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London, UK

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June 14-15, 2016
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Orlando, FL

Capitol Hill Modeling & Simulation Expo
July 7, 2016
Rayburn House Office Building (Foyer)
Washington , D.C.

2016 Simulation Innovation Workshop (SIW)
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Florida Hotel and Conference Center
Orlando, FL

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HEADLINES FROM THE MODELING, SIMULATION & TRAINING INDUSTRY

TSIS 2016 (Training & Simulation Industry Symposium)
June 14-15, 2016 (Tue-Wed)
Rosen Centre Hotel
Orlando, FL

TSIS provides an excellent opportunity to network and interact with procurement officials for Training and Simulation products and services from the Army, Marine Corps, Navy, Air Force. Returning to the format of years past, the focus will be on providing insight into opportunities forthcoming in the near to mid future. For the Army, in particular, you will hear about how requirements flow from the user through TRADOC and into the Material Developer (PEO STRI). Additionally, you will hear how S&T will be used to fill technology gaps that will ultimately be aimed to transition to the Warfighter. Acquisition strategies, timing, and funding levels, if

known, are briefed along with the appropriate point of contact information.

The TSIS has plenty of break time built into the agenda to allow for side-bar meetings with key Government attendees as well as Industry Partners to discuss teaming opportunities.

This year we will be at the Rosen Centre Hotel on International Drive. Once again the local organizations have worked together to present the TSIS (Tuesday and Wednesday 14-15 June, CFL NDIA), the Scholarship Golf Tournament (Friday 17 June, CFL Quad-A) and the Army Birthday Ball (Saturday 18 June, AUSA Sunshine Chapter) all at the same venue.

Note:
TSIS has been moved to 14-15 June to accommodate the PEO STRI Change of Charter occurring on 16 June.

Agenda & Registration:
To see the detailed agenda and to register, please visit our website.

Lodging:
The room rate for the conference is $110 per night, plus tax. **The cut-off date for room reservations is Friday, 13 May 2016**. Please note that the hotel is expected to be **SOLD OUT** during this event...so be sure to **book your rooms before Friday 13 May**.

Exhibits & Sponsorships
Limited Exhibits & Sponsorships are still available. Contact Debbie Langelier, CEM, at dlangelier@ndia.org.

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2016 Capitol Hill Modeling & Simulation Expo
July 7, 2016
Rayburn House Office Building (Foyer)
Washington D.C.

The 2016 Capitol Hill Modeling and Simulation Expo will be held on July 7, 2016 in the Rayburn House Office Building in Washington D.C.

2016 Theme - Black Swan: Using M&S to Prepare for the Unexpected
The National Training and Simulation Association is once again sponsoring the Capitol Hill Modeling and Simulation Expo in support of Congressman Randy Forbes and the Congressional Modeling and Simulation Caucus. The event will be held on Thursday, July 7, from 10:30 a.m. to 2:00 p.m. in the main foyer of the Rayburn House Office Building.

The Capitol Hill Expo will provide you with the opportunity to engage U.S. congressmen/women and their staffers by demonstrating your technology. They seek to learn ways in which they can help with U.S. policy to further the use and development

of these technologies in new and emerging fields. Some particular types of M&S capabilities that are of interest are technologies that can mitigate the effects of the constrained budget environment, such as modeling for disaster response, incident command response, national exercise program initiatives, terrorist response, and healthcare simulation.

Space is limited in the foyer and only a small number of demonstrations will be accepted. None will be allowed to exceed a footprint of 6x6. The cost to exhibit is $300. A call for presentations will be announced May 2016.

Please submit your questions to Debbie Langelier, NTSA's Director of Exhibits & Sponsorships, at dlangelier@ndia.org or 703-247-9480.

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SISO M&S Seminar at ITEC 2016 – Monday 16 May

Agenda, abstracts and registration are now available for the 5th SISO M&S Seminar at ITEC.

SISO is organizing its annual "Seminar on M&S standards in Europe" in conjunction with the ITEC conference and exhibit. The SISO event will be held on Monday 16 May 2016, a day before the ITEC official opening, at the same location (London ExCel, UK).

This full-day seminar will start with an introduction of SISO and its activity, including recently approved standards as well as the emerging ones. It will highlight some SISO standards that are less promoted than well-known SISO standards such as HLA or DIS and will also give typical and recent examples of successful uses of SISO standards. NATO M&S Group (NMSG) standardization activity will also be introduced since NATO is a key stakeholder in the M&S standard world.

The final agenda of this seminar is available on the ITEC web site (see link below).

The seminar is open to SISO members and also to non-members. Nevertheless SISO members attending the event will benefit from reduced fees for the ITEC conference.

Please see the agenda, go here.
To see seminar abstracts, go here.
Direct link to the registration page, go here.

SISO Survey

Please take a few minutes to complete the SISO Survey here: www.surveymonkey.com/r/SISO

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Headlines from the Interservice/Industry Training, Simulation & Education Conference (I/ITSEC)

I/ITSEC 2016 – Updates for Authors/Presenters & Scholarship Applicants

AUTHORS/PRESENTERS: Stage Two is open through June 17. **PAPERS**: There are frequently "traffic jams" during the last 48 hours, so avoid this issue by filing early. If you have any questions about submission, please go here (select Paper information, then "Stage Two"). If you don't find what you need, we are standing by to assist. Try your Birddog first, then Beth Biddle.

