



Federal STEM 5-Year Strategic Plan

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NAC Ad Hoc Task Force
for STEM Education
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Welcome and thank you!

Welcome, and thank you very much for your willingness to serve on this Task Force and to help NASA with this critical topic that is of national importance.

On behalf of the NASA Administrator, Charles Bolden, I would like to present you with your appointment letters for this Task Force.

We look forward to working with all of you over the next two years. Thank you again.



Federal STEM 5-Year Strategic Plan



- Report from the Committee on STEM (CoSTEM) Education, National Science and Technology Council. Put into place May, 2013
- Five Priority STEM Education Investment Areas
- Throughout the plan there are strategic highlights and coordination approaches
- Ellen Stofan, NASA Chief Scientist is NASA representative on CoSTEM Committee
- Donald James, NASA AA for Education, co-chairs the subcommittee on Federal Coordination-STEM (FC-STEM)
- NASA Education has representatives on all five STEM interagency working groups (IWGs)

Federal STEM Strategic Vision and Approaches



Strategic Vision: A future where:

- The United States has a well-qualified and increasingly diverse STEM workforce able to lead innovation in STEM-related industries and to fulfill CoSTEM agency workforce needs;
- American students have access to excellent P-12, postsecondary, and informal STEM education and learning opportunities; and
- Federal STEM education programs are based on evidence and coordinated for maximum impact in priority areas.

Strategic Approaches:

- 1) key outcomes for ways Federal agencies can contribute
- 2) areas to play lead roles increasing accountability
- 3) methods to build and share evidence
- 4) approaches for decreasing fragmentation

Cross Agency STEM Goal Statement



Improve STEM education by implementing the *Federal STEM Education 5-Year Strategic Plan*, announced in May 2013, specifically:*

- Improve STEM instruction
- Increase and sustain youth and public engagement in STEM
- Enhance STEM experience of undergraduate students
- Better serve groups historically under-represented in STEM fields
- Design graduate education for tomorrow's STEM workforce
- Build new models for leveraging assets and expertise
- Build and use evidence-based approaches

* From the **Cross Agency Priority Goal Quarterly Progress Update on STEM Education FY 15 Q1**

STEM Vision and Urgency*



Vision

- The Federal STEM Education 5-Year Strategic Plan sets out ambitious national goals to drive federal investment in five priority STEM education areas toward which significant progress will require improved coherence and coordination across federal agencies with STEM assets and expertise and STEM education resources.

Urgency

- Advances in STEM have long been central to our nation's economy, security, and ability to preserve the health of its people and the environment; enhancing U.S. students' engagement and success in STEM disciplines is essential to the U.S. maintaining its preeminent position in the world.
- We have considerable progress to make given that our K-12 system ranks “middle of the pack” in international comparisons.
- Meeting the growing demand for STEM expertise and competency is important to the economy and our democracy.
- Increasing opportunities in STEM for more Americans is critical to building a just and inclusive society.

STEM Update and Examples*



Federal Coordination in STEM Education (FC-STEM) updates:

- FC-STEM finalized charters for the five Inter-agency Working Groups (IWGS).
- Agreement that FC STEM will address coordination objectives as a whole.
- New leads identified for the P-12, Graduate, and Engagement IWGs to replace people who have left.

Cross-agency partnership/collaboration examples:

- The Department of Education's 21st Century Community Learning Centers (CCLC) program is piloting collaborations with the National Park Service and the Institute of Museum and Library Services and is expanding its NASA collaboration to include additional sites and engineering challenges (Engagement Priority Goal).
- In addition to the existing four agencies (Office of Naval Research, Smithsonian Institution, Federal Bureau of Investigation (FBI), and Department of Homeland Security(DHS)), the Graduate Research Internship Program (GRIP) added two partners, Environmental Protection Agency (EPA) and National Oceanic and Atmospheric Administration (NOAA) (Graduate Priority Goal).



Thank you again!



REACH
— NEW —
HEIGHTS



REVEAL
— THE —
UNKNOWN



BENEFIT
— ALL —
HUMANKIND

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