

Daniel P. Kelly

Assistant Professor of Instructional Technology
Department of Educational Psychology and Leadership
Texas Tech University
College of Education

3008 18th Street, Office 271
Lubbock, TX 79409-1071
Phone: 806.834.5391
Email: daniel.kelly@ttu.edu
Web: <http://drdanielkelly.com>

Curriculum Vitae – Updated: September, 2018

Education:

Doctor of Education in Technology Education (2017)

North Carolina State University
Minor: Digital Teaching and Learning
Cognate: Educational Psychology
Dissertation: Measurements of self-efficacy in engineering graphics students: An examination of factors impacting student outcomes in introductory engineering graphics courses

Master of Science in Technology Education (2015)

North Carolina State University
Thesis: STEM Teacher Efficacy in Inverted Classrooms

Matriculated – Master of Science in Teaching (2006-2007)

State University of New York at Potsdam
Completed 15 graduate credit hours in Secondary Science Education

Bachelor of Arts in Physics (2006)

State University of New York at Potsdam

Advanced Electronics Technical Core Program (1998)

Electronics Technician A-School (1999)

United States Navy

Certificate in Electricity/Electronics (1998)

Niagara/Orleans Board of Cooperative Education Services

Related Professional Experience:

Assistant Professor of Instructional Technology (2018-present)

Texas Tech University, Department of Educational Psychology and Leadership
Courses: Planning and Producing Instructional Materials (Instructional System Development)

Teaching Assistant Professor (2017-2018)

North Carolina State University, Department of STEM Education

Daniel P. Kelly

Curriculum Vitae

Courses: Engineering Graphics, Web Development, Electronics, Engineering, Design, Emerging Issues in Technology Education, and Robotics, University Supervisor for Technology Education student teachers

Program Director (2017-2018)

Virginia Polytechnic Institute and State University, School of Education

NSF Funded Project: Active Learning Modules to Support Problem-Based Learning: Effects on Engineering Retention and Academic Outcomes of At-Risk Students

Graduate Teaching Assistant (2016-2017)

North Carolina State University, Department of STEM Education

Instructor of Record

Courses: Engineering Graphics, Web Development, Research & Development in Technology Education, University Supervisor for Technology Education student teachers

National Teacher Effectiveness Coach (2016-2017)

International Technology and Engineering Educators Association (ITEEA)

Graduate Research Assistant (2015-2016)

North Carolina State University, Department of STEM Education

NSF Funded Project: Transforming Teaching through Implementing Inquiry

Instructor (2016)

Technology Training Solutions, North Carolina State University

Course: 3D Printing and Additive Manufacturing

Graduate Teaching Assistant (2015)

North Carolina State University, Department of STEM Education

Courses: Desktop Publishing/Imaging Technology and Concepts of Website Development

Teacher (2015)

Riverside High School, Durham, NC

Courses: Technology, Engineering, and Design

Teacher (2013-2015)

Franklin Academy Charter School, Wake Forest, NC

Project Lead the Way (PLTW) District Delegate

Courses: Science of Technology, Robotics, Digital and Emerging Technology, and Mathematics and English Language Arts Enrichment

Teacher (2011-2013)

Neal Middle School, Durham, NC

STEM Education Department Chair

School Improvement and Leadership Team Member

Courses: Project Lead the Way (PLTW), Electronics, Automation and Robotics,
Design and Modeling, Energy and the Environment, Science**Research Assistant** (2014-2015)

North Carolina State University, Department of STEM Education

Project: Creativity in Engineering Education

Research Assistant (2013)

North Carolina State University, Department of STEM Education

Project: Electronics Literacy

Publications:

Refereed Journal Articles:

Denson, C.D., **Kelly, D.P.**, & Clark, A.C. (2018). Developing an instrument to measure student self-efficacy as it relates to 3D modeling. *Engineering Graphics Design Journal*, 88(1).

Ernst, J. V., Williams, T. O., Clark, A.C., **Kelly, D. P.**, & Sutton, K. (2017). K-12 STEM educator autonomy: An investigation of school influence and classroom control. *Journal of STEM Education: Innovations and Research*, 18(5), 5-9.

Kelly, D.P. & Denson, C.D. (2017). STEM teacher efficacy in flipped classrooms. *Journal of STEM Education: Innovations and Research*, 18(4), 43-50.

