



TIDE *Inside* E

Technology, Innovation, Design, and Engineering

Tuesday, October 16, 2007

Teaching TIDE with Pride—Join ITEA in Salt Lake City!

Mark your calendar now for the one event you **MUST** attend in the new year—**ITEA's 70th Annual Conference in Salt Lake City, February 21-23, 2008**—and it promises to be the one you won't want to miss! The complete conference **Preliminary Program** is now available at www.iteaconnect.org/Conference/precon.pdf and will be in the center section of the November issue of *The Technology Teacher* as well.

January 18, 2008 is the deadline date for special preregistration pricing as well as deeply discounted room rates at the ITEA official conference hotels. You can find the latest conference information at www.iteaconnect.org/Conference/conferenceguide.htm.



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

While You Are in Salt Lake, Be Sure to Visit the Following Exhibitors

Amatrol	<i>Goodheart-Willcox</i>	<i>NComputing, Inc.</i>	Technology Education
Applied Technologies	<i>Publisher</i>	NetOp Tech, Inc	Concepts, Inc.
<i>Autodesk</i>	<i>Hearlihy</i>	Parallax Inc.	Universal Laser Systems,
Chief Architect	ISM Films	<i>Paxton/Patterson</i>	Inc.
Denford Inc.	<i>intelitek Inc.</i>	<i>Pitsco, Inc.</i>	Vernier Software &
DEPCO	Kelvin	<i>PTC</i>	Technology
Dimension 3D Printing	Lab-Volt Systems, Inc.	<i>SolidWorks Corporation</i>	Welsh Products, Inc.
GEARS Educational	LHR Technologies Inc.	<i>Synergistic Learning</i>	Educational Exhibitor:
Systems	<i>LEGO Education</i>	<i>Systems</i>	Ball State University
Glencoe/McGraw-Hill	<i>Mastercam/CNC Software</i>		
Graymark International, Inc.	MAXNC	<i>Blue italic type indicates sponsors.</i>	
Great Lakes Press/	Midwest Technology	<i>Exhibiting companies confirmed as of Oct. 10 2007.</i>	
Engineering Your Future	Products & Svcs		
Greene Mfg., Inc.	MR Board, Inc.		

ITEA Membership

Membership is more about giving than receiving. ITEA members who give to the association find they get the most from their membership.

Inside TIDE is a free service of



The International Technology Education Association

Brought to you by



New Engineering byDesign™ Curriculum Specialist Selected

ITEA's Center to Advance the Teaching of Technology and Science is pleased to announce the appointment of **Nicole M. Penn** as the newest Engineering byDesign™ (EbD) Curriculum Specialist. Nicole joins five other EbD™ specialists who are trained to present workshops on implementing standards-based courses in states and districts across the country. Nicole's background and experience make her a perfect fit to work with states and districts to implement the only national standards-based model for delivering technological literacy—**Engineering byDesign™**!

Nicole has worked with various age-groups since her student teaching at an inner city high school in New York City and graduating from Pace University. With Americorps/Project First, she facilitated computer instruction for K–2 students and their teachers along with providing school-based tech support. She has provided instruction in computer theory and job readiness at the Greenwich Village Business Institute/College. Since moving to North Carolina in 1996, Nicole has taught middle school Career Exploration and Exploring Technology courses in both a rural and urban setting, achieved National Board Certification in Technology Education, and earned her Master of Science degree with Honors in Technology Education at North Carolina Agricultural and Technical State University (NC A&T). In 2005, she presented "Gender Equity in STEM Careers" as a workshop at the North Carolina CTE conference. She has collaborated with the Institute of Electrical and Electronics Engineers (IEEE) and NC A&T University to form IEEE's first pilot program in public

schools promoting problem solving and design. Currently, Nicole teaches Technology Education in Greensboro, North Carolina.

Now Booking for Spring and Summer 2008

Six EbD™ Curriculum Specialists are currently available to provide professional development for workshops and sessions on a cost-recovery basis. These individuals are trained in standards-based curriculum development and implementation and well versed in Engineering byDesign™ curriculum, instruction, and assessment. Workshops vary in length, as they are tailored to provide a half-day, or 1-5 days of standards-based instruction. States can use these trainers to implement standards-based professional development plans that leverage the use Curriculum Specialists in a train-the-trainers model.

