



# SCITECH INSTITUTE

*Making STEM connections  
in Arizona and beyond*

# SciTech Institute

Connects business, industry, academic, civic, and community leaders to transform lives by providing everyone access to the world of possibilities in STEM



Tempe, AZ



10 full time staff  
+ 12 part-time team  
members

- 2004  
Established as the 501(c)3 of the Arizona Technology Council
- 2011  
Arizona SciTech Festival launched with Dr. Jeremy Babendure
- 2015  
Arizona STEM Ecosystem & Chief Science Officers programs launched
- 2017  
Chief Science Officers International program launched

# Arizona STEM Ecosystem: SciTech's History

Program-Based  
& Localized

Benefits: Grassroots, Locally  
Responsive

Limitations: Little Alignment  
of Efforts across Regions or  
outside Programs



Place-Based Informal STEM  
Learning Opportunities  
&  
Connecting STEM Stakeholders  
across Stakeholder Groups

Elevating Youth Voice in  
the STEM Community  
&  
Youth Serving as  
Ecosystem Liaisons





# Arizona STEM Ecosystem

Collaborative, grassroots network of 900+ businesses, educators, community members, and government organizations



STEM Hubs are smaller, regional pockets of the Ecosystem that connect local resources, foster collaboration, and highlight non-traditional STEM spaces and opportunities



Working Groups are statewide networks that connect experts in a given subject to share best practices, develop collaborative projects, and discuss issues

# Regional Hub Models



## Hub Coordinator Model

Hub has a designated Hub Coordinator, who is either a part-time or full-time team member.

- + Centralized, simple structure
- Funding limitations

*Ex: Pima STEM Hub Coordinator, Tom Wilson*



## Steering Committee Model

Hub is led by a committee of volunteers from each stakeholder group, and is co-chaired by SciTech and 1 local partner.

- + Community-led
- Recruitment & follow through

*Ex: West Valley STEM Hub Steering Committee Co-chaired by WESTMARC*



## Network Charter Model

Locally embedded organizations act as the lead for each hub. The network collectively applies for funding and takes on statewide projects.

- + Local ownership
- More hurdles for cohesion

*Ex: Yuma STEM Hub with Arizona Western College as charter lead*

# Hubs as Vehicles to Support Statewide Efforts

## Arizona Digital Equity Project

- Distributing surveys during research phase of Arizona's Digital Equity Plan
- Convening participants for community roundtables

