Dominick E. Fazarro, Ph.D., CSTM AMTAE Senior Fellow

Department of Technology The University of Texas at Tyler Tyler, TX 75799 Mobile-469.910.9181

EDUCATIONAL HISTORY

Ph.D., Industrial Education and Technology, 2001 Iowa State University

Ames, Iowa

M.S., Industrial Management, 1992 Central Missouri State University

Warrensburg, Missouri

B.S., Manufacturing Design Technology, 1989 Norfolk State University

Norfolk, Virginia

ACADEMIC EXPERIENCE

The University of Texas at Tyler

Department of Technology

• Professor

The University of Texas at Tyler

Department of Technology

• Associate Professor (Tenured)

The University of Texas at Tyler

Dept. of Human Resources Development and Technology

• Associate Professor

• Doctoral Faculty

(Ph.D. Program-Human Resource Development)

The University of Texas at Tyler

Affiliated faculty-School Improvement Doctoral Program

College of Education and Psychology

Sam Houston State University

Department of Agricultural and Industrial Sciences

Industrial Technology Program

Associate Professor

University of Arkansas at Pine Bluff

Industrial Technology Program

Department of Mathematical Sciences and Technology

• Associate Professor (promoted in 2007)

August 2019-Present

August 2015-August 2019

August 2010-August 2014

August 2022-Present

July 2007 - July 2010

August 2002 - May 2007

Longview Community College

Applied Sciences Department

• Adjunct Drafting Instructor

August 1997 - May 1998

Iowa State University

Student Affairs

George Washington Carver Academy

• Assistant Coordinator – Post-Doctoral

August 2001-June 2002

RESEARCH AGENDA

My research agenda focuses on various areas of innovative technologies which requires unique instruction to enhance learning outcomes

- Learning Styles
- Nanotechnology Safety and Education/Risk Assessment
- Nanotechnology Workforce Education and Development
- Workforce Development
- Evaluation and Assessment

INDUSTRY AND UNIVERSITY ACCREDITATION EXPERIENCE

- Assisted in University of Tyler ATMAE accreditation process (2013 & 2016)-Full Accreditation Status
- Completed NAIT/ATMAE Outcome-Based Assessment Training (2007 & 2009)
- Data Manager & Assessor-NSF STEM/ HBCU-UP Program University of Arkansas at Pine Bluff, (July 2004-May 2007)
- National Association of Industrial Technology (NAIT) ACCREDIATION University of Arkansas-Pine Bluff, (2006-2007)
- Data Manager & Assessor-NSF STEM/ HBCU-UP Program University of Arkansas at Pine Bluff, (July 2004-May 2007)
- Data Manager & Assessment Coordinator, Standard Two Assessment Team-National Accreditation for Teacher Education (NCATE University of Arkansas-Pine Bluff, (November 2004-May 2005)
- Evaluation Committee Chairperson University Assessment NCA/HLC(UAPB), (2005-2006)
- Directed university-wide data assessment on customer satisfaction survey, (August-December, 2006)
- Composite Designer-Newport News Shipbuilding and Drydock Co., (1989-1990)
- Data Manager-EDS/GM Fairfax Plant-Kansas City, Kansas, (1996-1997)
- Inventory Control/Logistics-U.S. Army, (1993-2001)
- Assistant Researcher (Research Internship)-Kauffman Foundation, Kansas City, MO, (June-August 1995)

CONSULTING-ASSESSMENT & EVALUATION

- External Evaluator-NSF-STEM/ HBCU-UP Program/Florida A&M University, (2009-2012)
- Data analysis and created reports for Pulaski Special County School District's Multiage Program, (2007-2011)
- External Provider-Minnesota Department of Education, (2007)

- Conducted needs assessment at the Alexandria Center's (Department of Youth Services-AR) Education Program, (2007)
- Generated survey data for Arkansas Baptist College, (October-December 2006)
- Coordinated the evaluation of The Online Journal for Workforce Education and Development (Southern Illinois University), (2006)
- Consulted for Edu-Care International (Supplemental Education Service Provider), (July 2004-March 2005)
- Designed an evaluation model for the Teacher Advisement Grant-Savannah School District, (2005)
- Conducted data analyses and developed data bases for the Kiwanis Pheifer Camp, (2004-2005)
- Evaluated the effectiveness of the John Deere Team Scholars Program, (Feb-May 1999)

PUBLICATIONS

NSE=Scholarship in Nanotechnology Safety Education NW=Scholarship in Nanotechnology Workforce WD=Scholarship in Workforce Development

RC=Scholarship in Research Collaboration LS=Scholarship in Learning Style

Peer-Reviewed Journal Publications (n=32)

