ITEEA Peer Mentoring Task Force Project Update

ITEEA President-Elect Jared Bitting and longtime ITEEA member Terrie Rust have been working with Maureen Wiley (ITEEA Membership, Sales, and Marketing Director) to develop a peer mentoring program for our members. This was initiated as a task force item in the 2012-15 Strategic Plan. The ITEEA Peer Mentoring program was officially launched at this year’s ITEEA Conference. We have a number of extremely qualified individuals from across the United States signed up as mentors but we can always use more! Our first mentor/mentee pairs will be meeting for the first time this month. If you are interested in being a mentee, this program will allow current and future ITEEA members to grow and learn through the mentoring process and help them become key professionals working to make a difference. Mentors and mentees will assist one another and the profession at large by becoming involved in the larger picture of education. The activities and experiences will serve to help our members become better teachers, keep up on current trends locally, nationally, and globally, and help members become stronger leaders in the profession.

The methods of interaction and time investment for the mentors and mentees will be unique in every situation, as every person and situation will not be identical. There are many aspects of the program that the mentors and mentees will be asked to discuss with one another in order to tailor each mentor/mentee relationship in such a way to make it the best experience possible for all involved. There is, however, a list of potential tasks that has been developed in order to give potential mentors an idea of what they may do as part of their commitment to the program. To learn more about the criteria and potential tasks for those individuals interested in becoming mentors, or to sign up to become a mentee, go to http://www.iteea.org/Membership/Mentor/mentoring.htm

American Association for the Advancement of Science (AAAS) Affiliation Renewed

Last fall ITEEA completed the application packet, supplied the appropriate supporting documents, and applied to renew its affiliation with AAAS. The review process took place in February and ITEEA recently received official approval notification. The AAAS website is now updated to reflect affiliation with ITEEA.

AAAS includes 117,000 diverse individual members and 262 affiliated scientific societies and academies of science. Responsibility for the affairs of the Association is vested in a small administrative body, the Board of Directors, which is elected by the membership at large, and a Council of 86 members. This affiliation should strengthen our ability to promote technology and engineering education through our Integrative STEM education programs throughout the Association.

CONFERENCE NEWS

Application to Present Now Open

ITEEA is building on the success of the Milwaukee conference as we continue the planning for DC 2016 in earnest! The application to present is now open and will remain open until June 30, 2015. Consider applying to present next March—capitalizing on the opportunity to share your knowledge with your colleagues while creating some great PR for your program! The theme for the 2016 Conference, to be held at the Gaylord National Resort and Convention Center, located just outside Washington, DC, is “Collaborating to Build a Diverse STEM-Literate Society.”
Applications should emphasize how collaboration at all levels enhances educator knowledge and student learning in order to support a diverse STEM-literate society. Applicants should show how their presentation makes a connection to one or more of the four strands as well as provides practical resources for teachers. Collaboration implies letting your guard down and opening yourself to other ideas. In a society that may be getting more isolated due to technology, the technology and engineering teacher has a wonderful structure for increasing collaboration at all levels, thereby deepening student exposure to the positive outcomes of cooperation and collaboration. Remember that the online application deadline is June 30, 2015. Apply today!

Be a Part of the STEM Showcase in 2016!
The 2016 Technology and Engineering STEM Showcase provides a forum to feature your best exemplar of technology and engineering instruction! Please come and share your STEM 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. Showcasers are asked to illustrate a single element of technology or engineering teaching and learning that exemplifies good STEM instruction to share with conference participants. ITEEA will be compiling these exemplars to share online as well with our members. The online application deadline is November 1, 2015. Apply today!

AWARDS

ITEEA’s Foundation Established on AmazonSmile
Recently ITEEA’s Foundation for Technology and Engineering Education was approved as a nonprofit organization through AmazonSmile: a simple and automatic way for you (and everyone connected to the Technology and Engineering profession) to support ITEEA’s FTEE every time you shop, at no cost to you. When you shop at smile.amazon.com, you’ll find the exact same low prices, vast selection, and convenient shopping experience as Amazon.com, with the added bonus that Amazon will donate a portion of the purchase price to support the education of future technology and engineering teachers. Click here https://smile.amazon.com/ch/52-1426174 to support ITEEA’s Foundation at AmazonSmile!

