



TIDE

Inside

Technology, Innovation, Design, and Engineering

Thursday, November 15, 2007

We're Going to Salt Lake City!

By now, you should have received your **Preliminary Program**, explored the [ITEA conference website](#), and know just about everything you need to know to make your decision to attend the ITEA conference in Salt Lake City, less than three months away. But just in case you need a fast update, you won't want to miss:

- **Specialized workshops**, focusing on robotics, automation, animation, and engineering
- **Educational tours**, focusing on communications, media, mining, aviation, and aerospace technologies
- **Professional Development Learning Sessions**—offering hands-on information that you can use in your daily classroom activities (see list of sessions at www.iteaconnect.org/Conference/sessions.htm)
- **Social events** that are also educational, including the Yearbook Dinner, FTE Breakfast and ITEA Awards Luncheon
- **Exhibits, exhibits, and more exhibits** for you to explore, and enjoy a free lunch in the exhibit hall on Friday
- **Action Labs**, where you'll learn specifics from vendor presentations about tools to help you in the classroom
- **Leading-edge keynote presentations** from our star keynote speakers, **Barbara Morgan** and **Dr. Robert Ballard**



Housing and Registration are both open NOW. Check the ITEA website at www.iteaconnect.org/Conference/conferenceguide.htm for complete details. And don't forget that your ITEA Membership must be current through the end of February 2008 in order to qualify for member rates. If you are not an ITEA member, please take advantage of the \$35 first-time membership promotion and enjoy not only ITEA member benefits, but also the deeply discounted conference registration rates.

Don't miss out on the educational event of the year, and the beauty of Salt Lake City—the downtown area where you can walk to just about everything—or take some extra time to explore the beauty of the nearby mountains. It all awaits you in Salt Lake.

TEI Changes Name

As a result of a unanimous vote at the recent Indiana state conference, the **Technology Educators of Indiana** will now be known as **Engineering/Technology Educators of Indiana**.

ITEA Membership Matters!

Share thoughts and dreams, and challenge yourself through networking. Grow professionally by attending the annual conference and trade show (and have fun, too!)

Don't delay—
the conference is almost one month earlier this year!

Inside TIDE is a free service of



The International Technology Education Association

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ITEA Election Results

ITEA's professional and life members have completed a balloting process to elect a new President-Elect and Directors for Regions II and IV.

Joining the ITEA Board of Directors are:

- **Ed Denton, DTE (President Elect)**. Ed is Director of Technology for the Neshaminy School District in Langhorne, PA.
- **Michael A. Fitzgerald, DTE (Region II Director)**. Mike is the Technology Education Specialist for the Indiana Department of Education's Office of Career in Technical Education in Indianapolis, IN.
- **Patrick McDonald (Region IV Director)**. Pat is a technology lab facilitator/classroom teacher at Bingham High School in South Jordan, UT.

Also joining the ITEA Board of Directors is **Jared Berrett**, a technology and engineering teacher at San Juan High School in Blanding, UT. Jared will represent the **Technology Education for Children Council (TECC)**.

Sincere thanks are extended to the new Board Members for taking on this leadership role, and to the other candidates for bringing such a wealth of experience and talent to the balloting process.



Ed Denton, DTE



Michael A. Fitzgerald, DTE



Patrick McDonald



Jared Berrett

Register to Exhibit in the 2008

Technology Festival: TEACHING TECHNOLOGY SHOWCASE

Saturday, February 23, 2008

Festival Hours: 9:00 a.m. to 11:00 a.m.

Do you have an interesting classroom idea, project, or lesson? If so, you should consider sharing it with your colleagues at the upcoming ITEA Conference in Salt Lake City.

The **Teaching Technology Showcase** (formerly the Technology Festival) is an interactive session where you share ideas and describe them to others. This is an exhibition of best practice in the teaching of technology education. Showcasers include, but are not limited to, K-12 technology teachers, teacher educators, administrators, undergraduate and graduate students, and informal educators.

