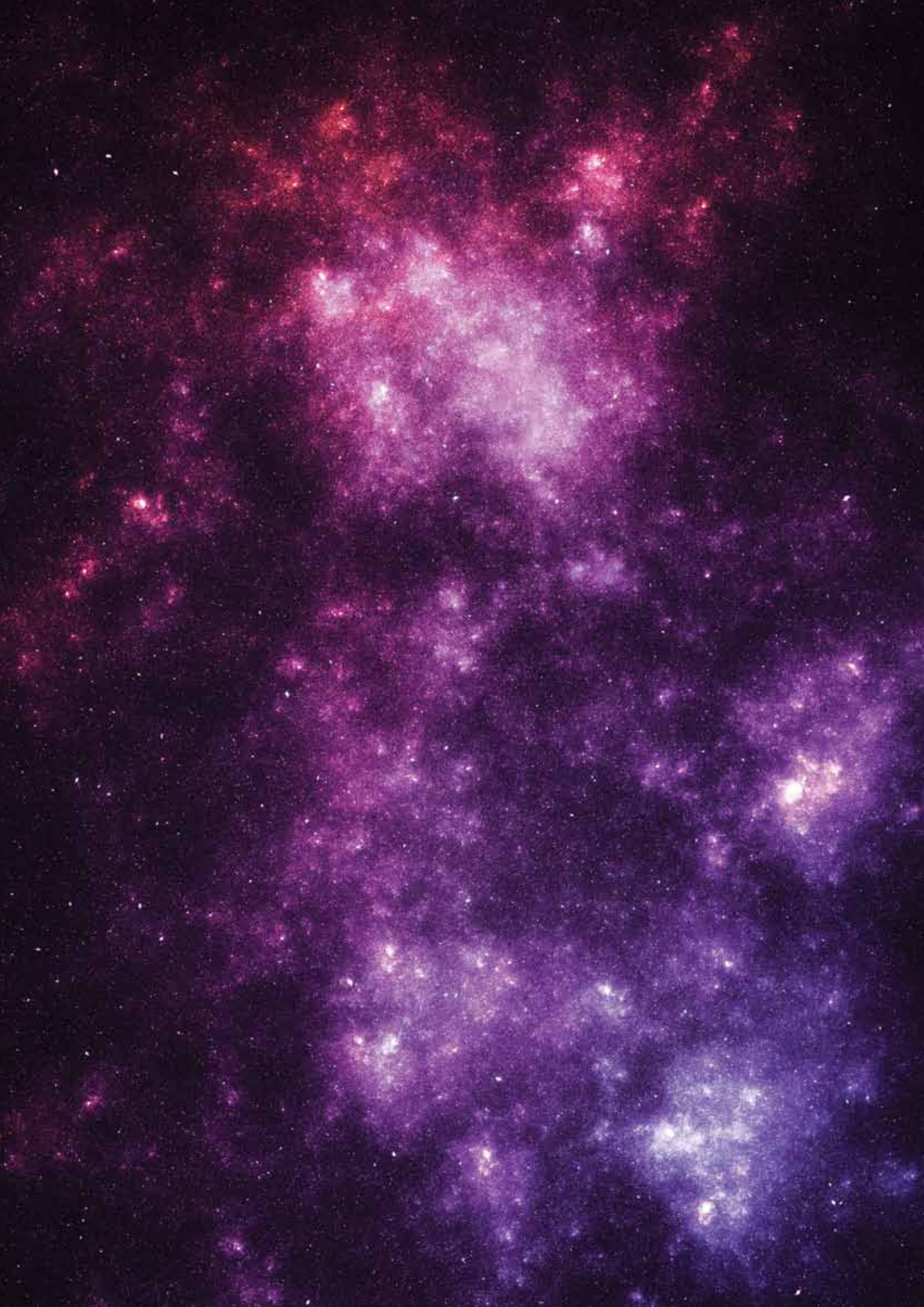

2010-2011
ANNUAL
REPORT
cybermission
ACCEPT THE CHALLENGE
U.S.ARMY



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REFLECTIONS

It has been another exciting and successful year for the U.S. Army's eCYBERMISSION Program, capped by the 2011 National Judging and Educational Event (NJ&EE) this past June at our nation's capital where this year's national winners were crowned.

I'm even more excited about the program's 10-year anniversary in 2011-2012! The quality of student projects from 6th through 9th grade in Science, Technology, Engineering and Mathematics (STEM) never ceases to amaze me! Capturing student interest in STEM is not only vital to the United States' global competitiveness; it's also a matter of national security.

Over the past nine years, more than 83,000 students have participated in the program and more than $8.5 million in U.S. Series EE Savings Bonds have been awarded to winners. The success of eCYBERMISSION continues to rely on the hundreds of Team Advisors and thousands of volunteers who selflessly give their time to provide STEM-rich learning experiences for students.

On behalf of the U.S. Army, I extend my deepest gratitude to the Volunteers who served as Ambassadors, Cyber Guides and Judges, and, most importantly, to the Teachers/Team Advisors and parents for continuing to help shape our nation's future and for your incredible dedication to our students' education.

The U.S. Army is proud of its role in developing future STEM talent and for developing the technology leaders of tomorrow. It's up to us – the U.S. Army, teachers and parents – to pave the way for these students by igniting their interest in STEM fields. For me personally, it is tremendously rewarding to know that the future of our country is in the hands of such talented, dedicated and hardworking students.

Again, on behalf of the U.S. Army, it is an honor to serve as the Executive Agent of the eCYBERMISSION program, and to host the 2012 NJ&EE!

Major General Nick Justice

Commanding General
U.S. Army Research, Development & Engineering Command

INTRODUCTION

2010-2011 was a year of change and growth for the eCYBERMISSION Program, a congressionally approved Science, Technology, Engineering and Mathematics (STEM) program. The enhancements made this year have helped propel eCYBERMISSION forward as one of the nation's leading STEM competitions. The U.S. Army continues to strive to make eCYBERMISSION the nation's premier STEM competition, creating a fun, engaging competition and increasing the number of students recognized for their efforts in STEM education every year. Due to the updated awards structure implemented in 2010-2011, we were delighted to award over 780 students this year for their remarkable eCYBERMISSION projects. We hope that their involvement in the program is only the start of their bright futures in STEM.

This report highlights the many achievements of the eCYBERMISSION Program for 2010-2011. It will walk through the various parts of the competition from registration through the National Judging and Educational Event, each piece playing an integral role and contributing to the overall success of the program.