TUTORIALS: If you try to submit but the file is too large, please use a system such as Sendspace or Dropbox to send to bmcdaniel@ndia.org, and let her know to watch for the file.

If you have any questions about submission, please go here (select Tutorial information, then "Stage Two"). If you don't find what you need, we are standing by to assist. Try your Birddog first, then David Milewski.

ALL AUTHORS – CLEARANCE RELEASE FORMS: Be sure your release forms are in process and working their way through your respective systems. Depending on your particular situation, this can be a time consuming process. Clearance forms must be in our hands before work can be accepted to move forward. **The due date for these is July 10th**. NOTE: No work can be approved for presentation without the release forms in hand.

SCHOLARSHIP APPLICATION DEADLINE – JUNE 20
RADM Fred Lewis Postgraduate I/ITSEC SCHOLARSHIP Packets must be postmarked by June 20th. See here for details on the $5,000 Masters or $10,000 Doctorate level for details on these opportunities.

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Hotel Reservations for I/ITSEC – Beware of Imposters!

Rogue companies continue to inaccurately represent themselves as our "housing vendor" when contacting individuals in the I/ITSEC community. Specifically, they will offer to make hotel reservations within the I/ITSEC block on your behalf, and some will also claim to be calling from one of the I/ITSEC hotels. If you provide your credit card information to any of these unauthorized vendors, your card may be charged but you may not have a reservation when you arrive in Orlando.

Stick with our approved provider – "**OnPeak**" - or a company that you know and trust. Disregard unsolicited sales pitches claiming to have rooms available for I/ITSEC. **OnPeak** is the only provider approved by NTSA-I/ITSEC. Complete housing information is

available here.

If you have any questions about the I/ITSEC hotel block, or general questions about I/ITSEC, please contact Barbara McDaniel at 703-247-2569 or bmcdaniel@ndia.org. Complete information about the conference is also available online at www.iitsec.org.

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International Training and Simulation Alliance (ITSA) News

ITEC 2016
May 17-19, 2016
ExCeL, London, UK
http://www.itec.co.uk

See the Official ITEC 2016 Preview here.

ITEC is an annual forum for representatives from the military, industry and academia to connect and share knowledge with the international training, education and simulation sectors. Presenting a unique overview of the industry's latest innovations, the event provides visitors with a platform to discuss developments in this evolving market and exchange ideas about future requirements for military training and simulation.

Established for over 26 years, ITEC offers a world-class exhibition (free to attend) and conference showcasing the very latest products and services from leading organisations, thought provoking papers as well as unique networking opportunities.

ITEC 2016 is set to welcome over 2,300 visitors from the international military training, education and simulation community to London for the first time since 2012.

This year's overarching theme is **"An Enterprise Approach; Beyond Training."** The conference will examine four key themes covering all major areas of the military training and simulation field.

For more details on keynote speakers, featured panelists and the four key conference themes, please visit here.

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NTSA Member News

CAE Wins Defence Contracts Valued at C$175 Million

CAE has won defence contracts valued at more than C$175 million to provide a range of simulation products and training support services for global military customers.

CAE was awarded a contract by Lockheed Martin to provide

Phenom 100 synthetic training equipment in support of the UK's MFTS program. CAE will provide a Phenom 100 full flight simulator (FFS), a Phenom 100 flight training device (FTD) and four Garmin 1000 part-task trainers. All training devices will be delivered in 2017 to Royal Air Force (RAF) Base Cranwell and used to support multi-engine pilot training as part of the fixed-wing training element of the UKMFTS program.

The Phenom 100 FFS and FTD will each include the CAE Medallion-6000 image generator and databases built to the Common Database (CDB) standard, which is an open database architecture that is rapidly updateable and enables distributed, interoperable mission training.

CAE has been awarded a contract to provide the Canadian Forces with simulator maintenance and engineering support services. CAE staff will provide on-site hardware and software maintenance and engineering support services at Canadian Forces Bases (CFB) in Trenton, Ontario; Greenwood, Nova Scotia; Gagetown, New Brunswick; and Comox, British Columbia as well as at the National Defence Headquarters (NDHQ) in Ottawa, Ontario. Specifically, CAE will be responsible for providing support services to a CC-130 operational flight trainer, CFB Trenton; CP-140 flight deck simulator, cockpit procedures trainer, operational mission simulator, maintenance procedure trainer, procedure crew trainer, integrated avionics trainer, and aircraft systems trainers, CFB Greenwood and Comox; CH-146 full flight simulator, CFB Gagetown; and Canadian Advanced Synthetic Environment mission rehearsal tactical trainers, NDHQ Ottawa.

The United Kingdom Ministry of Defence (MOD) has awarded a contract modification to CAE to upgrade two of the CH-47 Chinook dynamic mission simulators at CAE's Medium Support Helicopter Aircrew Training Facility (MSHATF) at RAF Benson. CAE will install the digital automatic flying control system (DAFCS) in each of the simulators to ensure concurrency with the RAF's CH-47 Chinook Mk6a helicopter. The upgrade of the first Chinook simulator will be complete by the last quarter of 2016 with the second simulator upgraded by mid-2017.

Boeing has awarded CAE USA a contract to provide a range of upgrades to previously-contracted P-8A operational flight trainers (OFTs) for the United States Navy. CAE will perform hardware and software upgrades to the P-8A OFTs to ensure concurrency with the P-8A aircraft, in addition to providing projector system upgrades for ten P-8A OFTs already delivered to the Navy.

