REVISE-ing the Conversation:

Introducing the Reimagining Equity and Values in Informal STEM Education (REVISE) Center

REVISE Center PI-Team

Stephen D. Alkins

Director of Vision and Accountability, **REVISE** Center

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TERC

Lisette Torres-Gerald

Director of Operations & Communication, **REVISE** Center

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TERC

Diane Miller

Director of Affiliate Programs & Research to Practice, **REVISE** Center

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Detroit Zoological Society

Pati Ruiz

Director of Virtual Infrastructure and Community, **REVISE** Center

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Digital Promise

Acknowledgements

Opening Remarks

We Are Hiring…

Center Manager

- 100% FTE
- Manage center operations
- Help synthesize and curate resources
- Project management
- Financial management
- Meeting and event coordination
- Communication and outreach

Content & Communications Coordinator

- 60% FTE
- Generate content for and by ISE Community
- Communications and marketing
- Creativity and flexibility to reach multiple audiences

https://www.terc.edu/work-with-us/careers/

RE VISE

Internal Advisors (TERC)

Ibrahim Dahlstrom-Hakki, Ph.D.
(STEM Education for Neurodiverse and Immigrant Populations)

Andee Rubin, Ph.D.
(Mathematical Reasoning in Informal Settings)

Martha Merson
(Informal Research Environments – Libraries, National Parks, etc.)

Judy Vesel
(Deaf & Hard of Hearing/Low-incidence Disabilities STEM Learning)

Nuria Jaumot-Pascual, Ph.D.
(Culturally Responsive Evaluation and Creative Research Methods)

Foloshadé Solomon, Ed.D.
(Arts Integration and STEM Identity Development)

Tara Robillard
(Institutional Review Board and Deaf & Hard of Hearing STEM Learning)

Santiago Gasca (Institutional Review Board & Culturally Responsive Evaluation)

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(Racial Equity in ISE/Culturally Responsive Arts-Integration in STEAM)

Daniel Aguirre
(Science Communication and Relationship-Building with Communities of Color)

Amaris Alanis Ribeiro, MS
(Community Engagement and Asset-Based Approaches)

John Baek, Ph.D.
(Vision and Responsiveness of National Resource Centers)

Kareemah Batts
(Accessibility, Intersectionality, and "Diverse-ability")

Ralph Bouquet
(STEM Learning Community Outreach in Media Production

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(Leveraging AISL Projects to Influence and Inform Policy)

Leonor Vanik, Ph.D.
(Physical and Intellectual Aspects of Program Evaluation from Perspectives of Disabled Latinx Communities)

Justice Walker, Ph.D.
(Bio-makerspaces, Youth, Interdisciplinary Curriculum Activities)

THANK YOU :)

RE VISE

Finding Our Inspiration and Name

"Revision is a <u>dynamic</u> practice of revisitation, premised on <u>ethically</u> reimagining the <u>ingredients</u>, scope, and primary <u>audience</u> of one's initial vision."

Kiese Laymon
Professor of English & Creative Writing at Rice University

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What does this mean in the context of equity in Informal STEM Education (ISE)?

Four Major Themes of REVISE

Promote equitable practices that support the AISL program and disrupt patterns of inequity across the ISE field

Cultivate a multi-sector, diverse community dedicated to promoting equity in ISE experiences and environments

Raise the visibility & impact of equity-focused research & practice in the ISE field & its contributions to the overall STEM endeavor

Support AISL PIs, prospective PIs, & partners in enacting their commitments to equity with respect to research & practice

REVISE CENTER: ISE Equity Framework

Working in community and solidarity with others

Reimagining and enacting what it means to construct a STEM identity aligned with one's epistemology, cultural values, and goals