Ernst, J.V., Williams, T.O., **Kelly, D.P.**, & Clark, A.C. (2017). Factors of spatial visualization: An analysis of the PSVT:R. *Engineering Design Graphics Journal*, 81(1), 1-10.

Kelly, D.P. & Rutherford, T. (2017). Khan Academy as supplemental instruction: A controlled study of a computer-based mathematics intervention. *Journal of Computer Assisted Learning*, 18(4), 70-77.

Sutton, K.G., Busby, J.R., & **Kelly, D.P.** (2016). Multicopter design challenge: Design, fly, and learn. *Technology and Engineering Teacher*, 76(2), 8-12.

Kelly, D.P. (2015). Overcoming barriers to classroom technology integration. *Educational Technology*, 55(2), 40-43.

Invited Journal Articles:

- Branoff, T., Ernst, J. V., Clark, A. C., **Kelly, D.P.**, & DeLuca, V. W. (In Press, 2019). Initial student evaluation. *Technology and Engineering Teacher*.
- Segedin, L., Fahrer, N., Ernst, J. V., Clark, A. C., **Kelly, D.P.**, & DeLuca, V. W. (In Press, 2019). Adapting instruction. *Technology and Engineering Teacher*.
- Steffern, V., Furse, B., Ernst, J. V., Clark, A. C., **Kelly, D.P.**, & DeLuca, V. W. (In Press, 2019). School and community. *Technology and Engineering Teacher*.
- Walton, M., Ernst, J. V., Clark, A. C., **Kelly, D.P.**, & DeLuca, V. W. (In Press, 2019). Lab and class management. *Technology and Engineering Teacher*.
- Buelin, J., Ernst, J. V., Clark, A. C., **Kelly, D.P.**, & DeLuca, V. W. (In Press, 2018). Formative evaluation techniques. *Technology and Engineering Teacher*.
- Busby, J., Ernst, J. V., Clark, A. C., **Kelly, D.P.**, & DeLuca, V. W. (In Press, 2018). Professional organizations. *Technology and Engineering Teacher*.
- Colelli, R., Harrison, H., Ernst, J. V., Clark, A. C., **Kelly, D.P.**, & DeLuca, V. W. (In Press, 2018). Student organizations. *Technology and Engineering Teacher*.
- Daugherty, J., Ernst, J. V., Clark, A. C., **Kelly, D.P.**, & DeLuca, V. W. (2018). Classroom quality. *Technology and Engineering Teacher*, 78(1), 32-33.
- Kelly, D.P.**, Sabet, A., & Galloway, C. (2018). Technological literacy through service learning and Go Baby Go!. *Technology and Engineering Teacher*, 78(1), 8-13.
- Brown, J., Ernst, J. V., Clark, A. C., DeLuca, V. W., & **Kelly, D.P.** (2017). Working with special populations. *Technology and Engineering Teacher*, 77(8), 10-13.
- Blue, C., Mupinga, D., Ernst, J. V., Clark, A. C., DeLuca, V. W., & **Kelly, D.P.** (2018). Multiculturalism in the classroom. *Technology and Engineering Teacher*, 77(7), 25-31.
- Luna, E., Ernst, J. V., Clark, A. C., DeLuca, V. W., & **Kelly, D.P.** (2018). Enhancing classroom creativity. *Technology and Engineering Teacher*, 77(6), 26-31.

- Lipscomb, K. & Nato, S., Ernst, J. V., Clark, A. C., DeLuca, V. W., & **Kelly, D.P.** (2018). Implementing learning activities. *Technology and Engineering Teacher*, 77(5), 14-19.
- Ridgeway, J., Ernst, J. V., Clark, A. C., DeLuca, V. W., & **Kelly, D.P.** (2017). Designing standards-based STEM. *Technology and Engineering Teacher*, 77(4), 30-35.
- Segedin, L. & Bottomley, L., Ernst, J. V., Clark, A. C., DeLuca, V. W., & **Kelly, D.P.** (2017). Engaging females in STEM. *Technology and Engineering Teacher*, 77(3), 29-31.
- Hart, N., Ernst, J. V., Clark, A. C., DeLuca, V. W., & **Kelly, D.P.** (2017). Best practices. *Technology and Engineering Teacher*, 77(2), 30-34.
- Brown, R., Ernst, J. V., Clark, A. C., DeLuca, V.W., & **Kelly, D.P.** (2017). STEM curricula. *Technology and Engineering Teacher*, 77(1), 26-29.