CAE Australia Pty Ltd was awarded a contract from Australia's Department of Defence Capability and Acquisition Sustainment Group (CASG) to develop a C-130J Fuselage Cargo Compartment Trainer for the Royal Australian Air Force (RAAF). For more details, see MS&T's article on that contract.

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Rheinmetall Germany Selected as Training Devices Provider for KC-390 Program

Embraer Defense & Security has selected Rheinmetall Defence Electronics Simulation and Training to develop and deliver the Training Media Suite for the KC-390 military transport jet.

"We are looking forward to building further on our recent fruitful cooperation and are confident that our partnership with Rheinmetall will result in a first class KC-390 Training Media Suite that will indefinitely contribute to the overall success of the KC-390 program," said Jackson Schneider, president and CEO, Embraer Defense & Security.

Embraer expects to receive the certification of the KC-390 jet by the end of 2017 with first deliveries of the aircraft scheduled for the first half of 2018.

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MASA's User Group Meeting Highlights Strong Collaboration

MASA Group has concluded its second SWORD User Group Meeting that this year was held at the French Army Military School in Saumur *(Les écoles militaries de Saumur)*. The event ran in conjunction with the SIMOPS conference and exhibition, the French Army led forum on operational simulation.

The SWORD User Group Meeting drew over 50 attendees that included current users and potential customers. The aim of the event was to discuss how SWORD is being used and to provide a forum where users and potential users could discuss case studies and national applications. User presentations were followed by demonstrations of SWORD by the French Army's Tactical Training Centre staff that are based in Saumur. These demonstrations included a high-intensity warfighting exercise and an emergency services scenario based on a series of terrorist attacks in the centre of Paris.

User presentations were given by Colonel Gamaliel M. Ortiz Herrera from the Peruvian Ministry of Defence; Colonel Estepa Florez Luis from the Colombian Armed Forces; Major Thierry Cadot and Lieutenant Colonel F. Martinez from the French Army; Colonel Minhaz from the Bangladesh Army and Lieutenant Colonel Yordan Trendafilov of the Bulgarian Army who is currently serving with NATO's Crisis Management and Disaster Response Centre of Excellence.

The speakers represented the first export customer for SWORD in the form of Peru (a customer since 2010), and the latest customer, NATO (who acquired SWORD in late 2015). Together, the wide spectrum of speakers highlighted the breadth of training uses that SWORD is now being applied to. As well as the obvious military

applications, SWORD is regularly used to train emergency response teams that are employed to combat natural disasters; para-military teams challenging internal security and criminal threats; and increasingly, used as a tool to validate tactics and to provide decision support reinforcement.

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L-3 Link Wins F-16 Trainer Support Contract from Poland

L-3 Link Simulation & Training (L-3 Link) has won the F-16 Trainer Support contract from the Polish Ministry of National Defence Support Directorate. The two-year contract includes maintenance, repairs, spares, modifications and technical assistance. Its value is dependent on future task orders issued by the Polish Air Force.

L-3 Link will support all training devices it delivered over the past decade to the Polish Air Force for its F-16 Aircrew Training System (ATS) program. These efforts will include performing updates and modifications to F-16 ATS devices, ensuring the training systems remain concurrent with platform changes and addressing system obsolescence issues. The F-16 ATS comprises one F-16C/D Block 52 Full Mission Trainer, two squadron-level trainers, instructor operator stations and computational systems. F-16 ATS training devices are installed at Poland's Krzesiny Air Base and Lask Air Base.

The F-16 full mission trainer reinforces a full range of pilot warfighting skills, including low-level flight, formation exercises, air refueling, takeoffs and landings, and emergency procedures. Pilots are able to acquire and identify targets, and deliver a full range of weapons during simulated air-to-air and air-to-ground combat scenarios. Squadron-level trainers are used to support extensive procedural training so pilots can sharpen their aircraft systems operational skills and practice basic flight maneuvers and emergency procedures.

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STEM Connector News

Introducing the New U.S. NEWS STEM SOLUTIONS 2016 Mobile App
U.S. News STEM Solutions
National Leadership Conference
May 18-20, Baltimore, MD
http://usnewsstemsolutions.com

This year, we have a new and improved mobile app for next week's U.S. News STEM Solutions National Leadership Conference. The app will enhance your experience both before and at the conference. With the U.S. News STEM Solutions 2016 mobile app, you can:

- Sync the app across all of your devices with Multi-Device

Sync
- Receive important real-time communications from U.S. News STEM Solutions 2016
- Build a personalized schedule and bookmark exhibitors
- Locate session rooms and exhibit hall on the Hilton Baltimore maps
- Find attendees and connect with your colleagues through Friends

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Or:

- Search the Apple App Store or Google Play for "US STEM."
- For all other device types (including BlackBerry, Windows, and all other web browser-enabled devices): While on your phone, click here - app.core-apps.com/stemsolutions - to be directed to the proper download version for your phone.
- Once you have downloaded the app, select U.S. News STEM Solutions 2016 and download.
- If you already have the STEM Solutions mobile app: With the 2015 app open, go to Settings and tap "Exit to Show List." Choose U.S. News STEM Solutions 2016, then download.
- Should you have any questions, please contact Customer Support.
- Register now at usnewsstemsolutions.com/registration/ and receive 50% off full conference registration by entering code APP16.

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Young women in STEM fields earn up to one-third less than men

One year after they graduate, women with Ph.D.'s in science and engineering fields earn 31 percent less than do men, according to a new study using previously unavailable data.