NSTA Congratulates ITEEA Award Winner
Dr. Kenneth Roy, co-author of ITEEA’s newly updated Designing Safer Learning Environments for Integrative STEM Education, was presented with the Prakken Professional Cooperation Award in Milwaukee. Dr. Roy has long been associated with NSTA as a renowned expert on safety in the classroom. We were pleased to see that NSTA is now following ITEEA on Facebook and that the information regarding Dr. Roy’s award was shared by NSTA via both Facebook and Twitter (with a link back to the ITEEA awards page).

FORGING NEW PARTNERSHIPS

Collaborative Effort Connecting ITEEA and NSTA for 2015 STEM Forum
ITEEA will be participating as a sponsor at NSTA’s 2015 STEM Forum & Expo in Minneapolis, MN on May 20-23, 2015 at the Minneapolis Convention Center. ITEEA will have a significant presence at the Forum with a booth next to the NSTA registration area to promote Integrative STEM Education. We are scheduled to also provide STEM workshop sessions. We will share what our association is about, how to join through our individual and group membership programs, along with delivering key essentials on our STEM+CTL to learn about opportunities surrounding our new STEM initiatives for 2015 and beyond. Participants attending our workshops will learn about EbD-TEEMS (elementary curriculum) and the secondary STEM-based model program; Engineering by Design™ with the new “iSTEM FocalPoints”—a collaboration of NGSS, CCSS, STL, and the NAE Engineering Habits of Mind. We encourage your attendance as well! ITEEA members will receive the same discount offered to NSTA members.
100Kin10 Network
ITEEA received notification that it was accepted as a partner within the “100Kin10” network. The “100Kin10” is a networked approach to providing America’s classrooms with 100,000 excellent STEM teachers by 2021 while supporting tens of thousands more. This program supports partners to reach the shared goal of 100Kin10 and achieve their unique, ambitious commitments in one of three strategic areas:
1. To increase the supply of great STEM teachers by recruiting and preparing more of them better;
2. To retain great STEM teachers by transforming how they are hired, supported, and developed, so that they continue to improve and inspire more students; or
3. To advance the goal of the 100Kin10 network by changing policy, telling the story, and funding the work over the long haul.

Itea will be actively participating in the 2015 summit in Chicago on May 12-14, 2015. ITEEA will work to identify both resources and strategies to recruit students in becoming technology and engineering educators. For more information, visit http://www.100kin10.org.

ITEEA MEMBERSHIP

ITEEA is always on the lookout for new members to join us. We need YOU to make it happen! Please direct anyone who is interested to www.iteea.org/Membership/membership.htm

New Institutional Member
The newest member to join ITEEA as an institutional member is Blaze Education. Blaze is a new kind of educational company built from the ground up for the 21st Century student. Blaze is a global K-12 research and development center specializing in Integrated STEM curriculum and learning environments that build the skills students need to thrive in higher education, in the business world, and in life. Terrie Rust (longtime ITEEA member and past Affiliate Representative) has joined Blaze as the Director of Curriculum.

ITEEA Institutional membership includes both colleges/universities and organizations/nonprofits. To see a list of current ITEEA Institutional members, visit http://www.iteea.org/Resources/institutionalmembers.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 http://www.iteea.org/Marketplace/corporatemembers.htm.

Current Membership Promotions
Membership promotions are ongoing and are updated periodically. Currently, ITEEA is offering the following member promotions:
• TSA Advisor - one-year Professional Membership for $50 (expires June 30, 2015).
• May STEM Connections - join by May 30 (new members only) and receive a $15 discount.
• State Conference - $10 off for new members.
Please be sure to always remind your colleagues to renew or join as new ITEEA members!
Post-Conference Reflection from ITEEA’s STEM + CTL

The Milwaukee conference provided STEM + CTL with an opportunity to collaborate with CSL, CTETE, and the Children’s Council, as well as EbD-Curriculum Partners (ECP). CTL staff either presented or co-presented as part of Council programming. The CSL and CTETE Councils were also featured prominently as part of the Administrator Strand, with Phil Reed representing CTETE and Lazaro Lopez from Chicago being an invited CSL guest speaker. The Center is now making plans for the Administrator Strand in DC and hopes to further involve all the ITEEA Councils. The Research and Assessment arm of the Center also played a pivotal role in both the Administrator Strand and collaborative sessions presenting research and opportunities to engage in integrative STEM education approaches and upcoming STEM + CTL initiatives.