Manuscripts under Review or Revision:

Refereed Proceedings:

- Ernst, J.V., Glimcher, S., **Kelly, D.P.**, & Clark, A.C. (2016). Active learning module development for at-risk learners in engineering graphics. Published proceedings of the *American Society of Engineering Education Annual Conference and Exposition*, Salt Lake City, UT, Paper #21548.
- Kelly, D.P.** & Kelly, D.L. (2018). Toward an understanding of dysgraphia as a barrier to STEM-related careers. Published proceedings of the *36th International Pupils' Attitudes Towards Technology Conference*, Athlone Institute of Technology, Co. Westmeath, Ireland, 36, 417-422.
- Ernst, J.V., Clark, A.C. & **Kelly, D.P.** (2018). Introduction to engineering design graphics project supporting problem-based learning for students at-risk. Published proceedings of the *Engineering Design Graphics Division of the American Society of Engineering Education's 72nd Midyear Conference*, Montego Bay, Jamaica, 72, 118-122.
- Denson, C.D., & **Kelly, D.P.** (2018). Using exploratory factor analysis to build a self-efficacy scale for three-dimensional modeling. Published proceedings of the *Engineering Design Graphics Division of the American Society of Engineering Education's 72nd Midyear Conference*, Montego Bay, Jamaica, 72, 29-35.

- Williams, T.O., Ernst, J.V., Clark, A.C., & **Kelly, D.P.** (2018). Using confirmatory factor analysis and model respecification to reproduce a one-factor model of the PSVT:R. Published proceedings of the *Engineering Design Graphics Division of the American Society of Engineering Education's 72nd Midyear Conference*, Montego Bay, Jamaica, 72, 78-81.
- Kelly, D.P.**, Ernst, J.V., & Clark, A.C. (2017). Hidden STEM: Identifying meaningful STEM career paths for underrepresented students. Published proceedings of the *2017 International Education Conference*, Stockholm, Sweden, 324, 1-6.
- Kelly, D.P.**, Sutton, K.G., & Clark, A.C. (2016). A “new” visualization assessment for engineering graphics courses. Published proceedings of the *Engineering Design Graphics Division of the American Society of Engineering Education's 71st Midyear Conference*, Nashua, NH, 71, 1-5.
- Clark, A.C., **Kelly, D.P.**, Fahrner, N.E., & Ernst, J.V. (2016). An examination of three assessment models of the PVST:R. Published proceedings of the *Engineering Design Graphics Division of the American Society of Engineering Education Midyear Conference*, Nashua, NH, 71, 1-5.
- Kelly, D.P.**, Clark, A.C., Ernst, J.V., & Sutton, K.G. (2016). Flipped instruction in engineering graphics courses: Current landscape and preliminary study results of instructors' perceptions. Published proceedings of the *American Society of Engineering Education Annual Conference and Exposition*, New Orleans, LA, Paper #15738.
- Ernst, J.V., Williams, T.O., Clark, A.C., & **Kelly, D.P.** (2016). Psychometric properties of the PSVT:R outcome measure: A preliminary study of introductory engineering design graphics. Published proceedings of the *Engineering Design Graphics Division of the American Society of Engineering Education Midyear Conference*, Daytona Beach, FL, 70, 10-15.
- Kelly, D.P.**, Clark, A.C., & Ernst, J.V. (2016). A model for engineering and technology teacher education professional development. Published proceedings of the *2016 International Education Conference*, Venice, Italy, 286, 1-4.

Books:

- Kelly, D.P.** (2014). *Falling down: A teenager's true story of redemption*. Durham, NC: Author.

Presentations:

International Conferences:

- Kelly, D.P.** & Kelly, D.L. (June, 2018). Toward an Understanding of Dysgraphia as a Barrier to STEM-Related Careers. Paper presentation at the 36th International Pupils' Attitudes Towards Technology Conference, Athlone Institute of Technology, Co. Westmeath, Ireland.
- Ernst, J.V., Clark, A.C. & **Kelly, D.P.** (January, 2018). Introduction to engineering design graphics project supporting problem-based learning for students at-risk. Paper presentation at the American Society for Engineering Education (ASEE) Engineering Design Graphics Division (EDGD) 72nd Midyear Conference, Montego Bay, Jamaica.
- Denson, C.D., & **Kelly, D.P.** (January, 2018). Using exploratory factor analysis to build a self-efficacy scale for three-dimensional modeling. Paper presentation at the American Society for Engineering Education (ASEE) Engineering Design Graphics Division (EDGD) 72nd Midyear Conference, Montego Bay, Jamaica.
- Williams, T.O., Ernst, J.V., Clark, A.C., & **Kelly, D.P.** (January, 2018). Using confirmatory factor analysis and model respecification to reproduce a one-factor model of the PSVT:R. Paper presentation at the American Society for Engineering Education (ASEE) Engineering Design Graphics Division (EDGD) 72nd Midyear Conference, Montego Bay, Jamaica.
- Kelly, D.P.**, Ernst, J.V., & Clark, A.C. (June, 2017). Hidden STEM: Identifying meaningful STEM career paths for underrepresented students. Paper presented at the 2017 International Education Conference, Stockholm, Sweden.
- Ernst, J.V., **Kelly, D.P.**, & Clark, A.C. (June, 2016). A model for engineering and technology teacher education professional development. Paper presented at the 2016 International Education Conference, Venice, Italy.

National and Regional Conferences:

- Kelly, D.P.** (April, 2018). Stop complaining about millennials in the classroom! International Technology and Engineering Educators Association (ITEEA) Annual Conference, Atlanta, GA.
- Kelly, D.P.**, Ernst, J.V., & Clark, A.C. (April, 2018) Learning modules for at-risk graphics students. Council on Technology and Engineering Teacher Education (CTETE), Atlanta, GA.

- Kelly, D.P.** (October, 2017). Addressing the gender gap in engineering graphics: trends, self-efficacy, and academic outcomes. Southeastern Technology Education Annual Conference, Raleigh, NC.
- Kelly, D.P.,** Autry, B.D., & Kelly, D.L. (October, 2017). Engaging at-risk students in STEM education. Southeastern Technology Education Annual Conference, Raleigh, NC.
- Kelly, D.P.,** Sutton, K.G., Clark, A.C., & Fahrner, N.E. (November, 2016). Spatial visualization and STEM educational attainment and persistence: Rationale and assessment. Southeastern Technology Education Annual Conference, Virginia Beach, VA.
- Kelly, D.P.** (March, 2017). Measurements of self-efficacy in engineering graphics students: An examination of factors impacting student outcomes in an introductory engineering graphics course. Poster presented at the 12th Annual Graduate Student Research Symposium at North Carolina State University, Raleigh, NC.
- Kelly, D.P.,** Sutton, K.G., Clark, A.C., & Fahrner, N.E. (November, 2016). Spatial visualization and STEM educational attainment and persistence: Rationale and assessment. Southeastern Technology Education Annual Conference, Virginia Beach, VA.
- Kelly, D.P.,** Sutton, K.G., & Clark, A.C. (October, 2016). A “new” visualization assessment for engineering graphics courses. Paper presentation at the American Society for Engineering Education (ASEE) Engineering Design Graphics Division (EDGD) 71st Midyear Conference, Nashua, NH.
- Clark, A.C., **Kelly, D.P.,** Fahrner, N.E., & Ernst, J.V. (October, 2016). An examination of three assessment models of the PVST:R. Paper presentation at the American Society for Engineering Education (ASEE) Engineering Design Graphics Division (EDGD) 71st Midyear Conference, Nashua, NH.
- Bowers, S., Ernst, J.V., **Kelly, D.P.,** & Clark, A.C. (July, 2016). Building teachers’ STEM practices. 5th annual STEM Forum & Expo, Denver, CO.
- Kelly, D.P.,** Clark, A.C., Ernst, J.V., & Sutton, K.G. (June, 2016). Flipped instruction in engineering graphics courses: Current landscape and preliminary study results of instructors' perceptions. Paper presented at the American Society for Engineering Education Annual Conference and Exposition, New Orleans, LA, Session W218.