The pay gap dropped to 11 percent when researchers took into account that women tended to graduate with degrees in fields that generally pay less than fields in which men got their degrees. The rest of the pay gap disappeared when the researchers controlled for whether women were married and had children.

“There’s a dramatic difference in how much early career men and women in the sciences are paid,” said Bruce Weinberg, co-author of the study and professor of economics at The Ohio State University.

“We can get a sense of some of the reasons behind the pay gap, but our study can’t speak to whether any of the gap is due to discrimination. Our results do suggest some lack of family-friendliness for women in these careers.”

The importance of helpful family policies is supported by the fact that single and childless women tended to have less of a pay gap than those who were married and those who had children. About equal percentages of men and women were married or partnered. And more men than women in the study (24 versus 19 percent) had children. But it was the married women with children who saw the lower pay.

“Our results show a larger child-gap in salary among women Ph.D.'s than among men,” Weinberg said.

“We can’t tell from our data what’s going on there. There’s probably a combination of factors. Some women may consciously choose to be primary caregivers and pull back from work. But there may also be some employers putting women on a ‘mommy track’ where they get paid less.”

Weinberg conducted the study with Catherine Buffington and Benjamin Cerf of the U.S. Census Bureau and Christina Jones of the American Institutes for Research. It appears in the May 2016 issue of the *American Economic Review: Papers and Proceedings*.

The researchers had data, not previously available to scientists, on 1,237 students who received Ph.D.'s from four U.S. universities from 2007 to 2010 and were supported on research projects while in school.

This data included federal funding support the Ph.D. graduates received as students, the dissertations they wrote (this told researchers what scientific field they studied) and U.S. Census data on where they worked and how much they earned one year after graduation, as well as their marital and childbearing status. Names and identifying characteristics were stripped from the data before the scientists had access to it.

Results showed clear differences in what men and women studied, with women clustered in the lower-paying fields. Overall, 59 percent of women completed dissertations in biology, chemistry and health, compared to only 27 percent of men.

Meanwhile, men were more than twice as likely to complete dissertations in more financially lucrative fields like engineering (45 versus 21 percent), and were 1.5 times more likely to study computer science, math or physics (28 versus 19 percent).

“We don’t know why women are in the fields that tend to pay less,” Weinberg said.

“Perhaps that’s just what interested them. Or were they guided there at a young age by teachers or parents? Or did they try a more male-dominated field but have bad experiences that drove them out? We just don’t know.”

Men and women had different experiences during school, as well. Women tended to be on smaller research teams.

“If you’re on smaller teams, you may get more interaction with faculty members who can help you,” Weinberg said. “But it also might mean that you’re on less prestigious projects and will have a smaller professional network when you graduate.”

For the average female graduate student in the study, more than 20 percent of the faculty members on her team were women, compared to fewer than 10 percent for male graduate students.

“We’re not sure if this difference is due to the choice of the students themselves or segregation, or a combination of both,” he said. “There needs to be further study of that.”

Once they graduate, the differences between men and women with Ph.D.'s continue. While industry tends to pay the largest salaries, women are more likely than men to work in government and academic settings. In fact, women in the study were 13 percentage points less likely than men to work outside of academia and government.
Even when they worked in industry, women still didn’t have equal pay with men.

“Both men and women earn the most in industry, but the pay gap between the sexes is even larger there than it is in academics and government,” he said.

Weinberg said he expects much more will be learned from this data in the future. Since this study was completed, the number of universities providing data has grown from four to 16. The researchers hope that this will expand to 150 institutions within a few years.

The data will be made available to other researchers under strict security and confidentiality protections and with all personally identifiable information removed, he said.

The study was funded in part by grants from the National Science Foundation, the National Institute on Aging and the Sloan and Kauffman foundations.

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SCMA and State Officials Announce the Debut of SC Future Makers

On April 6, the South Carolina Manufacturers Alliance and state officials announced the debut of the South Carolina Future Makers workforce initiative.

Powered by STEM Premier, South Carolina Future Makers' mission is to increase the skilled workforce pipeline entering advanced manufacturing and technical related careers. Through partnerships with multiple school districts, the Future Makers

initiative is reaching young persons, parents, and educators to inform those audiences of the opportunities, rewarding careers, and proper education pathways to earn skills necessary for a technical career. This public-private effort was created in response to the growing workforce challenges facing manufacturers and related fields in recruiting skilled and talented associates.

Featured on the South Carolina Future Makers website are five videos filmed with Governor Nikki Haley showcasing associates at manufacturing and technology locations. Companies featured in videos are BMW Manufacturing Co., Boeing South Carolina, Bridgestone, MTU, and Red Ventures.

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White House Highlights Museum of Science's Early STEM Education Curriculum

The Museum of Science, Boston's new engineering curriculum for preschool and kindergarten (PreK-K) was highlighted today at the first-ever White House Symposium on Early STEM Learning. Building on President Obama's early learning and "Educate to Innovate" agendas and working with the U.S. Departments of Education and Health and Human Services and Invest in US coalition, the White House announced its commitment to advance early STEM learning to support the nation's youngest learners and their caregivers and educators. The Museum's PreK-K curriculum, currently in development, is one of the commitments from philanthropy, industry, advocacy organizations, nonprofits, and government cited by the White House as addressing key areas in early STEM education.