Invention, Innovation, and Inquiry

In addition, Invention, Innovation, and Inquiry (I³) is a program that targets teachers in Grades 4–6, in both self-contained and technology education classrooms. Each unit is designed to last between 10 and 12 hours. All ten units include clear alignment to national standards, design activities that are focused around a common engineering design process, authentic and

traditional assessments, and teacher background material. All units have been pilot- and field-tested in about 20 different classrooms representing a variety of backgrounds and settings. For additional information, samples of student work, and unit PowerPoint® presentations, see www.i3cubed.com. The I³ Specialists are able to provide insightful, practical presentations and workshops on all aspects of the units, including content and how to incorporate the units into existing programs independently or as a whole.

Dates for Spring and Summer 2008 are now being accepted on a consortium-first basis (nonconsortium states on a first-come, first-served basis). Please note: If you are planning a workshop for next summer, now is the time to schedule your request for a specialist—as the summer months approach, the availability of dates are reduced by prebookings!

For more information about booking these elite specialists, or joining the EbD™ Consortium to get full access, contact **Barry Burke** at bburke@iteaconnect.org.



Birthday Request

ITEA would like the opportunity to recognize members on their birthdays. Email members@iteaconnect.org and include your ID number (if known), first name, last name, state, and birthday (year is not required).



**CABLE'S
LEADERS IN LEARNING AWARDS™**

**Where do new ideas in education begin?
They begin with YOU!**

**Apply for Cable's Leaders in Learning Awards
at www.LeadersInLearningAwards.org**

NASA Opportunities for Students

The NASA 50th Anniversary Essay Competition for middle and junior high school students is now accepting entries. The competition consists of two separate topics, each with a limit of 500 words. The first topic challenges students to describe how they benefit in their everyday lives from space technologies built by NASA over the last 50 years. The second topic requires students to imagine how their everyday lives will have changed because of NASA space technology in the next 50 years.

Students may submit two separate essays, each responding to a separate topic. Participants must be U.S. students in Grades 5–9 and under the age of 15.

An optional notice of intent is due on **December 7, 2007**. Final entries are due on or before **January 7, 2008**.

For more information, visit www.nasa.gov/audience/foreducators/5-8/features/F_Essay_Competition.html

NASA Undergraduate Student Research Program Spring 2008 Internship Session

NASA's Undergraduate Student Research Program is currently accepting applications for 15-week spring 2008 internships. These internships offer students the opportunity to work alongside NASA scientists and engineers at NASA's centers, laboratories, and test facilities.

Applicants must be U.S. college sophomores, juniors, or seniors with majors or course work concentration in engineering, mathematics, computer science, or physical or life sciences. Applicants must be U.S. citizens.

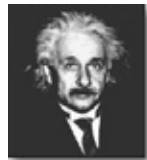
The application deadline for the spring 2008 session is **Oct. 22, 2007**.

For more information, visit <http://education.nasa.gov/usrp>

Einstein Fellowship Seeks Candidates for 2008-2009 School Year

Attention K-12 teachers:

Are you an experienced educator who is ready to make a difference on a national scale? If so, consider applying for an **Albert Einstein Distinguished Educator Fellowship** and prepare for a year of unique opportunities. As an Einstein Fellow, you will spend a school year in Washington, DC sharing your expertise with policy makers. You may serve your Fellowship with Congress or one of several government agencies such as the Department of Energy, NASA, the National Science Foundation, the National Institutes of Health, the National Oceanic and Atmospheric Administration, or the National Institute of Standards and Technology.



The Albert Einstein Distinguished Education Fellowship Program

Where Classroom Practice Informs Policy
K-12 Teachers Influencing Education

Paid Academic Year Fellowships in Washington, DC
Working with Congress or in a Federal Agency

Application available online 10/1/07
To apply please visit:
www.trianglecoalition.org/ein.htm

The goal of the Einstein Fellows program is to provide an opportunity for teachers to inform national policy and improve communication between the K-12 STEM education community and national leaders. Selection is based on excellence in K-12 mathematics, science, or technology teaching; demonstrated leadership; an understanding of national, state, and local education policy; and communication and interpersonal skills.

The Fellowship program was created in 1990 with support from the MacArthur Foundation. Congress formalized the program in 1994 by passing the **Albert Einstein Distinguished Educator Fellowship Act**. The Triangle Coalition administers the program under the direction of the Department of Energy. Online applications opened **October 1, 2007**—the deadline date for all applications is **January 13, 2008**. Apply online at <https://applicationlink.labworks.org/applicationlink/default.htm>.

