Curriculum Vitae for:

# Tyler S. Love, Ph.D., DTE

Penn State Harrisburg Department of Teacher Education 777 W. Harrisburg Pike Olmsted Building W319 Middletown, PA 17057 (717) 304-5869 (cell) TSL48@psu.edu Research Gate profile Google Scholar profile ORCID: 0000-0002-1161-1443

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## -EDUCATION-

<b>Virginia Polytechnic Institute and State University (Virginia Tech),</b> Blacksburg, VA <i>Major</i> : Curriculum and Instruction					
Concentration: Integrative STEM Education Graduate Certificate: Higher Education Administration: Student Development and Learning Track					
Degree: Ph.D.					
Dissertation Title: Examining the Extent to Which Select Teacher Preparation Experimentation Technology and Engineering Educators' Teaching of Secondary Content and Practices.					
<b>Virginia Tech,</b> Blacksburg, VA <i>Major</i> : Curriculum and Instruction	2012				
Graduate Certificate: Integrative STEM Education Degree: MAEd					
University of Maryland Eastern Shore (UMES), Princess Anne, MD <i>Major</i> : Technology Education (Technology and Engineering Education) <i>Degree</i> : BS, Summa Cum Laude	2009				
Activities: Honors Program Student and Division 1 Student-Athlete					
TEACHING EXPERIENCE					
Penn State Harrisburg 2	018-Present				
Assistant Professor of Elementary/Middle Grades STEM Education, Department of T Education					
• Director of the Capital Area Institute for Math and Science (CAIMS)					
University of Maryland Eastern Shore (UMES) Tenured Associate Professor	2017-2018				
<ul> <li>Coordinator of Technology and Engineering Education</li> <li>Associate Member of the Graduate Faculty</li> </ul>					
<b>University of Maryland Eastern Shore (UMES)</b> Assistant Professor	2015-2017				
Coordinator of Technology and Engineering Education					
Associate Member of the Graduate Faculty					
Virginia Initiative for Science Teaching and Achievement (VISTA) Project: Title I Teacher Recruiter and Professional Development Instructor, <i>Blacksburg</i> ,	2012-2014 VA				
Howard County Public School System, Maryland Technology and Engineering Teacher, JV Baseball Coach	2010-2011				
Queen Anne's County Public Schools, Maryland Technology and Engineering Teacher, JV Baseball Coach	2010				

PROFESSIONAL EXPERIENCE

<b>Pennsylvania Department of Education (PDE) -</b> <i>Academic Standards for</i> <i>Science, Technology and Engineering, and Environmental and Ecology Educate</i> <i>Content Writing Committee: One of 60 authors selected</i>	2020-2022 ion				
<b>International Technology and Engineering Educators Association (ITEEA)</b> - <i>Standards for Technological and Engineering Literacy</i> <b>Author, and Benchmark Crosswalk Matrix Development Committee</b> <i>One of 40 authors selected</i>	2019-2020				
<b>Safety Editor, Technology and Engineering Teacher</b> Responsible for editing the Safety Spotlight articles published in ITEEA's Technol Engineering Teacher journal	2016-2021 ogy and				
Maryland State Department of Education (MSDE) - Maryland Technology Education Standards: Grades 6-12 One of 31 authors invited	2016				
Virginia Tech School of Education: Graduate Research Assistant	2011-2015				
ITEEA Elementary STEM Curriculum: Assessment Item Writer	2012				
PROFESSIONAL LICENSURES AND CERTIFICATIONS					
Occupational Safety and Health Administration (OSHA) Authorized OSHA Trainer • General Industry Safety and Health OSHA 511 Certificate	2021-2025 2020-2025				
• OSHA Standards for General Industry Pennsylvania Department of Education	2013-Present				
<ul> <li>Instructional I Certificate</li> <li>Technology Education: Grades K-12</li> <li>Maryland State Department of Education</li> <li>Professional Eligibility Certificate</li> <li>Technology Education: Grades 7-12</li> <li>Ancillary Credits in Reading and Special Education</li> </ul>	2010-Present				
PROFESSIONAL MEMBERSHIPS					

Technology and Engineering Educators Association of Maryland (TEEAM)2007-2018Technology and Engineering Educators Association of Pennsylvania (TEEAP)2004-Present

- Wilburne, J. (P.I.)., Mareno, A., Asempapa, R. S., & Love, T. S. (Co-P.I.). (2022-2027). Project PRIDE: Preparing and retaining secondary mathematics teachers who implement diversity and equity practices in high-need schools. Robert Noyce Scholarship Program grant, National Science Foundation (Award No. 2151091). (\$1,200,000).
- Love, T. S. (P.I.). (2021). A research, teaching, and professional development GRA mentorship experience in STEM education. Graduate Research Experience and Training grant, The Pennsylvania State University. (\$29,000).
- Love, T. S. (P.I.)., Cysyk, J., Tunks, R., Harter, K., & Attaluri, A. (Co-P.I.). (2021). Using physical computing to teach how a heart functions: A professional development experience for high school biology and engineering teachers. Commonwealth Campus Center Nodes grant, The Pennsylvania State University. (\$34,000).
- Love, T. S. (P.I.)., Asempapa, R. S., & Roufos-Abbey, N. (Co-P.I.). (2021). Teaching standardsbased mathematical modeling, science, and engineering concepts through open-ended 3D printing design challenges. K-12 Project Based Learning grant, Lancaster County STEM Alliance. (\$5,000).
- Love, T. S. (P.I.). (2020). Smart home design challenges for middle and high school students: Integrating Pennsylvania's K-12 computer science, technology and engineering, and health education standards. Smart Home Research Initiative grant, The Pennsylvania State University. (\$2,000).
- Potlakayla, S., Attaluri, A., Rios, C., Wilburne, J., Love, T. S., & Rudrabhatla, S. (Co-P.I.). (2018). Arts as a means to communicate science, technology, engineering, and mathematics: STEAM 101 course development. Office for General Education, The Pennsylvania State University. (\$15,000).
- Love, T. S. (2018). *Title III faculty development travel fund*. (2018 International Technology and Engineering Educators Association conference in Atlanta, GA). Division of Academic Affairs, University of Maryland Eastern Shore. (\$1,500).
- Love, T. S. (2017). *Title III faculty development travel fund*. (2017 National Science Teacher's Association conference in Los Angeles, CA). Division of Academic Affairs, University of Maryland Eastern Shore. (\$2,000).
- Love, T. S. (2016). *Title III faculty development travel fund*. (Comprehensive NSF Proposal Development Workshop at the University of Baltimore). Division of Academic Affairs, University of Maryland Eastern Shore. (\$1,000).
- Love, T. S. (2016). *High-impact educational practices fund*. (2016 International Technology and Engineering Educators Association conference in Washington, D.C.). Division of Student Affairs and Enrollment Management, University of Maryland Eastern Shore. [Funded conference travel and attendance for six students]. (\$2,600).
- Love, T. S. (2016). *Title III faculty development travel fund*. (2016 National Science Teacher's Association conference in Nashville, TN). Division of Academic Affairs, University of Maryland Eastern Shore. (\$1,700).
- Love, T. S. (2015). *Title III faculty development travel fund*. (102nd Mississippi Valley Technology Teacher Education Conference in Nashville, TN). Division of Academic Affairs, University of Maryland Eastern Shore. (\$1,100).