Before the White House symposium, U.S. Secretary of Education John King addressed the importance of investing in early STEM learning. "With high-quality early STEM learning, children do better later in life," said King. "I am hugely excited about all the commitments represented here today." Symposium goals included exploring what works in early STEM learning and creating a community of practice. Said King, "The conversation is about giving all students regardless of their zip code, race, and language they speak, the fuel in the earlier years. Inspiring passion, interest, and engagement … to solve the challenges of our country."

The Museum is investing $425,000 in the three-year initiative to create a research-based PreK-K engineering curriculum for ages 3 to 5, building on the success of its Engineering is Elementary® (EiE®) curriculum for grades 1-5, which has reached an estimated 10 million students. The new curriculum will comprise six to eight classroom-tested lesson plans designed to integrate with the "interest centers" found in most preschool classrooms (e.g., building blocks or sand-and-water tables). To increase access for underserved populations, the lesson plans, due out in late 2017, will require inexpensive materials and will be available online at no charge.

"The Museum of Science is both honored and thrilled that the White House has included our PreK-K engineering curriculum in its early STEM learning initiative," said Ioannis Miaoulis, president and director, Museum of Science, Boston. "We have championed STEM for years because we believe the best way to prepare young children for success in life is to engage them early in the engineering design process, enabling them to use their math and science skills to solve problems." Miaoulis founded the Museum's National Center for Technological Literacy® in 2004 to introduce engineering in classrooms and museums nationwide.

Critical Need for Early STEM Learning
In 2013 President Obama charged Congress with making high-quality preschools--schools with well-trained teachers, small class sizes, and a rigorous curriculum -- available for every child in the country. About 12 million of the nation's more than 16 million three-to-six year olds are enrolled in some kind of early education program, according to the 2013 US Census, but high-quality STEM curricula for these programs are rare, even though the National Science Teachers Association strongly advocates for preschool instruction in science and engineering.

PreK-K Educators Wanted
The EiE curriculum development team is already combing the literature and observing children to understand the educational approaches most effective in early STEM learning. With this in mind, the new PreK-K curriculum is being developed in close consultation with preschool and kindergarten teachers. "We firmly believe one reason for the success of the EiE curriculum was our iterative approach to design. We asked for methodical feedback from elementary teachers, who truly know the challenges, constraints, and opportunities in real classrooms," said Museum vice president and EiE director Christine Cunningham.

As the EiE team pilots new activities in the coming months, they seek early childhood experts willing to review materials and provide feedback, as well as sites for field-testing. If these opportunities interest you, please visit http://www.eie.org/earlychildhood.

STEM for Schools with Limited Budgets
The new PreK-K curriculum will be available to educators at no cost online, following the model established with the successful EiE afterschool curricula Engineering Adventures® (for grades 3 - 5) and Engineering Everywhere™ (for grades 6 - 8). "Many early childhood programs face budgetary constraints," Cunningham says. "We're committed to using our resources to offer the widest support possible for engineering education." For updates on the PreK-K initiative, subscribe to EiE News at info.eie.org/newsletter.

After the April 21 White House event, video will be available here.

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Discovery Education Observes Earth Day With Virtual

Expedition And Exclusive New Digital Resources Supporting K-12 Science Instruction

Compelling Digital Content, Including Exclusive Under the Sea Footage from Ocean First Education, Inspires Students' Curiosity in Science and Encourages Appreciation for the Environment

Discovery Education, the leading provider of digital content and professional development for K-12 classrooms, helped educators nationwide observe Earth Day with a variety of dynamic new resources supporting classroom lessons focused on marine science, biodiversity, conservation, and other critical science topics. These new learning tools, which have been reviewed by Discovery Education's expert curriculum team and are aligned to state standards, have been added to Discovery Education's website as well as its award-winning services, Discovery Education Streaming Plus and the Discovery Education Science Techbook™.

Among the new resources available is an exciting underwater expedition created in partnership with Ocean First Education. During this unique experience, students will study the biodiversity of the coral reefs of the Caribbean and Indo-Pacific Oceans, and learn how shifting land masses impacted the number and types of organisms in these regions. Appropriate for grades K-12, the expedition features interviews with Ocean First Education founder Graham Casden, director of science and research Caine Delacy, and director of curriculum development Catherine E. Christopher, who discuss marine ecology and biology, the effects of mankind and evolution on our oceans, and the role students can play in protecting the health of our ocean for future generations. It also features Ocean First Education video and photographs from underwater research dives around the world. This expedition, as well as grade-band specific classroom resources that can be integrated into instruction to support Earth Day-related lessons, is available to educators at no cost, click here.

Educators using these resources will receive a free, 60-day trial of Discovery Education's Science Techbook. In addition, on April 22, from 1:00 - 1:30 PM ET, Discovery Education and Ocean First Education will host a "Meet The Marine Experts" Twitter chat. Tune in to @DiscoveryEd on Twitter with the hashtag #EarthDay2016 for a live question and answer session with Ocean First Education's team of experts.

Discovery Education has also added new digital resources supporting science instruction to its award-winning services. The following content has been added to the Discovery Education Science Techbook to support educators as they engage students in science topics as part of their Earth Day observances:

- Full Racing Extinction documentary – Discovery Channel's Racing Extinction documentary examines the loss of biodiversity, and its effect on humanity, and solutions that inspire hope for a more sustainable future. Students will be inspired to think beyond the walls of their classroom to

tackle some of our planet's most critical issues. This content is suitable for use with students in grades 6-12.