- 1. RCScott, D. & Fazarro, D. (2021) The Need for integration of smart glasses in policing for the 21st century, but is the technology there yet? *Technology Interface International Journal*, (A Journal) 22(1), 53-59.
- 2. NSEScott, D. & Fazarro, D. (2020) Bridging over criminal justice to address the growing threats of nanotechnology in local communities: An introspective look at how nanotechnology is impacting first responders. *Technology Interface International Journal*, (A Journal) 20(2), 31-34.
- 3. NSE**Fazarro, D.** & Trybula, W. (2020) Meeting the needs of the 21st century workforce: Nanotechnology safety training. *The Online Journal for Workforce Education and Development*. (B Journal) 10(1), 1-15.
- 4. NSE **Fazarro, D.** & Sayes, C. (2018). Students' perception of learning experience of risk management for nanoscaled materials. *Journal of Technology, Management, and Applied Engineering* 34 (3), 2-11. (A+Journal)
- 5. NSE **Fazarro**, D, Hanks, C., Trybula, W., & Tate, J. (2016). Introducing Engineering and Technology Majors to Nano-Safety and Ethics. *Technology Interface International Journal*, 17 (1), 5-17. (A+Journal)
- 6. NSETate, J., Hernandez, R.A., Hanks, C., Trybula, W., & **Fazarro**, D (2016). Addressing ethical and safety issues of nanotechnology in health and medicine in undergraduate engineering and technology curriculum. *Global Journal of Engineering Education*, 18(1), 1-5. (B Journal)
- 7. NSETate, J., Espinoza, S., Hanks, C., Trybula, W., & **Fazarro**, D. (2015). Military and National Security Implications of Nanotechnology. *Journal of Technology Studies*, 41 (3), 20-28. (B Journal)
- 8. RCKornegay, A., Fasanya, B., **Fazarro**, D. (2015) Technology Driven Innovation Strengthening Industry and Academia Partnerships for Advanced Manufacturing Gains. *Technology Interface Journal*, 15(2), 62-66. (A+Journal)
- 9. NSE **Fazarro**, D., Tate, J. & et. al. (2015). Evaluating Students' Perceptions for the Ethics Module Content in Nanotechnology Safety: Meeting the Needs for Post-Secondary Students in STEM Areas. *Journal of Technology, Management, and Applied Engineering*, 31(1), 1-20. (A+Journal)

- 10. RCGrant, G. J., **Fazarro, D**. & Steinke, L. J., (2014). Implementing problem-based learning into multimedia technology courses: Reinforcing industries' needs. *The Online Journal for Workforce Education and Development*, 7(1), 1-17. (B Journal)
- 11. LSWu, C. & **Fazarro**, D. (2013). Investigation of Learning Style Preferences of Business Students. *The Online Journal for Workforce Education and Development*, 6(2), 2-20. (B Journal)
- 12. Nanotechnology Safety Training: Addressing the Missing Piece. *Journal of Technology Studies*, 38 (1), 43-52. (B Journal)
- 13. NSE **Fazarro**, D. (2012). The urgency of nanotechnology safety education. *IEEE Nanotechnology Magazine*, 6 (1), 24, (*Peer-Review, Journal with a H Index 7*) (A+Journal)
- 14. NSE **Fazarro**, D., Newberry, D., Trybula, W. & Hyder, J. (2012). Introducing a nanotechnology curriculum and considerations for bridging academic/industry relationships for applied technology-oriented programs: The new challenge for ATMAE. *Journal of Technology, Management, and Applied Engineering*, 28 (1), 1-8. (A+Journal)
- 15. RCFazarro, D., & McWhorter, R. (2011). Leveraging green computing for increased viability and sustainability. *Journal of Technology Studies*, 37 (2), 116-123. (B Journal)
- 16. NSE **Fazarro**, D., Heshium, L. & McWhorter, R. (2011). Going virtual: Delivering nanotechnology safety education on the web. *Journal of sTEm Teacher Education*, 48(2), 38-62. (B Journal)
- 17. RCPannkuk, T. & **Fazarro**, D. (2011). Strengthening collaborations with landscaping industry and department of agricultural sciences: Using the structured group interview approach for enhancing the 21st century workforce. *The Online Journal for Workforce Education and Development*, 5(2), 1-15. (B Journal)
- 18. RCFazarro, D., Stevens, A., Reed, D., & Carwile, D. (2011-2012). Learning style preferences of African American students in agriculture sciences. *National Forum of Education Administration and Supervision Journal*, 28 (3), 32-51. (A Journal)
- 19. LSFazarro, D., Putnam, A. & Steinke, L. (2011). What should engineering technology instructors know about learning styles: Improving the learning environment for diverse students? *Workforce Education Forum*, 35 (2), 21-31. (B Journal)
- 20. RCYildiz, F., **Fazarro**, D., Coogler, K. (2010). The green approach: Self-powered house design concept for undergraduate research. *Journal of Industrial Technology*, 26 (2), 1-10. (A+Journal)
- 21. RCBeverly, M. Lau, M., Stutts, K. & Fazarro, D. (2009). Evaluation of customer survey data to develop an effective marketing plan for state parks: A case study using the Texas Parks and Wildlife Department State Park study. *Journal of Business Case Studies*, 5 (5), 19-28. (Impact Factor: .06)
- 22. NSETrybula, W., **Fazarro**, D. & Kornegay, A. (2009). The emergence of nanotechnology: Establishing the new 21st century workforce. *The Online Journal for Workforce Education and Development*, 4 (3), 1-10. (B Journal)
- 23. RCKornegay, A., **Fazarro**, D. & Hoffa, D. (2009). Gearing up to manufacture biofuels including ethanol and biodiesel. *International Journal of Modern Engineering (IJME)*, 9 (2), 13-16. (A+Journal)