-PUBLICATIONS AND PRESENTATIONS-

## Books:

- Love, T. S., & Roy, K. R. (2022). Safer engineering and CTE instruction: A national STEM education imperative. International Technology and Engineering Educators Association. https://www.iteea.org/SafetyReport.aspx
- Roy, K. R., & Love, T. S. (2017). Safer makerspaces, fab labs and STEM labs: A collaborative guide! Vernon, CT: National Safety Consultants, LLC. ISBN-13: 978-0-692-92408-2.
- DeLuca, V. W., & Haynie, W. J. (2014). *Designing safer learning environments for integrative STEM education* (4th ed., revised by **T. S. Love** & K. R. Roy). International Technology and Engineering Educators Association.

## Journal Articles (peer reviewed):

- Love, T. S., Attaluri, A., Tunks, R. D., Cysyk, J., Harter, K., & Sipos, R. (under review). Examining changes in P-12 science and engineering educators' perceptions of teaching biomedical and computational thinking concepts: An integrated stem professional development experience. *Journal of Pre-College Engineering Education Research*.
- Love, T. S., & Asempapa, R. (under review). Examining secondary students' attitudes about coding after participating in a screen-based or physical computing unit. *International Journal of Child-Computer Interaction*.
- Love, T. S., Bartholomew, S. R., & Yauney, J. (under review). Examining changes in teachers' beliefs toward integrating computational thinking to teach literacy and math concepts in grades K-2. *International Journal of Child-Computer Interaction*.
- Hughes, A. J., & Love, T. S. (under review). Middle and high school student mathematics and science academic level: Predicting success during educator scaffolded problem-solving experiences. *International Journal of STEM Education*.
- Love, T. S., Napoli, M., & Lee, D. (under review). Examining pre-service elementary educators' perceptions of integrating science instruction using poetry. *Journal of Science Education and Technology*.
- Love, T. S., & Hughes, A. J. (in press). Engineering pedagogical content knowledge: Examining correlations with formal and informal preparation experiences. *International Journal of STEM Education*.
- Love, T. S., Attaluri, A., Tunks, R. D., Cysyk, J. & Harter, K. (2022). Examining changes in high school teachers' perceptions of utilizing 3D printing to teach biomedical engineering concepts: Results from an integrated STEM professional development experience. *Journal of STEM Education: Innovations and Research*, 23(1).
- Love, T. S., Roy, K. R., Gill, M., & Harrell, M. (2022). Examining the influence that safety training format has on educators' perceptions of safer practices in makerspaces and integrated STEM labs. *Journal of Safety Research*, 82(2022).
- Love, T. S., & Love, Z. J. (2022). The teacher recruitment crisis: Examining influential recruitment factors from a United States technology and engineering teacher preparation program. *International Journal of Technology and Design Education*. https://doi.org/10.1007/s10798-022-09727-4
- Love, T. S. (2022). Examining the influence that professional development has on educators' perceptions of integrated STEM safety in makerspaces. *Journal of Science Education and Technology*. <u>https://doi.org/10.1007/s10956-022-09955-2</u>
- Love, T. S., & Maiseroulle, T. (2021). Are technology and engineering educator programs really declining? Reexamining the status and characteristics of programs in the United States. *Journal of Technology Education*, 33(1), 4-20. <u>https://doi.org/10.21061/jte.v33i1.a.1</u>

- Asempapa, R. S., & Love, T. S. (2021). Teaching math modeling through 3D-printing: Examining the influence of an integrative professional development. *School Science and Mathematics*, *121*(2), 85-95. <u>https://doi.org/10.1111/ssm.12448</u> \*\*\*
- Love, T. S., & Griess, C. J. (2020). Rosie revere's orangutan dilemma: Integrating computational thinking through engineering practices. *Science and Children*, *58*(2), 70-76.
- Love, T. S., & Bhatty, A.\* (2019). The crumble: Integrating computer science through engineering design. *Technology and Engineering Teacher*, 79(2), 16-22.
- Love, T. S. (2018). The T&E in STEM: A collaborative effort. The Science Teacher, 86(3), 8-10.
- Love, T. S., & Wells, J. G. (2018). Examining correlations between the preparation experiences of U.S. technology and engineering educators and their teaching of science content and practices. *International Journal of Technology and Design Education*, 28(2), 395-416.
- Love, T. S., Wells, J. G., & Parkes, K. A. (2017). Examining the teaching of science, and technology and engineering content and practices: An instrument modification study. *Journal of Technology Education*, 29(1), 45-66.
- Love, T. S. (2017). Perceptions of teaching safer engineering practices: Comparing the influence of professional development delivered by technology and engineering, and science educators. *Science Educator*, 26(1), 1-11.
- Love, T. S., & Ryan, L. (2017). The crab boat engineering design challenge. *Technology and Engineering Teacher*, *76*(7), 8-14. \*\*
- Loveland, T. & Love, T. S. (2017). Technological literacy: The proper focus to educate all students. *Technology and Engineering Teacher*, *76*(4), 13-17.
- Love, T. S., & Strimel, G. (2016). Computer science and technology and engineering education: A content analysis of standards and curricular resources. *The Journal of Technology Studies*, 42(2), 76-88.
- Grubbs, M. E., Love, T. S., Long, D. L., & Kittrel, D. (2016). Science educators teaching engineering design: An examination across science professional development sites. *Journal of Education and Training Studies*, 4(11), 163-178. http://dx.doi.org/10.11114/jets.v4i11.1832
- Love, T. S., Love, Z. J., & Love, K. S. (2016). Better practices for recruiting T&E teachers. *Technology and Engineering Teacher*, *76*(1), 10-15.
- Love, T. S. (2015). Examining the demographics and preparation experiences of foundations of technology teachers. *The Journal of Technology Studies*, *41*(1), 58-71.
- Love, T. S., & Deck, A. (2015). The ocean platform engineering design challenge: Flooded with STEM content and practices. *Science Scope*, *39*(3), 33-40.
- Love, T. S., Kreiser, N., Camargo, E., Grubbs, M., Kim, E. J., Burge, P. L., & Culver, S. M. (2015). STEM faculty experiences with students with disabilities at a land grant institution. *Journal of Education and Training Studies*, 3(1), 27-38. http://dx.doi.org/10.11114/jets.v3i1.573
- Love, T. S., & Loveland, T. (2014). Exploring the proposition of a joint conference between state science, and technology and engineering education associations. *Journal of Technology Education*, 26(1), 2-21.\*\*\*
- Love, T. S. (2014). Safety and liability in STEM education laboratories: Using case law to inform policy and practice [Electronic supplement]. *Technology and Engineering Teacher*, 73(5), 1-13. Retrieved from http://www.iteea.org/File.aspx?id=86487&v=52ffd40f
- Love, T. S. (2013). Addressing safety and liability in STEM education: A review of important legal issues and case law. *The Journal of Technology Studies*, *39*(2), 28-41.
- Love, T. S., & Strimel, G. (2013). An elementary approach to teaching wind power. *Technology and Engineering Teacher*, 72(4), 8-14.