- Rodney Raccoon Goes Green – Produced by Wayout Kids and Smith Show Entertainment, this content uses musical numbers and roundtable discussions to communicate ways to stay green, and helps students learn environmentally friendly habits. This content is suitable for use with students in grades K-5.
- Weather Things: Climate and Climate Change – This content, produced by Metstorm, examines the effects of natural and human-caused climate change, including a profile on carbon dioxide and the warming oceans. Students can learn how climate change is measured and ways to keep the earth in balance. This content is suitable for use with students in grades 6-8.
- Polar Bears International Virtual Field Trip – Produced by Discovery Education. This archived virtual field trip presents a discussion between a group of Arctic researchers about the disappearance of sea ice in the Arctic. Students will gain knowledge of the effect this phenomenon has on the polar bear population. This content is suitable for use with students in grades K-12.

In addition, new content from the following leading publishers and content providers is now available to Discovery Education Streaming Plus subscribers:

- Wilderness Productions: In 23 newly-added titles from Discovery Digital Network's series Breaking Trail with Coyote Peterson, students will embark on a virtual journey through nature, bringing them up-close with wildlife in some of the most amazing environments throughout North America. Along the way, students will encounter everything from manatees to iguanas while learning more about the biological science behind their behavior and appearance along the way. This content is suitable for use with students in grades K-8.
- Bennett-Watt Entertainment: These 21 new titles from Discoveries America National Parks explore the National Park Service and the magnificent resources they protect. Students will be transported to some of the most famous locations across the United States and learn about the historical context behind these national monuments and memorials. This content is suitable for use with students in grades 3-12.
- FortunaPIX: In 28 fascinating 3D videos, abstract concepts are transformed into visually engaging learning experiences for students, exploring a variety of science topics including plants and seeds, geology, and the internal structure of Earth, among others. This content is suitable for use with students in grades 6-12.

"Discovery Education's compelling digital content helps me connect Earth Day to the scientific topics my class is currently engaged in," said Margie Rogers, technology integration specialist at Waynesville R-VI School District in Missouri. "I plan to integrate

these resources into my existing lessons, as they will help me bring science concepts to life for my students in a way a textbook cannot."

"Earth Day is the perfect opportunity for students and teachers to engage in scientific questions related to our planet and the environment," said Kelli Campbell, senior vice president and digital learning officer at Discovery Education. "We are proud to support educators with relevant, up-to-date digital resources that will inspire students to study our planet and be wise stewards of our natural resources."

For more information on Discovery Education Streaming Plus, Discovery Education Science Techbook and other Discovery Education services and initiatives, visit discoveryeducation.com.

About Discovery Education
Discovery Education is the global leader in standards-based digital content for K-12, transforming teaching and learning with award-winning digital textbooks, multimedia content, professional development, and the largest professional learning community of its kind. Serving 3 million educators and over 30 million students, Discovery Education's services are in half of U.S. classrooms, over 40 percent of all primary schools in the UK, and more than 50 countries. Discovery Education partners with districts, states and like-minded organizations to captivate students, empower teachers, and transform classrooms with customized solutions that increase academic achievement. Discovery Education is powered by Discovery Communications (NASDAQ: DISCA, DISCB, DISCK), the number one nonfiction media company in the world. Explore the future of education at discoveryeducation.com.

About Ocean First Education
Founded in 2008 and based in Boulder, Colorado, Ocean First Education provides innovative and dynamic online marine science courses for middle school through adult learners. Our team of educators, scientists and researchers are committed to increasing awareness of marine environments and engaging students through interactive experiences. Ocean First Education is grounded in its mission to inspire our students, teachers and community to become stewards of the sea. For more information, visit www.OceanFirstEducation.com.

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Technology Student Association Announces 2016-2017 UNITE Sites

Sixteen universities will host a two-year summer program that targets high school students historically underserved and underrepresented in STEM areas

The Technology Student Association (TSA) recently announced that sixteen universities will serve as host sites for a 2016-2017 UNITE summer program.

Funded by the U.S. Army through the Army Educational Outreach Program (AEOP), UNITE is a four-to-six week, pre-collegiate, academic summer program for talented high school students from groups historically underrepresented and underserved in science, technology, engineering, and mathematics (STEM). Through rigorous STEM curriculum, hands-on activities, career events, and field trips, UNITE encourages and helps prepare students to pursue college-level studies, and ultimately, careers in engineering and related STEM fields. UNITE is administered by TSA, a national non-profit organization of middle and high school students in chapters nationwide; TSA provides STEM-aligned competitions, co-curricular activities, and leadership opportunities for its members.

“TSA is very pleased with the selection of 2016-2017 UNITE sites,” said Hillary Lee, the TSA UNITE program administrator. “Students who enroll in a UNITE summer program can expect a challenging and motivating experience designed to encourage their interest in STEM areas.”

Selected sites are located across the nation and in Puerto Rico:

- Alabama State University (AL)
- Fayetteville State University (NC)
- Florida Agricultural and Mechanical University (FL)
- Howard University (DC)
- Jackson State University (MS)
- Harris-Stowe State University (MO)
- Marshall University (WV)
- Michigan Technological University (MI)
- New Jersey Institute of Technology (NJ)
- Texas Southern University (TX)
- University of Colorado, Colorado Springs (CO)
- University of Nevada, Las Vegas (NV)
- University of New Mexico (NM)
- University of Pennsylvania (PA)
- University of Puerto Rico, Ponce Campus (PR)
- Virginia Tech (VA)

For more information about the 2016-2017 UNITE sites, visit the AEOP website.

