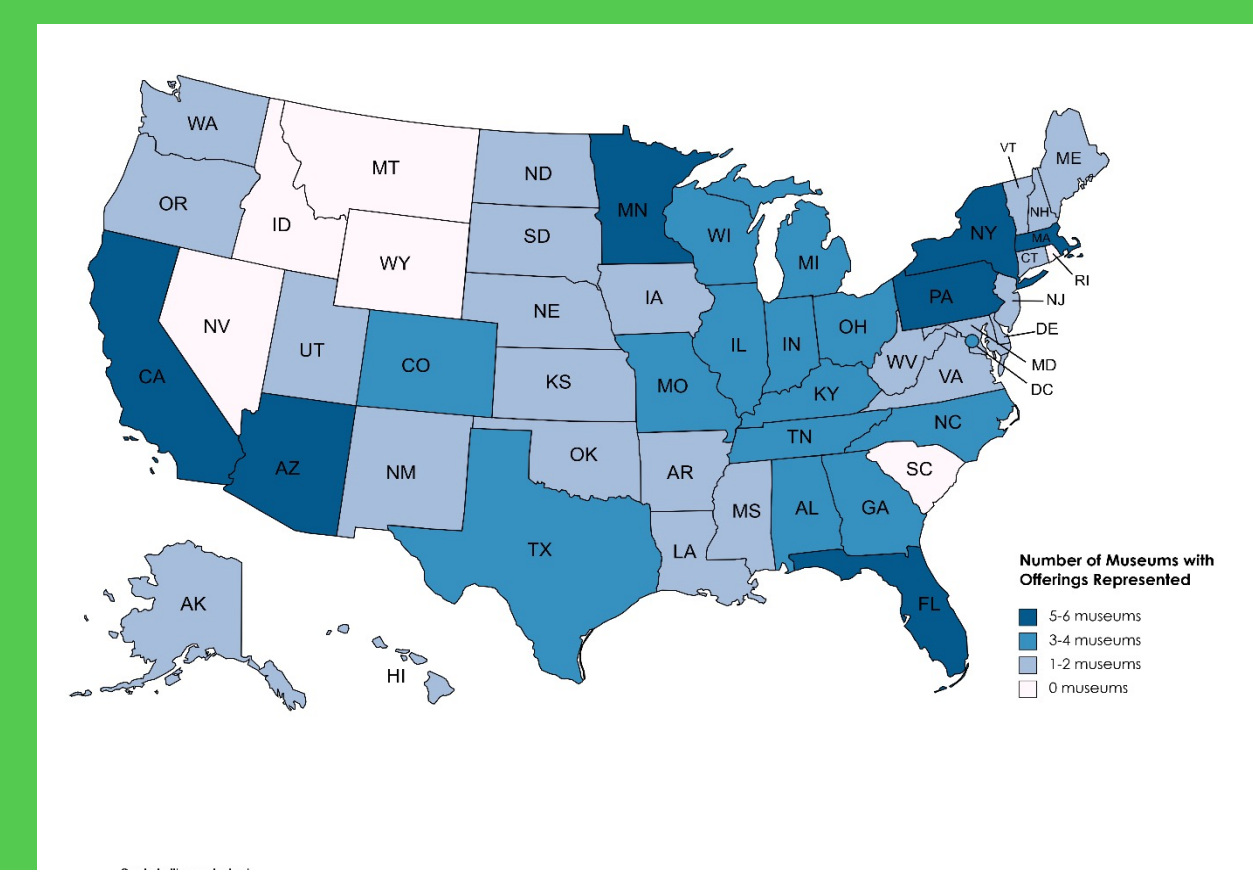


SARRC FAMILY RESEARCH: Pre-Visit questionnaire data from 75+ families who attend science museums with a child with ASD to explore the supports and challenges of their museum experiences. Initial analysis data and trends are being identified to inform this project and a wider understanding.

Community of Practice and Incubators: Monthly video meetings of the core team support reflexive practice on individual and organizational learning and changes, provide important data about institutional and individual change. SARRC staff is providing ongoing learning about ASD and inclusion, while ILI is monitoring participation and engagement, guide the reflexive practice, and explore which elements of the training and aspects of their delivery are most crucial for effective PD and organizational culture change.



National Inventory: Project includes the development of a national inventory – a searchable database collating information from 4 museums from the largest 2 metro regions in each state on the ways museums are currently communicating about their offerings for the ASD community online.



On-Site: Each museums receives customized SARRC training in their home institutions for one half day each week over 12 months. The imbedded SARRC expert is developing organizational trainings with each project team to expand knowledge at the organizational level.



NEXT STEPS

Implement Big Goal Idea.

Stemming from the Community of Practice meetings and Incubator workshops, each participating museum will develop plans for the implementation of one big goal. Plans for the development, implementation, and evaluation of these interventions will be developed over the fall of 2021 and will be implemented over the spring and early summer of 2022. This project plan will be awarded up to \$15,000 in support of implementing that plan.



The Second Phase

This project lays the groundwork for an evidenced-based, self-sustaining, institutional change model that, through future research, will be scaled up. This will provide the larger ISE community access to inclusive tools and resources for decades to come. We will be seeking additional national partners for the next phase.



Join Us

WHERE ARE YOU ON THE INCLUSIVE SPECTRUM? WHAT'S YOUR NEXT STEP?

ACCESSIBILITY VS. INCLUSIVITY

One of our primary foci in his project is the development of spaces that not only meet the ACCESSIBILITY needs of all potential participants but also support the INCLUSION of all potential participants.

Accessibility: improve ability to enter and tolerate.

Inclusivity: equal access to resources.

"...Then when he was still in distress, offered to give us a sensory backpack filled with items...after he calmed down, we entered, but only for 30 minutes."

"My son is attracted to the learning areas designed for younger children, but they are **too babyish for him**, and are full of small children.

While the exhibits for the older children and adults get overwhelming pretty quickly because it's **too advanced, and there can be a lot of reading.**"



Inclusivity differs from accessibility in that it doesn't necessarily address an individual's need or problem, but instead provides a range of tools and features that the individual's can select from in their given environment.

PARTNERS



AND OF COURSE... SEVERAL MEMBERS OF THE AUTISM SPECTRUM COMMUNITY