Love, T. S., & Valenza, F. (2011). Utilizing vacuum forming to make interdisciplinary connections. *Technology and Engineering Teacher*, *71*(3), 30-34.

- \* = Designates undergraduate student co-author
- \*\* = ITEEA award winning article
- \*\*\* = CTETE award winning article

#### Journal Articles (editor reviewed):

- Love, T. S., & Roy, K. R. (2021). Key findings from Wisconsin's responses to the 2020 national T&E education safety survey. *Interface: Journal of the Wisconsin Technology Education* Association, 61(1), 22-23.
- Love, T. S., Roy, K. R., & Sirinides, P. (2021). What factors have the greatest impact on safety in Pennsylvania's T&E courses? *Technology and Engineering Education Association of Pennsylvania Journal*, 69(1), 5-22.
- Gill, M., & Love, T. S. (2021). Laser focused on laser engraver/cutter safety. *Technology and Engineering Teacher*, 80(5), 21-23.
- Love, T. S., Duffy, B. C., Loesing, M. L., Roy, K. R., & West, S. S. (2020). Safety in STEM education standards and frameworks: A comparative content analysis. *Technology and Engineering Teacher*, *80*(3), 34-38.
- Roy, K. R., & Love, T. S. (2020). A clearer view of emergency shower and eyewash station requirements. *Technology and Engineering Teacher*, 80(1), 23-25.
- Love, T. S., & Roy, K. R. (2020). Preparing makerspaces and STEM labs for summer break: The OAH approach. *Technology and Engineering Teacher*, *79*(7), 26-29.
- Love, T. S., Roy, K. R., & Marino, M. T. (2020). Inclusive makerspaces, fab labs, and STEM labs. *Technology and Engineering Teacher*, *79*(5), 23-27.
- Loveland, T., **Love, T. S.**, Wilkerson, T. & Simmons, P. (2020). Jackson's Mill to Chinsegut: The journey leading to STEL 2020. *Technology and Engineering Teacher*, *79*(5), 8-13.\*\*
- Gill, M., Koperski, K, Love, T. S., & Roy, K. R. (2019). Developing a culture of safety through departmental planning. *Technology and Engineering Teacher*, *79*(1), 22-25.
- Love, T. S., & Roy, K. R. (2019). Field trip safety in K-12 and higher education. *Technology and Engineering Teacher*, 78(7), 19-23.
- Love, T. S. (2019). STEM education safety: Temporary concern or enduring practice? Examining the progress of safety in STEM education. *Technology and Engineering Teacher*, 78(6), 15-17.
- Love, T. S. (2019). Safety perspectives and resources from across the pond. *Technology and Engineering Teacher*, *78*(5), 34-37.
- Hartell, E. (foreword by **Love, T. S.**). (2019). Safety in DTE and crafts education in Sweden. *Technology and Engineering Teacher*, 78(4), 12-15.
- Love, T. S., & Roy, K. R. (2018). Who should make your maker spaces? ASEE Prism, 28(2), 54.
- Love, T. S., & Roy, K. R. (2018). Completing accident/incident reports: Recommendations to avoid legal pitfalls. *Technology and Engineering Teacher*, 78(3), 20-23.
- Love, T. S., & Roy, K. R. (2018). Converting classrooms to makerspaces or STEM labs: Design and safety considerations. *Technology and Engineering Teacher*, 78(1), 34-36.
- Love, T. S., & Tomlinson, J. (2018). Safer soldering in makerspaces and STEM labs. *Technology and Engineering Teacher*, 77(5), 20-22.
- Love, T. S., & Roy, K. R. (2018). Safety design challenge: Exciting students using STEM concepts. *Technology and Engineering Teacher*, 77(4), 21-24.

- Love, T. S., & Roy, K. R. (2017). 10 recommendations for a safer school year. *Technology and Engineering Teacher*, 77(1), 23-25.
- Love, T. S., & Roy, K. R. (2017). Tools and equipment in non-traditional spaces: Safety and liability issues. *Technology and Engineering Teacher*, *76*(8), 26-27.
- Love, T. S., Tomlinson, J., & Dunn, D. (2016). The orange pi: Integrating programming through electronic technology. *Technology and Engineering Teacher*, *76*(2), 24-29.
- Love, T. S., & Roy, K. (2016). 3D printing: What's the harm? *Technology and Engineering Teacher*, *76*(1), 36-37.
- Love, T. S., & Salgado, C. A. (2016). Teaching construction: A design-based course model. *Technology and Engineering Teacher*, 75(7), 22-28.
- Love, T. S. (2015). Innovative strategies for more engaging safety instruction. *Technology and Engineering Teacher*, 75(3), 26-32.
- Love, T. S. (2015). Preparing safer STEM literate citizens: A call for collaboration. *Tech Directions*, 74(9), 24-29. Retrieved from http://www.omagdigital.com/publication?i=252844
- Love, T. S. (2014). Unveiling ITEEA's newest resources for safer integrative STEM education. *Technology and Engineering Teacher*, 74(1), 15-16.
- Love, T. S. (2013). Using case law to address technology and engineering education safety and liability in the Commonwealth of Pennsylvania. *Technology and Engineering Education Association of Pennsylvania Journal*, *61*(2), 6-8. \*\*\*\*
- Love, T. S., & Ryan, L. (2012). Featherweight challenge. *Technology and Engineering Teacher*, 71(5), 33-35.