## Arizona STEM Acceleration Project

- Hosting educator PD sessions in each hub
- Sharing local educator resources



**ESSER**



# Working Groups



Reach across regional boundaries of the Hubs

Connect individuals working in specific subject areas

## Current Working Groups



STEM Workforce



Sustainability Education & Outreach



DEI in STEM



Pre-College STEM Programs



STEM in Libraries

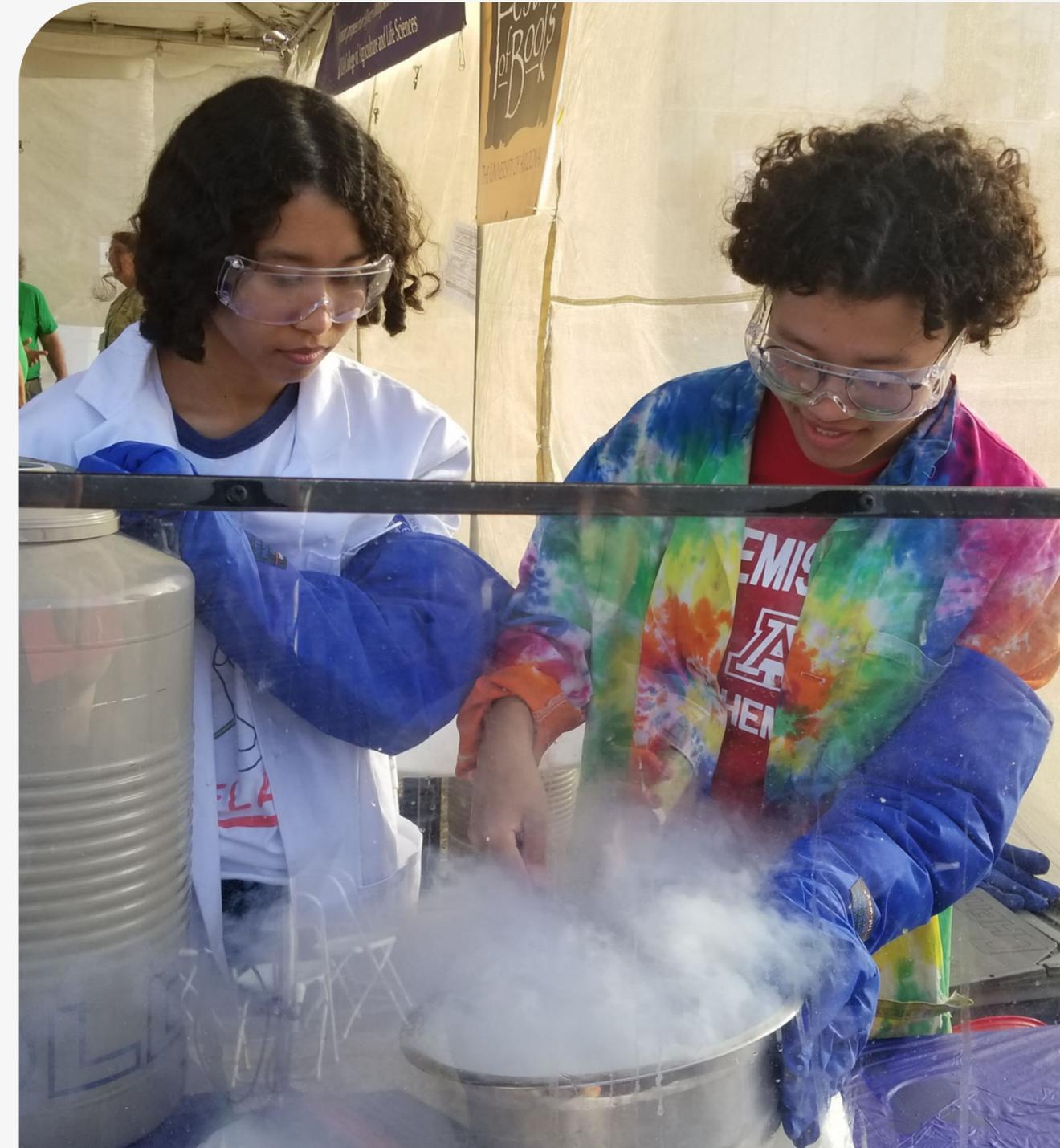


Arizona Informal Educators Network

# Ecosystem Tools

One main goal for community outreach is to align with & be supported through hubs and working groups, rather than through one-off engagements

Programs like SciTech Festivals and Chief Science Officers become tools in building the ecosystem



ARIZONA  
**SCITECH**  
festival

# EVALUATION

## 2023 Annual Ecosystem Survey Responses

As a result of participating in a hub and/or working group, have you or your organization:



# Ecosystem Funding

## Seed Money & Capacity Building



Broadening  
Participation  
in STEM



## Funding Challenges

- Nonprofit funders resistant to fund people instead of program
- Have run into repeated difficulties getting state funding, despite similar asks working well in other states