For more information about the Einstein Fellows program, visit www.trianglecoalition.org/ein.htm or contact **Liz Burck** at 703-516-5963 or burckl@triangle-coalition.org.

Membership Opportunity for Museums

Museums play an important leadership role in education, providing learning and training that promotes technological literacy for all. An ITEA membership enables museum staff to receive educational materials, participate in professional development opportunities, and be eligible for recognition awards for excellence by providing the following:

- **Annual subscriptions** for five staff members to *The Technology Teacher* and *Technology and Children*.
- **Online resources**
- **Free listing** to highlight and publicize the museum in the April issue of *The Technology Teacher* and a live link from our website
- **\$100 off** registrations for two staff members to attend ITEA's annual conference
- **Savings** on exhibit space at the annual conference

An ITEA membership shows support for technology education, science, and engineering and provides a wealth of benefits and services for the museum and staff for only \$210 per year.

For more information or a brochure, call 703-860-5032.



ITEA: Teaching Excellence in Technology, Innovation, Design, and Engineering (TIDE)

Retiring

Dr. Ronald Gonzales, DTE, of Brigham Young University in Provo, UT, a long-time active ITEA member and leader in the State of Utah has announced his retirement, planned for December. Congratulations, Dr. Gonzales!

FAQs About STS-118

Are the STS-118 design challenges also available on the NASA website?

Yes, the units are available on the NASA portal for free (www.nasa.gov/education/plantchallenge). However, they are only available in a print pdf—not an electronic version. Check them out on the portal—they are huge files and take considerable time to download. To get the electronic version, order the CD from ITEA for \$9.50 + \$2.00 shipping—and you get all three units (elementary, middle, high) on one CD. The electronic units on the CD are completely interactive, and you get the print version as well. Quite a bargain.

How do I register to receive the space-flown seeds for my class?

The only way to receive the space-flown seeds (the cinnamon-basil seeds that went up with Barbara Morgan on STS-118) is to click “Join the Challenge” on the NASA website and then “Register to Participate.” This registers you to receive the seeds. It is a first-come, first-served situation. There are a lot of seed packets available, but it is a finite number. Information about receiving the seeds is NOT on the CD, because we want the CD to be applicable after the seeds have been distributed.

How do I receive my certificate of participation?

After implementing the unit in class, teachers can go back to the NASA portal, click “Join the Challenge,” then click “Submit Feedback and Receive Certificate.” This entitles teachers to receive a certificate of participation from NASA. Again, this is the only way to receive this certificate.

STS-118 Engineering Design Challenges NOW AVAILABLE!



ITEA and NASA Partner Again to Promote STEM

In conjunction with the August 8, 2007 launch of STS-118, ITEA and NASA recently debuted STS-118 Design Challenges. Available on a single CD that combines elementary, middle, and high school, these challenges revolve around a lunar plant growth chamber to help supplement the diet of astronauts while living and working on the moon, as well as provide a sense of “home.”

These interactive, electronic Design Challenges are now available on CD from ITEA for an introductory cost of \$9.50. The Design Challenges include lessons, student and teacher resources, assessments, and materials lists. Moreover, the units integrate with the ITEA model program for technological literacy known as Engineering byDesign™. These units are the first of the Human Exploration Project curricula for space exploration to be introduced – coming Soon: Units on Space and Transportation and Space and Energy and Power!

To order CDs, contact ITEA at 703-860-2100. Shipping charges of \$2 per CD apply.

How do I sign up for a professional development workshop on the STS-118 Design Challenges?

For those interested in a teacher professional development workshop for their school, locality, district, or state on the STS-118 Engineering Design Challenges, ITEA has Curriculum Specialists available (who spent the summer presenting these workshops around the country). Contact **Shelli Meade** at smeade@itea-connect.org or **Barry Burke** at bburke@iteaconnect.org with

workshop inquiries or other questions regarding the STS-118 Engineering Design Challenges.

The **STS-118 Engineering Design Challenges** coordinate with ITEA's Model Program, **Engineering byDesign™**, which is a comprehensive program of K–16 curricula, professional development, online learning/professional communities for educators, online assessments, and participation in the direction of the program across the country for the benefit of all participating states.