\*\*\*\* = TEEAP award winning article

#### Manuscripts in Progress:

- Love, T. S., Roy, K. R., & Sirinides, P. (in progress). A national study examining factors associated with accidents in P-12 CTE and engineering education labs.
- Love, T. S. (in progress). Examining the influence of physical computing professional development on primary and secondary teachers' attitudes toward computing.
- Love, T. S. (in progress). Examining the influence of a physical computing unit on students' attitudes toward computing.
- Love, T. S., Roy, K. R., & Sirinides, P. (in progress). A national study examining if high hazards technology and engineering courses have a greater risk of accidents.
- Love, T. S., Roy, K. R., & Sirinides, P. (in progress). Examining the relationship between overcrowding in K-12 STEM labs and accident rates: A national analysis.

## Published Conference Proceedings:

- Reed, P. A., Dooley, K., Love, T. S., & Bartholomew, S. R. (2022). *Overview of standards for technological and engineering literacy*. Proceedings of the Annual Conference and Exposition of the American Society for Engineering Education, Minneapolis, MN.
- Love, T. S. (2017, July). Tools and materials in primary education: Examining differences among male and female teachers' safety self-efficacy. In L. Litowitz & S. Warner (Eds.), *Technology and engineering education – Fostering the creativity of youth around the globe*. Proceedings of the 34th Pupil's Attitude Toward Technology Conference, Philadelphia, PA: Millersville University. Retrieved from https://www.iteea.org/File.aspx?id=115739&v=21dfd7a
- Love, T. S. (2013). Theoretical underpinnings toward assessing science pedagogical content knowledge (PCK) of technology educators. In J. Williams & D. Gedera (Eds.),

*Technology education for the future – A play on sustainability.* Proceedings of the 27th Pupil's Attitude Toward Technology Conference, Christchurch, New Zealand: University of Waikato (pp. 291-296). Retrieved from

http://www.iteea.org/File.aspx?id=39517&v=7cec2187

Wells, J. G., & Love, T. S. (2013). Mississippi valley technology teacher education conference: Content analysis for 100 years of discussion. In T. L. Erekson (Ed.), *Mississippi Valley Technology Teacher Education Conference: The Proceedings of the 100th Meeting*, Proceedings of the 100th Annual Mississippi Valley Technology Teacher Education Conference, Chicago, IL (pp. 1-24).

## **Conference Papers:**

- Love, T. S., & Rajyaguru, J. (2022). Integrating computational thinking and engineering practices to teach STEM: Examining students' attitudes about physical computing. Paper presented at the 95th Annual Meeting of the National Association for Research and Science Teaching, Vancouver, Canada.
- Love, T. S., Sirinides, P., & Roy, K. R. (2022). Examining factors associated with accidents in CTE and STEM education labs: A national safety study. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Love, T. S., & Asempapa, R. S. (2021). A quasi-experimental study examining secondary students' views of physical computing. Paper presented at the 107th Mississippi Valley Technology Teacher Education Conference, Nashville, TN. <u>http://www.mississippivalley.org/wp-</u> content/uploads/2021/11/LoveAsempapa\_MVTTEC\_2021\_Final.pdf
- Love, T. S. (2018). *Perceptions of safety in makerspaces: Examining the influence of professional development*. Paper presented at the 105th Mississippi Valley Technology Teacher Education Conference, Nashville, TN. http://www.mississippivalley.org/wp-content/uploads/2018/11/Perceptions-of-Safety-in-Makerspaces-Love.pdf
- Love, T. S. (2015). An examination of preparation experiences that influence technology and engineering educators' teaching of science concepts. Paper presented at the 102nd Mississippi Valley Technology Teacher Education Conference, Nashville, TN. http://www.mississippivalley.org/wp-content/uploads/2015/12/Love.pdf
- Grubbs, M. E., **Love, T. S.**, Long, D. L., & Sterling, D. (2014). Examination of differences in science professional development delivery of the engineering design process. Published Proceedings of the American Educational Research Association Annual Conference, Philadelphia, PA.

## **Conference Presentations:**

- Roy, K. R., & Love, T. S. (2022, April). *Safer makerspaces and stem labs: Results and recommendations from a national study.* Presentation at the annual meeting of the National Science Teaching Association, Houston, TX.
- Harrell, M., & Love, T. S. (2022, March). *Safety training for educators transitioning to T&E.* Presentation at the annual meeting of the International Technology and Engineering Educators Association, Orlando, FL.
- Love, T. S., Attaluri, A., Tunks, R. D., Cysyk, J. & Harter, K. (2021, November). Results from an integrative professional development experience for Pennsylvania's high school biology and engineering teachers. Presentation at the Penn State University Office of the Senior Vice President for Research's Commonwealth Campus Center Nodes Symposium, University Park, PA.

- Rajyaguru, J., & Love, T. S. (2021, April). Addressing changes in middle school students' attitudes toward coding and engineering using microcontroller design challenges. Poster session presented at the Penn State University 2021 Exhibition for Research, Inquiry, Creative Activity, and Engagement Experiences, University Park, PA.\*
- Rajyaguru, J., & Love, T. S. (2021, April). *Integration of computer science and engineering design through the use of the crumble microcontroller*. Poster session presented at the Penn State Harrisburg Research Poster Exhibition, Harrisburg, PA.\*
- Love, T. S. & Roy, K. R. (2021, March). *The 2020 national T&E safety study results*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Virtual Conference.
- Love, T. S. & Gill, M. (2020, October). *Maryland's results from the 2020 T&E education safety survey*. Presentation at the annual meeting of the Technology and Engineering Educators Association of Maryland, Virtual Conference.
- Love, T. S., Buccitelli, A., & Welsh, C. (2020, October). *Panel on research, education, and the arts: STEM/STEAM*. Presentation at the annual Penn State Harrisburg Faculty Research Day, Harrisburg, PA.
- Love, T. S., Buccitelli, A., & Richardson, T. (2020, October). *Smart home research initiative panel: Overview of smart home research activities.* Presentation to the Grey Lions. Elizabethtown, PA.
- Roy, K. R., & Love, T. S. (2020, April). Safety in makerspaces and STEM labs: Fostering realworld student experiences! Presentation at the annual meeting of the National Science Teaching Association, Boston, MA. Conference cancelled due to COVID-19.
- Roy, K. R., & Love, T. S. (2020, April). Responsible leadership in promoting safer STEM activities. Presentation during the National Science Education Leadership Association (NSELA) professional development session at the annual meeting of the National Science Teachers Association, Boston, MA. Conference cancelled due to COVID-19.
- Love, T. S. (2020, March). *Physical computing: Integrate programing and engineering design*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Baltimore, MD.
- Love, T. S. (2019, November). *3D printing*. Presentation at the 2019 Penn State Health Pro Wellness night at Wheatland Middle School, Lancaster, PA.
- Love, T. S. (2019, October). *Integrating coding, engineering, and science: Hands-on applications for grades 3-7.* Presentation at the annual meeting of the Pennsylvania Science Teachers Association, Lancaster, PA.
- Love, T. S., & Asempapa, R. (2019, October). *Teach math modeling concepts through 3D printing*. Presentation at the annual meeting of the Technology and Engineering Education Association of Pennsylvania, Lancaster, PA.
- Love, T. S. (2019, October). *Physical computing: Applying computer science to solve engineering design challenges*. Presentation at the annual meeting of the Technology and Engineering Education Association of Pennsylvania, Lancaster, PA.
- Love, T. S. (2019, July). *Elementary STEM building blocks: EbD TEEMS PreK-6*. Presentation at the 2019 National Science Teachers Association STEM Forum and Expo, San Francisco, CA.
- Love, T. S. (2019, July). *The computer science and computational thinking of STEM*. Presentation at the 2019 National Science Teachers Association STEM Forum and Expo, San Francisco, CA.
- Love, T. S. (2019, June). *Standards based mathematical modeling instruction using 3D printing*. Presentation at the annual Pennsylvania State Department of Education's Computer Science for All Summit, Enola, PA.

