

NASA Educational Technology Services  
Administered by Marshall IT Services (MITS)  
Type of Agreement (Contract)  
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### PROJECT DESCRIPTION

NASA Educational Technology Services (NETS) is a cross-cutting NASA education technology project that prepares and delivers educational content on NASA's website ([www.nasa.gov](http://www.nasa.gov)), and maintains the Office of Education website ([education.nasa.gov](http://education.nasa.gov)) and numerous other education sites. Additional Web support is provided by identification and linkage of multimedia resources to support video programming on the NASA TV Education File and for selected activities needing website creation and support. NETS provides Web-based support to NASA's Office of Education external partnerships and cooperative agreements. During fiscal year 2013, NETS was transitioned to the Office of Education Infrastructure Division to serve as a principal provider of agency-wide Web services for NASA's Office of Education. In this infrastructure role, NETS provides essential information delivery services for the Office of Education that include an 18,000 member listserve, weekly product and opportunity updates, and capability for promoting important events and announcements on the NASA Education Home Page and education pages on the NASA Home Page (For Educator and For Kids). The service impact of NETS spans all NASA Mission Directorates and Field Centers.

### PROJECT GOALS

- Identify and create content for the education sections of the NASA website ([www.nasa.gov](http://www.nasa.gov)). Identified content is based on current NASA mission directorate or education projects, activities, or events. NETS assesses the educational value of the content, determines the appropriate grade level, and ensures that it meets portal standards.
- Develop games and interactive features for NASA Kids' Club, ensuring that the games contain educational value and are appropriate for their grade-level audience.
- Publish and syndicate NASA educational content on the NASA.gov website.
- Develop new websites for NASA Education projects and activities.
- Migrate education websites into the new NASA.gov content management system.

- Collaborate with the NASA mission directorate education leads, NASA Education management, and activity sponsors to create or promote NASA e-learning content and educational opportunities. NETS also collaborates with external partners to inspire student interest in science, technology, engineering, and mathematics (STEM) content.
- Provide support for activities such as usability studies, education product cross-promotion, and education activities to ensure that NASA educational content is reaching audiences as effectively as possible.

### PROJECT BENEFIT TO OUTCOMES 5.1, 6.1, 6.2, AND 6.4

Outcome 5.1: Identify, cultivate, and sustain a diverse workforce and inclusive work environment that is needed to conduct NASA missions.

Outcome 6.1: Improve retention of students in STEM disciplines by providing opportunities and activities along the education pipeline.

Outcome 6.2: Promote STEM literacy through strategic partnerships with formal and informal organizations.

Outcome 6.4: Inform, engage, and inspire the public by sharing NASA's missions, challenges, and results.

As a component of the Office of Education Infrastructure Division, NETS provides support for these outcomes by:

- Providing accessibility to and availability of NASA's educational materials and articles in the education sections of the NASA website, by disseminating information on NASA Education opportunities and activities via the EXPRESS Listserv, and by developing, publishing, and maintaining educational content on the NASA website.
- Maintaining various NASA Education websites with relevant, timely quality content; working with internal/external partners to promote electronic professional development opportunities via the EXPRESS Listserv and on the NASA website; maintaining current alphabetized lists of all educational publications and websites so that educators can find standards-based educational and curricular-support materials easily; and collaborating with partners who wish to use NASA educational materials or website resources.
- Promoting NASA events and educational activities at museums and science centers nationwide, collaborating with partners to develop and post features on NASA Education activities and projects, and producing

and maintaining educational content on NASA's missions and challenges on NASA's website.

