

The ITEEA Headliner

The Most Recent and Pertinent News and Information for the Technology and Engineering Education Field

Member Input for New Strategic Plan Design

The ITEEA Board of Directors is in the process of establishing a draft format for the new Strategic Plan taking effect after the upcoming 2015 conference in Milwaukee, Wisconsin. The Board's goal is to engage all members, enabling them to provide their input on the strategic goals and actions developed in this plan for our new direction in delivering and leading technology and engineering education! Please be on the lookout for more information in the coming months leading up to the conference regarding how you and others within our profession will have the opportunity to provide input and direction for the Association and profession's future!

“SOMETHING’S BREWING IN MILWAUKEE”: CONFERENCE NEWS

ITEEA STEM Showcase: Apply to Present



Plan now to be a part of the ITEEA Teaching Technology and Engineering STEM Showcase in Milwaukee, Wisconsin by completing the application at www.iteea.org/Conference/apptopresent.htm.

We need YOU to make it happen! Apply no later than November 15, 2014—and encourage your colleagues too!



NEW Exhibitor Marketplace Web Page!



The Exhibitor Prospectus, floor plan, Exhibitor Showcase schedule, sponsorship information, and contracts are available at www.iteea.org/Marketplace/marketplace.htm. You can also view a highlight video of the ITEEA Orlando conference. The floor is over half full, so please encourage interested parties to book early! For more information, please contact Christine Maggio at cmaggio@iteea.org.

We need YOU to make it happen! Please send interested exhibitors/sponsors to the marketplace link.

ITEEA Conference Registration is Now Open

The ITEEA Conference Registration is open to members and non-members. Encourage all to register early to receive discounts at www.iteea.org/Conference/registration.htm.

Preliminary Conference Program Launch

Take a sneak peek into ITEEA's 77th Annual Conference and see what we've got brewing in Milwaukee. www.iteea.org/Conference/conferenceguide.htm



AWARDS



Applications are being accepted for the Distinguished Technology and Engineering (DTE) and NEW Emerging Leader (EL) Recognition Programs. All who meet the criteria are encouraged to apply.

We need YOU to make it happen! Celebrate your own achievements as well as those of a colleague by applying on your own behalf and nominating another deserving education professional prior to December 1st.

Distinguished Technology and Engineering Educator (DTE)

ITEEA's Distinguished Technology and Engineering Professional (DTE) designation is a coveted mark of distinction in technology and engineering education. It recognizes technology, innovation, design, and engineering educators who have demonstrated a high level of competence and professional activity in the field of technology and engineering education. Anyone with ten or more years of ITEEA membership is invited to apply.

www.iteea.org/Awards/awardedte.htm

ITEEA Emerging Leader (EL)

ITEEA's Emerging Leader honor is a coveted mark of distinction in technology and engineering education. It recognizes technology, innovation, design, and engineering educators who have demonstrated a high level of competence and professional activity in the field of technology and engineering education. Anyone with five or more years of ITEEA membership is encouraged to apply.

www.iteea.org/Awards/awardel.htm

MARKETING/PR/COMMUNICATIONS

Conference Video

Our TEECA students put an amazing video together to showcase all the wonderful exhibits and activities that happened at ITEEA's conference in Orlando. This new marketing tool can be used to promote our conference in Milwaukee and will be distributed through all of our media channels, website, and referenced in all of our publications. To view the video on YouTube, visit www.youtube.com/watch?v=mzm2J9T3Qr0&feature=youtu.be.

ITEEA Marketing Kit: Who is ITEEA and What is Technology and Engineering Education?

ITEEA has been missing one important piece in its marketing arsenal, what we are now referring to as "ITEEA in a Box." It's a complete package that can be carried to high-level meetings and that does an accurate and comprehensive job of explaining ITEEA's mission, history, membership, and professional efforts. In addition to a designed folder and inserts, the kit will also contain additional pieces such as selected issues of *Technology and Engineering Teacher*, *Children's Technology and Engineering*, Executive Summaries of all ITEEA standards, and other pertinent materials. We have nearly completed work on the folder elements and have moved into the design phase in order to ultimately have a package that has a clear overall theme and message, and that represents ITEEA in the most positive and professional way possible.