- Love, T. S. (2019, June). *Physical computing: Coding, electronic sensors, and hands-on design.* Presentation at the annual Pennsylvania State Department of Education's Computer Science for All Summit, Enola, PA.
- Roy, K. R., & **Love, T. S.** (2019, April). *Creating or updating makerspaces and STEM labs with safety in mind!* Presentation at the annual meeting of the National Science Teachers Association, St. Louis, MO.
- Love, T. S., & Roy, K. R. (2019, April). Promoting safer STEM through collaboration and cross-curricular connections. Presentation during the National Science Education Leadership Association (NSELA) professional development session at the annual meeting of the National Science Teachers Association, St. Louis, MO.
- Todd, R., Coon, D., Birks, J., & Love, T. S. (2019, March). *Construction, coding and control for all, wow!* Presentation at the annual meeting of the International Technology and Engineering Educators Association, Kansas City, MO.
- McCade, J., & Love, T. S. (2019, March). *Computer science panel: Teaching computer science through engineering design*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Kansas City, MO.
- Love, T. S. (2019, March). *Makerspaces and labs: Designs and safety considerations*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Kansas City, MO.
- Love, T. S. (2019, January). *Integrating coding through hands-on engineering challenges*. Presentation at the annual meeting of the Georgia Engineering and Technology Education Association, Rincon, GA.
- Love, T. S. (2018, December). *Makerspace, STEM, and coding initiatives from across Pennsylvania*. Presentation at the annual Pennsylvania State Department of Education's Standards Aligned System (SAS) Institute, Hershey, PA.
- Love, T. S. (2018, October). *Integrating computer science through engineering design*. Presentation at the annual meeting of the Technology and Engineering Education Association of Pennsylvania, Lancaster, PA.
- Love, T. S. (2018, October). *Makerspaces and labs: Designs and safety considerations*. Presentation at the annual meeting of the Technology and Engineering Education Association of Pennsylvania, Lancaster, PA.
- Love, T. S. (2018, September). *Safety, responsibility and liability while "making": Makerspaces, theatre, after school activities and more!* Presentation at the annual back to school professional learning day for the Montgomery County Public Schools Library and Media Programs, Gaithersburg, MD.
- Love, T. S. (2018, July). *Makerspaces, fab labs, and STEM labs: Designs and safety concerns!* Presentation at the annual meeting of the Virginia Technology and Engineering Educators Association, Alexandria, VA.
- Love, T. S. (2018, July). *Safer makerspace and STEM labs: A collaborative approach.* Presentation at the 2018 National Science Teachers Association STEM Forum and Expo, Philadelphia, PA.
- Camick, P., Fischer, D., Basham, L., Livingston, D., & Love, T. S. (2018, April). Council for supervision and leadership panel session: Meeting the needs of non-traditional technology education teachers. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Atlanta, GA.
- Love, T. S., & Roy, K. R. (2018, March). Addressing makerspace, STEM lab, and fab lab safety hazards. Presentation at the annual meeting of the National Science Teachers Association, Atlanta, GA.

- Roy, K. R., & Love, T. S. (2018, March). *Successful strategies for teaching science lab safety concepts.* Presentation at the annual meeting of the National Science Teachers Association, Atlanta, GA.
- Love, T. S. (2017, October). *Makerspaces and STEM labs: Designs and safety concerns*. Presentation at the annual meeting of the Technology and Engineering Education Association of Pennsylvania, Lancaster, PA.
- Love, T. S. (2017, October). *Safety considerations for makerspace and STEM labs*. Presentation at the annual meeting of the Technology and Engineering Educators Association of Maryland, Baltimore, MD.
- Love, T. S., & Bhatty, A. (2017, October). *Introduction to OnShape*. Presentation at the annual meeting of the Technology and Engineering Educators Association of Maryland, Baltimore, MD.\*
- Love, T. S. (2017, October). *Safer makerspaces and STEM labs*. Presentation at the annual regional meeting of the National Science Teachers Association, Baltimore, MD.
- Allen, R. E., Jin, Y., & Love, T. S. (2017, August). Academic panel: Articulations, MOUs, dual degrees, and partnerships on the horizon. Presentation at the Opening Activities for UMES's Division of Academic Affairs, Princess Anne, MD.
- Love, T. S. (2017, July). *Makerspace and STEM lab safety*. Presentation at the 2017 National Science Teachers Association/International Technology and Engineering Educators Association STEM Forum and Expo, Orlando, FL.
- Roy, K. R., & **Love, T. S.** (2017, March). *Innovative and engaging strategies for teaching lab safety concepts.* Presentation at the annual meeting of the National Science Teachers Association, Los Angeles, CA.
- Deck, A., Grubbs, M., Love, T. S., & Mentzer, N. (2017, March). *Panel session: I-STEM focal points – defining effective integrative STEM*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Dallas, TX.
- Loveland, T., **Love, T. S.**, Rigler, K., Stewart, K., Grubbs, M., & Strimel, G. (2017, March). *Panel session: Who are we?* Presentation at the annual meeting of the International Technology and Engineering Educators Association, Dallas, TX.
- Rouch, D., Love, T. S., & McLaughlin, C. (2017, March). *CTETE panel session: Addressing the challenges of teacher recruitment*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Dallas, TX.
- Love, T. S. (2017, March). *Recruiting T&E teachers: A collaborative effort*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Dallas, TX.
- Love, T. S., & Moore, J. (2016, October). Drone design challenge utilizing 3D printing. Presentation at the annual meeting of the Maryland Association of Science Teachers/Technology and Engineering Educators Association of Maryland, Baltimore, MD.\*
- Love, T. S., Moore, J., & Brown, C. (2016, October). UMES technology and engineering education mini-drone project. Presentation at the Mid-Atlantic Higher Education Business and Research Conference, Princess Anne, MD.\*
- Deck, A., & Love, T. S. (2016, April). *STEMulate student learning by infusing engineering design using the 6Es.* Presentation at the annual meeting of the National Science Teachers Association, Nashville, TN.
- Roy, K. R., & Love, T. S. (2016, April). Safer STEM activities through collaboration! Presentation at the annual meeting of the National Science Teachers Association, Nashville, TN.