The Showcase provides a forum for those concerned with advancing technological literacy to feature an idea, technique, or best practice related to learning activities, marketing materials, career guidance, facility design, program design, assessment methods, equity, or classroom and laboratory management techniques, among other unique practices. Showcasers are asked to illuminate a single element of technology teaching and learning that they feel they have exemplified.

Plan now to be a part of the **Teaching Technology Showcase** in Salt Lake City, Utah by completing the applica-

tion at www.iteaconnect.org/Conference/conferenceguide.htm.

We are seeking lessons, projects, and activities for elementary through high school. If you have something, please share it. If you know someone who is doing something interesting, please let us know so we may contact them.

This is a great chance to gain some valuable recognition for your program and the hard work you do. Don't miss this extraordinary opportunity to collaborate with your peers and celebrate the future of our profession. See you in Salt Lake City!

**FREE award-winning interactive CD-ROM
for middle and high school students**

Building Homes of Our Own



Applies real-world context to math, science, technology, social studies and consumer economics curricula as students design, build and sell a 3D home.

Order today at www.HomesOfOurOwn.org

Computers for Youth Family Software Award finalist, Parents' Choice Silver Award, and International EMMA (Learning 3-18)

Developed by the National Association of Home Builders, this is a complete program (not a demo) that comes with a Teacher's Guide and is FREE to classroom teachers (no shipping or handling charges).

STS-118 Basil Seeds on the Move

The 10,000,000 basil seeds that flew in space on the STS-118 space shuttle mission have moved one step closer to the classroom. The seeds were returned to NASA's Johnson Space Center in Houston, Texas, on October 4, 2007, and were then packaged and sent to Park Seed Company, located in Greenwood, SC. At Park Seed Company, the seeds will be sorted and placed in small packets, each packet containing approximately 50 seeds. The packets of space-flown seeds and control packets of seeds that have not flown will then be distributed to educators who have registered to take part in the Engineering Design Challenge. The seeds will be packaged in a commemorative envelope with an insert that provides additional information about the seeds.

The seeds are available to the first 100,000 registrants, who must be residents of the United States or U.S. Territories and Outlying Areas. For more information on the challenge and to register to participate, visit www.nasa.gov/education/plantchallenge.

**Salt Lake City Exhibitors
Want YOU!**

Come to the ITEA Annual Conference in Salt Lake City for the opportunity to visit companies on the trade show floor that are leaders in the industry. The latest equipment and materials will be available for you to consider for your classroom. Visit the websites below so you can plan ahead—and be sure to include the popular **ACTION LABS** in your conference schedule.

Exhibitor Information:

www.iteaconnect.org/Marketplace/exhibitorlist.htm

Action Lab Schedule:

www.iteaconnect.org/Conference/actionlabs.htm

JTE Announces Rate Increase

Beginning in January 2008, the new rates for the *Journal of Technology Education* will be:

Domestic	\$15	Domestic Library	\$25
International	\$20	International Library	\$30

Grants for Youth STEM Programs

The **Society of Manufacturing Engineers (SME) Education Foundation Youth Grant Program** aims to expose students to science, technology, engineering, and math (STEM) to make informed decisions about pursuing a career in these areas. Emphasis is placed on involving women and minority students, two groups that industry and the profession have recognized as largely untapped pools of talent. Eligible applicants include a project director working at middle or high school, two- or four-year institutions, and nonprofit organizations.

The foundation will accept one-time applications requesting up to \$25,000 for project support, up to three years. Multiple requests for a single project will not be considered. **Proposals are due by December 5.** For proposal support, refer to www.sme.org/cgi-bin/smeefhtml.pl?/foundation/grants/youth_program_grants.htm&&SEF&.

Brillion High School Technology and Engineering Students Receive National Invention Grant From Massachusetts Institute of Technology

The **Brillion High School Technology and Engineering Department** was awarded a **Lemelson-MIT InvenTeams grant** in the amount of \$7850 for students to invent an all-terrain electric assist multi-machine. BHS was one of 16 high schools nationwide to be selected as an InvenTeam this year.

