NASA Education Update
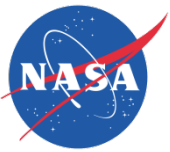
Advancing high quality
STEM education using
NASA's unique capabilities

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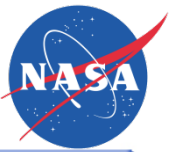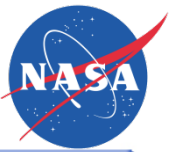# Education Sequestration Waivers & Activity Summaries Update

Education ViTS
April 26, 2013

Education and Public Outreach (EPO) – Waiver Update

- As of Friday, April 26, Office of Education has reviewed 118 and Communications has reviewed 163 waivers generated by the March 22 EPO Sequestration Guidance
    - Approved: Education: 103; Communications: 121
    - Conditionally approved: Education: 0; Communications: 25
    - Denied: Education: 13; Communications: 12
    - Out of scope (no need for approval/denial): Education: 2; Communications: 5
    - Outstanding: Education: 0; Communications: 1

- Lessons Learned to Date
    - Review/response has been staff-intensive; quick turnaround challenging
    - ECC member support is critical in gathering and compiling data
    - All data requested and in the proper format (template) helps expedite review

EPO Activities Under Sequestration - Outcomes and challenges as result of guidance

Near Term Outcomes:

- Facilitating dialogue within ECC and the EPO community at large regarding value and return on investment of planned activities

- Providing an appropriate level of insight into activities and proposed investments

- Opening the door for better alignment of activities with Agency priorities

- Providing venue to focus and leverage activities and investments through improved collaboration across organizations

- Accelerating ECC vision of coordinating a consistent integrated portfolio

Challenges:

- Creating anxiety within the Education and Outreach communities, compounded by the FY2014 budget request.

- Increasing staff workload in documenting and rapid disposition of waivers

EPO Review Process (May-Sept Activities)

Process/Actions	Target Completion Date
1) Initial Spreadsheets Compiled, sorted by organization and identify categories of activities	4/24
2) OE & OC perform initial reviews and consolidation. Validate reviewing office for each activity	4/24
3) OE & OC independently review May 1-June 7 requests by bins and against established criteria.	4/30
4) OE & OC prepare summary memos (rather than individual waivers) for May 1 – June 7. Acquire relevant AA approval and signatures, and issue through CCC and ECC representatives	5/1
5) Refine process based on experience of reviewing May requests	5/1
6) Conduct analysis of activities by categories/bins (more info on Slide 4)	5/1 – 5/31
7) OE & OC hold joint meetings to review June-Sept waivers by bins	5/13 & 5/17
8) Subset of ECC and CCC members review preliminary analysis	
9) OE & OC prepare summary memos (rather than individual waivers) based on categories/bins developed and share with ECC and CCC to discuss observations and recommendations	5/31
10) OE & OC refine memos based upon ECC and CCC input and finalize for relevant AAs approval.	6/7
11) Issue memos through ECC and CCC	by 6/7
12) Establish process for reclama and for late submissions throughout the summer	by 6/7

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EPO Review Process – Categories/Focus Areas

- June-September activities will be grouped into categories/bins for the purpose of more strategic analysis (Step 6 on previous slide)

  PROPOSED CATEGORIES/BINS:

  Video/multimedia; audio; podcast/vodcast; apps

  Public engagement activities; conferences/workshops; exhibits; publications

  Web and social media

  Internal engagement and communications
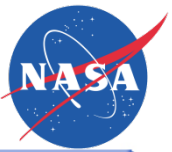
  Media activities; speaking engagements

  STEM Engagement

  Education Workshops

  Other

- Summary memos by relevant categories/bins will be prepared for ECC and CCC discussion to include:
  - Observations, trends, issues, concerns
  - Recommendations
  - Long-term considerations, items for discussion

Criteria for Reviewing EPO Activity Summaries

Proposed Criteria to be used in evaluating all future activities:

- Connection to Agency Priorities: **Extent to which activity connects to** *(for Education)* Education Lines of Business and/or Annual Performance Goals; *(for Communications)* **2013 strategic communications priorities**

- Value/Return on Investment: Resources vs. outcome (reach) and/or impact, including ability/plans to further amplify reach beyond activity and/or enabling multi-use or re-use of products

- Outcome/Impact: Consideration of activity goals, outcomes, target audiences

- Status of development of activity: Concept, investment expended vs. planned, audience selected, etc.

NASA Approach to STEM Education

➢ The Agency's education efforts will be fundamentally restructured into a consolidated education program funded through the Office of Education to support the Administration's FY 2014 STEM Education plan.