Re-defining and fostering STEM competencies that are responsive to different cultures and abilities
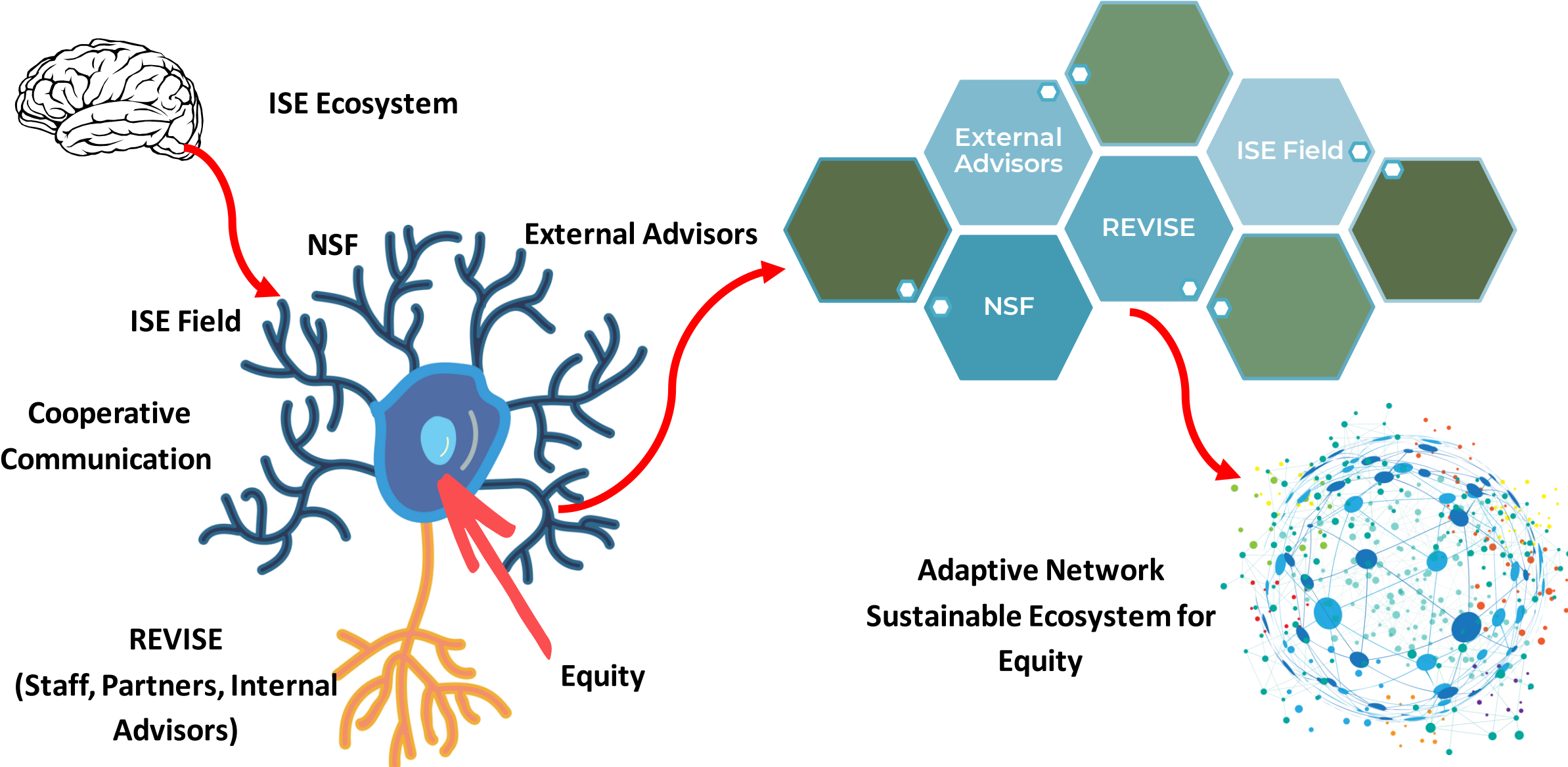
REVISE CENTER
ISE Equity Framework Impact