# National Efforts thru Ecosystem work

**Rural Ecosystem  
Connects**



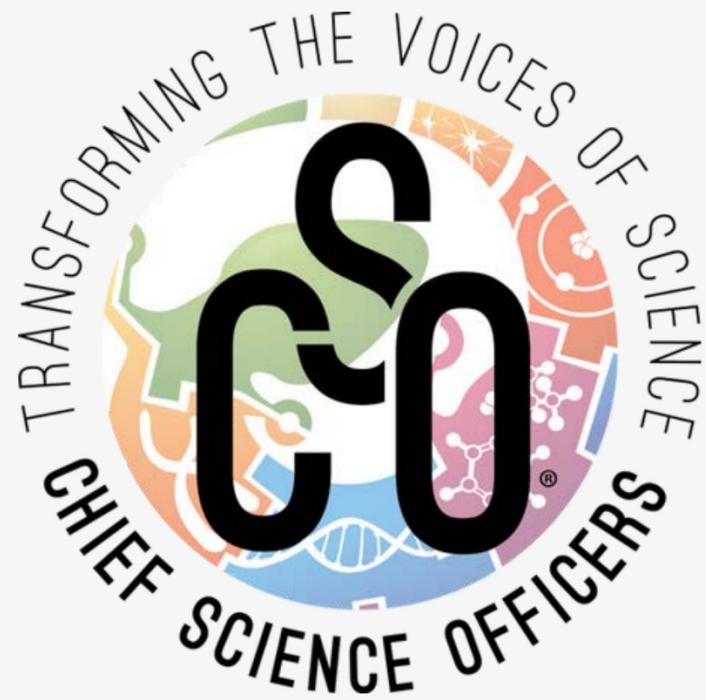
**Youth STEM  
Congress**



**The Pitch**



# Chief Science Officers



## How often do students have a voice...



...in making STEM connections in THEIR communities

...in advocating for STEM in THEIR schools



...in planning the jobs of THEIR future

## Chief Science Officers (CSOs)

are 6th to 12th grade student STEM ambassadors who are identified by their peers and demonstrate interest in STEM, innovation and advocacy.



### Program Goals

- Create a network of diverse STEM leaders
- Foster communication & collaboration
- Enrich STEM culture and career awareness
- Amplify student voice in STEM conversations