- Kelly, D.P. & Fahrner, N.E.** (April, 2016). Flipping an undergraduate engineering graphics communication course: Research goals and design. Poster presentation at the STEM Education Research Symposium, North Carolina State University, Raleigh, NC.
- Clark, A.C., Ernst, J.V., & **Kelly, D.P.** (March, 2016). Online professional development for technology/engineering education teachers. International Technology and Engineering Educators Association (ITEEA) Annual Conference, Washington, D.C.
- Kelly, D.P.** (March, 2016). Integrative STEM education: A catalyst for bringing STEM to life! – What is PBL and should we care? Panel presentation at the International Technology and Engineering Educators Association (ITEEA) Annual Conference, Washington, D.C.
- Carter, C., Coates, T., Welker, M, & **Kelly, D.P.** (March, 2016). 3D printing is changing the way we think. – 3D printing: Beyond the “cool factor.” Panel presentation at the International Technology and Engineering Educators Association (ITEEA) Annual Conference, Washington, D.C.
- Ernst, J.V., Williams, T.O., Clark, A.C., & **Kelly, D.P.** (January, 2016). Psychometric properties of the PSVT:R outcome measure: A preliminary study of introductory engineering design graphics. Paper presentation at the American Society for Engineering Education (ASEE) Engineering Design Graphics Division (EDGD) 70th Midyear Conference, Daytona Beach, FL.
- Kelly, D.P.** (December, 2015). The continuing role of vocational education in 21st century schools: A case study. Poster presentation at the Graduate Student Poster Session, North Carolina State University, Raleigh, NC
- Kelly, D.P.** (November, 2015). STEM teacher Efficacy in inverted classrooms. Mississippi Valley Technology Teachers Education Annual Conference/Southeastern Technology Education Annual Conference, Nashville, TN.
- Kelly, D.P.**, Sutton, K.G., Clark, A.C., & Ernst, J.V. (November, 2015). Flipped instruction for technology and engineering educators. Mississippi Valley Technology Teachers Education Annual Conference/Southeastern Technology Education Annual Conference, Nashville, TN.
- Kelly, D.P.** (March, 2015). STEM teacher efficacy in flipped classrooms. Research Roundtable: Council on Technology and Engineering Teacher Education (CTETE), Milwaukee, WI.

Kelly, D.P. (March, 2015). Overcoming barriers to classroom technology integration. International Technology and Engineering Educators Association (ITEEA) Annual Conference, Milwaukee, WI.

Kelly, D.P. (March, 2015). STEM teacher efficacy in inverted classrooms. Poster presentation at the STEM Education Research Symposium, North Carolina State University, Raleigh, NC.

Kelly, D.P. (March, 2015). Overcoming barriers to classroom technology integration. International Technology and Engineering Educators Association (ITEEA) Annual Conference, Milwaukee, WI.

Kelly, D.P. (November, 2014). Overcoming barriers to classroom technology integration. Teaching and Learning with the iPad, Raleigh, NC.

Kelly, D.P. (October, 2014). Overcoming barriers to classroom technology integration. Luddy Education Conference, Wake Forest, NC.

Service and Outreach Presentations:

Kelly, D.P., Taylor, P., & Taylor, T. (September, 2017). Working with students in foster care. Pre-Service Teacher Professional Development Workshop at North Carolina State University, Raleigh, NC.

Kelly, D.P. (July, 2017). Millennials and technology in the classroom. Beginning Teacher Institute at North Carolina State University, Raleigh, NC.

Kelly, D.P. (March, 2016). Choosing appropriate technology for the 21st century classroom. North Carolina Science Teachers Association, Raleigh, NC.

Grant and External Funding:

Kelly, D.P., Clark, A.C., Ernst, J.V., Blanchard, M.R., & Peterson, B. (In Review). *Connecting STEM - My College Mentor: The Development of an E-Mentoring Model Linking Rural Middle School Students to University STEM Mentors*. ITEST Strategies, National Science Foundation, \$1,199,625/3 years. Principal Investigator.

Rutherford, T., **Kelly, D. P.**, Hite, R., Walkowiak, T., & Jhala, A. (In Review). *Integrating Computational Thinking in Elementary Mathematics through Tangible, Collaborative Coding (CTinELM)*. STEM + Computing (STEM+C) Partnerships Program, National Science Foundation, \$1,479,894/3 years. Co-Principal Investigator.

Ernst, J.V., Brown, J., Clark, A.C., **Kelly, D.P.** (2017). *Active Learning Modules to Support Problem-Based Learning: Effects on Engineering Retention and Academic Outcomes of At-Risk Students*. IUSE- Exploration & Design, National Science Foundation, \$599,485/3 years. Institutional Principal Investigator.

Ernst, J.V., Bottomley, L., Clark, A.C., DeLuca, V.W., & Ferguson, S. (2011). *Transforming Teaching through Implementing Inquiry*. Discovery Research K-12, National Science Foundation, \$1,994,342/5 years. Research Associate (2014-2015).

