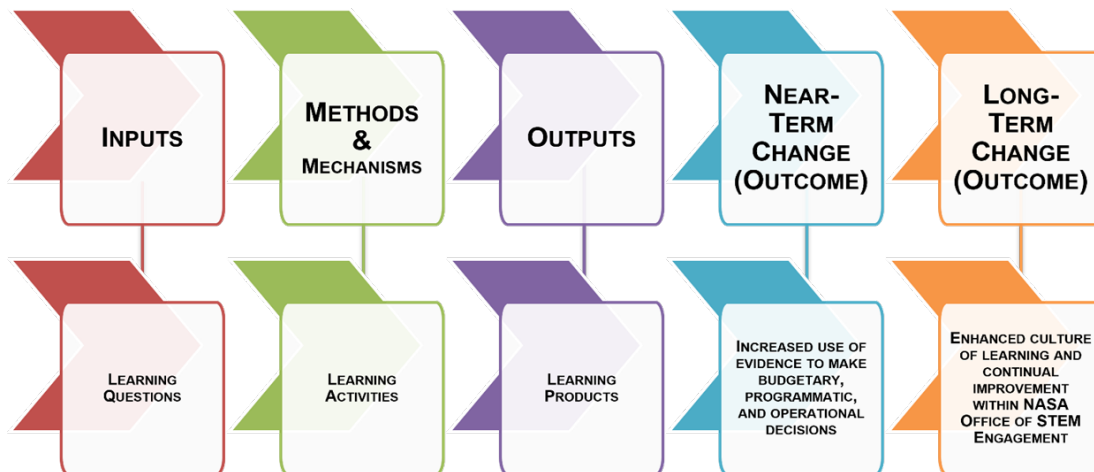# Learning Agenda

The NASA STEM Engagement Learning Agenda represents a systematic approach to identifying gaps in knowledge and conducting research to generate knowledge to fill these gaps.

The purpose of this Learning Agenda is to put forth Learning Questions with associated sub-questions, Learning Activities and assessment methodologies, and Learning Products that will inform the NASA Office of STEM Engagement's understanding of the scope, methods, mechanisms, and impacts of its investments. The answers to these questions will enable the Office to more effectively prioritize and narrow the focus of STEM engagement investment areas by making evidence-based budgetary, programmatic, and operational decisions.

The Learning Questions are strategic, intentionally developed questions that, when answered, provide evidence or new understanding to fill knowledge gaps and that may be used to more effectively make budgetary, programmatic, or operational decisions. Learning questions may be used to develop or test theories of change, fill gaps in technical understanding, develop scenarios, or identify effective practices. The Learning Activities are the strategies, tasks, methods, and mechanisms used to answer Learning Questions. The Learning Products are the documents, reports, infographics, Websites, or other items that are created to share the findings of the Learning Activities with internal and external stakeholders.

NASA's Office of STEM Engagement Learning Agenda Theory of Change

The STEM Engagement Learning Agenda development process was guided by a theory of change, which posits: If strategic Learning Questions are developed, Learning Activities are conducted to answer the Learning Questions, and the evidence gathered from the Learning Activities is used to create Learning Products, then the Office of STEM Engagement will be better equipped with evidence to make budgetary, programmatic, and operational decisions. The intended long-term change (outcome) of implementing this Learning Agenda is to develop a culture of learning and continual improvement within NASA's OSTEM.

Annually, NASA analyzes performance and participation data through the verification and validation process utilizing the NASA STEM Gateway System (Universal Registration/Application and Performance Management Tool) and key evidence-building activities in support of the Learning Agenda.

The findings and recommendations from data analyses and evidence building activities are shared with internal and external stakeholders in order to make programmatic evidence-based decisions and develop the next Learning Agenda in alignment with the NASA 2022 Strategic Plan.