# The CSO Experience & Opportunities



**Leadership Training Institute**



**Year-Round Support**



**Cabinet Meetings**

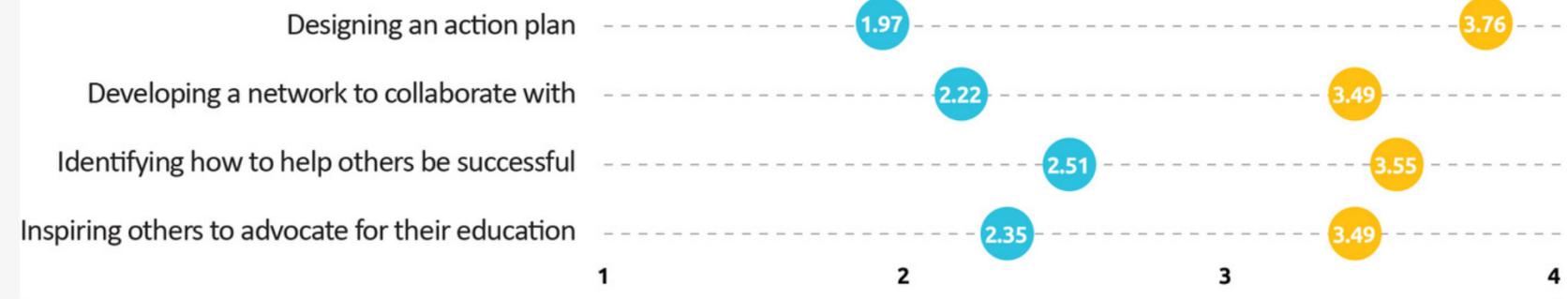


**International Engagement**

## School and Community Engagement

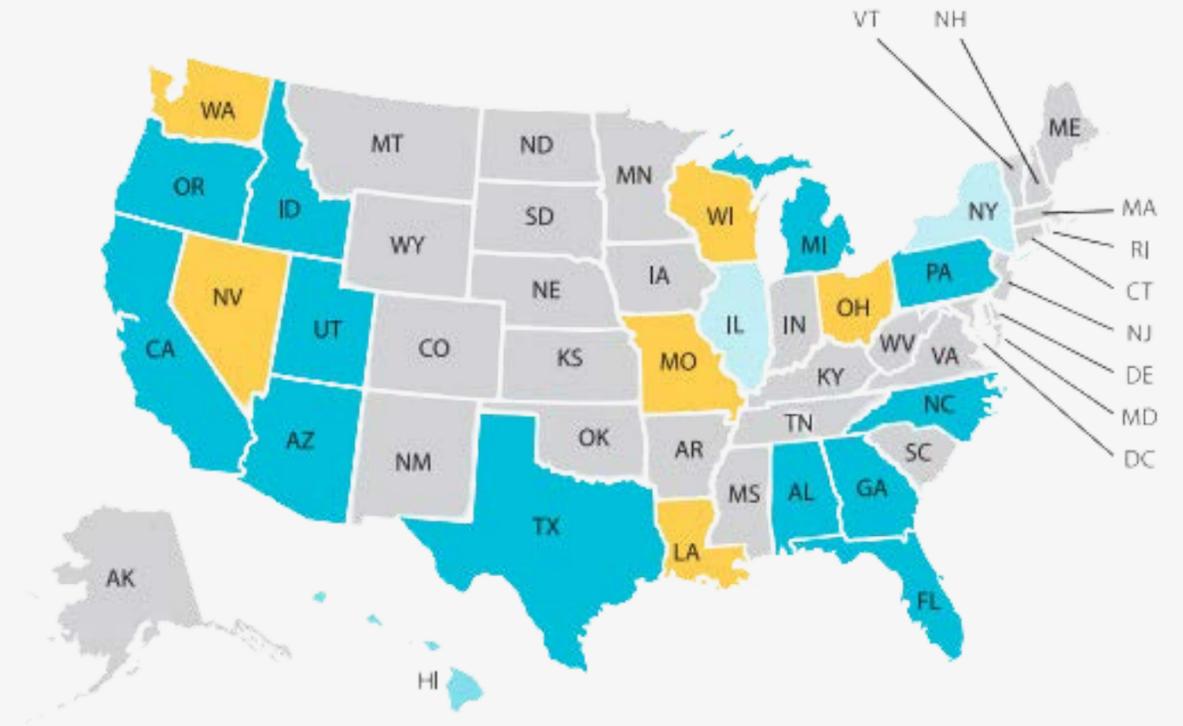
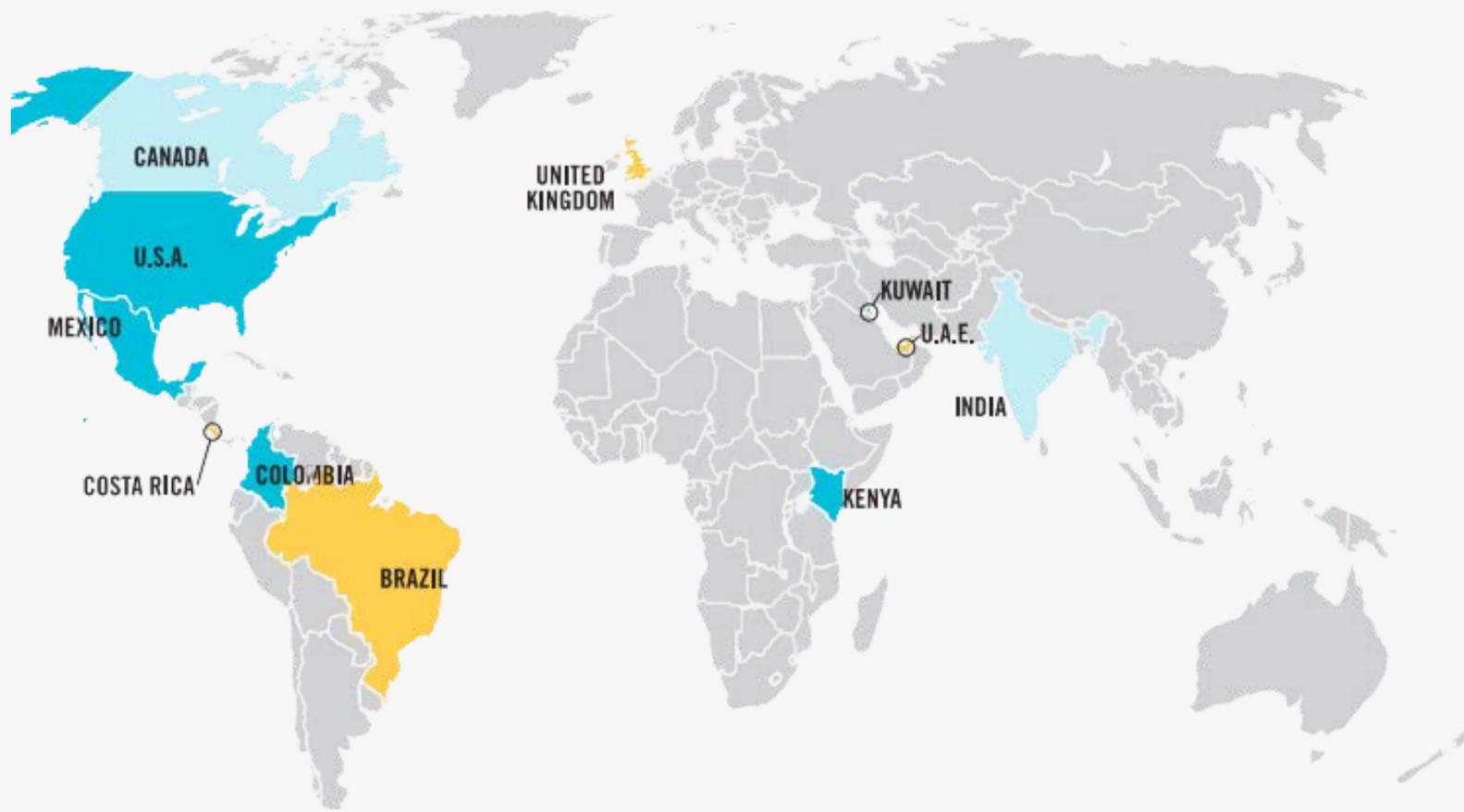