EbD Curriculum Partners also played a pivotal role as they provided sponsored presentations and materials that connect to STEM + CTL’s Engineering byDesign™ Model Program. These included EPICS (Purdue) and BirdBrain Technologies highlighting new EbD™ units of instruction. Additionally there were presentations by partners such as the Community College of Baltimore County and by Kansas’ ESSDACK, highlighting post-secondary articulation (EbD and post-secondary Engineering Technology programs) and how to grow a STEM + CTL Consortium from scratch.

Additionally, the CTL’s Teacher Effectiveness Coaches (TECs) put on workshops (EbDLabs) for teachers. EbDLabs are 3-4 hour hands-on workshops that enable teachers to get a flavor of what EbD courses are all about. Add to this the preconference workshops in which the new STEM + CTL Consortium product deliverables were unveiled. The TECs found the week to be exhilarating and rewarding—but a bit tiring! Next up for them are summer workshops beginning in early June. Hat’s off to the STEM + CTL Curriculum and Instruction unit that organized and delivered materials for all the workshops in “EbD-Central” and made sure that all participants were engaged throughout the week.

STEM + CTL – Special Projects TSA Leadership “Think Tank”

ITEEA’s STEM + CTL participated in a “think tank” on the future of the Technology Student Association’s leadership initiatives. Meeting for two days, the leadership team discussed past, current, and future TSA leadership programs. The meeting was guided by a shared leadership model. Participants included Tanner Huffman (ITEEA), Mary Jo Patterson (TSA Emeritus), Jerry Ridgeway (Virginia TSA), Tonya Vandergriff Childress (Tennessee TSA); and Myka Raymond (Colorado TSA). The goal of the “think tank” was to expand TSA’s mission of leadership preparation and envision a comprehensive TSA leadership program.

What is Tech Fluency?

ITEEA’s STEM + CTL’s Associate Director, Tanner Huffman, was a member of the “What is Tech Fluency” panel at the first annual Context Conference at Carnegie Mellon University. Other members of the panel included Dustin Stiver (The Sprout Fund), Illah Nourbakhsh (CREATE Lab), Todd Hoffman (Environmental Charter School), Jeffrey Carver (West Virginia University), Cynthia Pulkowski (ASSET STEM Education), Roberta Schomburg (Carlow University), and Lou Karas (West Liberty University). Dr. Huffman’s addressed “What does Tech Fluency look like in the classroom?” He shared his perspective of technological fluency with a focus on standards-based curriculum and classroom instruction guided by Standards for Technological Literacy.
UPDATES FROM ITEEA COUNCILS

ITEEA’s Children’s Council Seeks Presenters
Come share the great things you are doing in elementary STEM and submit a proposal for the 2016 ITEEA Conference. ITEEA’s Children’s Council focuses on STEM topics in grades prekindergarten through 6. Click here to complete the application to present a Children’s Council session. The 2016 conference will be in Washington, DC on March 2-4. The deadline to apply is June 30, 2015. Note: Presenters must be ITEEA members and register for the conference by December 1, 2015. Questions can be emailed to Thomas Roberts, VP of Programming for the Children’s Council. Thank you for considering sharing the exciting things you are doing with elementary STEM.

UPDATES FROM STATE ASSOCIATIONS

Meet ITEEA’s Newest Affiliate Representatives
David C. Campbell, Assistant Professor for Engineering and Technology Education, at the University of Idaho has replaced Janel Kerr. He can be reached via email at DaveC@uidaho.edu

Scott Barholomew, a PhD student at USU, has replaced Doug Livingston. Scott is also participating in the 21st Century Leadership Academy and is the TEECA Competitive Events Coordinator. He can be reached via email at scott.bar-tholomew@aggiemail.usu.edu