The Lemelson-MIT InvenTeams program provides inspiration and resources to encourage high school students to identify a real-world problem and work collaboratively to invent a solution. Lemelson-MIT InvenTeams is a premiere national grants initiative that enhances science, technology, engineering, and math (STEM) education by offering students a comprehensive, self-directed invention experience.

Technology and Engineering Teacher, **Steve Meyer**, completed the InvenTeams application process last spring. This fall, a prestigious panel of judges composed of educators and researchers from the Massachusetts Institute of Technology (MIT) and Harvard University; representatives from industry; MIT staff and alumni; and former Lemelson-MIT award winners selected Brillion High School as one of this year's InvenTeams.

Brillion students, led by team leaders **Tony Ott** and **Sam Wallander**, will invent an all-terrain, electric-powered, multipurpose lifting machine called the EZ-Lift. This device will use an electric motor propulsion system, a ratcheting lever arm, and multiple attachments to gather, lift, move, and dump heavy, awkward objects. Through the use of the multiple

attachments, farmers, manufacturing plant workers, landscapers, and general consumers will be able to use this machine to efficiently transport rocks, parts racks, manure, etc.

This is an unbelievable opportunity for students to come up with a legitimate product, receive a patent, and market their product to investors. The students are planning to take their invention a step further and come up with a business plan, manufacturability proposal, production tooling designs, and other data required to actually produce their product. BHS is receiving national press for the things its students are doing in the area of technology and engineering education.

The BHS InvenTeam will spend the next eight months developing the EZ-Lift. In the spring, the team will showcase its invention at the InvenTeams Odyssey at MIT in Cambridge, MA. This year, the InvenTeams Odyssey will be part of the **Lemelson-MIT Program's EurekaFest**, which brings together prominent inventors,

students, and the Greater Boston community for a week-long celebration of the inventive spirit.

The Lemelson-MIT Program recognizes outstanding inventors, encourages sustainable new solutions to real-world problems, and enables and inspires young people to pursue creative lives and careers through invention.

Jerome H. Lemelson, one of the world's most prolific inventors, and his wife Dorothy founded the Lemelson-MIT Program at the Massachusetts Institute of Technology in 1994. It is funded by The Lemelson Foundation, a private philanthropy that celebrates and supports inventors and entrepreneurs in order to strengthen social and economic life. More information on the Lemelson-MIT Program is online at <http://web.mit.edu/invent/>.

In case you missed it, check out Steve Meyer's Model Program article about Brillion High School in the September 2007 issue of The Technology Teacher.

Attention High School Girls

What's your idea of a dream job? Being creative? Making a difference? Working with great people? Earning a big salary? Loving your work, and living your life too? You can have it all as an engineer! Check out www.EngineerYourLife.org to discover if engineering is a career you'd love!

Your Passion. Your PC. You Design It

Microsoft and IDSA want you to look long and hard at your PC and tell us how you'd reconstruct it—hardware, software, and all—to make it a tool that better suits the way you engage and act on your passions. Submissions for this year's **Next-Gen PC Design Competition** will be accepted through **December 14**. Get your ideas ready and send them in. www.nextgendesigncomp.com/Default.aspx.

Source: IDSA's designBytes, November 5, 2007

NASA Opens Applications for New Astronaut Class

NASA is now accepting applications for the **2009 Astronaut Candidate Class**. Those selected could fly to space for long-duration stays on the International Space Station and missions to the moon. To be considered, a bachelor's degree in engineering, science, or math and three years of relevant professional experience are required. Typically, successful applicants have significant qualifications in engineering or science, or extensive experience flying high-performance jet aircraft.

Teaching experience, including work at the kindergarten through 12th grade level, is considered qualifying. Educators with the appropriate educational background are encouraged to apply. After a six-month period of evaluation and interviews, NASA will announce final selections in early 2009. Astronaut candidates will report to Johnson Space Center in the summer of 2009 to begin the basic training program to prepare them for future spaceflight assignments. **NASA will accept applications through July 1, 2008.** To apply, visit www.usajobs.gov. More details are at www.nasa.gov/astro-nauts/recruit.html.

