National Aeronautics and
Space Administration

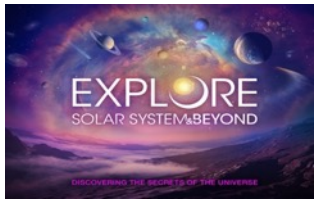
INSPIRE - ENGAGE - EDUCATE - EMPLOY

The Next Generation of Explorers

NASA Strategy for Science, Technology, Engineering and Math (STEM) Engagement 2018 – 2020

New Architecture Enabling Student Opportunities & Contributions

NASA Mission Directorate Drivers & Requirements



Focus Areas

Evidence-based strategies

Rigorous planning

Integrated operational model

Create unique opportunities for students to contribute to NASA's work.

Build a diverse future STEM workforce by engaging students in authentic learning experiences.

Strengthen understanding of STEM by enabling powerful connections to NASA's mission and work.

Strategic, balanced portfolio

NASA-unique learning experiences

Student contributions to NASA's work in action

Scalability to Magnify NASA's Reach and Impact

Beneficiaries of NASA's STEM Engagement Portfolio

K-Elementary School

Middle School

High School

Undergraduate

Graduate

NASA Strategy for STEM Engagement

The *NASA Strategy for Science, Technology, Engineering and Math (STEM) Engagement* serves as a roadmap to frame and guide the agency's work in STEM engagement over the next 3 years.

Beneficiaries of NASA's STEM Engagement Portfolio


Elementary


Middle School


High School


Undergraduate


Graduate

STEM engagement is comprised of a broad and diverse set of programs, projects, activities and products developed and implemented by HQ functional Offices, Mission Directorates and Centers.

NASA Strategy for STEM Engagement

Focus Areas

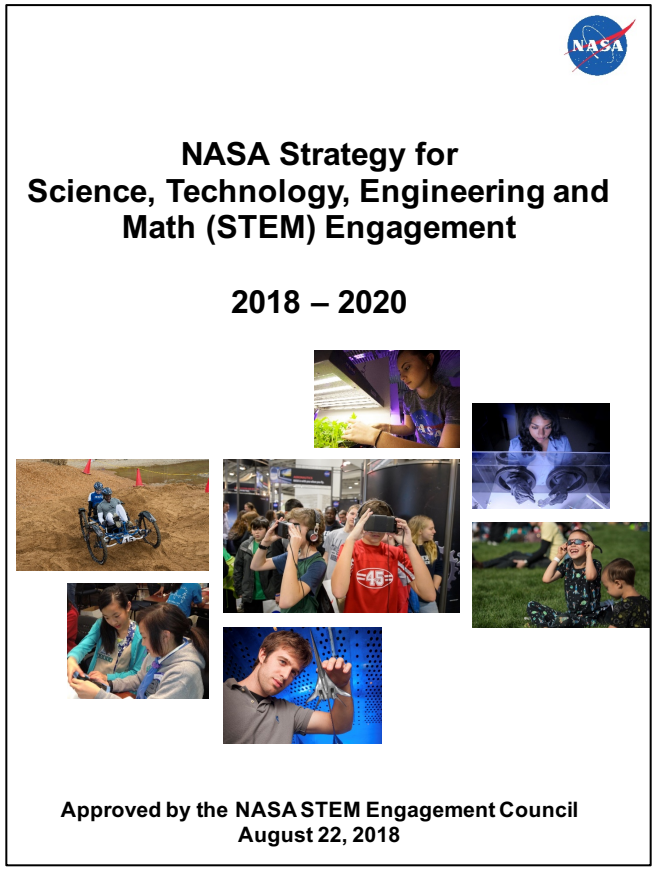
- Enable contributions to NASA's work
- Build a diverse, skilled, future workforce
- Strengthen STEM through connections to NASA

Objectives

- Mission-driven student contributions
- Building our pipeline
- Connecting with students