- Roy, K. R., & Love, T. S. (2016, April). STEM teacher liability: Walking on the safer side! Presentation at the annual meeting of the National Science Teachers Association, Nashville, TN.
- Love, T. S. (2016, February). Strategies for promoting safer STEM education laboratories. Presentation at the Frederick County Public Schools Spring T&E Education Professional Development Institute, Frederick, MD.
- Love, T. S. (2015, November). STEM opportunities. Presentation at the meeting of the College of Southern Maryland Educators Rising Club, Prince Frederick, MD.
- Love, T. S., & Grubbs, M. E. (2015, May). Differences in delivery of the engineering design process among science professional development sites. Poster session presented at the Southwest Virginia STEM Summit, Blacksburg, VA.
- Love, T. S., Grubbs, M. E., & Magliaro, S. (2015, April). Differences in how engineering design was taught among science professional development sites. Poster session presented at the 2015 Learning Sciences Research Symposium, Blacksburg, VA.
- Loveland, T., & Love, T. S. (2015, March). *Impact of joint conferences on professional associations*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Milwaukee, WI.
- Roy, K. R., & Love, T. S. (2015, March). Safer STEM activities through collaboration. Presentation at the annual meeting of the National Science Teachers Association, Chicago, IL.
- Grubbs, M. E., Love, T. S., & Long, D. (2014, November). Differences in teaching engineering design: Findings and suggestions for response to the NGSS and integration of engineering into science education. Presentation at the annual professional development institute of the Virginia Association of Science Teachers, Roanoke, VA.
- Love, T. S. (2014, November). *Previewing ITEEA's newest safety resources*. Presentation at the annual meeting of the Technology and Engineering Education Association of Pennsylvania, Camp Hill, PA.
- Love, T. S. (2014, October). Classroom ready safety resources for delivering engineering. Presentation at the annual meeting of the Maryland Association of Science Teachers/Technology and Engineering Educators Association of Maryland, Ellicott City, MD.
- Loveland, T., & Love, T. S. (2014, October). *Impact of joint conferences*. Presentation at the annual meeting of the Maryland Association of Science Teachers/Technology and Engineering Educators Association of Maryland, Ellicott City, MD.
- Love, T. S. (2014, August). *Mathematics instruction for grades 4-8*. Presentation at the Wythe County Public Schools Professional Development Institute, Wytheville, VA.
- Love, T. S. (2014, July). *Teaching science/math through engineering design*. Presentation at the Southwest Virginia Higher Education Center's annual Summer STEM Institute for K-12 Educators, Abingdon, VA.
- Love, T. S. (2014, March). *Case law, safety, and liability in STEM*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Orlando, FL. Retrieved from

http://www.iteea.org/mbrsonly/Library/SpecialInterest/ORL.htm

- Grubbs, M. E., & Love, T. S. (2014, March). *Experiences with students with disabilities*. Presentation at the annual meeting of the International Technology and Engineering Educators Association, Orlando, FL.
- Love, T. S., Kreiser, N., Camargo, E., Grubbs, M. E., Kim, E. J., & Burge, P. L. (2014, February). Accommodating higher education students with disabilities: STEM faculty experiences. Poster session presented at the annual Conference on Higher Education

Pedagogy, Blacksburg, VA. Retrieved from www.cideronline.org/confPresentations/files/resource-1320-1.pdf

- Love, T. S. (2013, November). *Safety and liability in STEM education: Examining Pennsylvania case law.* Presentation at the annual meeting of the Technology and Engineering Education Association of Pennsylvania, Camp Hill, PA.
- Love, T. S. (2013, November). *Methods to improve laboratory safety and avoid liability*. Poster session presented at the annual meeting of the Technology and Engineering Education Association of Pennsylvania, Camp Hill, PA.
- Love, T. S. (2013, October). Addressing safety and liability in STEM education: Reviewing legal issues and case law. Presentation at the annual meeting of the Maryland Association of Science Teachers/Technology and Engineering Educators Association of Maryland, Fulton, MD.
- Love, T. S. (2012, March). *Design a candy bar and featherweight challenge*. Poster session presented at the annual meeting of the International Technology and Engineering Educators Association, Long Beach, CA.
- Love, T. S. (2012, October). *Engineering challenges*. Poster session presented at the annual meeting of the Technology and Engineering Educators Association of Maryland, Westminster, MD.
- Love, T. S. (2004, November). *How to make a wooden baseball bat*. Poster session presented at the annual meeting of the Technology Education Association of Pennsylvania, Camp Hill, PA.

\*Presentation with Undergraduate student(s)

## Keynote Addresses:

- Love, T. S. (2019, January). *Makerspaces and STEM labs: Designs, safety concerns, and free resources*. Address presented at the Georgia Engineering and Technology Education Association annual meeting, Rincon, GA.
- Love, T. S. (2018, May). *Accessibility and safety in makerspaces*. Address presented at the Maryland Makes Spring Briefing meeting, Salisbury, MD.
- Love, T. S. (2017, December). *Safer makerspaces and STEM labs*. Address presented at the Maryland State Department of Education and Maryland Science Supervisors Association quarterly meeting, Frederick, MD.
- Love, T. S. (2017, May). *Transitioning from athlete to professional*. Address presented at the University of Maryland Eastern Shore Athletic Department Academic Awards Breakfast, Princess Anne, MD.
- Love, T. S. (2015, April). *Applying your honors program experience*. Address presented at the University of Maryland Eastern Shore's 62<sup>nd</sup> Annual Honors Program Convocation, Princess Anne, MD.

#### Media Appearances:

- Love, T. S. (Interviewee). (2020, October 27). ISTEM and ISTEAM teaching: Safety first! [Audio podcast episode]. In A. Gess (Host), *Room 366: Podcast season 1*. Augusta, GA: Augusta University.
- Love, T. S. (Interviewee). (2020, January 15). How teachers are using 3D printers in schools [Radio broadcast episode]. In D. Cash (Senior Producer), Randi Zuckerberg Means Business. New York, NY: SiriusXM Radio.