The 2011 NJ&EE was a tremendous success! I was excited to see the many projects worthy of Regional Finalist and National Winner recognition. As we approach eCYBERMISSION's 10th year anniversary, I look forward to program enhancements that will not only result in increased student participation, but will also usher in program success throughout the next decade.

Louie Lopez

eCYBERMISSION Program Manager
U.S. Army Research, Development & Engineering Command

What is eCYBERMISSION?

The eCYBERMISSION Program is a component of the Army Educational Outreach Program and is a National, web-based competition free to students in grades six through nine, designed to encourage students to become more actively engaged in their STEM education. eCYBERMISSION strives to encourage students from all backgrounds and proficiency levels to understand how to apply what they learn in the classroom to a real life situation, promoting self-discovery through hands-on learning. Students work in teams to identify a problem in their community and utilize the scientific method/scientific inquiry to propose a solution, learning the value of teamwork and community service. Students compete for State, Regional and National awards, and students on winning teams can win up to $8,000 in U.S. Series EE Savings Bonds and a chance to attend the National Judging and Educational Event in the Washington, D.C. metropolitan area.

This year's recipient of the first annual Army Values Award was DR.MED, an eighth-grade team from San Antonio, Texas. Pictured above are (from left): Carlos Zapata, Nathaly Salazar, Ms. Heidi Shyu, Ricky Rodriguez, Jocelyn Hernandez, Maj. Gen. Nick G. Justice, Team Advisor Sandra Geisbush and Command Sgt. Major Hector Marin.

2010-2011 Year in Review

The 2010-2011 eCYBERMISSION competition year was a success, with more than 12,000 students across the country accepting the challenge and a record number of Volunteers supporting the program. Highlights from this year include:

Updated Awards Structure

For the first time since the competition's inception, the awards structure was completely revamped this year, with the implementation of state level awards and an Honorable Mention category. With this updated structure, eCYBERMISSION is able to reward more than 66 percent of all students who submit a Mission Folder for their hard work and dedication to their STEM education. In addition, state level awards allow the program to provide rewards equally across the country, holding to its commitment to encourage students from all backgrounds and proficiency levels.

National Judging and Educational Event

The 2011 National Judging and Educational Event (NJ&EE) was the best yet, complete with special appearances by Michael and Geoffrey Howe from the popular Discovery Channel show "Black Ops Brothers;" senate visits and a tour of the Capital Building; a keynote address by Ms. Heidi Shyu, Acting Assistant Secretary of the Army for Acquisition, Logistics and Technology; and a special appearance by Secretary Eric Shinseki, former Chief of Staff of the U.S. Army whose call for a 'science fair for the nation' helped launch eCYBERMISSION. Other noteworthy guests were Mr. Zachary Lemnios, Assistant Secretary of Defense for Research and Engineering; Dr. Marilyn Freeman, Deputy Assistant Secretary for Research and Technology, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology; and Dr. Scott Fish, Chief Scientist of the U.S. Army. A highlight of NJ&EE was Army Labs Day, in which scientists and engineers from several Army research and development centers conducted hands-on experiments with students, demonstrating the advanced technologies of the Army and the many applications of STEM education.

A new addition to this year's NJ&EE was the implementation of the **Army Values Award**, in which the non-commissioned officers (NCOs), who lead the students throughout the week, nominate a team that best exemplifies the Army's core values (loyalty, duty, respect, selfless service, honor, integrity, personal courage). This year's recipient of the first annual award was DR.MED, an eighth-grade team from San Antonio, Texas.

Outreach

An aggressive, strategic outreach campaign to states with historically low participation helped generate more awareness of and interest in eCYBERMISSION, reinforcing the brand and the quality of the program in these areas. The previously low registration states that saw the greatest increases as a result of the team's outreach efforts were Georgia, Hawaii, Iowa, Maryland, Michigan, Missouri, North Carolina, South Dakota and Washington. In Maryland alone, there was an increase of 134 students over the previous competition year as a result of dedicated outreach to local communities.

These outreach campaigns combined with conference attendance, presentations across the country and direct marketing efforts directly resulted in strong participation numbers, with registered participants in 48 states, as well as in three U.S. Territories (American Samoa, Guam and Virgin Islands) and Department of Defense Education Activity (DoDEA) schools in Armed Forces Europe and Armed Forces Pacific. Twenty-six states and U.S. Territories saw an increase in participation.

In addition, the number of Volunteers who support the program and help make it a success grew exponentially this year, with more Virtual Judges, CyberGuides and Ambassadors than ever before. Their tireless support of eCYBERMISSION helped make the 2010-2011 competition year a success!

"I like participating in eCYBERMISSION because it showed me I can do something to help the community whether it's small or big." [Student, Surf City Smartbikes, California]

751
Team Advisors

12,251
Registered students

90%
Students registered on complete and eligible teams

1,174
Virtual Judges

88
CyberGuides

179
Ambassadors

Updated Awards Structure

eCYBERMISSION modified its awards structure in 2010-2011 to recognize a larger pool of students for showing an interest in STEM by competing in eCYBERMISSION. The new plan maximizes the amount of student winners, and ensures that awards are spread out among students across the country, representing the commitment to encourage students from all backgrounds and proficiency levels to take an active interest in their STEM education.

Prior to the re-organization of the awards structure, only 3.5 percent of participants received awards. With this updated structure, eCYBERMISSION will recognize 66 percent of students who submit a Mission Folder.

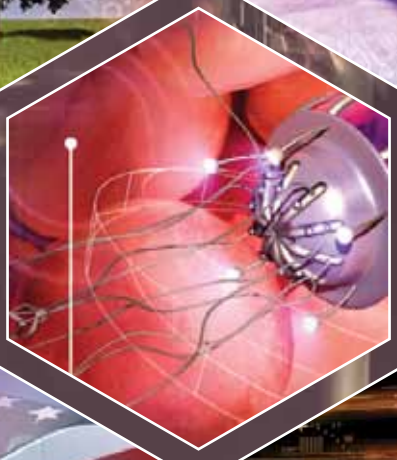
STEM education is a top priority of the current administration and the "all hands on deck" urgency of encouraging STEM education across the country is evident. We are constantly striving to grow eCYBERMISSION, and this updated structure is an important piece in the continued longevity of the program. This will also help when promoting the competition and encouraging students to utilize STEM in solving problems in their community – a skill and professional passion that this country truly needs. As more students across the country participate in the competition each year, this structure provides many more opportunities for recognition and will help encourage students from all states to accept the eCYBERMISSION challenge.