Addressing the needs of diverse communities

Forging new STEM career paths

Generating and providing evidence-based information to allow everyone to make informed decisions leading to successful outcomes for themselves and their communities.
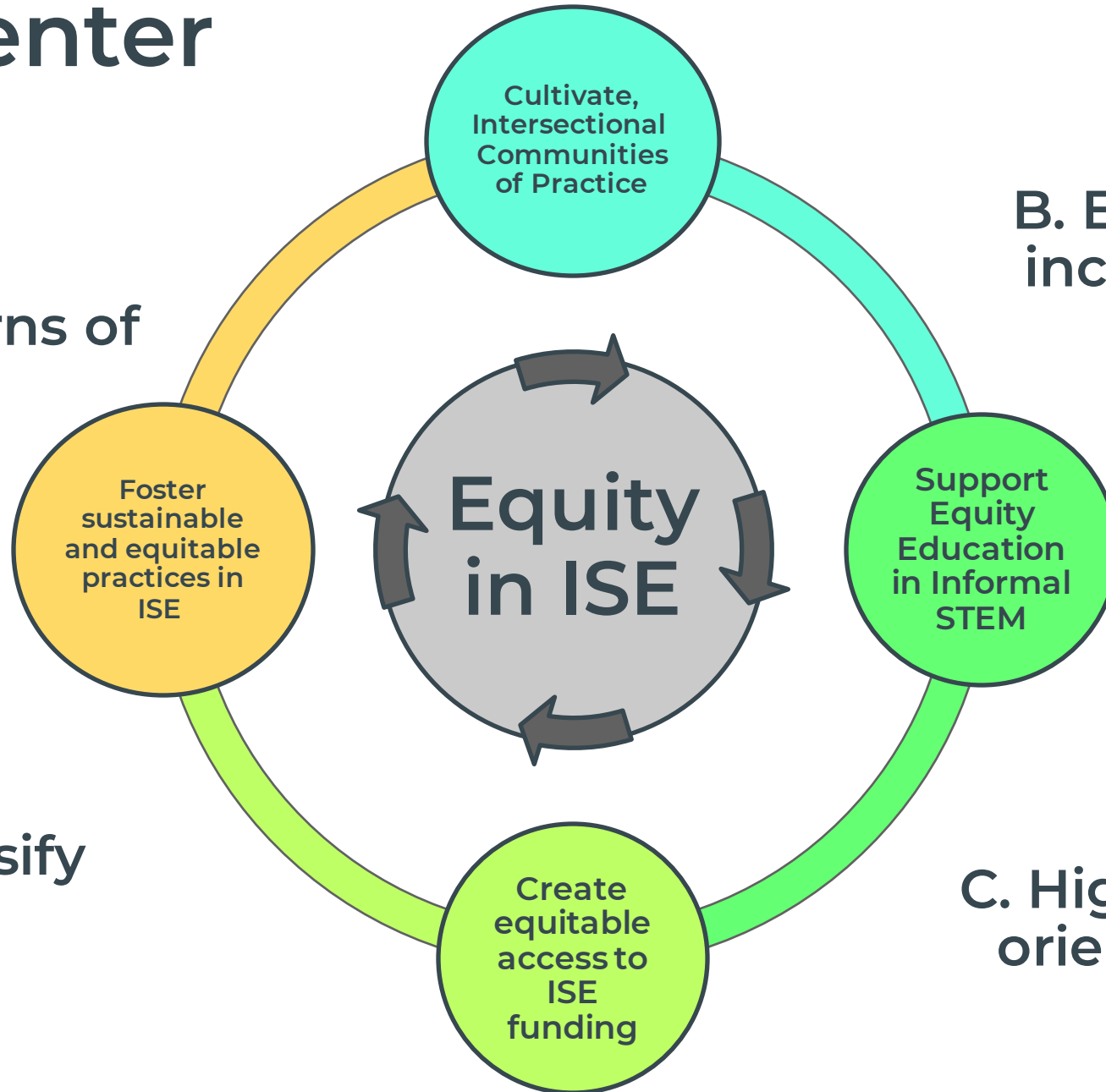
REVISE CENTER Cooperatively Communicates with and Generates Resources for the ISE Ecosystem

ISE Ecosystem

NSF

External Advisors

ISE Field

Cooperative Communication

Equity

REVISE
(Staff, Partners, Internal Advisors)

External Advisors

ISE Field

REVISE

NSF

Adaptive Network
Sustainable Ecosystem for Equity

REVISE Center Functions

A. Disrupt patterns of inequity

B. Expanding and including diverse populations

C. Highlight equity-oriented practices

D. Expand/diversify AISL-portfolio

Cultivate, Intersectional Communities of Practice

Support Equity Education in Informal STEM

Create equitable access to ISE funding

Foster sustainable and equitable practices in ISE
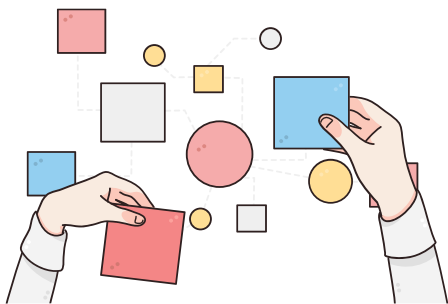
Equity in ISE

REVISE Center Functions
(A) Disrupt Patterns of Inequity

1. Provide consistent support to groups that identify levers of power to address in cultural institutions.

2. Support the development of strategic plans and research projects aimed at addressing systemic inequities to create institutions of belonging.