CTTE Notes

The 56th CTTE yearbook, *Assessment of Technology Education*, edited by Marie Hoepfl (Appalachian State University) and Michael Lindstrom (Anoka-Hennepin Schools, Minnesota), was distributed to council members this summer. As in past yearbooks, there is a great deal of useful, practical information in each chapter. Much knowledge and wisdom is shared in the 303 pages of the 2007 CTTE yearbook.

CTTE Program Set for Salt Lake City 2008

Early this fall, the Council's program for the annual ITEA Conference in

Salt Lake City (February 21-23, 2008) will be distributed. CTTE will present special interest sessions as well as other CTTE events, such as the annual business meeting, committee work session, executive team meetings, etc. Major functions, like the CTTE Yearbook/ITEA-CS Luncheon, will fit into designated spots in the ITEA conference schedule.

Fall 2007 Schedule Of Events

This fall's professional schedule includes state conferences or workshops in Virginia, Maryland, Minnesota, Florida, Illinois, Ohio, Indiana, Pennsylvania, and regional



conferences in New England, Kansas, Colorado, and the Southeast States, among others.

Yearbook Committee

The CTTE Yearbook Committee, directed by Past President Michael De Miranda, is still seeking topics and writing team members for future publications. Contact Michael at mdemira@engr.colostate.edu with any ideas, suggestions, and proposals.

Source: CTTE One Five, Vol. 1, Issue 4, July 15, 2007

Toshiba/NSTA Exploravision Program Now Accepting Entries for 2008 Program

Students Have Fun Learning About Science and Can Win Prizes Including \$10,000 Savings Bonds

The Toshiba/National Science Teachers Association ExploraVision Awards Program, one of the world's largest K-12 science and technology competitions, is now accepting entries for its 2008 competition. For the past 15 years, the ExploraVision program has provided an opportunity for students to envision a better future and has given educators a valuable tool for helping motivate their students to excel. The competition asks student teams of two to four to select a current technology and imagine what it might be like in 20 years. Up to \$240,000 in savings bonds will be awarded this year to student winners whose innovative ideas combine imagination with the tools of science. Toshiba laptop computers for schools and other prizes for students, teachers, and mentors will also be presented.

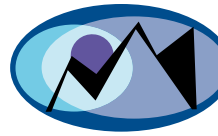
In ExploraVision, students envision amazing advancements in science and technology. Some of 2007's winning student teams, for instance, imagined advancements in fields such as nanotechnology and polymer creation. They conceptualized future technologies ranging from innovative treatments for diabetes and kidney disease to a possible solution to the worldwide scarcity of drinkable water, a novel treatment for drug addiction, a potentially lifesaving fire-extinguishing system, and an ingenious method for harnessing "wasted" energy from automobile use. There was even an idea for a special dental hygiene device that would brush all your teeth at once—and provide a song while doing it!

Students on the four first-place winning teams will each receive a \$10,000 U.S. Series EE Savings Bond.

Students on second-place teams will each receive a \$5,000 bond. (Canadian winners receive Canadian savings bonds purchased for the equivalent issue price in Canadian dollars.) The eight teams will also receive an all-expense-paid trip with their families, mentor, and coach to Washington, DC for a gala awards weekend in June 2008. Activities will include a visit to Capitol Hill to meet with members of Congress, a Science Showcase during which the students will display and demonstrate their winning ideas, and sightseeing. The highlight of ExploraVision weekend will be a gala awards banquet and ceremony where students will be formally recognized for their creativity and accomplishments.

For more information or an application for 2008, visit www.exploravision.org or email exploravision@nsta.org.

Conference Opportunities



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

Salt Lake City conference, February 21-23, 2008. [Register early and save!](#)
[Click here to register.](#)

January 18, 2008
 Preregistration
 deadline for money-
 saving registration
 discounts for ITEA's

October 17-19, 2007 The **National School Boards Association T+L** (technology and learning) **Conference** will be held in Nashville, TN at the Gaylord Opryland Resort and Convention Center. The conference will feature over 170 sessions on the latest technology innovations and programs for educational settings. Visit www.nsba.org/t+l/ for information.

October 17-20, 2007 **CONNECTING '07**, the **Icsid/IDSA World Design Congress**, in San Francisco, CA is expected to attract as many as 3000 attendees from all over the world. Register today at www.regonline.com/Checkin.asp?EventId=136374 to reserve your place at the international table. For a glimpse at the sensational program, visit www.idsa.org/PDFs/connecting07_schedule.pdf.