State Awards per grade	**First-Place State Winners** $1,000 U.S. Series EE Savings Bond per student **Second-Place State Winners** $500 U.S. Series EE Savings Bond per student **Honorable Mention Awards** Award certificate and STEM Tool Kit
Regional Awards per grade	**First-Place Regional Winners** $2,000 U.S. Series EE Savings Bond per student and an all-expense paid trip to Washington, D.C., to compete for the First-Place National Award
National Awards per grade	**First-Place National Winners** $5,000 U.S. Series EE Savings Bond per student

"It was pretty amazing to participate in eCYBERMISSION because I was able to utilize skills that I had and work with the team to put together a great project." [Student, Team Charger 5, North Carolina]





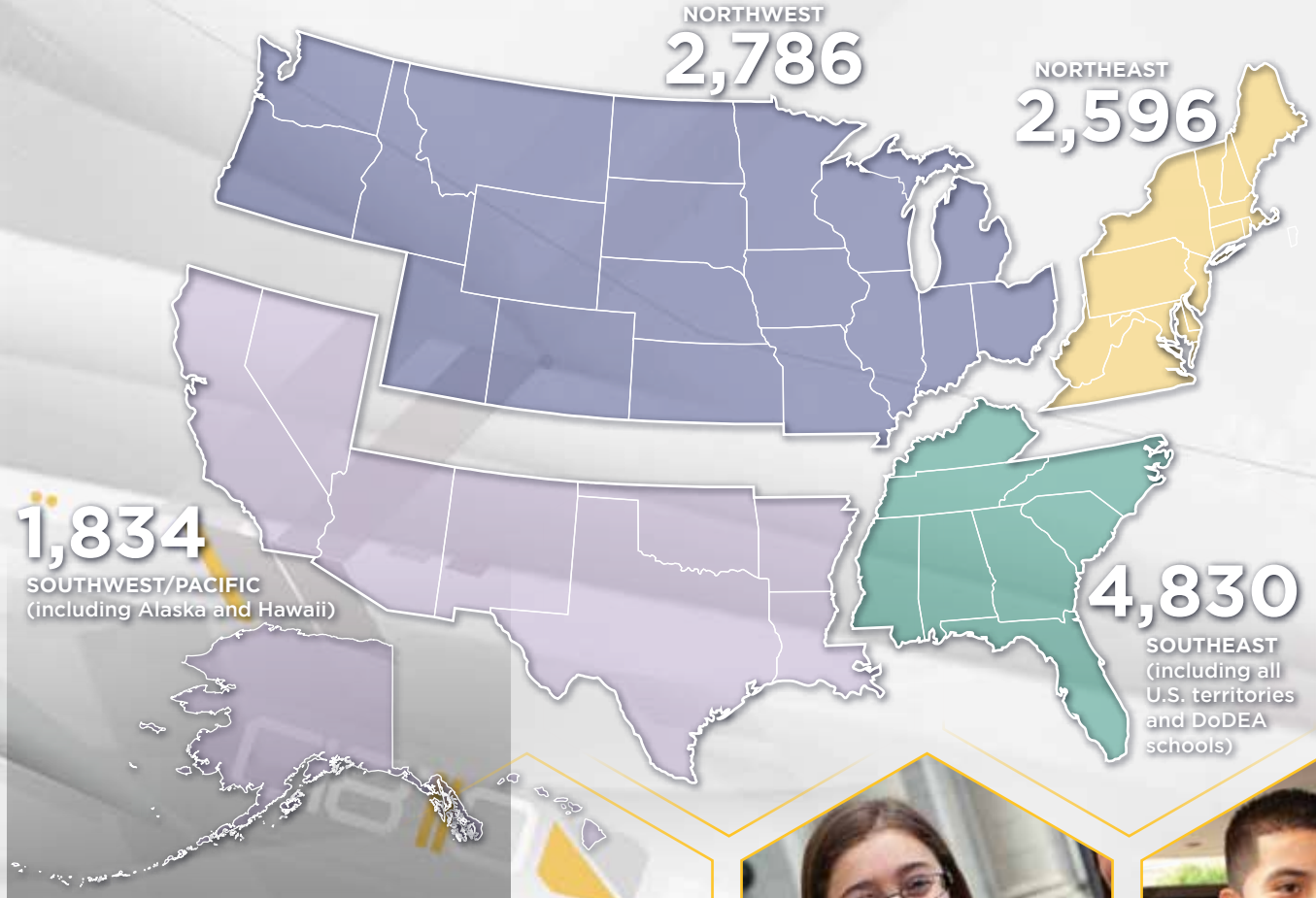


New Mission Challenges

This year, the number of Mission Challenges was increased from four to nine to better reflect the ever-changing scientific environment. Providing more concrete subject areas helped students as they sought a starting point for their projects.

The new Mission Challenges are as follows:

- **Alternative Sources of Energy**
- **Ecosystems**
- **Environment**
- **Food, Health & Fitness**
- **Nanotechnology**
- **National Security & Safety**
- **Robots & Robotics**
- **Sports & Recreation**
- **Speed, Velocity, Acceleration, Vectors & Scalars**



More than

12,000

students participated, in over

50

states and U.S. Territories.

"I accepted the challenge because...I thought it would be a good way to take one step ahead and stand out from the crowd." [Student, DR.MED, Texas]

Registration Period

The eCYBERMISSION Registration Period, which takes place over a 20-week time period, allows time for students and Team Advisors to register for the competition during the first half of the traditional school year. Volunteers are also recruited during this time, as they play a significant role in the success of the program throughout the competition year. Steady increases were seen week to week, with strong increases shown after direct marketing tactics and outreach efforts were employed.

At the close of registration, 12,251 students from across the country were registered. There was also an increase in complete and eligible teams as well as the number of returning Team Advisors, making this our most successful year yet.

For the 2010-2011 competition, eCYBERMISSION registered students in 48 states and three U.S. Territories (American Samoa, Guam and Virgin Islands), as well as DoDEA schools in Armed Forces Europe and Armed Forces Pacific. Twenty-six states and U.S. territories had an increase in registered students and complete teams over the 2009-2010 competition year. The most significant increases were seen in Georgia, Hawaii, Iowa, Maryland, Michigan, Missouri, North Carolina, South Dakota and Washington.

