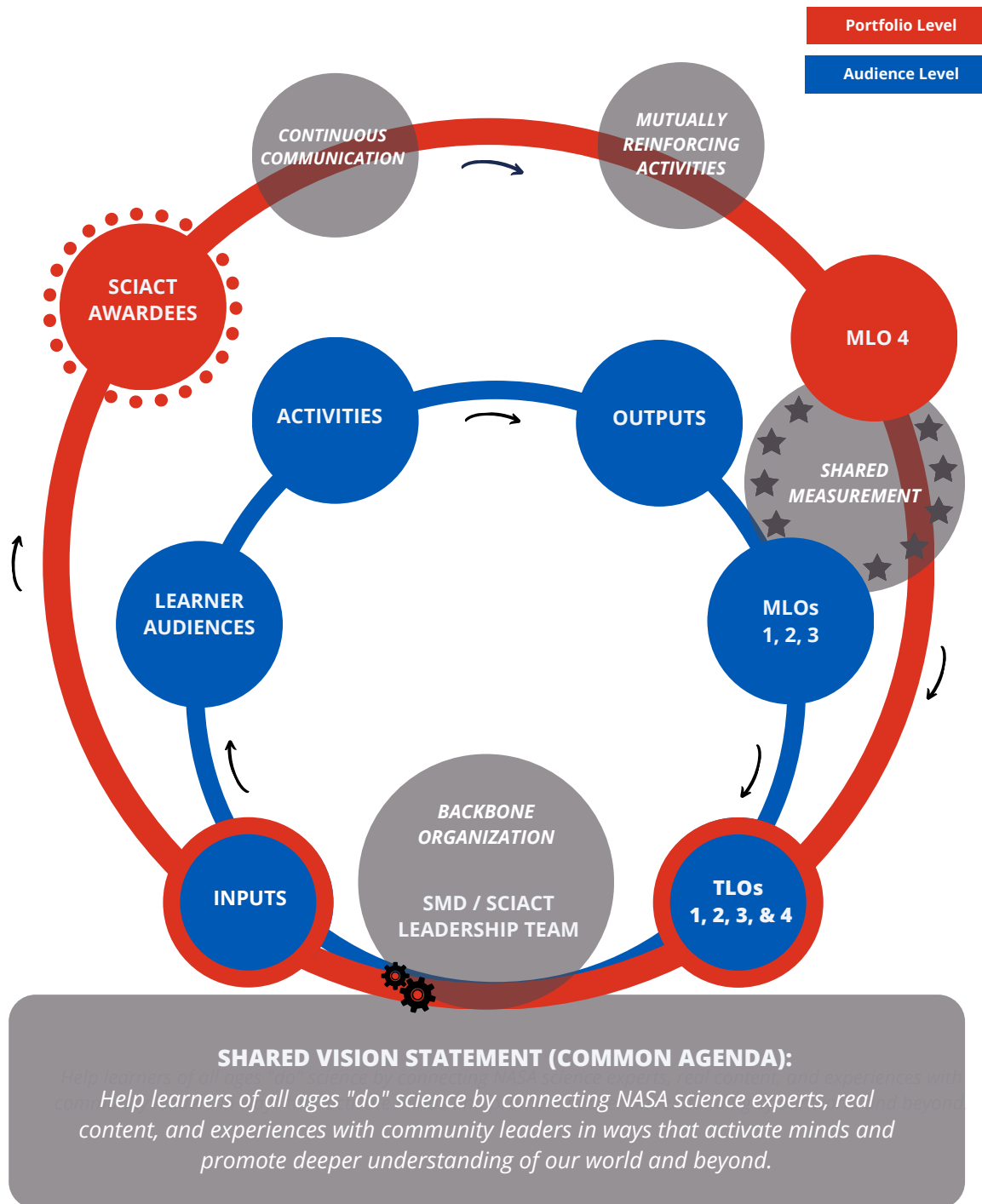


# NASA SCIENCE MISSION DIRECTORATE SCIENCE ACTIVATION PROGRAM, 2.0 LOGIC MODEL

A visual representation of program-wide SciAct 2.0 components, emphasizing relationships across activities and program alignment with the Collective Impact model

## LOGIC MODEL LEGEND

Key terms, color codes, and texture patterns are defined and detailed below



### COMPONENTS OF COLLECTIVE IMPACT

**Translucent components highlight alignment between the Collective Impact model and SciAct components.**

**Common Agenda:** A shared vision for change, one that includes a common understanding of the problem and a joint approach to solving it through agreed upon actions.

