

ASTC's Community Science Framework

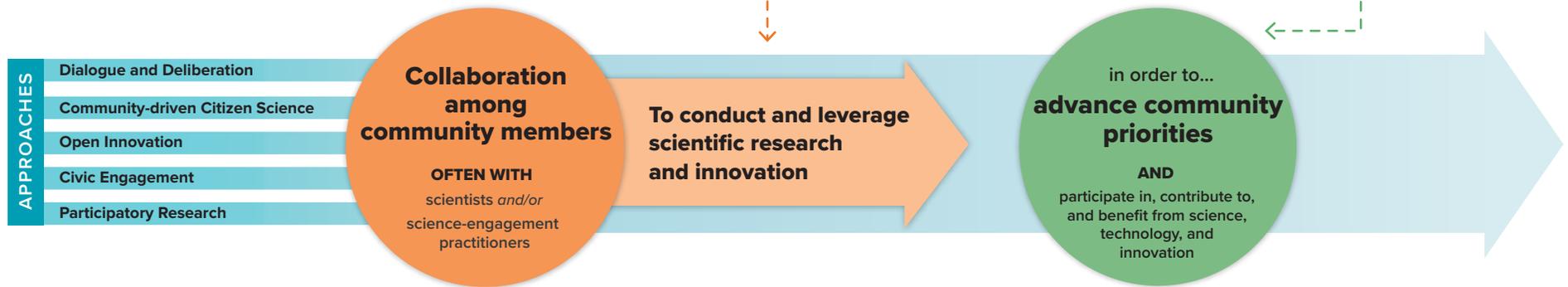
Our world faces challenges and opportunities when it comes to issues at the intersection of science and society, such as climate change, public health, and rapidly developing technologies. Community science encompasses a wide array of approaches that groups of people who share a common geography, set of characteristics, interests, and goals use to answer science- and technology-related questions and construct solutions relevant for their communities.

Conducting community science can include:

- designing a research agenda
- determining best methods and practices
- collecting actionable data and observations
- conducting rigorous analysis

Community priorities may include:

- improving air and water quality
- planning for climate resiliency
- improving health outcomes
- ensuring that scientific data is widely accessible
- influencing policy to align with community values



APPROACHES

Community science encompasses a diverse set of approaches to help communities cultivate deeper connections with science. The methods and goals of these approaches often overlap, and here approaches are categorized here by their primary "purpose" or focus.

Read more about these approaches on the following page.

ATTRIBUTES

Attributes are centered around doing respectful work with communities and pursuing authentic, equitable partnerships. Each attribute requires ongoing evaluation and reflection to ensure growth over time.

- Centers Community Priorities
- Equity-Focused
- Respects Community Strengths
- Aims for Action
- Shares Leadership

OUTCOMES

Outcomes of community science will differ based on how a program is designed. This framework can be used to push our commitment towards deeper, mutually beneficial, and sustainable partnerships with communities.

- Strong Community Partnerships
- Ethical Decision-Making
- Capacity for Civic Engagement
- Increased Science Agency
- Inspiration for New Science
- Sustainable Solutions for Society
- Impactful Scientific Research

