

2020

2020 President's Message

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2020 President's Message

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We must all embrace the reality that we are ambassadors of our profession.

First and foremost, thank you! I am honored and humbled to serve as the 75th President of ITEEA. Like many in our field, I did not start out in technology education but had great leaders who helped me find my way. I did take industrial arts in junior high, but in senior high I took business courses and started college as a business major. I struggled in my college business courses because I did not feel engaged or see the relevance. Ultimately, my grades suffered, and I was placed on academic suspension. (That's right, I invented the gap year!).

Kidding aside, my first experience with college taught me the value of failure. That point in my life was a time of significant growth where I worked full time, paid for my own apartment, and attended the local community college. Eventually, several friends who were studying technology education encouraged me to consider that option. I reflected and realized how much I enjoyed tinkering with my bike, skateboard, surfboards, and car. I also had several construction jobs framing houses and working for

an electrician that I enjoyed. My friends had me intrigued, so I decided to try a couple of technology classes. Once I experienced the personal connection of teaching and the disciplinary content, I was hooked. The engagement and relevance of technology education was and still remains crystal clear.

A second point of clarity for me has been the dynamic nature of our field. I have been fortunate to serve as a secondary teacher, an administrator at various levels, an elected leader in my state and national organizations, and as a teacher educator. Through these experiences I have developed the belief that our field is the toughest yet most relevant and rewarding subject in education. Think about this for a minute. Like educators in all subjects, we learn about adolescent development, curriculum, instructional methods, assessment, and content.

However, we also engage students in the most active learning environments in school that require a knowledge of tools, machines,

by
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materials, and safety. Additionally, our content base changes much more rapidly than other disciplines, and we must update and maintain these complex environments. Finally, we are one of the most interdisciplinary subjects (well beyond Integrative STEM) with strong connections to technical language and writing, history, and the arts. Be proud that you teach the toughest, most relevant subject in education.

The stereotype that we are merely shop teachers in the back of the school is often used by people who do not understand what we do. More and more people, however, have come to realize the great things we do and are adopting our practices, albeit in limited ways. Makerspaces in library media centers, engineering design in science classes, robotics clubs, and other activities introduce students to technology and engineering, but these experiences typically do not provide the deeper learning opportunities students receive in our technology and engineering programs and courses. Initially, we may be inclined to react defensively to "shop teacher" comments and perceived turf issues, but I always try to embrace these optimistically as teachable moments and potential points of collaboration.

Our Role

We must all embrace the reality that we are ambassadors of our profession. This transcends job titles such as teacher, administrator, and teacher educator, and is about our overall career journeys as professional educators. By virtue of being an ITEEA member, you have embraced your ambassadorship. You are engaged beyond your daily duties, and you are active in the premier professional organization for technology and engineering education. So where to from here?

Technology and engineering educators are great at problem solving, but in my experience, they are just as adept at problem finding. For example, we develop authentic lessons and assessments all the time based on current socio-technological events. I want to tap into your innate problem-finding skills to make ITEEA even better. First, I want to share some of my thoughts on our profession and ITEEA and ask that you reflect on these ideas and use your problem-finding skills to expound upon them. I am sure you already have some great ideas you have been reflecting on. Finally, since problem finding is proactive, develop a plan for bringing your leadership ideas to fruition.

A Dynamic Association for a Dynamic Field

ITEEA always has projects in the works, but several current projects are very significant. Foremost is the update of our content standards from *Standards for Technological Literacy* (ITEEA, 2007) to *Standards for Technological and Engineering Literacy (STEL)*. The STEL project is led by Dr. Thomas Loveland, DTE, Dr. Marie Hoepfl, and our Executive Director, Steven Barbato,

DTE. Through their leadership, ITEEA obtained National Science Foundation (NSF) funding to convene 40 educators last August to begin the revision process. Since then, there has been a continuous flurry of iterative writing and reviewing to publish a final STEL document in 2020. If you have not kept up with the project's activities, I encourage you to review the materials on the project webpage: www.iteea.org/STEL.aspx.