Outreach and Interdisciplinary Activities:

STEM Explorers

Summer Camp program to engage foster children in STEM activities

ConnectingSTEM.org

Collaborative research and educational resource for STEM education

Honors and Awards:

- International Technology and Engineering Educators Association (ITEEA) Emerging Leader Designation (2018)
- Epsilon Pi Tau Robert & Marilyn Wenig Scholarship. (2017)
- Epsilon Pi Tau Robert & Marilyn Wenig Scholarship. (2016)
- Best Presentation Award: A Model for Engineering and Technology Teacher Education Professional Development, 2016 International Education Conference, Venice, Italy (2016)
- Foundation for Technology and Engineering Education (FTEE), International Technology and Engineering Educators Association (ITEEA) and Council on Technology & Engineering Teacher Education (CTETE) 21st Century Leadership Academy Fellow (Class of 2017)
- Foundation for Technology and Engineering Education/Donald Maley Outstanding Graduate Student Award (2016)
- William Everett Warner Graduate Student Research Award (2015)
- Teacher of the Month (February, 2013)
- STEM Educator of the Month (October 2012)
- United States Navy – Three Letters of Commendation (1998-1999)

Service and Leadership:

Academic:

- Associate Editor – Engineering Design Graphics Journal (2018-present)
- Reviewer, The International Review of Research in Open and Distributed Learning (2017)
- Editorial Board Member, Meridian: A K-16 School Computer Technologies Journal (2016-2017)
- Reviewer, ASEE Annual Conference and Exposition (2017)
- Reviewer, EDGD 72nd Annual Mid-Year Conference (2016)
- Reviewer, EDGD 71st Annual Mid-Year Conference (2016)
- Reviewer, Meridian: A K-16 School Computer Technologies Journal (2015-2016)
- Reviewer, ASEE Annual Conference and Exposition (2016)
- Reviewer, Clute Institute 2016 International Education Conference (2016)
- Reviewer, EDGD 70th Annual Mid-Year Conference (2015)

Organizational:

- Council on Technology & Engineering Teacher Education (CTETE) – Chair, Committee on Teacher Revitalization and Retention (2018-present)
- Engineering Design Graphics Division (EDGD) of the American Society for Engineering Education (ASEE) 73rd Annual Mid-year Conference – Program Chair (2019)
- Technology and Engineering Education Collegiate Association – Judge (2016)
- GLBT Advocate Program (2016-present)
- Epsilon Pi Tau Honor Society
President – Alpha Pi Chapter (2015-present)
Vice-president – Alpha Pi Chapter (2014-2015)
- The PUSH Initiative
President (2014-present)
- Graduate Student Advisory Board
Member (2015-2016)
- Ed Council – Epsilon Pi Tau Representative (2015)
- Neal Middle School
CTE Department Chair (2011-2012)
School Leadership Team Representative (2011-2012)
- Tri-Town Volunteer Rescue Squad, Inc.
New York State Certified Emergency Medical Technician (2004-2009)
Vice President (2005-2007)
Board of Directors (2005-2008)
- North Country Community Health Programs
Executive Director (2007-2009)

- Brasher-Winthrop Fire Department, Inc.
Volunteer Fire Fighter (2003-2008)
Captain (2006-2007)
- West Stockholm Fire Department, Inc.
Volunteer Fire Fighter (2002-2003)
- United States Navy
Honorably Discharged (1999)

Professional Licensure:

State of North Carolina #1144177

- Technology Education
- Science (6-9)

Professional Memberships:

- American Educational Research Association (2014-present)
- International Technology and Engineering Educators Association (2013-present)
- Epsilon Pi Tau Honor Society (2014-present)
- Southeastern Technology Education Conference (Life Member)
- Mississippi Valley Technology Teacher Education Conference (Life Member)
- American Society for Engineering Education (2015-present)
- North Carolina Association for Career Technical Education (2017)
- Phi Kappa Phi Honor Society (2017)
- National Education Association (2015-2018)
- North Carolina Association of Educators (2015-2018)
- International Society for Technology in Education (2014-present)
- Spatial Intelligence and Learning Center (2014-present)

Additional Training:

Project SAFE Ally (2016)

Project Lead the Way

- Certified in the following courses:
 - Automation and Robotics
 - Design and Modeling
 - Energy and the Environment
 - Flight and Space
 - Magic of Electrons
 - Science of Technology