The 2010-2011 competition year also saw the largest number of Volunteers in the program's history, with 1,422 Ambassadors, CyberGuides and Virtual Judges registered. Volunteers are a vital component to the success of eCYBERMISSION, helping the competition have more of an impact in communities nationwide from Registration through Judging.

- **Ambassadors** – Serve as the "face of eCYBERMISSION" by promoting the competition and recruiting both students and Volunteers in their communities.
- **CyberGuides** – Provide online assistance to eCYBERMISSION Students through the use of Discussion Forums, Chat Rooms, Instant Messaging and interactive webinars.
- **Virtual Judges** – Evaluate and score team Mission Folders via the eCYBERMISSION website.

"My favorite part of eCYBERMISSION was seeing these kids develop in their character and team-building. They really were four individuals and once they started the team effort they bonded very well. We've seen the best of them come out."
[Team Advisor Kay Johnson, Oklahoma]

1,422

the largest number of Volunteers in the program's history

Volunteer Registration Overview

Registered Volunteers	Total Registered
Ambassadors	179
CyberGuides	88
Virtual Judges	1,174
Total	**1,422**

A robust strategic plan for outreach designed to raise awareness of the competition and promote registration for the 2010-2011 competition year was created based on the recommendations of competition stakeholders as well as on lessons learned from previous competition years.

Outreach Initiatives

Exhibiting and presenting at specific conferences allows the eCYBERMISSION Team to generate awareness of and interest in the competition among targeted audiences, reaching a large pool of potential participants in one location. In addition, conferences allow the team the opportunity to network with other individuals from the educational community, enabling the team to learn about potential changes within the educational landscape or challenges that may impact future participation.

Road shows are outreach trips to universities and military installations designed to promote the eCYBERMISSION Program to recruit Volunteers. During the 2010-2011 competition, the eCYBERMISSION Volunteer Team hosted road shows at various U.S. Army and federal government organizations.

eCYBERMISSION Staff conducts outreach to universities and targeted organizations as a way to recruit Volunteers. The Volunteer Team conducted five presentations during the 2010-2011 competition year to local universities and organizations that have an interest in STEM education.

Low Registration Outreach

Several tactics were employed to increase student and Team Advisor participation from states which had low registration in 2009-2010. The focus of this outreach was on Alaska, Delaware, Illinois, Maine, Massachusetts, Minnesota, Mississippi, Montana, New Hampshire, New Mexico, North Dakota, Oregon, Rhode Island, South Dakota, Utah and Wisconsin, as well as the Armed Forces Pacific and Puerto Rico. As a direct result from this outreach, there were significant increases in several of the previously low registration states.

eCYBERMISSION was represented at the following conferences:

APG Community Day	Aberdeen Proving Grounds, Md.	Aug. 11
Communications-Electronics Research, Development and Engineering Center (CERDEC) Math and Science Summer Program Closing Ceremony	Tinton Falls, N.J.	Aug. 11-12
Hispanic Engineering, Science & Technology (HESTEC) Conference	McAllen, Texas	Oct. 1-3
Michigan Association of Secondary School Principals (MASSP) Conference*	Mt. Pleasant, Mich.	Oct. 4-5
New Mexico Science Teachers Association Fall Conference*	Albuquerque, N.M.	Oct. 7-9
Massachusetts Association of Science Teachers/Massachusetts Science Education Leadership Association Conference	Boxborough, Mass.	Oct. 20-22
New Hampshire Science Teachers Association Fall Conference*	Manchester, N.H.	Oct. 24-25
Mississippi Science Teachers Association Conference*	Jackson, Miss.	Oct. 25-26
Women of Color in STEM Conference Robotics Competition	Dallas, Texas	Oct. 28-30
Learn to Lead Conference*	Sutton, W.Va.	Oct. 29-30
National Middle School Association Annual Conference*	Baltimore, Md.	Nov. 4-6
National Science Teachers Association Regional Conference*	Baltimore, Md.	Nov. 11-13
Army Science Conference	Orlando, Fla.	Nov. 29-Dec. 2

* Indicates when eCYBERMISSION Staff gave a presentation to conference attendees

"My favorite part of eCYBERMISSION... I got to work on something I really like while keeping it fun and learning lots of new things." [Student, Team Charger 4, North Carolina]

"I think the most rewarding part is the small victories these kids have made – whether it's overcoming their fear of public speaking, or learning how to do research – seeing them being able to build on these skills and seeing them overcome their fears is absolutely rewarding." [Team Advisor Scottie Barnes, Oregon]

Ambassadors

A vital component of the success of eCYBERMISSION and increasing student participation is Ambassadors, Volunteers across the country who reach out to communities nationwide to spread the word about the competition and encourage schools and organizations to get involved. Their continued support helps make the competition a success. With more Ambassadors this year than ever before at 179, these Volunteers were instrumental in significantly increasing participation in previously low registration states such as Georgia, Hawaii, Iowa, Maryland, Michigan, Missouri, North Carolina, South Dakota and Washington.

A good example of the success of this outreach is Mr. Derhun Sanders; education outreach specialist from the Tank, Automotive Research, Development and Engineering Center (TARDEC) in Michigan. His dedicated efforts, combined with those of six other Ambassadors from TARDEC, have served to increase awareness of eCYBERMISSION throughout Michigan, and played a large role in the increases seen in that state over the last year.

Direct Marketing

More than 200,000 educators in new target locations and states with previously low participation received email blasts and direct mail items to provide information about eCYBERMISSION, updates to the competition, important dates and deadlines, and to encourage registration.

Webinars

A comprehensive webinar schedule kicked off during the Registration Period, designed to reach a broad audience across the country from the convenience of their own homes or offices. Webinar topics included:

- Exploring How STEM Can Work in Your Classroom
- 2010-2011 Awards Structure
- Incorporating eCYBERMISSION Into Your Curriculum

The last webinar series, Incorporating eCYBERMISSION Into Your Curriculum, was revamped to include a series with a winning Team Advisor, Amanda Sperling from Poe Middle School (Virginia), who spoke about how she successfully incorporated eCYBERMISSION into her classrooms, providing helpful insight to teachers interested in the competition.