3. Listening to the ISE community to evolve the understanding and contextual framework for equity that further inform the functions of the Center.

4. Co-develop and share equity inventory tools to help evaluate impact.

REVISE Center Functions
(B) Expanding and Including Diverse Populations

1. Targeted Universalist approach to identifying underserved populations or areas in ISE (e.g., practitioners, rural locations, etc.).

2. Provide counter-spaces (e.g., affinity groups, etc.) to prioritize experiences of historically excluded groups and help set research agendas.

3. Form communities of practice (CoP) to bridge research to practice and evaluation (e.g., knit together impactful projects, etc.).

REVISE Center Functions
# (C) Highlight Equity-oriented Practices

1. Webinars, mini-convenings, and PI award meetings that center marginalized voices to showcase equity-oriented research methodologies and practices.

2. Empower diverse ways of knowing and multiple lenses of equity across cultural institutions.

3. Create consistent conversation on implementation and learning of equity-oriented practices.
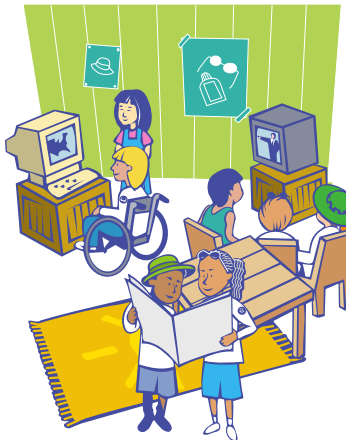
REVISE Center Functions
## (D) Expand/diversify AISL-portfolio

1. Identify and Support AISL-Aspiring Organizations (AAOs) to improve chances to acquire federal funding (NSF, NSF-AISL, etc.).

2. Collaborate with NSF to provide educational opportunities and experiences for ISE practitioners to develop funding access, cultural knowledge of funding landscape (e.g., Panelist Review Campaign, etc.).
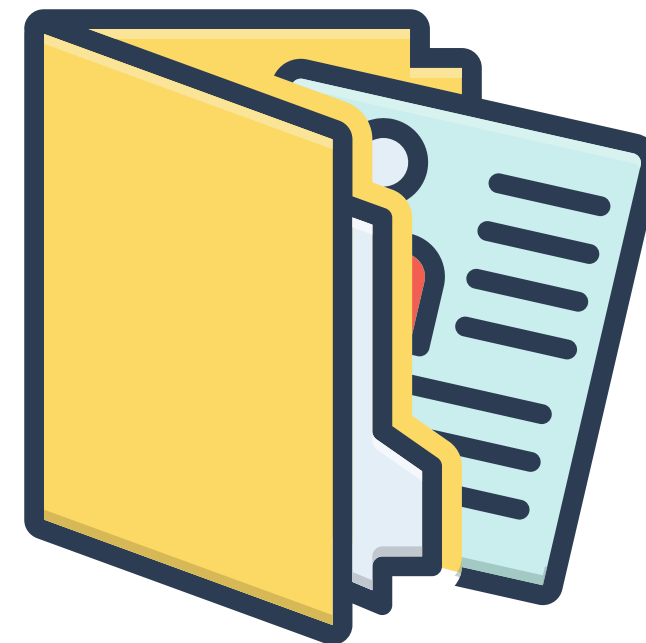
OVERARCHING GOAL FOR STAKEHOLDER ENGAGEMENT

To <u>co-create</u> communities of practice with individuals & organizations that <u>want to continue</u> to grow their ability to design & conduct equity-focused, evidence-based innovations in ISE research, programming, or both.