Source: *Triangle Coalition Electronic Bulletin*
October 11, 2007 Volume 13, Number 39 Online Version

And, through the IdeaGarden, Gary Wynn adds:

The application to be one of two Teachers in Space can be found at: www.teachersinspace.org/apply/TISapplic.doc

For more information: www.teachersinspace.org/apply.htm

Application Process

Teachers in Space recently announced the start of its first two pathfinder competitions. These competitions will select the first two teachers who will fly as part of Teachers in Space. These first teachers will be pathfinders. They will help us validate the selection process and develop training procedures for the hundreds of teachers who follow. One pathfinder competition will be for STEM (science, technology, engineering, and math) teachers. Applicants will be asked to submit a proposal for an experiment that can be performed on a suborbital spaceflight.

It would be GREAT if one or two of these teachers were technology/engineering teachers—they might even take a state technology education supervisor. . .

Where would we be without
Invention and Innovation?
Still in the dark.

Invention and Innovation:

A Standards-Based Middle School Model Course Guide

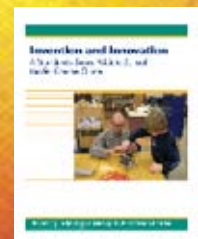
This guide overviews invention and innovation, the core concepts of technology and problem solving: design, troubleshooting, research and development, and experimentation. 118 pages, 2005

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Mention Code 11/07 to receive sale price.

Shipping fees apply.



What's Next in the World of Education?

Edutopia, the magazine of **The George Lucas Educational Foundation**, has announced its annual list of ten predictions for the school year ahead. The look to the future for ideas to improve education is based on the knowledge of experts and lessons learned over the course of the previous school year. Among this year's predictions:

- Online learning for students and teachers will grow exponentially.
- Increasing access to digital content will lead to an exponential growth in school-based online communities on the MySpace/YouTube model.

- Merit pay and other new approaches will be seen as the best answer to getting and retaining gifted teachers.
- A Sputnik-like crisis in scientific literacy will lead to a revitalization of science teaching.
- Vocational education academies will energize the American workforce.

More details are online at www.edutopia.org/whats-next-2007.

Source: *Triangle Coalition Electronic Bulletin*
October 11, 2007 Volume 13, Number 39 Online Version

ITEA is pleased to announce a new networking opportunity for those involved in TIDE (Technology, Innovation, Design and Engineering) Teaching!

In addition to currently existing networking avenues for members, ITEA has created three Facebook Groups to allow classroom teachers, university professionals, and student members to locate one another and share information and ideas directly.

Facebook is a social/professional networking service that focuses on the building and verifying of online social networks for communities of people who share interests and activities, or who are interested in exploring the interests and activities of others.

We've created the following Facebook Groups, *especially for ITEA members*:

ITEA Young Professionals—Here is your opportunity to network with other young professionals and students in the field of technology education. Invite your colleagues and friends to participate and share insights into the world of technological literacy! www.facebook.com/group.php?gid=5514937085

ITEA Classroom Professionals—This group provides a forum for technology, innovation, design, and engineering (TIDE) classroom teachers to network with one another. Invite your colleagues to participate and share insights into the world of technological literacy! www.facebook.com/group.php?gid=6513778641

ITEA University Professionals—This is an opportunity for university professionals to network with others in the field of technology, innovation, design, and engineering (TIDE) education. Invite your colleagues and associates to participate and share insights into the world of technological literacy!
www.facebook.com/group.php?gid=5756054822

Take advantage of this opportunity to connect with your colleagues—TODAY!
Questions? Contact Katie de la Paz at kdelpaz@iteaconnect.org



ED in '08 New Sweepstakes Will Provide \$50,000 in College Scholarships

Strong American Schools' ED in '08, a national education campaign, has announced it will provide \$50,000 in college scholarships to America's students through a new sweepstakes, **Join.Learn.Act.Win!**

Three scholarships will be awarded: a \$25,000 grand prize; a \$15,000 second place prize, and a \$10,000 third place scholarship. Winners will be selected at random from

eligible entries. Entry forms, official sweepstakes rules, and more information about Join.Learn.Act.Win! can be found at www.EDin08.com. The contest ends **December 31, 2007**.