## **Invited Talks:**

- Love, T. S. (2022, February). *Best safety practices for teaching in makerspaces and STEM labs in 2022*. Invited talk to the North Carolina State University Technology, Engineering and Design Undergraduate Teacher Preparation Program. Raleigh, NC.
- Love, T. S. (2021, October). *STEM education collaborative research and outreach initiatives at Penn State Harrisburg*. Invited talk to the Penn State Harrisburg Board of Advisors. Harrisburg, PA.
- Love, T. S. (2021, October). *Engaging teachers in integrative PD: Design-based physical computing and more.* Invited talk to the Virginia Tech Integrative STEM Education graduate program. Blacksburg, VA.
- Love, T. S., & Roy, K. R. (2021, April). *Pennsylvania's results from the 2020 T&E education safety survey: Comparing to the national averages and recommendations to address areas of concern.* Invited webinar for the Technology and Engineering Education Association of Pennsylvania. Harrisburg, PA.
- Love, T. S. (2020, October). *New Jersey's results from the 2020 national T&E education safety survey*. Invited webinar for the New Jersey Technology and Engineering Educators Association. Monmouth Junction, NJ.
- Love, T. S. (2021, April). *Liability and safety considerations for future technology and engineering teachers*. Invited talk to the Millersville University Technology and Engineering Undergraduate Teacher Preparation Program. Lancaster, PA.
- Love, T. S. (2021, March). *Best safety practices for teaching in makerspaces and STEM labs in 2021*. Invited talk to the North Carolina State University Technology, Engineering and Design Undergraduate Teacher Preparation Program. Raleigh, NC.
- Love, T. S., & Roy, K. R. (2020, February). Developing safer facilities and practices to engage individuals of all abilities in STEM. Invited webinar for the International Technology and Engineering Educators Association's Integrative STEM Education Professional Learning Community: STEMinar 34. Reston, VA.
- Love, T. S., & Roy, K. R. (2019, October). *Legal and safety considerations when planning and maintaining a makerspaces or STEM lab.* Invited webinar for the Pennsylvania Science Teachers Association. Harrisburg, PA.
- Love, T. S. (2019, October). *Making integrative STEM connections beyond graduate school*. Invited talk to the Virginia Tech Integrative STEM Education graduate program. Blacksburg, VA.
- Love, T. S. (2019, October). *Computational thinking applications in engineering courses*. Invited talk to the International Technology and Engineering Educators Association's STEM Leadership Forum. Reston, VA.
- Love, T. S., & Roy, K. R. (2019, May). *Makerspaces, fab labs & stem labs: Safer designs and practices!* Invited webinar for the National Science Education Leadership Association. Aurora, CO.
- Love, T. S. (2019, February). *Better safety practices for teaching in makerspaces, fab labs, and STEM labs*. Invited talk to the North Carolina State University Technology, Engineering and Design Undergraduate Teacher Preparation Program. Raleigh, NC.
- Love, T. S. (2019, February). *Safer practices for managing your school's makerspaces, fab labs, and STEM labs.* Invited talk to the North Carolina State University MAEd in STEM Education Program. Raleigh, NC.
- Love, T. S. (2018, September). *Managing safer makerspaces, fab labs, and STEM labs*. Invited talk to the Purdue University T&E Teacher Preparation Program. West Lafayette, IN.

- Love, T. S. (2017, November). *STEM labs: Collaborative safety practices for science and T&E educators*. Invited talk to the Worcester County Public Schools Faculty Professional Development Session. Snow Hill, MD.
- Love, T. S. (2017, October). *Maximizing STEM education opportunities through collaboration*. Invited talk to the 2017-2018 International Technology and Engineering Educators Association's 21st Century Leadership Academy cohort. Reston, VA.
- Love, T. S., & Roy, K. R. (2017, September). *Makerspaces, fab labs & stem labs: Building in safety!* Invited webinar for the International Technology and Engineering Educators Association's Integrative STEM Education Professional Learning Community: STEMinar 8. Reston, VA.
- Love, T. S. (2017, September). *Better practices for safer learning in makerspaces and STEM labs*. Invited talk to the Purdue University T&E Teacher Preparation Program. West Lafayette, IN.
- Love, T. S. (2017, May). *Student engagement: Innovative teaching strategies*. Invited talk to the University of Maryland Eastern Shore School of Pharmacy and Health Professions Inter-Professional Faculty Development Seminar. Princess Anne, MD.
- Love, T. S. (2017, April). Opportunities at UMES and methods for teaching lab safety concepts. Invited talk to Worcester Technical High School Faculty Professional Development Session. Newark, MD.
- Potter, B. S., & Love, T. S. (2017, March). Maximizing your STEM lab: Best practices. Invited webinar for the International Technology and Engineering Educators Association's Integrative STEM Education Professional Learning Community: Session 3. Reston, VA.
- Love, T. S. (2017, March). *Innovative teaching strategies to engage students*. Invited talk to the University of Maryland Eastern Shore Faculty Learning Community. Princess Anne, MD.
- Love, T. S. (2016, September). *Better practices for safer STEM learning environments*. Invited talk to the Purdue University T&E Teacher Preparation Program. West Lafayette, IN.
- Love, T. S. (2015, August). *Lab safety and STEM education activities*. Invited talk to Queen Anne's County Public Schools Fall CTE Professional Development Session. Stevensville, MD.
- Grubbs, M. E., & Love, T. S. (2013, November). *Status of integration between science and engineering education*. Invited talk to the College of Education and Human Development at George Mason University. Fairfax, VA.

## Workshops:

- Love, T. S. (2021, November). *Integrating computational thinking through literacy and mathematics in grades K-2*. Workshop for Penn State Harrisburg's Capital Area Institute of Mathematics and Science, Harrisburg, PA.
- Love, T. S. (2021, June). *Engineering technology education lab safety workshop*. Workshop for the Kentucky Department of Education, Richmond, KY.
- Coon, D., & Love, T. S. (2020, March). *Implementing coding and microcontrollers through hands-on STEM applications*. Pre-conference workshop at the annual meeting of the International Technology and Engineering Educators Association, Baltimore, MD.
- Patel, J., & Love, T. S. (2020, March). Using the raspberry pi for smart home applications. Workshop for Penn State Harrisburg's Capital Area Institute of Mathematics and Science, Harrisburg, PA.