Publications Update

The following publications have recently been released for sale by ITEEA:

- *Foundations of Technology, Third Edition* (an Engineering byDesign product)
- *Game Art Design* (an Engineering byDesign product)
- *Invention and Innovation, Third Edition* (an Engineering byDesign product)
- *Designing SAFER Learning Systems for Integrative STEM Education*
- *Engineers and Engineering: A Review*

ITEEA Launches Video Contest

ITEEA launched its first video contest on August 1st. This "challenge" to our members is designed to build a nice collection of 2-5 minute videos that demonstrate how technology and engineering bring STEM to life in classrooms around the country/world. The winning video will be played at a general session in Milwaukee and the person who submits it will receive a free Milwaukee conference registration.

We need YOU to make it happen! Please actively seek out, identify, and solicit excellent technology and engineering teachers to submit videos prior to the November 30th deadline at www.iteea.org/Publications/VideoContestRules.pdf.



PARTNERSHIPS

National Academy of Engineering (NAE)

ITEEA is one of four national organizations to participate in the PreK-12 Engineering Education Online Toolkit project that also includes Achieve, Inc., National Science Teachers Association (NSTA), and American Society for Engineering Education (ASEE). ITEEA's role as a partner in the NAE three-year Chevron-funded project is to help lead the development of a resource website to support efforts in the U.S. to teach engineering to K-12 students.

Air Force Research Lab (AFRL)/Discovery Lab - 2014 Summer Program

ITEEA partnered with the Air Force Research Lab (AFRL)/Discovery Lab to offer technology and engineering teachers an opportunity to build an automated device using a combined physical and virtual world experience. In a five-week pilot program, participating members used the AFRL Discovery Lab's Deep Horizons virtual reality setting to facilitate learning, share ideas during project development, and evaluate results. Look forward to seeing some of the resulting projects at the ITEEA conference in Milwaukee.

MEMBERSHIP



ITEEA is always on the lookout for new members to join us.

We need YOU to make it happen! Please send anyone who is interested to

www.iteea.org/Membership/membership.htm

Corporate Members

ITEEA Corporate Members are committed partners who not only support the ITEEA mission but also exhibit, advertise, and sponsor many of our events. To see current ITEEA partners, visit www.iteea.org/Marketplace/corporatemembers.htm

Institutional Members

ITEEA Institutional membership was extended to include both colleges/universities and organizations/non-profits. To see a list of current ITEEA Institutional members, visit www.iteea.org/Resources/institutionalmembers.htm

Care Packages Sent to Support ITEEA in the Field

Since April, 20 care packages have been sent to ITEEA Affiliate Representatives to assist them with membership promotions at their state conferences. Care packages contain membership brochures, insurance information, conference materials, sample journals, and latest press releases if applicable.

Two New Group Memberships!

Beginning July 1, two new group memberships were added to ITEEA's membership portfolio: Middle School and High School Integrative STEM Membership. A new brochure and press release were created to promote this to all pertinent channels. For more info, visit www.iteea.org/Membership/membership.htm

Current Membership Promotions

Membership promotions are ongoing and include the following:

- TSA Advisor – special reduced rate using current promotion code
- 2014 S&E Festival – \$20 discount for new members
- EbD Training – \$20 discount for NEW Members
- Children's Council, NEW Member at State Conference, EPICS – save \$10 on new membership
- All expired members – Save \$20 renew by June 15, 2014
- NEW Student – save \$15 (Mastercam CNC sponsorship)

Promotions combined with website and electronic communications have all contributed to the 17% growth in membership over last year.