**Shared Measurement System:** Agreement on the ways successes will be measured and reported.

**Mutually Reinforcing Activities:** A diverse group of stakeholders working together by encouraging each participant to undertake the specific set of activities at which it excels in a way that supports and is coordinated with the actions of others.

**Continuous Communication:** Regular meetings to allow stakeholders to build experience with one another, and recognize and appreciate the common motivation behind their different efforts.

**Backbone Support Organizations:** Separate, dedicated staff to plan, manage, and support the initiative through ongoing facilitation, technology and communications support, data collection and reporting, and handling logistical and administrative details

Kania, John, and Mark Kramer. "Collective Impact." Stanford Social Innovation Review 9, no. 1 (Winter 2011): 36-41.



### SCIACT AWARDEES INCLUDED IN PORTFOLIO EVALUATION

- CAN-15, with Extension**
  - AAA
  - Arctic SIGNS
  - AREN
  - eClips
  - Exploratorium
  - GLOBE Mission Earth
  - Infiniscope
  - NAML
  - NASA's Universe of Learning
  - NESEC
  - OpenSpace Project
  - PLANETS
  - RWRS -> Learning Ecosystems Northeast
  - SEES
  - SEISE-Net/NISENet
  - Smoky Mountain STEM
- ROSES-20**
  - CosmicDS
  - ES:CSP
  - N3
  - Native Earth | Native Sky (NENS)
  - NCCN
  - Planetary Reach
  - SaSa
  - SciAct STEM Ecosystems
  - SCoPE
- ROSES-21**
  - CHALLENGER/ LEARNER (2.0)
  - Eclipse Ambassadors
  - Eclipse Ballooning
  - HEAT (2.0)
  - ID Dark Sky
  - NESSP (2.0)
  - OCEANOS
  - PLACES

### MID-LEVEL OBJECTIVES

Used to guide Awardee-level programmatic and evaluation activities

- 1a.** Inspire participants' interest in STEM and the development of their identities as science learners.
- 1b.** Provide opportunities for participants to engage with the disciplinary content related to NASA science and engineering.
- 1c.** Increase number of and frequency with which NASA SMD assets are used by learners across the US.
- 2a.** Advance participants' understanding of the process of science using NASA SMD assets.
- 3a.** Increase participation in learner-centered experiences based on NASA SMD assets.
- 3b.** Increase the diversity of participants reached by Science Activation through intentional, inclusive programming.
- 3c.** Engage participants in learning experiences that promote development of skills for STEM careers.
- 4a.** Leverage internal mechanisms to support sharing and learning across the SciAct portfolio.
- 4b.** Utilize external partners to leverage reach and effectiveness of the SciAct portfolio.

### GUIDING OBJECTIVES AND MEASURABLE CONSTRUCTS

#### TOP-LEVEL OBJECTIVES

Used to provide collective vision across SciAct

- Enable STEM Education**
- Advance National Education Goals**
- Improve U.S. Scientific Literacy**
- Leverage Efforts Through Partnerships**

#### CONSTRUCTS

Used to organize Portfolio-Level evaluation activities

- STEM interest
- STEM identity
- Interest in STEM-related careers
- Awareness of the range of SciAct activities, generally
- Awareness of SciAct activities as distinct or unique from other STEM offerings
- Knowledge of science process.
- Expression of science knowledge.
- Application of science process.
- Confidence using SMD Assets in scientific processes.
- Performance of STEM skills
- Confidence using STEM skills.
- Awareness of STEM skills use as they relate to a profession.
- Intent to apply STEM skills in a professional setting
- Awareness of SciAct Resources/ SMD Assets to inform practice
- Intent to use SciAct Resources/ SMD Assets in practice