RE
VISE

Focal Audiences
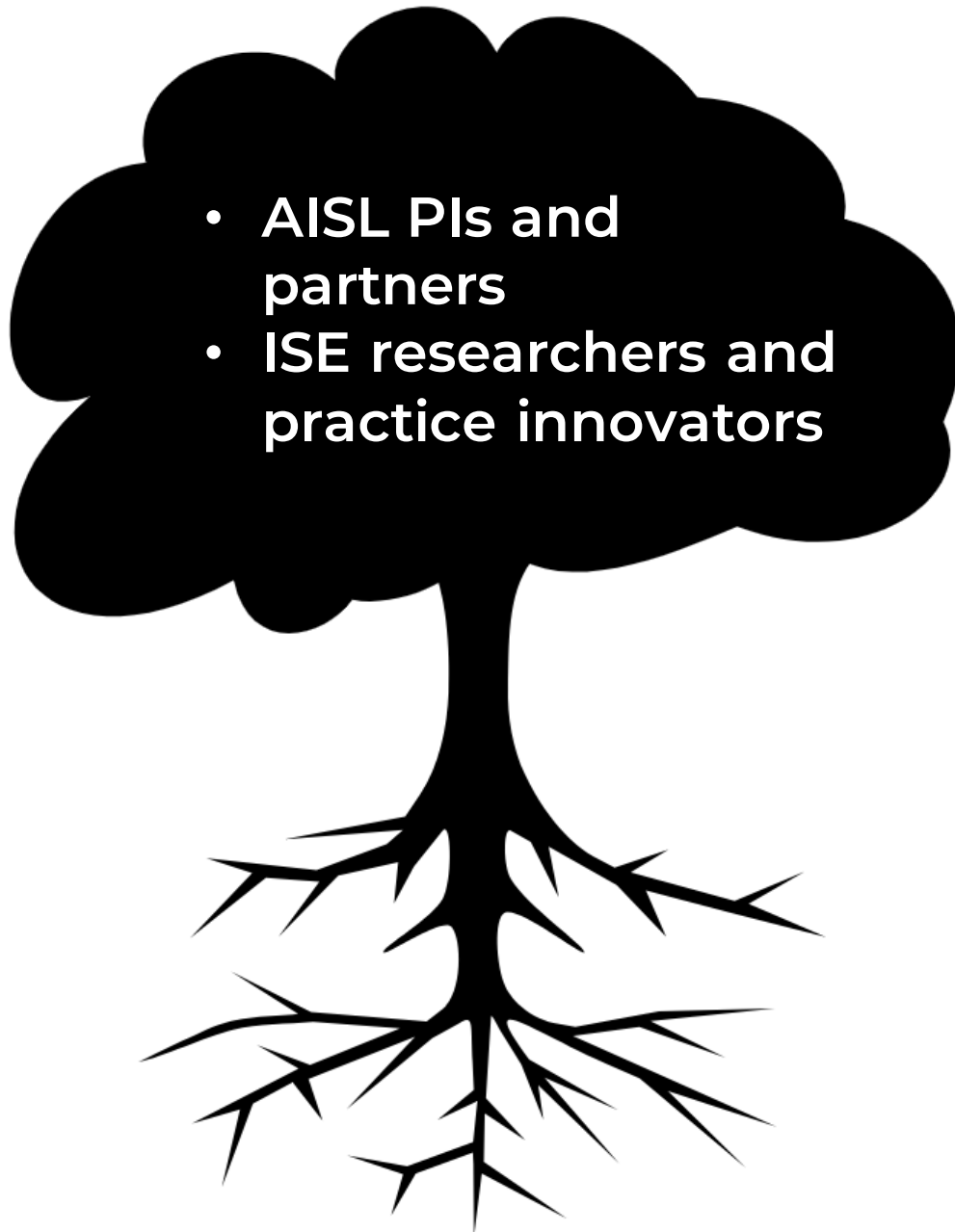
- AISL PIs and partners
- ISE researchers and practice innovators

- Prospective AISL PIs and partners
- Historically excluded stakeholders
- For example, BIPOC, AAPI, who work in and with researchers, in cultural institutions or organizations that carry out ISE
- Hard to reach/engage with stakeholders

RE VISE

Tools and Resources We Will Create Together

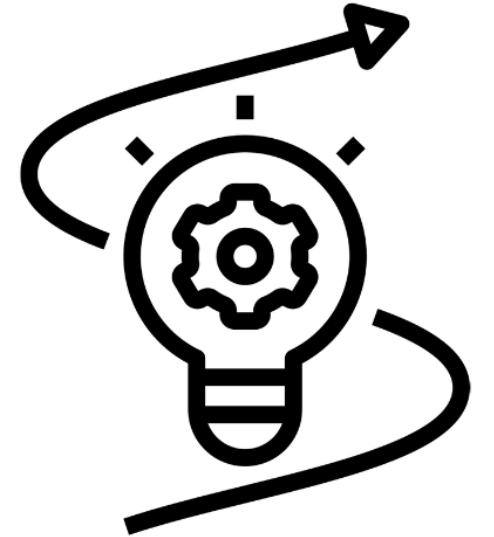## Traditional tools that take from within the ISE research

- Website
- Listserv
- Newsletter
- Press releases
- Podcast and blog
- Advisors are key resources/tools for this work which have already been curated

REVISE

Innovative approaches

- Brag and Swag Wall
- Virtual Communities of Practice – that support interest groups
- Creating counter spaces
- … and your ideas

RE VISE

How Do You Evaluate Equity?