➢ The Agency's education efforts will use evidence-based competitive processes to fund the best education and public outreach programs within NASA and coordinate closely with the Department of Education, the National Science Foundation, and the Smithsonian Institution to broaden the reach of NASA's capability to inspire and educate.

➢ The Agency will align its STEM education investments with the federal strategic plans of the National Science and Technology Council (NSTC) Committee on STEM Education (CoSTEM).

➢ The STEM Education Reorganization Initiative preserves Space Grant, EPSCoR, MUREP and GLOBE programs at NASA and refocuses $27 million to facilitate the wider application of its best education assets.

NASA Education Roles in STEM Reorganization

- ➢ Fund the best education programs from across the Agency.

- ➢ Provide evidence-based approaches and results to support the NASA Education activities.

- ➢ Ensure NASA's unique facilities, assets and workforce are integrated into federal coordination effort.

- ➢ Lead development of CoSTEM Strategic Plan with the National Science Foundation.

- ➢ Execute a unified, systematic, and standardized approach to data collection and performance assessment across NASA Education.

- ➢ Leverage NASA investments in STEM infrastructure to scale up dissemination of NASA content through coordinated efforts.

Statutory Requirements for STEM Education

National Science and Technology Council (NSTC) Committee on STEM Education (CoSTEM) was established pursuant to the requirements of Sec. 101 of the America COMPETES Reauthorization Act of 2010.

➢ It requires NASA to actively engage in collaborations with other federal agencies to ensure the Agency's programs are supportive of national STEM priorities.

➢ The CoSTEM will serve as part of the internal deliberative process of the NSTC and provides overall guidance and direction. The purpose of the CoSTEM is to coordinate Federal programs and activities in support of STEM education.

➢ In accordance with the Act, CoSTEM is currently reviewing STEM education activities and programs, and the respective assessments of each, throughout Federal agencies to ensure effectiveness; coordinating, with the Office of Management and Budget, STEM education activities and programs throughout Federal agencies; and will develop and implement through the participating agencies a 5-year STEM education strategic plan, to be updated every 5 years.

Description of 5-year Federal STEM Education Strategic Plan

The Strategic Plan will provide common goals, outcomes, and strategies to create a coordinated portfolio of STEM education across the Federal government. It requires Federal agencies to design and revise their STEM education investments to accomplish the following objectives:

1. **Do What We Know Works** – Ensure Federal STEM investments utilize what is known about effective STEM education and best practices in STEM education.

2. **Learn More About and Share What Works** – Improve assessment and evaluation of STEM education investments to facilitate continual improvement and tracking of outputs and outcomes.

3. **Increase Efficiency and Cohesion** – Ensure Federal STEM education investments are coordinated to efficiently utilize and leverage Federal resources.

4. **Identify and Focus on Priority Issues** – Effective K-12 STEM Teacher Education, Engagement in STEM, Undergraduate STEM Education, and Serving Groups Traditionally Underrepresented in STEM
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$ in Millions	FY 2012 Budget Estimate	Changes	FY 2014 Budget Request
Total	**202.5**	**(93.1)**	**109.4**
Education	**138.4**	**(44.2)**	**94.2**
Aerospace Research and Career Development	**58.4**	**(25.4)**	**33.0**
NASA Space Grant	40.0	(16.0)	24.0
ESPCoR	18.4	(9.4)	9.0
STEM Education and Accountability	**80.0**	**(18.8)**	**61.2**
MUREP	30.0	**0.0**	30.0
STEM Education and Accountability Projects	40.0	(8.8)	**31.2**
Formal and Informal Education			
Innovation in Educaton			
Evaluation, Performance, Monitoring, & Accountability			
Informal STEM Education	10.0	(10.0)	
GLOBE		**4.5**	4.5
STEM Interagency Coordination		**6.8**	6.8
STEM Facilitation		**19.9**	19.9
Mission Directorates Subtotal	**64.1**	**(48.9)**	**15.2**
Science	41.9	(41.9)	0.0
Aeronautics Research	3.3	(3.3)	0.0
Space Technology	10.4	4.8	15.2
Exploration	4.4	(4.4)	0.0
Space Operations	0.0	0.0	0.0
Cross Agency Support	4.1	(4.1)	0.0

Questions

➢ What will be the focus of the NASA Education Program?

➢ NASA's education funding has been slashed in the FY14 President's Budget Request. What will happen to the numerous NASA programs and center education efforts?

➢ Where did the list that we saw on Space Ref come from? Is it accurate?

➢ What is happening and how will the transition period work with the Smithsonian, Department of Education and NSF?

➢ What will happen to the education activities that are congressionally mandated?

➢ We have spent decades building up our expertise. How will the other agencies take advantage of the skills NASA has?

Back-Up Slides