36%
Returning Team Advisors

64%
New Team Advisors

volunteers

35%
Ambassador retention

34%
CyberGuide retention

40%
Virtual Judge retention

"We got to see the kids come together and work as a team, and we saw each of them develop their own strengths – and they really worked well together and learned to depend on each other."
[Team Advisor Kathy Pirkle, California]

Team Advisor Retention

Team Advisors are the focal point of eCYBERMISSION's local outreach as they are the primary contact and mentor for students throughout the competition cycle. Retention of Team Advisors is critical to the growth and sustainability of the program. Through tactics such as monthly retention call and email campaigns, and the increased use of student registration templates, there were more returning Team Advisors this year than any year before. The retention call and email campaign is used to not only determine the participation status of previous Team Advisors, but also to enable the eCYBERMISSION Staff to discuss any limitations that are holding them back from participating again as this helps to address these concerns and improve the program.

Volunteer Retention

In an effort to retain the Volunteers who supported eCYBERMISSION in the past, an outreach campaign was conducted to previous Ambassadors, CyberGuides and Virtual Judges. This effort was successful, with strong retention for all three Volunteer roles.

Online Outreach

Online outreach through the use of social media and other online outlets allows eCYBERMISSION Staff to have broad reach in areas that might not be reached through other campaigns, making this tactic an inexpensive and efficient way to recruit students, Team Advisors and Volunteers.

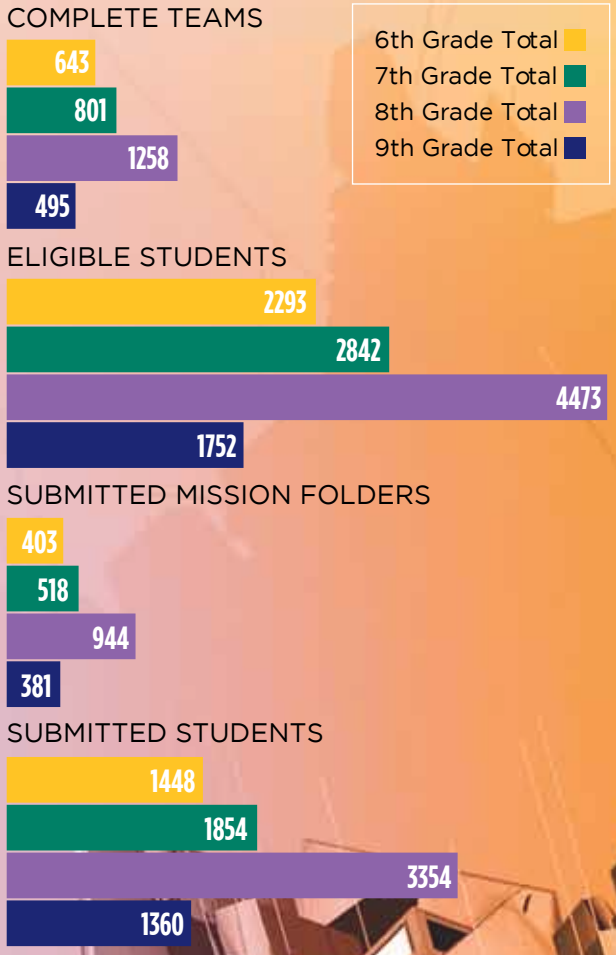
- For the first time, eCYBERMISSION advertised on Facebook, utilizing the expansive reach of the popular social media tool to reach a targeted audience based on an individual's interests.
- Army Knowledge Online, a web-based enterprise information service that reaches over 2.2 million Army, joint, and Department of Defense customers, was utilized to reach a targeted military audience.
- Soldiers Magazine ran a full-page eCYBERMISSION advertisement during their November and February issues, promoting the competition to a large, targeted Army audience.

Submission Period

Once eCYBERMISSION participants are registered to a complete and valid team, they may begin to work on their Mission Folders and begin submitting their projects. This year, the number of submitted Mission Folders saw a steady increase from the 2009-2010 competition year.

The success of the 2010-2011 Submission Period can be attributed to the continued concentration of a personalized approach with Team Advisors. The eCYBERMISSION Team utilized an outreach campaign consisting of programmatic email blasts, emails containing Mission Folder Tips and worksheets, call campaigns, website information, and social media resources promoting key events in the competition timeline. There was a 12 percent increase in the completion rate compared to the 2009-2010 competition year.

2010-2011 eCYBERMISSION Mission Folder Submissions by grade



12%

increase in number of submitted Mission Folders from the 2009-2010 competition year

"Too much of what happens in school is small, isolated assignments – kids do them and they're done. The opportunity to have something that kids can work on for a long time and get feedback – they come into obstacles and they refine, they make changes and they make improvements – is a great thing to watch them do." [Team Advisor Allyson Weseley, New York]

Submission Campaign

A comprehensive outreach plan was launched to provide support and resources to Team Advisors from the moment their students registered until they submitted their Mission Folders. Tactics included:

- **MISSION FOLDER TIPS** To help teachers keep their students on track when completing each phase of the Mission Folder, they were provided with Mission Folder Tips and corresponding worksheets on a weekly basis to share with their students. eCYBERMISSION offered 10 Mission Folder Tips, expanding on the eight tips provided in 2009-2010 due to their popularity and effectiveness, and the increase in Mission Folder questions. These tips guided teams through each step of the scientific method and Mission Folder phases.

  Each Mission Folder Tip was delivered with a corresponding worksheet to further encourage students to exercise the content they reviewed.

- **INTERACTIVE WEBINARS** Webinars, hosted by eCYBERMISSION CyberGuides, were used as an effective way to guide both students and Team Advisors through the steps of their Mission Folders and the scientific method, directly corresponding with the Mission Folder Tips and worksheets. A recorded playback of each webinar topic was posted on the eCYBERMISSION website so that students in different stages of their Mission Folders could still benefit from the webinars.

  CYBERGUIDES CyberGuides are professionals working in the STEM fields who volunteer their time to assist students as they complete their Mission Folders, answering questions about their projects and helping them to overcome potential issues with their experiments. CyberGuides often host webinars offered throughout the Submission Period, giving students an open forum to ask questions and seek guidance from STEM professionals. The efforts of CyberGuides play a significant role in helping students complete and submit their Mission Folders, and students are provided the unique opportunity to gain valuable insight from professionals.

- **SOCIAL MEDIA OUTREACH** The eCYBERMISSION social media sites were utilized to both reach students and Team Advisors who may not have received the Mission Folder Tips or were not able to attend a webinar, and as a way to promote the competition to a larger audience. Each Mission Folder Tip was posted on the eCYBERMISSION Blog and each post was linked to the student and Team Advisor home pages on the eCYBERMISSION website. In addition, the webinar links were posted on the blog to promote the series to eCYBERMISSION participants, and to drive educators looking for a supplemental tool for their classroom to the webinar series and the eCYBERMISSION website. Descriptions of and links to each blog post are provided on the eCYBERMISSION Facebook page and Twitter feed, which are connected to the blog and updated automatically.