Leverage expertise of advisors and field:
Formation of Advisory Council (Cultural Guides)

Formative and Summative Evaluation
Sustainability Study (Impact of Equity Initiatives)

In-Depth Case Studies (AAOs)

RE VISE

Visit:

www.informalscience.org

Subscribe: REVISE Newsletter

Introducing: REVISE

We are excited to introduce the Reimagining Equity and Values in Informal STEM Education (REVISE) Center. In a cooperative agreement with the National Science Foundation's (NSF) Advancing Informal STEM Learning (AISL) program, this new equity resource center will serve as a critical voice and champion for advancing equity in the Informal STEM Education (ISE) field. REVISE seeks to cultivate lasting change among the ISE community and the broader STEM education ecosystem.
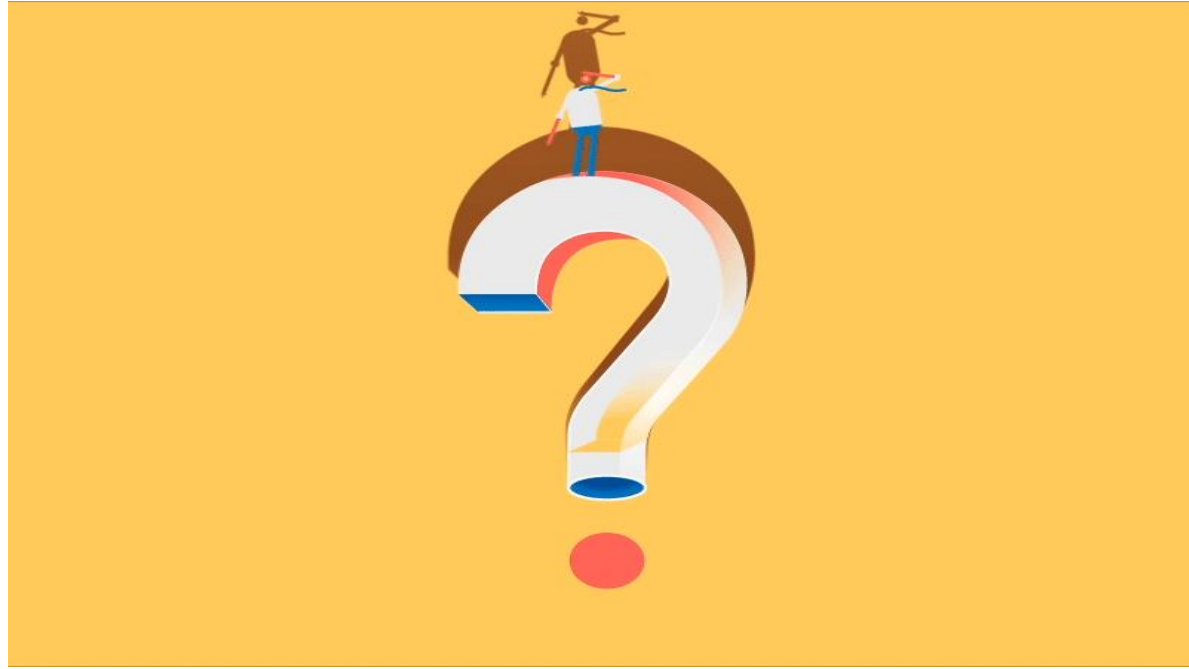
How do you want to participate?

www.informalscience.org

revise@terc.edu

Post-Conversation Survey

www.informalscience.org

revise@terc.edu

Acknowledgements

REVISE Center Staff:
Kelly Paulson, TERC
Sana Karim, Digital Promise

REVISE Partners:
Selene González-Carrillo, Organic Oneness
Karyl Askew & Team, Karyl Askew Consulting, LLC
Tara Courchaine & Team, CAST

NSF AISL Program Officers:
Lynn Tran, Ph.D. (AISL Program Co-Lead)
Monya A. Ruffin-Nash, Ph.D. (AISL Program Co-Lead)
Ellen McCallie, Ph.D. (Cognizant Program Officer)

Gloshanda Lawyer, Ph.D. & Team, ASL Interpreters
(COCOA Language, Advocacy, and Consulting, LLC)
Sandy Ling (Technology & Zoom Support, Detroit Zoo)

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