October 18-20, 2007 The **Florida Technology Education Association** will hold its **78th Annual Professional Development conference, "Inspiring today, applying tomorrow,"** at the Holiday Inn Hotel & Suites Harbourside in Indian Rocks Beach. Information is available at www.ftea.com/2007conference.asp.

October 19, 2007 The **Technology Education Association of Maryland** will present its **Seventh Annual Technology Education TECH EXPO 2007, TEAM's All-Star Line-Up: CATTs, PLTW, STEM and VSC**, at the Baltimore Museum of Industry, Baltimore, MD. This is TEAM's Annual Conference for all technology education teachers and supervisors in the State of Maryland. Additional information can be found at www.techedmd.org/conference.htm; or contact **Will Johnson**, EXPO 2007 Coordinator, at wdjwin@aol.com.

October 19-20, 2007 The **14th Annual Illinois Technology Education Conference (ITEC)** will be held at the Peoria Holiday Inn Centre in Peoria, IL. ITEC has secured **Joseph Fatheree**, Illinois Teacher of the Year 2006-07 and known for his work in the field of technology integration and curriculum development, as keynote speaker. For more information visit www.teai.net.



October 22, 2007 The **LITE (Learning Institute for Technology Education) Fall Fest Conference, Math, Science and Technology Through Design**, will take place at the Eastern Michigan University Student Center in Ypsilanti, MI from 4:30-7:00 pm. Visit www.litesource.org/Conference10.22.07.htm for complete information.

October 24, 2007 The **Department of Technological Studies at The College of New Jersey, School of Engineering** will present its **21st Annual Professional Conference**. Sessions are generally limited to 25 people, and all participants must pre-register! Online registration is available at www.tcnj.edu/~techstudies. For further information or for late registration, call **Judy Smedley** at 609-771-2543 or **Adam Brunner** at 609-771-2784.

October 25-26, 2007 The **Department of Technology, State University of New York at Oswego**, will present its **68th fall conference** for technology teachers and other professionals, **Technology Education: Inspiring Outstanding Performance**, on the Oswego campus in Wilber, Park, and Sheldon halls. New this year are sessions on technology education for science and mathematics elementary classes to encourage integrative learning. For more information, visit www.fallconference.com or contact **Judith Belt**, Conference Chair, at jbelt@oswego.edu.

October 25-27, 2007 The **Society of Women Engineers** will present its **2007 National Conference, Women IN TUNE with TECHNOLOGY**, at the Nashville Convention Center in Nashville, TN. For complete conference information, visit www.swe.org/2007.

October 27, 2007 The **Ohio Technology Education Association (OTEA) Fall Conference** will focus on the role of technol-

ogy education as a STEM partner. Visit www.otea.info/CONFERENCES.HTML or contact **Timothy Tryon** at Timothy878@zoominternet.net for details.

November 1-2, 2007 The **22nd Annual Colorado Technology Education Conference, Reaching New Heights**, will take place at the Copper Conference Center in Copper Mountain, CO. Complete information about the conference is available at www.cteaonline.org/.

November 4-5, 2007 The **Technology Educators of Indiana (TEI)** will present their **76th Annual Conference, Passion for the Profession**, at the Clarion Hotel and Conference Center, in Indianapolis. Visit www.teiwww.org/conference/ for complete conference information.

November 8-9, 2007 The **Technology Education Association of Pennsylvania (TEAP)** will hold its **55th Annual Conference** at the Radisson Penn Harris Conference Center in Camp Hill, PA. Visit the TEAP website at www.teap-online.org/index2.htm and click on "conference" for complete information.

November 9-11, 2007 The **Institute of Electrical and Electronic Engineers (IEEE)** will present a special conference in Munich, Germany, **Meeting the Growing Demand for Engineers and Their Educators 2010-2020 Summit**. A call for papers has been issued and can be accessed at www.ieee.org/web/education/preuniversity/globalsummit along with additional information.

November 16, 2007 The **2007 MasSTEC (Massachusetts Technology Education/Engineering) Conference, Technology Education/Engineering Produces Ingenious Results**, will be held at Fitchburg State College in Fitchburg, MA. **Dr. Yvonne Spicer** will be the keynote lunch speaker. Visit www.masstec.org/conference.html for complete details.