



TECHNOLOGY AND ENGINEERING EDUCATION



Bringing STEM to Life

BUILDING A STEM TOOLKIT

Connecting Globally: A Collaborative Learning Experience

INTERNATIONAL PERSPECTIVE

STEM in the New Zealand Context

BRINGING STEM TO LIFE

Starting from Scratch: The Lesson Planning Disadvantage

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2024 LEADERS TO WATCH

Those who have contributed to the technology and engineering education field for many years are known for their teaching, written work, presentations, research, and recognition received from professional groups. The selected individuals who are highlighted here have shown outstanding leadership ability as educators early in their careers.

This list is by no means inclusive. There are many other professionals in the field with similarly impressive qualifications.

Individuals who want to recognize other technology and engineering educators with outstanding qualifications should forward their vitae and a sponsoring letter to ITEEA for consideration.

The leaders of our field are our future; we should promote and encourage them to realize their potential.



BRENT CURRAN

**Secondary Computer Science, IT,
and Technology Education Consultant
Office of Career and Technical Education
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of Public Instruction
Raleigh, NC**

Brent Curran unknowingly began his career in education while taking part in his high school engineering program. His principal tapped him to promote the program to the surrounding middle schools in the district and Brent would later spend his summer working as a technology camp counselor for rising high schoolers.

As a product of Career and Technical Education (CTE), Brent started community college to begin a degree in IT. During his studies, he worked as a manager in retail and enjoyed training his team on various equipment to expand their skills. He ultimately realized his passion for education and transferred from the IT program into the College of Education at North Carolina State

University (NCSU). Brent is a double alumnus of NCSU with his Bachelor's and Master's of Education in Technology, Engineering, and Design. While at NCSU, Brent was a member of its Technology and Engineering Education Collegiate Association (TEECA) chapter. During his first year in TEECA, alongside his late mentor, Joe R. Busby, Brent realized the value of intracurricular experiences for all.

After completing his bachelor's degree, Brent taught *Scientific & Technical Visualization, Game Art & Design*, and CTE Advanced Studies courses to high school students in Wake County, NC. During his time as a high school teacher, he co-advised a Technology Student Association (TSA) chapter, coached TEAMS (Tests of Engineering Aptitude, Mathematics, and Science), served on the Media Technology Advisory Committee, and chaired the Technology Education PLT. He first became involved with ITEEA as a conference presenter with Joe Busby. Brent received the Young Educator award from the North Carolina Association for Career & Technical Education (NC ACTE), and an Advisor of the Year award from TSA.

Today, Brent works as an education consultant in the Computer Science, IT, and Technology (CSITT) discipline within the Office of Career and Technical Education for the North Carolina Department of Public Instruction (NCDPI). His day-to-day responsibilities include the acquisition of curriculum and assessment, professional development, and field support for approximately 30

secondary education courses. His other projects include serving on the CompTIA National CTE Advisory Committee, assisting with NC TSA operations and judging, and serving as the ITEEA State Champion for North Carolina.

In his spare time, Brent may be found at a coffee shop, theater, science fiction convention, or at a goth concert when not spending time at home with his wife, Emma, and their pets Fury, Nebula, and Drax.



MEGAN DOYLE

Design and Engineering Teacher
Avon Middle School North
Avon, IN

Megan recently earned a bachelor's degree in Engineering Technology Education with a minor in Design and Innovation, along with a concentration in K-12 Integrated STEM Education from Purdue University. Her journey in this field began during high school when she enrolled in Project Lead the Way courses, igniting her passion for design, engineering, and technology education.

Throughout her undergraduate years, Megan actively participated in Purdue University's Technology and Engineering Education Collegiate Association (TEECA) chapter. Additionally, she served as the national president of TEECA, where she repre-

sented and advocated for collegiate TEECA members across the country. As president, she also led the national officer team in the collaborative planning and execution of the international conference, outreach events, and communication with ITEEA.

Megan is currently in her first year as an educator at Avon Middle School North (IN). In this role, she leads the PLTW Gateway Design and Engineering program, where students learn how to utilize the design process and the safe operation of machinery to construct products that solve problems. Within this program, students acquire valuable skills in problem-solving, collaboration, critical-thinking, and creativity. Megan finds the most rewarding aspects of teaching to be the establishment of connections with her students and witnessing the remarkable growth of their self-confidence within her classroom. Megan looks forward to the personal growth of her students and her own professional development in the coming year. She is excited about her prospects as a Technology and Engineering educator and what the future may hold.

Eric Deneault, who has worked with Megan in multiple capacities as part of his roles within TEECA shared, "as TEECA president, Megan was an exceptional undergraduate leader who not only made a significant impact on the organization but also demonstrated tremendous potential to become a future leader in the field of Technology and Engineering Education (TEE). Her passion, commitment to growth, vision, and networking skills will undoubtedly provide a positive impact on current and future TEE professionals."

During her free time, Megan enjoys outdoor adventures, staying active, and traveling when she can. These activities hold a special place in her heart, especially when shared with loved ones.



CHIH-JUNG KU, PHD

National Taiwan Normal University
Taipei City, Taiwan
Visiting Scholar at Purdue University
West Lafayette, IN

Chih-Jung Ku earned her Ph.D. from National Taiwan Normal University, a prestigious institution ranked 26th in the QS World University Rankings by Subject 2022, and is a dedicated advocate for advancing technology and engineering education, with a profound passion for research and teaching.

Chih-Jung's educational odyssey began at NTNU, where she earned her bachelor's degree in Engineering in 2015, demonstrating early on her penchant for the intricacies of technology. Her academic curiosity led her to broaden her horizons further, culminating in attaining a master's degree in Education in 2020. Alongside her formal education, she fortified her commitment to pedagogy by acquiring a teaching certificate in 2015, which became the gateway to over seven years of invaluable teaching experience in secondary schools.

Currently, Chih-Jung's academic journey has taken her across the globe as a visiting scholar at Purdue University. In this international academic crucible, she collaborates with leading experts and esteemed