Key Topics for Mission Folder Tips

- The Scientific Method
- Creating Your Mission Plan
- Conducting Research and Citing Your Sources
- Measurable Action Words
- Constructing a Hypothesis
- Testing Your Hypothesis
- Writing a Scientific Survey
- Analyzing Your Data
- Drawing Conclusions
- Submission Tips and Guidelines

Webinar Topics

- Building Your Team's Mission Folder Plan
- Constructing a Hypothesis
- Testing your Hypothesis
- Conducting a Survey
- Conducting Data Analysis and Drawing Conclusions
- Mission Folder Tips/General Q&A with a CyberGuide

Judging

The 2010-2011 competition marked the first year that there were two phases during the Judging Period. This year, Virtual Judges evaluated and scored all submitted Mission Folders to determine the state level winners. New to the program was the addition of the Regional Judging Panel, which evaluated and scored the First-Place State Winners to determine the 16 Regional Finalist Teams that would go on to compete at the national level. Also, the Volunteer Program conducted extensive training with the Virtual Judges prior to the Judging Period, which was well received by the Volunteers.

Training

A multi-pronged approach was implemented during the 2010-2011 competition year to ensure Virtual Judges were informed and prepared for the month of Virtual Judging in which over 2,000 Mission Folders were to be scored up to five times each. An instructional email was sent to all registered Virtual Judges with step-by-step instructions on logging in to the eCYBERMISSION website and navigating the judging module. The email also included an invitation to attend any one of four Virtual Judge Training webinars.

The Virtual Judge Training webinar was designed for new Virtual Judges in order to acquaint them with basic background information on the program, competition rules, website features and judging criteria. The interactive session allowed for participants to watch the eCYBERMISSION Volunteer Program navigate the eCYBERMISSION website and locate the judging module. The webinar environment also allowed for participants to ask questions directly to the Volunteer Program and receive live feedback and responses. Upon the completion of the webinar session, a recording was archived on the eCYBERMISSION website for Virtual Judges to reference while completing their judging assignments. The Volunteer Program received consistent feedback that the Virtual Judge Training webinar was an invaluable training experience.

Virtual Judging Period

It is vital for the Volunteer Program to recruit a sufficient amount of Virtual Judges to score the thousands of Mission Folders that are submitted by students. This year 2,246 Mission Folders were submitted and each folder is ideally scored five times. The more Virtual Judges that register, the fewer folders each individual Virtual Judge is assigned. Virtual Judges were assigned 13 Mission Folders for the 2010-2011 competition year, compared to 20-25 in past years.

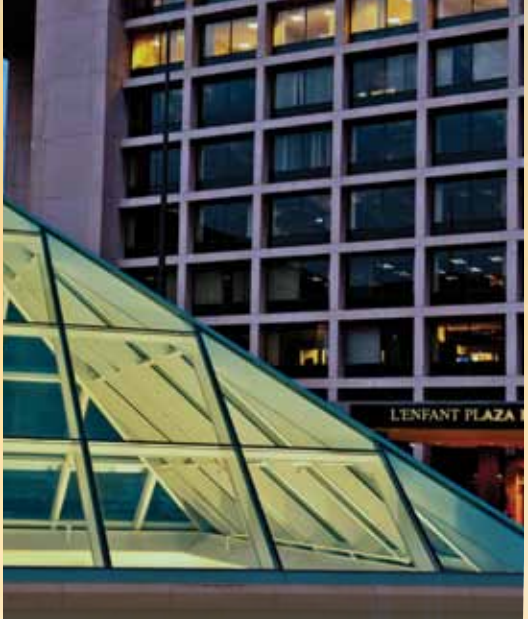
For the 2010-2011 competition, the United States Military Academy (USMA) at West Point offered their students extra credit for participating in eCYBERMISSION as a Virtual Judge. Due to this incentive, 489 West Point cadets registered as Virtual Judges, and were required to score five Mission Folders in order to receive the extra credit. USMA plans to offer this opportunity to their cadets again in 2011-2012 and other institutions have shown interest in the extra credit course as well, such as Johns Hopkins University ROTC Program. Developing these relationships with universities and institutions creates a greater awareness and support of eCYBERMISSION and the STEM education initiative.

At the end of the Virtual Judging Period, the scores were electronically compiled to determine the state level winners. The teams with the highest overall score in each grade and state were named the First-Place State Winners and those with the second highest score in each grade and state were named the Second-Place State Winners. The new First and Second-Place State Awards allowed students who would not have been recognized with the previous awards structure the opportunity to win as they were competing with other students in their grade and state versus an entire region.

Regional Judging

For the first time, the 2010-2011 competition included a Regional Judging Period where the First-Place State Winning Mission Folders were evaluated by a Regional Judging Panel. Regional Judging took place immediately following the Virtual Judging Period. The panel was comprised of 16 individuals chosen from among the RDECOM Elements. Each Regional Judge was assigned to a specific grade, allowing for each team in each grade to be reviewed by four Regional Judges. At the close of the Regional Judging Period, the 16 Regional Finalist Teams were determined. Those 16 Regional Finalist Teams were then invited to compete nationally at the 2011 NJ&EE held in Washington, D.C.

The inclusion of a Regional Judging Panel added many benefits to the program. First, the additional level of awards – State, Regional and National – created more opportunities for students to be recognized for their STEM education efforts. Also, having a smaller, defined Regional Judging Panel ensured that the projects selected to compete at NJ&EE were high quality and science/technology focused, which led to one of the best national competitions to date.



2011 National Judging and Educational Event

"It's been neat to watch them come here and realize, 'Hey, we've done something amazing." [Team Advisor Barbara Morrow, North Carolina]

"My favorite part of eCYBERMISSION... It's such a unique opportunity and it really took science outside the classroom." [Student, Team Charger 4, North Carolina]

The 2011 NJ&EE took place at the L'Enfant Plaza Hotel in Washington, D.C., from June 20-25. Sixteen teams from across the country traveled to NJ&EE to vie for the National Title in their grade, and to enjoy a week filled with hands-on activities and field trips throughout the nation's capital. The 2011 NJ&EE was filled with activities designed to promote STEM, teamwork and creativity, and to give the students a chance to witness firsthand some of the U.S. Army's most advanced technologies.