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AEOP Selects New Partners to Promote STEM Initiatives

Competitive grants awarded to increase diverse student participation in STEM

The Army Educational Outreach Program (AEOP), in collaboration with Battelle, has awarded grants to eight organizations and technical associations to expand student participation in enriching science, technology, engineering and math (STEM) exploration and learning, particularly for underserved students. AEOP offers students and teachers Army-sponsored programs that effectively

engage, inspire and attract the next generation of STEM talent.

Through AEOP's suite of programs, students from elementary school to college, representing all proficiency levels and ethnic, economic and academic backgrounds, participate in real-world experiences involving STEM disciplines. Scientists, technology experts, engineers and mathematicians, who act as mentors and guides, introduce students to the various opportunities in STEM fields through hands-on experiences and provide advice for technical skill development and career planning.

"By leveraging strong local networks, we will provide even more students with high-quality experiences that deepen their engagement with science and expose them to the wide variety and opportunity offered by STEM careers," said Jeffrey Singleton, Director of Basic Research, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology or ASA(ALT). "These partnerships will leverage critical programs already proven to help students reach their potential."

AEOP's new partners were selected specifically for their leadership in STEM learning and outreach to African-American, Hispanic, female and military-connected students. Together with these federal, academic and industry partners, the Army seeks to strategically work investments together so that its programs provide the highest quality experiences and contribute to an exceptionally prepared workforce. Bringing together the strongest thought and strategic partners also allows the Army's programs to better reflect the best of our diverse nation.

"Mentorship and hands-on learning opportunities allow students to step into the role of the engineer, inventor or scientist, and begin a path toward a future in STEM," said Aimee Kennedy, Vice President, Education, STEM Learning, & Philanthropy at Battelle. "Expanding these opportunities for students of all backgrounds and zip codes also ensures a more diverse pool of future innovators."

The grantees will each receive awards ranging from $45,000 to $52,000 to facilitate meaningful collaboration that will ultimately integrate with or enhance the suite of opportunities already offered by AEOP. Grants will be awarded on a rolling basis. First-round recipients include:

DC STEM Network, Carnegie Academy for Science Education (Washington, D.C.): The DC STEM Network will align its STEM Teacher Leader Cadre (STEM TLC), Network Ambassadors and digital communications to create a three-fold, comprehensive strategy to reach more than 3,000 D.C.-area students, parents and teachers.

EduCare Foundation (Van Nuys, Calif.): EduCare's STEM Pilot Project will serve at--risk, underserved middle and high school youth from ten Los Angeles Unified School District (LAUSD) schools. EduCare's STEM Pilot Project is a unique project that builds the STEM proficiencies, skills, and knowledge of youth, while developing necessary life skills for youth to pursue and be successful in STEM careers. EduCare will create a

comprehensive, coordinated STEM program that incorporates AEOP's Junior Solar Sprint (JSS), eCYBERMISSION, and Junior Science and Humanities Symposia (JSHS) programs. It serves as an introduction of AEOP and the beginning of a process of integrating the entire AEOP portfolio within LAUSD's after school STEM programming.

Harmony Public Schools (Houston, Texas): Harmony Public Schools is a network of high-performing K-12 public charter schools across Texas that operates 46 high-quality schools serving a diverse student population of 30,000: 61 percent of students receive free or reduced price lunch and 70 percent are under-represented minorities. Harmony plans to take part in an integrated suite of AEOP offerings with 400 students in grades 5-12, with the goal of training 40 STEM teachers to guide students to take part in AEOP programs and create awareness of STEM careers.

Research Foundation for the State University of New York - System Admin. (Albany, N.Y.): The State University of New York (SUNY) is planning to scale-up the highly successful AEOP eCYBERMISSION initiative in New York State through afterschool programs in collaboration with the New York Academy of Sciences and SUNY colleges and universities using the infrastructure established though the National Science Foundation- funded SUNY/New York Academy of Sciences Afterschool STEM Mentoring Program. SUNY will partner with the Academy to train SUNY graduate students in STEM programs to mentor middle school teams in three New York regions, New York City, Syracuse, and Utica, participating in eCYBERMISSION projects.

Society of Women Engineers (SWE) (Chicago, Ill.): SWE will support the expansion of its outreach programming for 5,000 K-12 girls nationwide and 750 K-12 STEM educators in order to engage, inspire and attract the next generation of talent in engineering and technology. While girls are traditionally underrepresented within STEM, and especially engineering, SWE is also committed to supporting girls from underserved communities. Through its existing and expanded programming, SWE will continue to work with organizations that provide services to underrepresented and underserved youth and will promote AEOP Programs (especially eCYBERMISSION, Camp Invention and RESET) to its students and teachers.

Tiger Woods Foundation (TWF) (Irvine, Calif.): TWF will enhance AEOP's programs, specifically UNITE, GEMS and JSHS, by promoting these and other AEOP programs to TWF's network of 10,000 students and 500 teachers nationwide. Through its award-winning STEM Professional Development Program, TWF projects serving 100,000 students over the next five years. TWF also has an extensive history of working with and serving the military through its programming at Marine Corps Base Quantico. In addition, with programs for underserved youth in Washington, D.C., Orange County, Calif., and Stuart, Fla., and a strategic plan to serve 1,000,000 students by 2020.

