

Performance and Evaluation Strategy

NASA STEM Engagement executes a comprehensive performance assessment and evaluation strategy, Annual Performance Plan (APP) and a Learning Agenda.

NASA is enhancing the effectiveness of STEM engagement investments using performance assessment and evaluation-driven processes including the development and execution of a comprehensive performance assessment and evaluation strategy, Annual Performance Plan (APP), Annual Evaluation Plan (AEP) and a Learning Agenda. The Annual Performance Plan defines NASA Office of STEM Engagement (OSTEM) performance goals and success criteria in alignment with [NASA's 2022 Strategic Plan](#). The NASA STEM Engagement Learning Agenda puts 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. Annually, a body of evidence (i.e., milestone accomplishments, performance and participation data, evaluation outcomes, and/or other metrics) is generated to assess progress of STEM engagement investments in achieving APP performance goals and success criteria and to assess AEP outcomes and impacts.

The comprehensive performance assessment and evaluation strategy includes three key components: performance activities, evaluation activities, and a learning agenda.

- Through our performance activities, we monitor program accomplishments, particularly progress toward our established performance goals.
- Through our evaluation activities, we examine how a particular program meets its objectives, typically executed through year-long studies.
- The learning agenda allows us to look systematically across performance and evaluation activities to identify gaps in knowledge and establish a research agenda that generates knowledge to fill these gaps.



Each component of the strategy provides a unique contribution to OSTEM's continuous improvement and evidence-based decision-making processes while simultaneously contributing to a portfolio of evidence that is used to inform evidence-based budgetary, programmatic, and operational decisions.

The NASA OSTEM assesses progress of its investments towards achieving programmatic goals and objectives and progress in achieving the following multi-year OSTEM Performance Goals (PGs) outlined in the Annual Performance Plan (APP) which directly align with the [2022 NASA Strategic Plan](#) Strategic Goals 1, 2 and 3:

- Performance Goal 4.3.1 (Strategy for STEM Engagement Goal 1) Create unique opportunities for a diverse set of students to contribute to NASA’s work in exploration and discovery.
- Performance Goal 4.3.2 (Strategy for STEM Engagement Goal 2) Build a diverse future STEM workforce by engaging students in authentic learning experiences with NASA’s people, content and facilities.
- Performance Goal 4.3.3 (Strategy for STEM Engagement Goal 3) Attract diverse groups of students to STEM through learning opportunities that spark interest and provide connections to NASA's mission and work.

STEM Engagement Strategic Performance Framework