- Love, T. S. (2020, February). *Critical safety considerations for designing and running a makerspace or STEM lab*. Workshop for the Lancaster-Lebanon Intermediate Unit 13. Lancaster, PA.
- Coon, D., & Love, T. S. (2019, November). *Ultimate STEM, STEAM, and makerspace activities workshop*. Workshop for Penn State Harrisburg's Capital Area Institute of Mathematics and Science, Harrisburg, PA.
- Love, T. S. (2019, May). Teaching computer science through engineering design. Workshop for Penn State Harrisburg's Capital Area Institute of Mathematics and Science, Harrisburg, PA.
- Love, T. S., & Asempapa, R. (2019, March). *Teaching math modeling through 3D printing*. Workshop for Penn State Harrisburg's Capital Area Institute of Mathematics and Science, Harrisburg, PA.
- Todd, R., **Love, T. S.**, & Seymour, J. (2018, July). *Practical hands-on coding, logic and control activities for all*. Workshop presented at the annual meeting of the Virginia Technology and Engineering Educators Association, Alexandria, VA.
- Love, T. S. (2018, July). *Makerspace and STEM lab safety: Critical issues and instructional methods*. Invited workshop for the Lancaster-Lebanon Intermediate Unit 13. Lancaster, PA.
- Todd, R., Steeg, T., **Love, T. S.**, Claymier, B., & Seymour, J. (2018, June). *Systems and control workshop*. Presented at the Sims Academy of Innovation and Technology, Winder, GA.
- Love, T. S. (2018, April). *Technological college programs and scholarships*. Workshop at the Delaware Technology Student Association State Conference, Dover, DE.
- Claymier, B., **Love, T. S.**, Schurr, K. L., & Todd, R. (2018, April). *Introductory systems and control*. Pre-conference workshop at the annual meeting of the International Technology and Engineering Educators Association, Atlanta, GA.
- Love, T. S. (2017, October). *STEM teachers as leaders*. Workshop at the Delaware CTE Fall Leadership Conference, Dover, DE.
- Love, T. S., & Warner, S. A. (2015, December). Teaching technology, engineering, innovation and design. Workshop at the annual meeting of the Educators Rising Association of Delaware, Dover, DE.
- Love, T. S. (2015, September). *Safety training for the technology education lab*. Invited workshop for Baltimore County Public Schools New T&E Teacher Safety Training. Baltimore, MD.
- Love, T. S. (2015, June). *Lab safety in science and technology education classrooms*. Invited workshop for the Lancaster-Lebanon Intermediate Unit 13. Lancaster, PA.
- Love, T. S., & Deck, A. (2015, March). *Classroom materials and practices for safer Integrative STEM education*. Pre-conference workshop at the annual meeting of the International Technology and Engineering Educators Association, Milwaukee, WI.

## Videos:

Love, T. S. (Producer). (2005). *Turning baseball bats on your lathe: An instructional DVD.* Available from Penn State Industries.

## **Dissertation:**

Love, T. S. (2015). Examining the extent to which select teacher preparation experiences inform technology and engineering educators' teaching of science content and practices (Doctoral dissertation) Virginia Tech, Blacksburg, Virginia. Retrieved from http://vtechworks.lib.vt.edu/handle/10919/64004

# **Reviewer of Scholarly Work:**

Books, Invited Reviewer	
<ul> <li>National Science Teaching Association (NSTA) Press</li> </ul>	2020
<ul> <li>Goodheart-Willcox Publisher</li> </ul>	2020
Journal Articles, Invited Reviewer	2010
International Journal of STEM Education	2019-2022
<ul> <li>Journal for STEM Education Research</li> </ul>	2017 2022 2021
ITEEA: Safety editor for all publications	2016-2021
<ul> <li>Journal of Research in Science Teaching</li> </ul>	2010 2021
<ul> <li>Technology and Engineering Teacher</li> </ul>	2016
Research Monographs, Invited Reviewer	2010
Council for Technology and Engineering Teacher Education	2019
Conference Proposals, Invited Reviewer	_017
International Technology and Engineering Educators Association	2015-2018
PROFESSIONAL LEADERSHIP AND SERVICE	
National and International Leadership	
National Science Teaching Association (NSTA): Safety Advisory Board	2016-present
ITEEA: Council on Technology and Engineering Teacher Education,	2016-Present
Marketing Committee Chair	
ITEEA: Teacher Recruitment Task Force	2016-Present
International Technology and Engineering Educators Association (ITEEA):	2018-2020
2020 Conference Planning Committee (Baltimore, MD)	
State and Regional Leadership	
STEM Advisory Board, Penn State Pro Wellness	2020-2022
Technology Student Association of Pennsylvania: Judge	2019
Technology Student Association of Delaware: Judge	2016-2018
Technology and Engineering Educators Association of Maryland (TEEAM):	2016-2018
Board Member: University Representative	
TEEAM Board Member: Vice-President of Student Affairs	2010-2011
College Leadership	
Penn State Harrisburg: Classroom Design Committee member	2021-2022
Penn State Harrisburg: STEM Steering Committee Co-Chair	2019-2020
Penn State Harrisburg: South Central PA Robotics Competition Planning Committee and Judge	2019-2021
AWARDS	
ITEEA: Distinguished Technology Educator (DTE)	2022
<b>CTETE: Outstanding Research in Technology Education Award</b>	2022
ITEEA's Dr. Gerald Day Excellence in Authorship Award: Top Volunteered Article	2021

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ITEEA's CTETE Gerhard Salinger Award for Enhancing STEM Education through Technological/Engineering Design-Based Instruction	2020
ITEEA Special Recognition Award for Outstanding Service	2020
ITEEA Leaders to Watch	2019
CareerSafe® Safety Educator of the Year Award (Presented at ACTE CareerVisi	<b>on</b> ) 2018
ITEEA's Dr. Gerald Day Excellence in Authorship Award: Top Peer-Reviewed Article by a University/Classroom Teacher Team	2017
TEEAM Leadership Award	2017
University of Maryland Eastern Shore (UMES) "Ductus Exemplo" Distinguished Alumnus Award	2015
ITEEA's CTETE Silvius-Wolansky Outstanding Publication Award	2015
Virginia Tech Graduate School Student of the Year: 1 of 4 Finalists	2015
Dr. Nevin Andre Award for Outstanding TEEAP Journal Article	2014
Virginia Tech Graduate School Student of the Year – Finalist and Honorable Mer	<b>ntion</b> 2014
Virginia Tech College of Liberal Arts and Human Sciences Outstanding Doctoral Student Finalist	2014
Iota Lambda Sigma Nu (Maryland Chapter) Scholar of the Year	2014
21st Century Leadership Academy, coordinated by ITEEA	2013-2014
Virginia Tech's Outstanding Student in Integrative STEM Education	2011-2012
Underrepresented Minorities: A Rich Pool of STEM Talent Scholar	2012
UMES Athletics Department: Male Student Athlete Sportsmanship Award	2009
NCAA Division 1 Baseball Senior CLASS Award: 1 of 30 National Finalists	2009
UMES Athletics Department: Male Scholar Athlete of the Year	2007-2008