Highlighted events throughout the week were:

- Special guest appearance by Michael and Geoffrey Howe and the crew of Discovery Channel's popular "Howe and Howe Technologies" program, who specialize in innovative thinking and creativity to develop high-tech projects.
- Army Labs Day, when scientists and engineers from eight Army RDECs conducted interactive sessions with students that were designed to teach the applications of STEM and demonstrate the range of high-tech work within the Army.
- A National Showcase highlighting the finalist teams and their eCYBERMISSION projects, and feature appearances by senior Army leaders.
- Keynote address by Heidi Shyu; Acting Assistant Secretary of the Army for Acquisition, Logistics, and Technology.
- The Awards Banquet, attended by Army leaders and VIP guests, during which the National Winning Team in each grade was announced. Special guest appearance by Secretary Eric Shinseki; former Chief of Staff of the U.S. Army, who was instrumental in launching eCYBERMISSION. Additional distinguished guests were Mr. Zachary Lemnios, Assistant Secretary of Defense for Research and Engineering; Dr. Marilyn Freeman, Deputy Assistant Secretary for Research and Technology, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology; and Dr. Scott Fish, Chief Scientist of the U.S. Army.





In addition to those activities, students toured the National Air and Space Museum, the Natural History Museum, and the Capitol where many of the students had the opportunity to meet with their state legislators. Students kicked off the week with an introduction to their non-commissioned officers (NCO), who would serve as their leaders for the week, and a session on Army Values.

"I got to see all kinds of technology I hadn't seen before and it was very cool."
[Student, Team Charger 4, North Carolina]

Army Values Award

The 2011 NJ&EE introduced the Army Values Award, in which the NCOs reward a team that has exemplified the Army core values (loyalty, duty, respect, selfless service, honor, integrity, personal courage) throughout the week. This year's recipient was DR.MED, an eighth-grade team from San Antonio, Texas. Team Advisor Sandra Geisbush and students Jocelyn Hernandez, Ricardo Rodriguez, Nathaly Salazar and Carlos Zapata earned this recognition for demonstrating these values in their interactions with fellow eCYBERMISSION Students, Team Advisors and Staff throughout all of the week's activities.

National Finalist Teams:

Sixth Grade:
- » "Team Genius;" West Woods Elementary; Hamden, Conn.
- » "Team Charger 7;" Providence Day School; Charlotte, N.C
- » "The Rescuers;" Fern Ridge Middle School; Veneta, Ore.
- » "snickerdoodles;" Lawton Academy of Arts and Sciences; Lawton, Okla.

Seventh Grade:
- » "The Deicers;" Learning Without Limits; Iowa City, Iowa
- » "JUNIOR WIN TEAM;" Westerly Innovations Network; Westerly, R.I.
- » "Lack of Oxygen;" Lawton Chiles Middle Academy; Lakeland, Fla.
- » "Surf City Smartbikes;" Mesa View Middle School; Huntington Beach, Calif.

Eighth Grade:
- » "DR.MED;" NEISD STEM Academy; San Antonio, Texas
- » "SonicSoundScientists;" Saint Dominic Elementary School; Brick, N.J.
- » "Team Charger 4;" Providence Day School; Charlotte, N.C.
- » "The POD People;" Fern Ridge Middle School; Veneta, Ore.

Ninth Grade:
- » "Buzz Busters;" Learning Without Limits; Iowa City, Iowa
- » "HUGE;" Roslyn High School; Roslyn Heights, N.Y.
- » "Team Charger 5;" Providence Day School; Charlotte, N.C.
- » "Sleepy Heads;" Byng Junior High School; Ada, Okla.

National Awards Banquet

The 2011 National Awards Banquet was hosted by Maj. Gen. Nick G. Justice and emceed by Radio Disney. All 16 National Finalist Teams were recognized for their efforts in STEM, and received certificates and medals in honor of their achievements in eCYBERMISSION. Finally, the four National Winning Teams in each grade were announced, and each student was given an additional medal and a certificate awarding each with an additional $5,000 in U.S. Series EE Savings Bonds.

The Awards Banquet was attended by several distinguished Army leaders:

- » General Eric Shinseki, Secretary of Veterans Affairs
- » Honorable Zachary Lemnios, Assistant Secretary of Defense for Research and Engineering
- » Ms. Heidi Shyu; Acting Assistant Secretary of the Army for Acquisition, Logistics and Technology
- » Maj. Gen. Nick Justice; Commanding General of the U.S. Army's Research, Development and Engineering Command (RDECOM)
- » Dr. Marilyn Freeman; Deputy Assistant Secretary for Research and Technology, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology
- » Dr. Scott Fish; Army Chief Scientist
- » Command Sgt. Maj. Hector Marin

"I joined eCYBERMISSION because it gives you a variety of opportunities, and it opens doors for you, and it gives you new experiences that might not be available in other places." [Student, DR.MED, Texas]

National Winning Teams

- **SIXTH GRADE** "Team Genius" from West Woods Elementary; Hamden, Conn. Team Advisor Kavita Saxena with students Allison Barone, Vivake Kumar, Alok Murthy and Thomas Peters

  From left: Allison Barone, Alok Murthy, Dr. Marilyn Freeman, Thomas Peters, Vivake Kumar, Ms. Heidi Shyu, Team Advisor Kavita Saxena, Maj. Gen. Nick G. Justice, Command Sgt. Major Hector Marin

- **SEVENTH GRADE** "Surf City Smartbikes" from Mesa View Middle School; Huntington Beach, Calif. Team Advisor Kathy Pirkle with students Zachary Goodale, Grant Gochman, Huongly Do and Bijan Afghani

  From left: Zachary Goodale, Dr. Marilyn Freeman, Grant Gochman, Huongly Do, Ms. Heidi Shyu, Bijan Afghani, Team Advisor Kathy Pirkle, Maj. Gen. Nick G. Justice, Command Sgt. Maj. Hector Marin

- **EIGHTH GRADE** "The POD People" from Fern Ridge Middle School; Veneta, Ore. Team Advisor Scottie Barnes with students Tucker Barnes, Tristan Cornelius and Connor Magid

  From left: Team Advisor Scottie Barnes, Dr. Marilyn Freeman, Tucker Barnes, Ms. Heidi Shyu, Connor Magid, Tristan Cornelius, Maj. Gen. Nick G. Justice, Command Sgt. Maj. Hector Marin

