NASA Educational Technology Services (NETS) Administered by SAIC

Type of Agreement: Contract Project Manager: Jeff Ehmen Marshall Space Flight Center

Telephone Number: 256-961-1567

PROJECT DESCRIPTION

NASA Educational Technology Services (NETS) is a cross-cutting NASA education technology project that prepares and delivers educational content on the NASA Portal (www.nasa.gov), and maintains both the Office of Education Web site (education.nasa.gov) and the Central Operations of Resources for Educators web site (core.nasa.gov). Additional Web support is provided by identification and linkage of multimedia resources to support video programming on the NASA TV Education File and Education Services channel and for selected projects needing Web site creation and support. NETS provides assistance to education projects in complying with the Agency mandate to migrate all Web content to a portal infrastructure. NETS provides Web-based support to NASA Office of Education external partnerships (Space Act Agreements) and cooperative agreements, and conducts customer focus and usability studies to determine improved methods to deliver electronic content to NASA's key education audience.

PROJECT GOALS

- Create 6-part video podcast series for multiple venue use
- Create 25 career focus articles
- Create 40 features
- Create 45 topic-based content articles
- Populate the Portal with meta tagged educational products to be delivered by faceted navigation tool
- Breakout 14 educator guides into individual segments that are meta tagged for search on the NASA Portal
- Increase the Kids' Club page views by 5 percent to 16,245,212
- Prepare Web dissemination plan for widely sharing approved materials
- Meta tag content from segmented educator guides (see 2.3.7) to take advantage of Portal faceted search capabilities
- Meta tag content from segmented educator guides (see 2.3.7) to take advantage of Portal faceted search capabilities
- Implement the Web dissemination plan from 3.1.4
- Reach a cost per page view of \$0.038 (3.8 cents).

PROJECT BENEFIT TO OUTCOME 2

NETS supports NASA Education efforts to accomplish Outcome 2: to attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers, and faculty.

NETS supports Outcome 2 by developing, producing, and publishing curricular support materials/products and disseminating them to the education community via the NASA Home Page (www.nasa.gov) as well as by distributing materials at educational conferences and in workshops throughout the year. Among the products created and published to support students and educators are feature articles, educator guides, educational games, current opportunities (contests, design challenges, professional development workshops, etc.), Flash features, interactive Web sites, video clips, podcasts, and homework tools.

NETS provides agency-wide support by developing and publishing educational content on the NASA Home Page to support various missions and educational projects. These efforts include collaborating with internal and external contacts to develop products and to ensure content quality before products are disseminated. Additionally, NETS works with internal/external staff to promote products, projects, and opportunities via the Express list serve, which has over 15,500 subscribers. NETS also promotes products, projects, and opportunities at educational conferences, as well as in workshops and sessions.

NETS assists and consults with other NASA field center education offices and projects in migrating Web content of center education and education project pages into the NASA Home Page framework. This promotes the public's access to electronic information and materials from NASA, and helps NASA achieve mandates issued under the E-Gov Act.

PROJECT ACCOMPLISHMENTS

NETS accomplished or exceeded the majority of its Annual Performance Goals (APGs) for FY08. Some APGs were not met and will be considered for inclusion for FY09 goals. NETS provided support to projects and activities that was not anticipated at the time the APGs were identified. Accomplishments include:

- Had representation on the committee overseeing the redesign and structure of the new NASA Home Page Web site
- Produced and published content to support the rollout of the redesigned NASA Home Page in Dec. '07
- Created and published 19 career-focused articles, 119 feature articles, and 26 topic-based articles
- Added 115 products and 215 educational video segments to the "For Educators" section of the NASA Home Page

- Segmented four educator guides into individual lessons and posted them in the "For Educators" section
- Increased the page views of NASA Kids' Club 24.7 percent from FY07.
 During FY 2008, NASA Kids' Club had 19,301,697 page views (monthly average 1,608,475). Page views in FY07 totaled 15,471,631
- Added meta tags to 1,490 educational products to make them searchable using the Educational Materials Finder on the NASA Home Page
- Supported the NASA/Office Max partnership by adding 115 new documents added to Office Max Print-on-Demand page; referrals from the NASA Education Products pages resulted in 1,862 document orders from Office Max
- Developed and published educational materials and articles to support six space shuttle missions
- Worked with the National Institute of Aerospace, NASA Langley Research Center, and NASA Ames Research Center to develop the NASA eClips Web site within NASA Home Page structure
- Added 85 education project descriptions to the NASA Education Web site
- Conducted Office of Management and Budget-approved focus groups and usability testing to garner customer feedback to aid in developing/ publishing educational content that meets the needs of students and educators
- Promoted 138 NASA Education projects and activities via the Express list serve
- Logged 860,624 downloads of educational materials in PDF format
- Distributed/demonstrated NASA educational materials at seven educational conferences, with combined attendance of more than 62,000 participants
- Converted and posted 78 NASA Education performance reports on the NASA Education home page meeting the OMB-mandated deployment date of June 1, 2008
- Developed and published a K-4 picture dictionary on the NASA Home Page based on usability data from focus groups denoting K-4 users prefer graphic interfaces
- Wrote a draft of a speech for NASA Administrator Mike Griffin, which was assigned, produced, and delivered in a 5-hour period

PROJECT CONTRIBUTIONS TO PART MEASURES

NETS contributes to the PART 15 measure "Dollar invested per number of people reached through e-education technologies". The NETS contributing measure is the number of page views to education sections on NASA Portal (educators, students, kids), the NASA Education Home Page, and the Central Operations for Educators (COREO home page. During Fiscal Year 2008 (October 2007 – September 2008) there were 44,439,471 page views. The PART measure goal

for NETS was to reach a cost of 3.8 cents per page view. The actual cost per page view in FY08 was 3.2 cents.

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

Worked with numerous groups to migrate content into NASA.gov structure; aided some groups with development of content. Groups assisted include, but are not limited to, NASA Explorer Schools, Exploration Systems Mission Directorate's Lunar Outpost project team, Fit Explorer Challenge team, Brain Bites, the Digital Learning Network, Marshall Center and Kennedy Center Education Offices, Marshall's Educator Resource Center, NASA Ames and YouTube; Teaching from Space, Hubble education team, Space Grant & NASA Experimental Program to Stimulate Competitive Research (EPSCoR), and the NASA Office of Education. These activities take advantage of knowledge and efficiencies known by NETS producing quicker and more accurate outcomes.

PROJECT PARTNERS AND ROLE OF PARTNERS IN PROJECT EXECUTION

NETS worked a variety of external partners supporting developing and publishing of educational materials, games, podcasts, video clips, features, and announcements.

- Worked closely with Disney to develop and publish educational materials, feature articles, games, and blogs for the Buzz Lightyear projects to support STS-124. The Buzz Lightyear Mission 5 podcast appeared as the third most popular (downloaded) audio in the October statistics report for NASA.gov.
- Worked with Discovery Communications to publish teacher guides/videos to support NASA's 50th Anniversary campaign.
- Collaborated with United Media to support the Space Act Agreement between NASA and United Media involving the Snoopy campaign and NASA's 50th Anniversary.
- Collaborated and consulted with USA Today on educational content to support the NASA/USA Today partnership.
- Collaborated with Disney-Pixar on the Wall-E educational and outreach activities to support the Space Act agreement between NASA and Disney.