ITEEA OUTREACH

ITEEA is regularly involved in outreach efforts. Below are some key events that ITEEA participated in as well as upcoming planned events.

APRIL, 2014

NAE Chevron-Funded “PreK-12 Engineering Education Online Toolkit” Grant

ITEEA participated as one of four leading associations (ITEEA, ASEE, NSTA, Achieve Inc.) in partnership with the National Academy of Engineering (NAE) at the initial planning session for the 22-member committee meeting held in Washington, DC.

Science and Engineering Festival in Washington, DC

Approximately 325,000 people attended to engage in activities with some of the biggest names in STEM. ITEEA staff as well as several volunteers were on hand to answer questions, share hands on activities, and network with industry and educators.

MAY, 2014

STEAM Conference in PA

An ITEEA member conducted several workshops as well as presented at the conference. Membership materials and curriculum samples were distributed.

ITEEA Helps Kids at Bloomsburg University of PA Gear Up for College and STEM Careers!

ITEEA sent a care package in support of TRiO Upward Bound, a U.S. Department of Education grant-funded program for first-generation college students. TRiO Upward Bound works with high school freshmen through high school seniors to assist them with everything college preparatory.

- Each year, they host a six-week Summer Academy on the campus of Bloomsburg University in order to simulate a college-going experience. The theme this summer was STEM!
- Students also peruse majors, careers, and general interest in STEM via exhibit tables set up in the residence hall.

JUNE, 2014

TSA Annual Conference

ITEEA had a booth display stocked with materials, conducted two session presentations, and offered a membership promotion to all TSA advisors. Due to the success of last year’s TSA Chapter Advisor membership promotion, ITEEA and TSA renewed this campaign for another year.

NAE/Chevron “PreK-12 Engineering Education Online Toolkit” Regional Workshop in DC

ITEEA represented our profession as a lead partner with the NAE on this first “stakeholder” regional meeting held in June in Washington, DC in conjunction with the second meeting of the NAE/Chevron Online Toolkit project committee. The focus of this regional program was to solicit input from educators, teacher educators, and state/district leaders and other “influencers” on the website content and delivery for the Engineering Education online toolkit.

EbD™ at American Society for Engineering Education (ASEE) K-12 Workshop

ITEEA’s STEM \oplus CTL led two Engineering byDesign™ sessions at the 2014 ASEE K-12 Workshop on June 14th in Indianapolis, IN. Granted the special three-hour long sessions, EbD *TEEMS* (Grades 3-4), and *Advanced Design Applications (ADA)* EPICS (Engineering Projects in Community Services) were highlighted as hands-on integrative STEM curriculum solutions for attending teacher and administrators. Participants attending the *TEEMS* (Grades 3-4) session will have the opportunity to engage in a professional development experience that will leverage a balance between modeling student inquiry and design activities and investigating appropriate pedagogy and instructional strategies at the elementary grade levels. Participants attending the *ADA* EPICS workshop will engage in course materials to create a local, meaningful needs assessment and service-learning implementation plan.

ITEEA's New Photo Website

ITEEA is now the proud owner of a robust photo repository and search site at iteea.smugmug.com. It was created as part of an effort to safely store and organize the thousands of photos in our possession as well as to make them searchable for use in publications and marketing materials. As an added bonus, ITEEA's account is completely free due to its status as a nonprofit organization. Thousands of photos have been uploaded and the keywording work is well underway. In the interest of privacy, 90% of the website is completely locked down—no one without the proper login credentials can see them. One area that is “public” is the conference photo area at iteea.smugmug.com/Conference – to anyone who logs in, this is the only viewable folder.

JULY, 2014

Launched the new group membership campaign for the 2014-15 school year.

Initiated the TSA Advisor membership campaign.