- **NINTH GRADE** "Team HUGE" from Roslyn High School; Roslyn Heights, N.Y. Team Advisor Allyson Weseley with students Anvit Kalra-Lall, Ross Kaplan and Andrew Penner

  From left: Co-Team Advisor Rupila Kalra-Lall, Anvit Kalra-Lall, Dr. Marilyn Freeman, Andrew Penner, Ms. Heidi Shyu, Ross Kaplan, Maj. Gen. Nick G. Justice, Command Sgt. Maj. Hector Marin (not pictured: Team Advisor Allyson Weseley)

2011-2012: Looking Forward

The 2011-2012 competition year will be very exciting, as we will celebrate the 10th anniversary of eCYBERMISSION! Since the program's inception in 2002, we have continued to grow eCYBERMISSION and the number of students from all backgrounds and proficiency levels that participate – more than 83,000 students have competed over the last ten years, and the U.S. Army has awarded more than $8.5 million in U.S. Series EE savings bonds to these students in support of the STEM leaders of tomorrow. This fun and engaging competition will continue to strive to challenge students to advance in their STEM education and apply what they learn in their classrooms to real life situations, helping them to realize the limitless opportunities available to them.

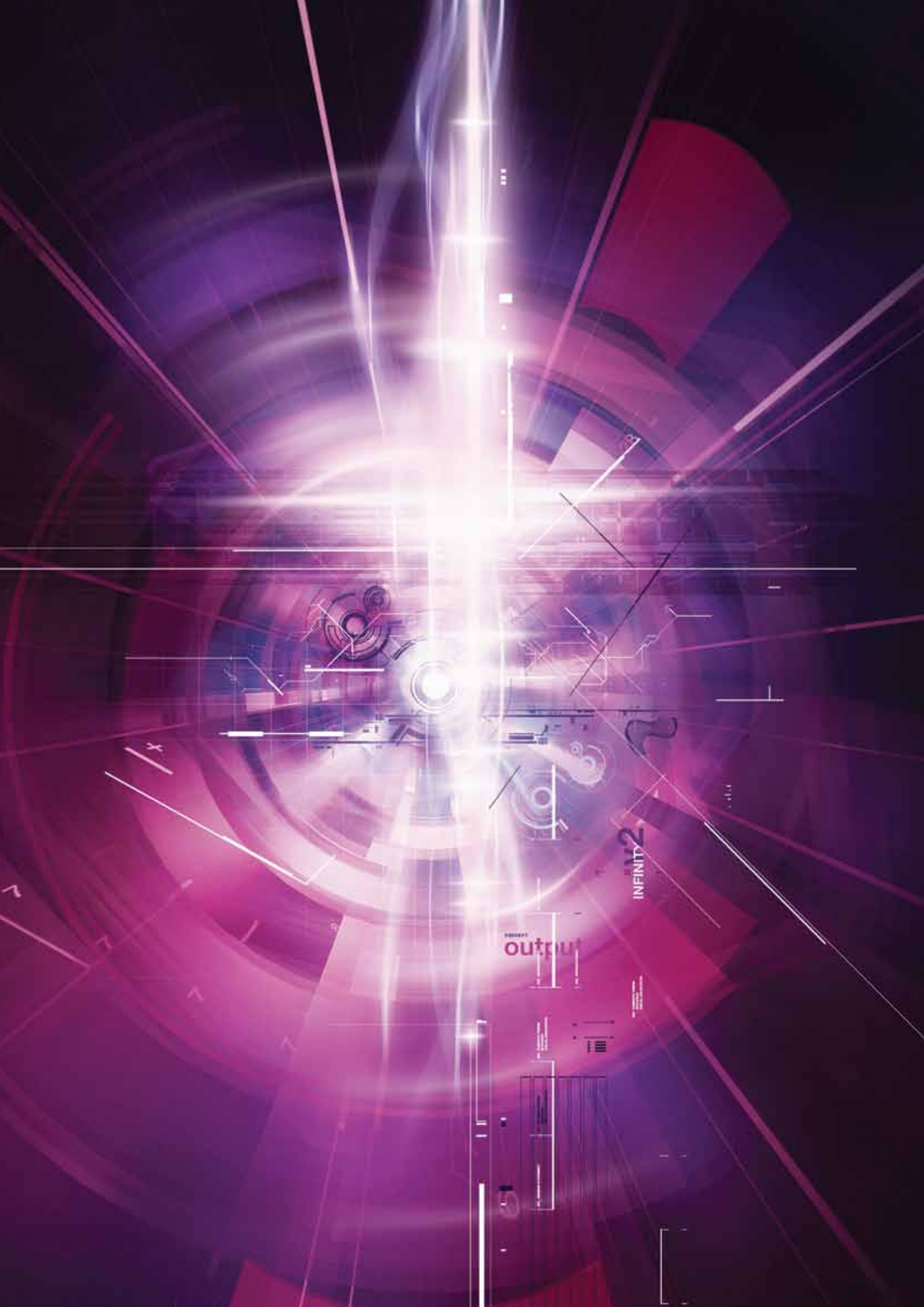
With the advent of eCYBERMISSION's 10th anniversary, more exciting changes and updates to the competition are underway to reflect the ever-changing STEM environment and to bring an even better experience to students across the country. We expect this year to bring in more student participants than ever before, with even more awards given to honor these students and their hard work and dedication to the advancement of their STEM education.

Representing the "E" in STEM

Each year, many teams submit engineering-related projects, and we expect even more of those projects with the addition of the Nanotechnology and Robots & Robotics Mission Challenges. After much review and consideration, the 2011-2012 competition year will introduce the engineering design process to the program, allowing the teams who choose to complete an engineering project to have a more accurate method when completing their Mission Folders. Students who choose this process will have slightly different Mission Folder questions and judging criteria than those who chose to follow the scientific method or scientific inquiry, allowing for better representation of the work that is conducted when completing an engineering-related project.

Outreach

The eCYBERMISSION Team will build upon the successful outreach tactics implemented in the 2010-2011 competition year, focusing efforts on Ambassador outreach and retaining previous Team Advisors, as well as in states with historically low participation that have a large population of potential students. Our targeted, strategic outreach plan is geared to reach more students, teachers, administrators and Volunteers than any other year. This outreach will not only generate more awareness of and interest in eCYBERMISSION, it will also serve to provide us the opportunity to gain insight from educators throughout the country on ways to continue to grow and improve the program. Through these efforts, we will reach our goal of making the 10th anniversary year a huge success!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