Strong American Schools is a nonpartisan campaign supported by The Eli and Edythe Broad Foundation and the Bill & Melinda Gates Foundation promoting sound education policies for all Americans.

ASEE Seeks Panelists

On behalf of the Department of Defense (DoD), the **American Society for Engineering Education (ASEE)** is looking for panelists for the **Science, Mathematics, and Research for Transformation (SMART) Defense Scholarship for Service Program** evaluation meeting to be held in Arlington, VA on **January 25-26, 2008**; and the **National Defense Science and Engineering Graduate (NDSEG) Fellowship Program** evaluation meeting to be held in Arlington, VA on **February 15-17, 2008**.

The **SMART Scholarship** is available to undergraduate, master's, and doctoral students in science or engineering. Students receive full tuition and fees, an annual starting stipend ranging from \$22,000 to \$39,000, health insurance benefits, paid summer internships, and career opportunities after graduation.

The **NDSEG Fellowship** is a three-year award offered annually by the DoD to approximately 200 students pursuing doctoral degrees in science or engineering disciplines. The NDSEG Fellowship provides recipients with full tuition and required fees, a yearly salary starting at \$30,500, and a \$1,000 annual health insurance allowance.

Every January and February, there are evaluation meetings in the Washington, DC area to review the applications received for the NDSEG Fellowship and SMART Scholarship programs. This year, the meetings will again be held at the Sheraton National Hotel in Arlington, Virginia. The SMART meeting will be Friday and Saturday, January 25-26th. The NDSEG meeting will be all day on Saturday, February 16th, 2008, with optional activities on the 15th-17th. All travel, meals, and hotel arrangements are covered by the NDSEG and SMART Programs, and panelists will be provided with an honorarium for their service. (ASEE cannot cover the travel expenses of DoD employees; NDSEG is allowed to cover the hotel and meal expenses, and SMART covers meal expenses at the meeting.)

ASEE is looking for panelists able to review graduate-level (both SMART and NDSEG) and undergraduate (SMART only) applications in the following areas:

- Aeronautical and Astronautical Engineering
- Biosciences
- Chemical Engineering
- Chemistry

- Civil Engineering
- Cognitive, Neural, and Behavioral Sciences
- Computer and Computational Sciences
- Electrical Engineering
- Geosciences
- Information Sciences (SMART only)
- Materials Science and Engineering
- Mathematics
- Mechanical Engineering
- Naval Architecture and Ocean Engineering
- Nuclear Engineering (SMART only)
- Oceanography
- Operations Research (SMART only)
- Physics

If you are interested in being considered to serve as a panelist for the NDSEG or SMART Programs, please visit www.asee.org/panelists and register in the system. If you have registered or been a panelist before, we still ask that you log-in again with your email and password from last year and update your information; there is a Forgot Password link on the page, so please use that if you do not remember your password. If you have not registered in the database previously, we request that you do so now. If you do not log-in and update your information, we cannot consider you to be a panelist this year. **Please register in the database by Monday, November 19.** If you know other qualified professionals who would be interested in serving on one of the evaluation panels, please either forward our URL or write to SMART or NDSEG and give us their names and email addresses. For SMART Program details, go to www.asee.org/SMART or email smart@asee.org. For NDSEG details, please visit www.asee.org/ndseg or email ndseg@asee.org. For questions about the panelist website, please email **Jed Lyons** at lyons@engr.sc.edu.

Thank you for your consideration.
The NDSEG and SMART Program Teams

ASEE
1818 N St. NW
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phone (SMART): 202-331-3544
fax: 202-265-8504

Conference Opportunities

November 16, 2007 The **2007 MassTEC (Massachusetts Technology Education/Engineering) Conference, *Technology Education/Engineering Produces Ingenious Results***, will be held at Fitchburg State College, 160 Pearl Street, Fitchburg, MA from 7:30 a.m.–3:00 p.m. **Dr. Yvonne Spicer** will be the keynote lunch speaker. Visit www.masstec.org/conference.html for complete details.