ITEEA STEM ⊕ CTL Future Leaders Scholarship

ITEEA's STEM ⊕ CTL announced the creation of the “Future Leaders Scholarship.” This scholarship is a content and geographically targeted initiative designed to provide current or recently graduated students with an Engineering byDesign™ professional development mentee opportunity. Goals of the program include: (1) Provide an easily accessible professional development preparation experience; (2) Engage future leaders as a way to foster powerful Mentor/Mentee relationships with established leaders in the Technology and Engineering Education profession; and (3) Leverage effective and research-based instructional methods taught in Technology and Engineering Education Teacher Preparation programs. The “Future Leaders Scholarship” is designed to put our best and brightest in a professional spotlight at strategically selected professional development workshops across the country.

Legacy Project Now Available to All

At the request of Legacy Project Leads, Kendall Starkweather and Johnny Moye, ITEEA has made available to the general public all of the completed series articles at www.iteea.org/Resources/PressRoom/Legacy/LegacyProject.htm. The Legacy Project's intent is to focus on the lives and actions of leaders who have forged our profession into what it is today. Members of the profession owe a debt of gratitude to these leaders and ITEEA is honoring them by making their stories available to all. Each Legacy will be printed in *Technology and Engineering Teacher* over time and several have already been published.

AUGUST, 2014

International Manufacturing Technology Show (IMTS) Smartforce Student Summit

ITEEA exhibited and two ITEEA Board members represented the association. IMTS brings together over 114,000 industrial decision-makers (10,000 are students with their teachers) who come to get ideas and find answers to their manufacturing questions. The Summit is an IMTS program that enriches student and educator attendance at the Show and encourages career consideration in the manufacturing technology industry.

NAE/Chevron “PreK-12 Engineering Education Online Toolkit” Regional Workshop in MN

The second regional stakeholder meeting was held in Minneapolis, MN. As with the June 30 program held in Washington, DC, the focus was to solicit input from teachers, administrators, teacher educators, and informal education providers on the website content and delivery for the preK-12 Engineering Education online toolkit. A total of 65 regional educators attended, including the NAE committee members who facilitated the small group activities at each table. There were several ITEEA members from the Minnesota region in attendance. ITEEA is one of four association partners working with the NAE on this project.

ITEEA STEM ⊕ Center for Teaching and Learning Strategic Planning

ITEEA's STEM ⊕ CTL conducted its annual strategic planning session over a long weekend in Reston, VA. This strategic planning session developed strategies to engage leaders in the profession to further develop its Mission and Vision for the next five years. Invited guests included James Boe (Valley City State University/President, ITEEA), Mark Crenshaw (State

Supervisor – GA/CSL President-elect), Michael de Miranda (Colorado State University) and Nathan Mentzer (Purdue University). Envisioning included cross-functional discussions in the areas of Assessment, Research, Professional Development, and Curriculum, and provided keen and strategic insights for the future. New ideas and initiatives are being developed as a result that will position the Center as a key player in the STEM/EbD marketplace. STEM ⊕ CTL staff will bring Strategic Questions to the Fall Leadership Forum held in September for the EbD STEM Consortium, as well as engaging new partners and constituents to better position the profession—definitely exciting times!

STEM ⊕ CTL Special Projects

ITEEA's STEM ⊕ CTL announced a partnership with littleBits Electronic, Inc. (<http://littlebits.cc/>) to design, develop, and promote a series of Engineering byDesign™ curriculum units with a focus on Engineering Habits of Mind and Coding. littleBits is “leading a hardware renaissance where everyone, regardless of age, gender, technical ability, or discipline, can be creative with electronics and reinvent their world. Each curriculum product (K-2, 3-4, 6-8 and 9-12) will be six weeks in length with the option of being integrated into current EbD™ offerings and/or being offered as supplemental enrichment materials (e.g., extracurricular clubs, summer camps). The first unit in development will be “Engineering Iteration Infusion (HS).” This Learning Module is being funded by littleBits Electronic, Inc. in order to deliver high quality curriculum solutions to the EbD Consortium of States at no cost! In addition to financial support, littleBits Electronic, Inc. will provide classroom testing materials, expert contributions by littleBits staff and reviews during the curriculum design and development phases. The ITEEA STEM ⊕ CTL staff is continually exploring new opportunities to deliver the highest quality curriculum, professional development, and assessment for our members and the profession.