Strategies

- Strategies toward achieving 8 objectives aligned with Vision focus areas



NASA Strategy for STEM Engagement

Focus Areas

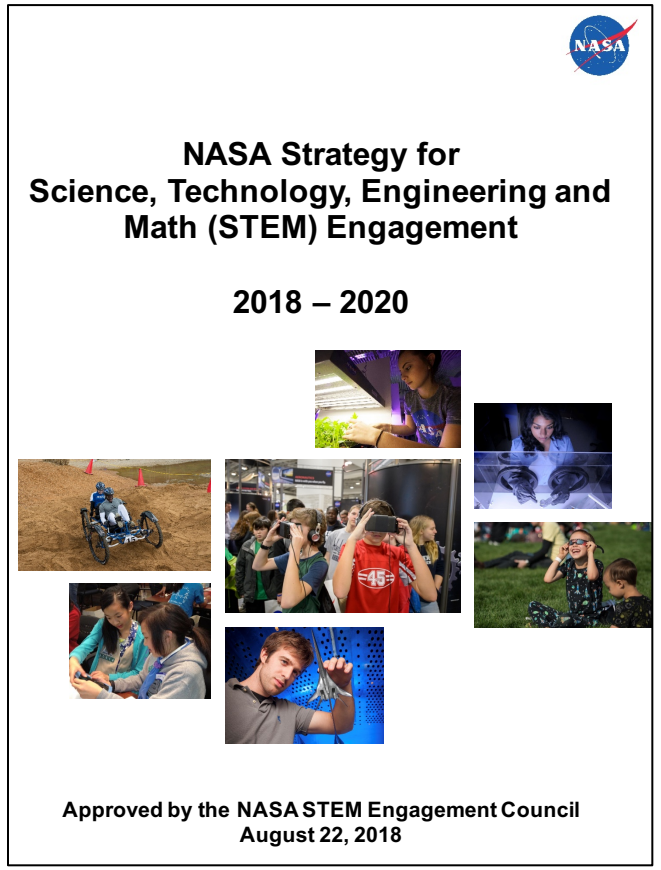
Enable contributions to NASA's work

Build a diverse, skilled, future workforce

Strengthen STEM through connections to NASA

Objectives

- Students contribute to NASA's endeavors in exploration and discovery.
- Research and development capacity of educational institutions is enhanced, enabling broad and diverse contributions that directly address NASA priorities.



NASA Strategy for STEM Engagement

Focus Areas

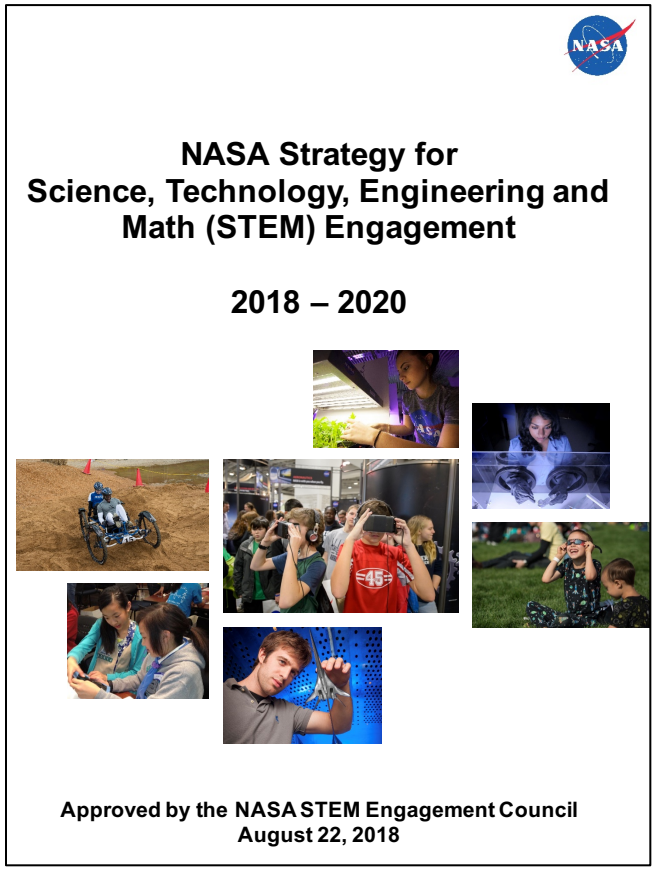
Enable contributions to NASA's work

Build a diverse, skilled, future workforce

Strengthen STEM through connections to NASA

Objectives

- Broad and diverse set of students are attracted to STEM through NASA opportunities.
- Students, including underrepresented and underserved communities, explore and pursue STEM pathways through authentic learning experiences and research opportunities with NASA's people and work.
- The portfolio of NASA STEM engagement opportunities meets agency workforce requirements and serves the nation's aerospace and relevant STEM needs.
- Strategic partnerships with industry, academia, non-profit organizations and educational institutions enhance and extend the impact of NASA's efforts in STEM engagement.



NASA Strategy for STEM Engagement

Focus Areas

Enable contributions to NASA's work

Build a diverse, skilled, future workforce

Strengthen STEM through connections to NASA

Objectives

- Youth are introduced to STEM concepts and content through readily available NASA STEM engagement resources and content.
- Students gain exposure to STEM careers through direct and virtual experiences with NASA's people and work.