## Communication and Leadership Skills

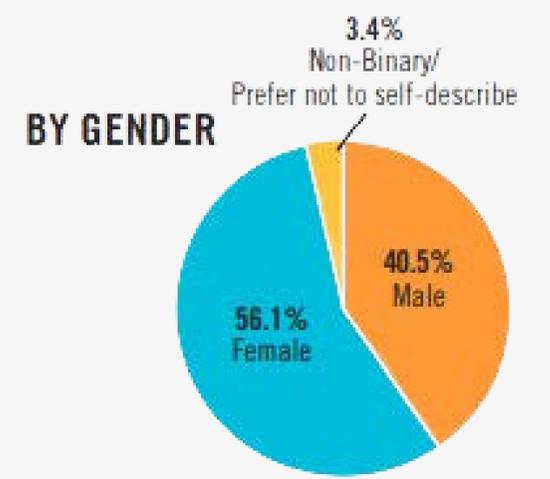
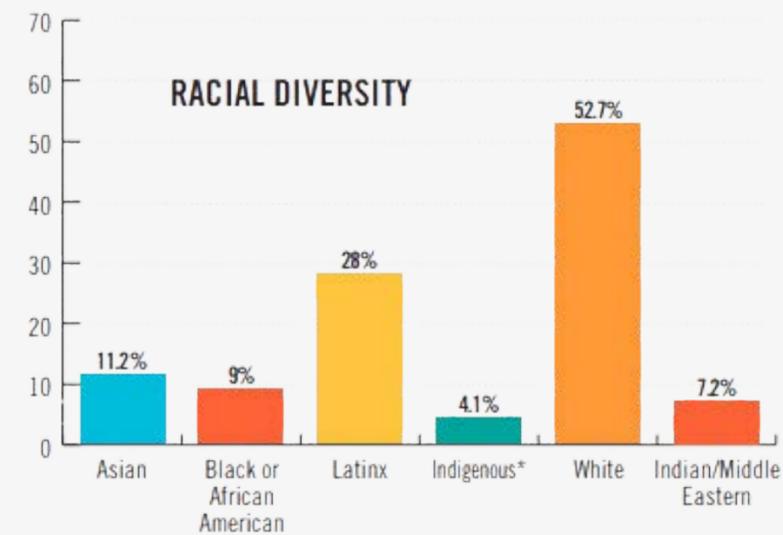


# Program Reach

■ 22/23 REGION 
 ■ EMERGING REGIONS 
 ■ EXPANSION DISCUSSIONS



■ 22/23 REGION 
 ■ EMERGING REGIONS 
 ■ EXPANSION DISCUSSIONS



# Whats makes a STEM Ecosystem thrive?

## Community

Are there diverse members of the community driven to engage?

## Strategy

Are there effective strategies in place to meaningfully make the greatest impact?

## Capacity

Is there time, talent, and treasure in place to make things happen?

## Support

Are there trusted channels from regional and national backbones to fuel local work?

# Thank You



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