Position Paper in Connecticut (CTEEA)
CTEEA, along with several of its members, has been working on a position paper regarding STEM in Connecticut, where there is currently no formal definition of STEM. Additionally, CTEEA believes that technology and engineering teachers throughout our state do not perceive STEM the same way nor realize the importance of how STEM can solidify technology and engineering educations’s role and importance with the core subjects. The purpose of the position paper is to not only define STEM but also define how to change, implement, and advocate for our role within STEM in our schools, district and state. The initiative began two years ago with “meet and greets” throughout our state to reflect and discuss our experiences with STEM and what we thought it should look like. At these events we collected all of the input and began to craft a definition of STEM. More importantly, we discussed what we as teachers would need to change programs both philosophically and physically. Last year’s conference theme revolved around STEM and offered workshops and discussion groups to accomplish the same goals as the “meet and greets”—but with a different pool of teachers. In late 2014 a committee began working on the position paper. After several data review meetings, we found several keywords kept coming up. At our fall conference, we asked all attendees to participate in on one large session, split into five small groups, and, using the key words we found from our data, to begin crafting a definition of STEM. The committee drafted part one of our position paper in which we have developed a definition, vision, and philosophy of STEM and our role as technology and engineering teachers regarding STEM. We have continuously sent disseminated our work to all technology education teachers throughout Connecticut for review and feedback. We are now at the point of working on part two of our position paper in which we are beginning to look at ways to implement this changes as well as to determineand how to help our teachers to be successful doing so. Our goal is to have the draft of part 1 and 2 completed by our fall conference and ask for our membership to vote on approval. If passed, we can share it with all TEE teachers throughout our state and begin phase two in which we start to work with the science and math teachers assoiations along with the the admnisitrators association in sharing our position regarding STEM.

Nebraska News
April was a busy month in Nebraska for Engineering and Technology Education events. The Nebraska SkillsUSA State Leadership and Skills Conference was held April 15-17. Over 1500 students and advisors converged on Omaha for three full days of intense competition, leadership building, and great camaraderie. The state champions are looking forward to traveling to Louisville in June to participate in the National Leadership and Skills Conference.
The Nebraska Educational Technology Association Conference was also held in Omaha during April. There was a strong showing of the state’s Engineering and Technology Education teachers, with many presenting on topics such as Robotics, 3D printing, Maker Spaces, and information technology integrating in E&T classes. One of the highlights of the conference was a keynote address given by Nebraska’s Governor Pete Ricketts, in which he emphasized the need for more engineering, technology, and career education courses for students to ensure a quality workforce for our state and country.

**New York News**

*New York Technology and Engineering Education Association sends their message straight to the TOP:*

Dear Senator Gillibrand:

I am writing to thank you for sponsoring the Manufacturing Universities Act of 2015 and to ask that you consider expanding the efforts to build an effective pipeline of skilled labor. We cannot rely solely on engineering colleges/students as a solution because the need for a skilled workforce is not limited to engineers. As quoted on your web site, “Access to engineers and skilled tradesmen is critical for the success of manufacturers large and small, in WNY and nationwide,” said Benjamin Rand, Chairman of the American Small Manufactures Coalition.

An effective skilled labor pipeline must expose students to Technology and Engineering Education (T&E) in the elementary school, where it sparks an interest and nurtures talent, and then continue through high school. CTE programs such as T&E are the reason that many students remain in school and graduate. The hands-on, minds-on approach to learning about the human built world makes learning relevant and encourages them to explore various STEM related careers.

Today’s Technology and Engineering programs are preparing students for college and career by:

1. Integrating core academic skills while applying them to everyday situations, which students will ultimately experience in the workplace and in real life;
2. Providing job-specific, technical skills such as computer aided design, 3D modeling, precise measurement, and materials processing, which are critical skills in manufacturing careers; and
3. Reinforcing employability skills including creativity and innovation, problem solving, critical thinking, communication, time management, and responsibility, all of which are essential in any career.

Technology and Engineering programs have a proven track record in developing students who can successfully go on to pursue a post-secondary degree and/or employment in their particular field. Ultimately, T&E programs prepare students to grow into productive and successful citizens who contribute to their communities, the State, and the nation.

Yet, due to lack of State funding, T&E programs continue to be minimized or eliminated in schools across New York. On behalf of our students as well as the growing number of manufacturing industries in our State, I do hope we can count on you to support Technology and Engineering Education programs in grades K-12 as well as in community colleges Statewide. On behalf of the 2700 educators we represent, I offer the NYSTEEA’s assistance with any effort that will help build a solid K-16 STEM pipeline in our State.