ASTC's Community Science Initiative

Approaches to Community Science

COMMUNITY-DRIVEN CITIZEN SCIENCE

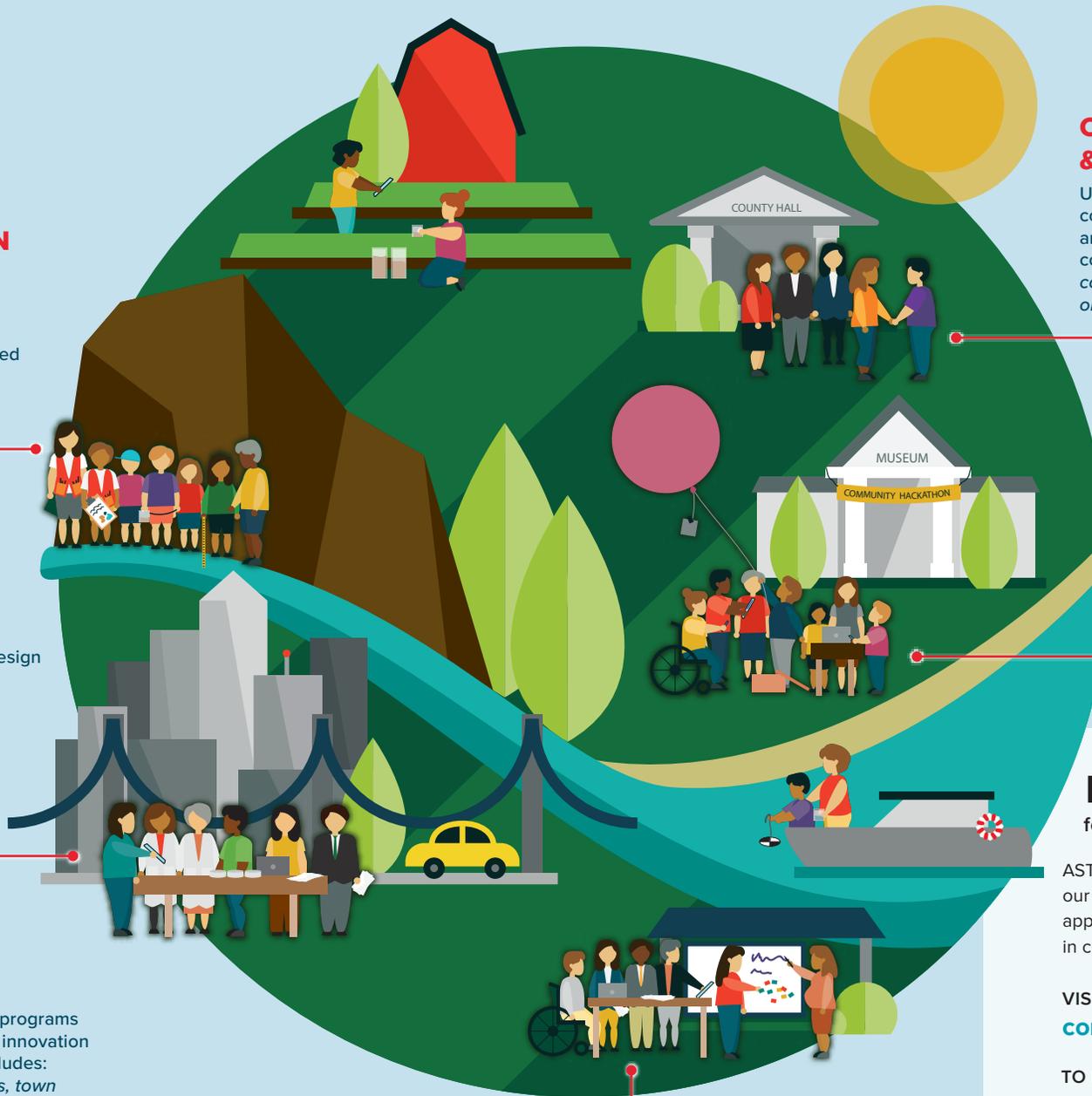
Projects that address community interests and questions using research approaches co-developed by non-professional scientists. Includes: *crowdsourcing data, open access technologies*

PARTICIPATORY RESEARCH

Community participation in the design and implementation of research initiatives. Includes: *community-based participatory research, co-creation labs, focus groups*

DIALOGUE & DELIBERATION

Public dialogue and deliberation programs on how science, technology, and innovation intersect with societal issues. Includes: *public forums, conversation cafes, town halls, intergroup dialogues*



CIVIC ENGAGEMENT & POLICY MAKING

Using research as an input for collective action and making policy and governance decisions to advance communities' goals. Includes: *guided community tours, community organizing, action research*

OPEN INNOVATION

Open challenges, competitions, and calls to action that use science and technology to solve difficult problems. Includes: *hack-a-thons, open-source information*

RESOURCES

for Science Engagement Professionals

ASTC's Community Science Initiative supports our members in leveraging community science approaches so they can join their communities in co-constructing solutions.

VISIT OUR WEBSITE

communityscience.astc.org

TO FIND OUR

- Resource hub
- Community of practice
- Capacity-building activities