February 7-9, 2008 The **American Association of Colleges for Teacher Education (AACTE)** will celebrate its **60th Annual Meeting and Exhibits, *Quality Matters: Our Commitment to All Learners***, at the Hilton New Orleans Riverside, New Orleans, Louisiana. Learn more at www.aacte.org/Events/meeting_exhibits.aspx.

- For daily news briefs on teacher education issues please visit www.aacte.org/News/default.aspx
- For education related blogs and daily newspapers please visit www.aacte.org/News/education_news_blogs.aspx
- For grant opportunities for K-12 teachers and institutions of higher education please visit www.aacte.org/News/grants_awards.aspx

February 28-March 1, 2008 The **Annual Virginia Children's Engineering Convention** will be held at the Holiday Inn Select, Koger South Conference Center, Rich-

mond, VA. Visit the website at www.vtea.org/ESTE/ for complete information.

March 28-29, 2008 The **Ohio Technology Education Association (OTEA) Annual Spring Conference** will be held at Worthington Kilbourne High School in Worthington, Ohio. The conference will be an extension of the 2007 OTEA Fall Conference, with topics of discussion focusing around STEM and other educational topics. Visit www.otea.info for the latest details.

April 13 - 16, 2008 The **13th Annual Technology in Education Conference and Tech Exposition, TechEd 2008**, will take place at the Ontario Convention Center in Ontario, California. The Community College Foundation is calling for presentations for this event, the theme of which is ***Realizing the Vision***. A full description of topics and the Abstract submission process is available online at www.TechEdEvents.org/2008. Registration Starts **September 1, 2007**, and the Program will be available after **January 1, 2008**.

May 1-2, 2008 Save the date for the **2008 New Jersey Technology Education Association (NJTEA) Conference**, which will take place at the Hyatt in New Brunswick, NJ. More information and registration materials will be available soon.

May 8-10, 2008 Hold the Date for '08 for the **Ontario Council for Technology Education's (OCTE) 2008 conference**, to be held at the Nottawasaga Inn in Alliston, Ontario. The Council is now accepting speaker and seminar ideas. Contact joehogan@rogers.com for information.

July 4-6, 2008 The **Second International Symposium on Educational Cooperation for "Industrial Technology Education" – *Developing Human Resources for Making Things***, will be held at Karlya City Industrial Promotion Center in Karlya City, Japan. Abstracts for Presentation are due by **November 30, 2007**. Visit www.auetech.aichi-edu.ac.jp/bsite2008 for details.

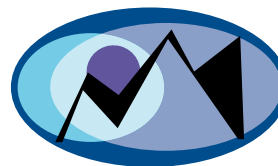
August 6-8, 2008 The **Virginia Technology Education Association (VTEA)** will hold its **Annual Conference** at the Virginia Beach Resort Hotel and Conference Center in Virginia Beach, VA. Visit www.vtea.org/conference/annual.html for complete information, including presenter application forms (deadline for submission of applications to present is **January 1, 2008**). Or contact **John Ledgerwood**, Conference Chair, at john.ledgerwood@vbschools.com or **Dr. Lynn Basham**, State Specialist for Technology Education, at lynn.basham@doe.virginia.gov for additional conference information or questions.

January 18, 2008

is the **Preregistration deadline** for money-saving registration discounts for **ITEA's Salt Lake City conference**, taking place February 21-23, 2008. **Register early and save!**



Salt Palace Convention Center



International Technology Education Association
SALT LAKE CITY
 February 21-23, 2008

[Click here to register.](#)

February 21-23, 2008

ITEA's 70th Annual ITEA Conference, *Teaching TIDE With Pride*, will be held in Salt Lake City, UT.

The latest information and details are available on the ITEA website at www.iteaconnect.org/Conference/conferenceguide.htm.