Publishing STEL is just the beginning. There will be a tremendous need for professional development at all levels, updates to Engineering by Design™, as well as many other standards-based activities. It is difficult to predict what opportunities will be connected to STEL, but you can help lead these efforts. When *Standards for Technological Literacy* (ITEEA, 2000/2002/2007) was released, no one could have predicted it would be translated into multiple languages, referenced in numerous projects of the National Academies, or even serve as a foundation for the *National Assessment of Educational Progress* (i.e., The Nation's Report Card) *Technology and Engineering Literacy* (NAEP TEL) assessment. Where will STEL take us? More importantly, where will you, as an ambassador, take STEL?

Two other projects offer additional leadership opportunities. ITEEA 2019-2020 President, Michael Sandell, DTE, has led a comprehensive update of our strategic plan and the associated task forces that carry out the strategic initiatives. Senior Fellow, Dr. Johnny Moye, DTE, has been working on a comprehensive study of trends and issues in technology and engineering education. Both projects were undertaken to guide our profession, and they were designed to foster collaboration between task forces, councils, state affiliate associations, and other groups. As ambassadors, we are all already involved with many professional groups. I ask you to challenge these groups on ways to bring the ITEEA strategic plan and the recommendations of the trends and issues study to life.

Collaboration is already spreading well beyond our task forces, councils, and state affiliate associations. ITEEA has published a joint document authored by Advance CTE, Association of State Supervisors of Mathematics, and Council of State Science Supervisors titled *STEM4: The Power for Change* (see www.iteea.org/STEM4.aspx). The three principles outlined in this document are:

Principle 1: STEM education should advance the learning of each individual STEM discipline.

Principle 2: STEM education should provide logical and authentic connections between and across the individual STEM disciplines.

Principle 3: STEM education should serve as a bridge to STEM careers.

These principles allow each content area to stay true to its discipline, engage in meaningful ways, and prepare students for relevant employment opportunities. We have many opportunities here to address some longstanding issues. For example, ITEEA has traditionally had a general education, technological-literacy for-all focus, but we should certainly look at ways to strengthen our prevocational role. If you look at the 16 Career Clusters and 79 Pathways (NASDCTEC, 2015), it is obvious that they all require students to have some level of technological literacy. What are ways we can foster these career connections?

ITEEA has also been collaborating with the STEM Leadership Alliance (www.stemleadershipalliance.org/) and other associations such as the National Council of Teachers of Mathematics (NCTM), National Science Teaching Association (NSTA), and the American Society for Engineering Education (ASEE). These connections have provided networking opportunities for integrative STEM education as well as insights into other professional education associations. For example, many associations have divisions and special interest groups (SIGs), whereas ITEEA has councils that basically serve the same functions as divisions. However, given the breadth of technology and engineering education, should we consider SIGs? Some possible special interest groups may include: design, the history and philosophy of technology, career and technical education (CTE), information technology, integrative STEM, instructional technology, engineering, and informal learning environments.

Hopefully my thoughts and questions have you thinking or, better yet, planning. There are certain words that command our attention, evoke strong emotions, and shape us. One of these words for me is "inspire." My college friends inspired me to start this path, and I am hoping you will continue with me because I get inspired by you, the ambassadors of our field. Thank you.

References

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ITEEA is one of 67 professional education associations that belong, as a group, to the Trust for Insuring Educators. The TIE insurance program consists of more than a dozen insurance plans, including life, accident, disability, health, long-term care, auto, identity theft, legal, and professional liability coverages underwritten by some of the nation's leading insurance companies. Many plans are specially designed for educators, with features, benefits, and rates not readily available elsewhere in the market.

TIE insurance plans are available exclusively to members of participating TIE associations such as ITEEA. In addition, all NEW ITEEA members receive a free \$60,000 life insurance policy just by joining ITEEA! Also take advantage of excellent reduced group rates for Liability insurance (\$99 for a million dollars of coverage), Identify Theft, Legal Shield, Health care, and much more. Learn more about specific plans offered in your state for ITEEA members.



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