NAE Resource Website Update

As reported previously, it is exciting for ITEEA to be a partner as one of four national organizations in the preK-12 project that also includes Achieve, Inc., National Science Teachers Association (NSTA), and American Association for Engineering Education (ASEE). ITEEA's role as a partner in the NAE three-year Chevron-funded project is to help lead the development of a resource website to support efforts in the U.S. to teach engineering to K-12 students. In follow-up to the PreK-12 Engineering Education Online Toolkit committee meetings, NAE and Diamax (web developers contracted to work with project development) requested potential resources for the “Alpha 1” site (i.e., samples of resources with brief contextual descriptions). Diamax needs the resources to move from the concept stage to a real website. Despite the short timeframe involved, ITEEA met the challenge and was able to provide a variety of sample resources from each of the requested areas, including: video files, informational documents (lesson plans/projects, guidance for preservice and inservice professional development, explaining the core ideas and/or habits of mind in engineering, making the case for the value of engineering education at the PreK-12 level), links to existing PreK-12 materials, and a list of “experts” on topics involving PreK-12 engineering education or in integration of engineering into other subjects. We look forward to continuing our efforts as an integral partner on this project.

SEPTEMBER, 2014

ITEEA STEM ⊕ CTL Fall Leadership Forum for all State Consortium Members

Churchill Fellow Visits U.S.

ITEEA HQ was recently contacted by Australian technology teacher and Churchill Fellow from Australia with a request to visit schools in several U.S. cities. She joins 105 other high-achieving Australians as they journey to various international destinations in the pursuit of research excellence. The Winston Churchill Memorial Trust has now funded over 3,900 Australian Fellowships, providing talented citizens with the opportunity to explore their areas of expertise across the globe. Each Fellowship is designed to produce findings that benefit the wider Australian community. With the help of STEM ⊕ CTL's Tanner Huffman and Fairfax County Public Schools' Tony Casipit, tours were arranged for three schools in the Pittsburgh, PA area and two in the Washington, DC area. The Australian teacher will return for more program visits in November and again in March to attend the ITEEA conference in Milwaukee.

ITEEA Assists FLL Team

ITEEA HQ was recently contacted by the lead coach of a FIRST LEGO League (FLL) team of seven elementary school children (4th and 5th Grade) from Loudoun County, VA. FLL is an international program for 9- to 16-year-old children to get them excited about science and technology. Children work alongside adult mentors to design, build, and program autonomous robots and create an innovative solution to a problem as part of their research project. For the research project, teams are encouraged to meet with Subject Matter Experts to understand their identified topic and its challenges and current solutions. The team's challenge is "to find an innovative way to improve the way international students learn." ITEEA arranged for the Australian Churchill Fellow to Skype in to the students and answer questions and has arranged a visit and question session with ITEEA Executive Director, Steve Barbato, on September 30.

OCTOBER, 2014

Triangle Coalition's 14th Annual STEM Education Conference

ITEEA will have strong representation in the legislative lobbying sessions held in Washington, DC. We will be providing robust examples and testimony in support of, and in promoting, our profession while representing what our members deliver to all students each and every day.

International STEM Education Association (ISEA) Conference

This conference is held in Branson, MO and attracts teachers and administrators from technology and engineering education as well as mathematics, science, and other disciplines. James Boe, ITEEA President will be attending this conference and representing our association and profession.

NOVEMBER, 2014

ITEEA Board of Directors Meeting

The ITEEA Board of Directors, supported by the office staff, will be meeting in Milwaukee, Wisconsin on Nov. 21st-23rd for its annual business meeting. During that time Board members will also tour the Milwaukee hotel and convention center facilities and review plans for the conference in March, 2015.