Sanford Research (Sioux Falls, S.D.): STEMwise Communities:

Building STEM Literacy through Community Problem Based Learning and eCYBERMISSION will create a series of workshops across South Dakota to inform and build teacher confidence in the use of community Problem Based Learning (PBL) in their classrooms and to create lasting partnerships between STEM educators and professionals.

TechBridge (Oakland, Calif.): Techbridge will forge a powerful link between their after-school STEM education programs for girls in Oakland, California and the AEOP Research & Engineering Apprenticeships (REAP) at UC Berkeley, to give these underserved girls deeper exposure to STEM skills, careers and role models. Techbridge will engage 70 high school girls from low-income communities in a year-long after-school program and introduce them to a broad array of STEM disciplines.

About AEOP
The Army Educational Outreach Program (AEOP) is comprised of Army-sponsored research, education, competitions, internships, and practical experiences designed to engage and guide students and teachers in science, technology, engineering, and mathematics (STEM). From elementary school through graduate school, students at all levels, interests, ethnic, economic, and academic backgrounds are encouraged to participate in hands-on programs in STEM disciplines. More information is available at: www.usaeop.com.

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EA Sports, NFL Players Association and Discovery Education Bring STEAM Careers to Life in 'Magic of Madden' Live Virtual Event!

During the week of April 18, thousands of students nationwide tuned-in LIVE to the Magic of Madden Virtual Field Trip for a behind-the-scenes look at the science, technology, engineering, arts and math (STEAM) careers powering the popular video game series, Madden NFL. Hosted by EA SPORTS™, the NFL Players Association (NFLPA), and Discovery Education, this live virtual event journeyed inside EA SPORTS Tiburon Studios in Orlando, Fla., to introduce students to the engineers, animators, analysts and producers behind the world's coolest games.

Featuring Washington quarterback Kirk Cousins, the Magic of Madden Virtual Field Trip offered an exclusive studio tour of one of the largest studios among EA's worldwide video game development facilities, and provided students with real-world insight about how STEAM skills bring Madden NFL to life. Participating students got a firsthand glimpse at motion capture – the process used to record movements of objects or people to animate digital character models – and saw Edwin Batista, a student from Florida's Orange County Public Schools, transformed into a Madden NFL character and the final result when he was – surprise! – inserted into the game. Students also had their questions answered by Cousins during the live event.

The Magic of Madden Virtual Field Trip is part of EA SPORTS, NFLPA and Discovery Education's EA SPORTS Madden NFL: Football by the Numbers initiative, which is available at no cost and offers a ground-breaking digital learning game that teaches math and science concepts using the game of football and real-world applications.

Click here to see an archive of the virtual field trip

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EverFi and Goodyear Collaborate on Career Readiness Initiative

Program focuses on STEM, Entrepreneurship and Digital Citizenship

EverFi, the leading critical skills education company, and The Goodyear Tire & Rubber Company today announced the **Goodyear Future STEM Leaders Program** that will extend digital learning opportunities to students at the National Inventors Hall of Fame® (NIHF) STEM High School and the associated NIHF Center for STEM Learning in Akron, Ohio.

Today, only 6 percent of the 3.8 million ninth graders in the United States are expected to choose a STEM-focused degree in college. Meanwhile, STEM industries continue to be one of the fastest growing sectors of the economy with projections forecasting more than nine million STEM-related jobs available in America by 2018.

The Goodyear Future STEM Leaders Program will provide students with interactive programs that help them build entrepreneurship and STEM (science, technology, engineering and math) skills. Using the power of cutting-edge instructional design, gamification, and real world simulations, students are also introduced to the technical careers of the future and the skillsets needed to succeed in these fields.

The program is aligned with Ohio Treasurer Josh Mandel's Ohio Strong Initiative, which recognizes Ohio workers in manufacturing and the skilled trades, and raises public awareness to encourage more people to pursue careers in these fields.

"As the baby boomers retire, I frequently hear about the shortage of welders, pipe-fitters, electricians, carpenters, machinists and other skilled trades across Ohio. There are high-paying jobs going unfilled because employers can't find a modern workforce to hire with the skill sets they need," said Mandel. "I believe that there is a quiet crisis upon us, and in order to prosper as a country, we need to encourage young Americans to pursue careers in the skilled trades. I launched the Ohio Strong Initiative to help bring pride and profile to dedicated men and women across our state who work in these fields that are so vital to our economy."

The Goodyear Future STEM Leaders Program is part of the organization's broader community engagement efforts focused on

STEM career preparedness, road safety, and established volunteer programs near its Akron headquarters.

About EverFi, Inc.
EverFi, Inc. is the education technology innovator that empowers learners with the skills that prepare them to be successful in life. With backing from some of technology's most innovative leaders including Amazon founder and CEO Jeff Bezos, Google Chairman Eric Schmidt, and Twitter founder Evan Williams, EverFi has built the most comprehensive critical skills platform focused on Financial Education, Digital Citizenship, STEM Career Readiness, Entrepreneurship, and Health and Wellness. The EverFi Education Network is powered by over 1,200 partner organizations across all 50 states and Canada and has certified over 12 million students. Learn more at www.everfi.com.

About Goodyear
Goodyear is one of the world's largest tire companies. Headquartered in Akron, Ohio, it employs approximately 66,000 people and manufactures its products in 49 facilities in 22 countries around the world. Its two Innovation Centers in Akron, Ohio and Colmar-Berg, Luxembourg strive to develop state-of-the-art products and services that set the technology and performance standard for the industry. For more information about Goodyear or its products, go to www.goodyear.com/corporate.

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