Sincerely,

Alta Jo Longware, President 2014-16

**More From NYSTEEA’s President**

As the NYSTEEA president, I want to say that it is my pleasure to work on behalf of all the technology and engineering educators and students across our state. It’s been ten years since my first term as President of NYSTEEA, when our primary goal was to ensure that SED maintained the middle school mandate for Tech Ed and FACS. Since that time, my involvement with NYSTEEA has continued in many different capacities including both Executive Secretary and Vice President to several Presidents. The experience has strengthened my commitment to ensure that Technology and Engineering Education remains in the forefront during the current STEM movement and in the SED proposed multiple pathways to graduation.
To be successful, NYSTEEA must help strengthen the foundation of our profession and build a system of support for Technology and Engineering programs in grades K-12. To accomplish this task I have set the following goals:

1. Increase advocacy efforts through support from our network of stakeholders including business, industry, parents, and community, as well as other professional organizations.
2. Organize and/or provide quality professional development specific to Technology and Engineering Education, STEM and/or CTE approved pathways.
3. Improve communication with our members through multiple media, which will include rebuilding the NYSTEEA.org website and distributing monthly e-news updates as well as continuing the monthly newsletter of electronic resources and publishing printed journals.

NYSTEEA stepped up our efforts towards meeting these goals early this summer. The T&E was well represented during the STEM Institute at Alfred University. Many T&E educators attended and NYSTEEA’s Charles Goodwin was conference chair or the man behind the curtain so to speak. I had the pleasure of presenting “Design Folios-Integrate STEM, the Common Core and More” to a large group of S, T&E, and M teachers. Kudos to the STEM Collaborative for organizing an excellent conference.

The following week, I was off to Utica where I participated in an outstanding Engineering byDesign training at the Oneida-Herkimer BOCES. EbD is a standards-based curriculum, which includes lesson plans, resources, and hands-on activities, that can be easily integrated into the most basic classroom or T&E lab. Samples of the EbD Curriculum for elementary, MS and HS can be found on ITEEA’s website.

In early August, a NYSTEEA team attended the Career and Technical Education, Technical Assistance Center (CTETAC) Leadership Seminar in Latham. Working in conjunction with other NYSACTE association leaders, NYSTEEA outlined a plan to improve our organization, develop a public relations plan to promote T&E, and to advocate for the CTE graduation pathway option for all students.

As keynote, Commissioner King, expressed his full support of CTE and the multiple pathways option for college and career readiness. You can review the NYSACTE recommendation for “Developing College and Career Ready Students” The Board of Regents will be addressing the pathways proposal during their September session. It is critical that T&E educators contact the Regents to express support for the pathways. Sample letters for individuals and businesses are available at www.NYSACTE.org.

NYSTEEA is Growing

On behalf of the Executive Board, I welcome Mark Hardy, Associate Professor at SUNY Oswego, as the NYSTEEA Vice President. His expertise in teacher preparation will be valuable as NYSTEEA undertakes a teacher recruitment campaign to help meet the demand for T&E educators as well as regional professional development opportunities specific to technology and engineering educators.

I also welcome the following individuals who have recently joined the NYSTEEA team:

- Eric Phillips, CTE Supervisor of FACS and Technology Education at North Colonie Schools and President Capital District TEE as delegate to NYSCEA and NYSACTE.
- Jessie Perison, Technology Instructor, Randolph High School as a member of CTETAC Leadership Team.
- Joe Merrihew, T&E Educator at Saranac Lake Middle School as NYSUT Technology & Engineering Educator Liaison

NYSTEEA is membership is growing and as a result, the organization is growing stronger. When we advocate for Technology and Engineering at the State Education Department, we are advocating on the behalf of all our members, which should be every T&E teacher in State. If you know a T&E educator who is not a member, please encourage him/her to join. Every student in NYS deserves all our support.
**Professional Development Initiatives**

NYSTEEA is already in the planning stages for several targeted T&E educator professional opportunities. Underway are plans for a workshop on nanotechnology sponsored by Erie Community College in Buffalo. Also, The Skyscraper Museum in New York City will offer a workshop on NYC and International Skyscrapers. The dates are to be determined.

If there is a STEM based college or other connection in your area, NYSTEEA will gladly assist with organizing a local workshop. Please contact me at ajlatnystea@westelcom.com if you have any questions, suggestions or concerns.

Thank you for your support! I look forward to working with you this year and advocating for all T&E programs, educators and students.

Alta Jo (AJ) Longware

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**News from North Carolina**

NCTEDE (North Carolina Technology, Engineering and Design Education Association) is holding its 1st Annual Spring Conference May 14-15, 2015 at the Nesbitt Discovery Academy in Asheville NC, one of North Carolina’s state-of-the-art STEM high schools. Networking and industry events will include Police Bomb Robotics, a brewery tour, a Biltmore Estates STEM in Education manufacturing tour, and a career awareness tour. Guaranteed to be fun and engaging!