## PROJECT ACCOMPLISHMENTS

- Migrated 15 education websites and Web pages into the new Drupal-based portal content management system.
- Produced, published, and maintained two new education websites and six new education Web pages. (APG 6.1.1.1)
- Added 70 educational products to, modified 95 products in, and deleted 31 outdated products from the NASA website, which currently houses more than 2,000 educational materials, references, and resources. (APG 6.1.1.1)
- Sent 30 EXPRESS messages and posted eight articles promoting opportunities and activities for Aeronautics Research Mission Directorate. (APG 5.1.2.1)
- Sent 36 EXPRESS messages and posted 28 articles promoting educational opportunities and activities for the Human Exploration and Operations Directorate. (APG 6.1.1.1; APG 5.1.2.1; APG 6.1.2.1)
- Sent 91 EXPRESS messages and posted 17 articles promoting educational resources, activities, and opportunities for the Science Mission Directorate. (APG 6.1.2.2)
- Sent 14 EXPRESS messages and posted three articles to promote opportunities for students and teachers to participate in NASA education activities supported by the Space Technology Mission Directorate. (APG 6.1.1.1; APG 6.1.2.1)
- Sent 42 EXPRESS messages and posted one article promoting opportunities for NASA Internships, Fellowships, and Scholarships. (APG 5.1.2.1)
- Sent 163 EXPRESS messages promoting opportunities for educator professional development. (APG 6.1.1.1)
- Sent 120 EXPRESS messages and posted 20 features to promote STEM engagement opportunities and activities. (APG 6.1.2.1)
- Sent 21 EXPRESS messages and posted eight articles to promote institutional engagement opportunities and activities. (APG 6.4.1.1)
- Posted five features to promote NASA's Office of Education activities and opportunities. (APG 6.1.2.1)
- Leveraged social media resources to disseminate messages to more than 4.9 million users. (APG 6.1.1.1)
- Produced and published one new Do-It-Yourself podcast module, one professional development tutorial video series, and 15 blog posts to encourage teachers to use technology and STEM-based content in the classroom. (APG 6.1.1.1)

- Supported 11 chats for NASA Explorer Schools. (APG 6.1.2.1)
- Produced and published four mission features and five image sets, as well as launched the new clubhouse on NASA Kids' Club. (APG 6.1.1.1)
- Maintained the NASA Students Facebook page, increasing the "likes" to 23,693, an increase of 16,078 in fiscal year 2013. (APG 6.1.2.1)
- Moderated 2,320 emails and 2,586 comments during this fiscal year.)

Notes:

- NASA Kids' Club was highlighted in the Dec. 5, 2012, edition of the "EdTech Times." <http://edtechtimes.com/2012/12/05/nasa-adds-new-interactive-k-4-features-to-nasa-kids-club/>
- NASA Kids' Club featured in an MSN Money feature – "12 cartoon characters your taxes paid for" <http://money.msn.com/now/12-cartoon-characters-your-taxes-paid-for>

## PROJECT CONTRIBUTIONS TO PART MEASURES

APG 6.1.1.1 (Maintain no fewer than 1,000 online STEM-based teaching tools for K-12 and informal educators and higher education faculty.)

NETS serves as the curator for a variety of online STEM-based teaching tools that are accessed via the NASA website. The website currently houses more than 1,000 educational materials, references, and resources.

## IMPROVEMENTS (e.g., project management, efficiencies, etc.) MADE IN THE PAST YEAR

- Utilized a new content management system on NASA Education Web pages.
- Increased use of social media outlets to broaden the reach of messages to users.
- Completed a total of 206 hours of training as a team to garner skills and knowledge to better support customers.
- Created an online form and Web page for the Office of Education to help process speaker and meeting requests.
- Created a Web page for the Office of Education to provide the status of education projects and activities affected by sequestration.
- Worked with NASA Headquarters to get approval for creating a NASA Education YouTube channel.
- Transitioned to Google Analytics to comply with the Digital Government Strategy for Federal agencies to implement performance and customer satisfaction measuring tools on all Federal government websites.

## PROJECT PARTNERS AND ROLE OF PARTNERS IN PROJECT EXECUTION

During fiscal year 2013, NETS worked with contacts throughout the agency and with numerous external partners to produce and publish EXPRESS messages and articles promoting educational opportunities, projects, and activities:

- National Oceanic and Atmospheric Administration and the National Science Foundation (Tri-Agency Climate Education Catalog)
- Human Exploration and Operations (Why We Explore presentation; products on NASA.gov)
- Hudson Alpha Institute ("Collaboration Promotes NASA-Bioscience Education" feature story)
- International Astronautical Congress (Call for abstracts)
- Pearson Foundation (NASA resources suitable for use on Pearson's ecosystem website)
- Lockheed Martin, National Institute of Aerospace, and NASA Teaching From Space Project (Engineering Design Challenge website)
- Summer of Innovation (Virtual meeting support)
- Interdisciplinary National Science Project Incorporating Research and Education Experience (Feature covering six participating students)
- NASA Explorer Schools (Chat support, website migration activities)
- Games, Learning, and Assessment Lab (Identified NASA resources for GlassLab Games)
- Michigan Virtual School (Feature on teacher Andrew Vanden Heuvel)
- 21<sup>st</sup> Century Community Learning Centers (Three STEM challenges)