- 24. WDFazarro, D., Pannkuk, T., Pavelock, D, & Hubbard, D. (2009). The effectiveness of instructional methods based on learning style preferences of agricultural students: A research tool for continuous improvement for faculty in career and technical education (CTE) programs. *Journal of Industrial Teacher Education*, 45(3), 84-104. (B Journal)
- 25. RCUllrich, D. R., Pavelock, D. & **Fazarro**, D. (2007). Effectiveness of career and technology student organizations (CTSOs) in Texas. *The Online Journal for Workforce Education and Development*, 3 (4), 1-11. (B Journal)
- 26. WDLusk, S. & **Fazarro**, D. (2006). The effects of psychosocial factors on career and workforce development for students with disabilities. *The Online Journal for Workforce Education and Development*, 2 (3), 1-20. (B Journal)
- 27. LSFazarro, D & Buckner, E. (2005). What is your learning style preference? A look at industrial technology and agriculture students. *The Online Journal for Workforce Education and Development*, 1(3), 1-14. (B Journal)
- 28. LSFazarro, D. (2005). An investigation of learning style preferences based on socio-economic status of African American students at a historical black university in the delta region of South Central United States. *International Journal of Knowledge, Culture and Change Management*, (4), 1076-1079. (B Journal)
- 29. LS Fazarro, D. & Stevens, A. (2004). Topography of learning styles preferences for undergraduate students in industrial technology and engineering programs at historically Black and predominately white institutions. *Journal of Industrial Teacher Education*, 41 (3), 5-30. (Awarded Outstanding Manuscript of the Year 2003-04 by the journal) (B Journal)
- 30. LS Fazarro, D. & Martin, B. (2004). Comparison of learning styles of agriculture, human sciences, and industrial technology students at a historically black university. *Workforce Education Forum*, 31 (2), 17-26. (B Journal)
- 31. WDFazarro, D. (2003). Tech-Upward bound program: A program to introduce students to world of technology. *TechDirections*, 63 (7), 26-27. (A Journal)
- 32. LSFazarro, D. (1999). Motivating African American youth in technology education. *TechDirections*, 59 (1), 25-27.

Peer-Reviewed Proceedings (n=7)

- 1. NSEHanks, C., Tate, J., Fazarro, D. & et. al. (2015). A multi-disciplinary multi-institutional approach to teaching ethics of emerging technologies. Proceedings of The 2015 American Society of Engineering Education (ASEE) Gulf-Southwest Annual Conference, March 25-27, 2015.
- 2. RCKornegay, A., Fasanya, **Fazarro**, D. & et. al. (2014). Technology-Driven Innovation—Strengthening Industry and Academia Partnerships for Advanced Manufacturing Gains. Proceedings of The 2014 IAJC-IJME International Conference, ISBN 978-1-60643-379-9, September 25-27, 2014.
- 3. NSEHanks, C. **Fazarro**, D., Tate, J. & et. al. (2014). The Continuing Shock of the New: Some Thoughts on Why Law, Regulation, and Codes Are Not Enough to Guide Emerging Technologies (Paper 2014-10610). Proceedings of The 2014 American Society of Engineering Education (ASEE), June 14-17, 2014.
- 4. NSEHanks, J. C., Tate, J., Fazarro, D., Trybula, W., McLean, R. J. C., Dutta, S., & et. al. (2014). Fostering ethical, social, Environmental, Health, and Safety Awareness in Tomorrow's Engineers and

Technologists. In ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE). (Vol. 14). American Society of Mechanical Engineers (ASME). doi: 10.1115/IMECE2014-38264

- NSEFazarro, D. & Trybula, W. (2011). Empowering Academia to Look Into the Future: Nanotechnology Safety Education-Creating the Workforce That You Will Need. Proceedings of the IEEE Conference, Portland, OR., August 15-18, 2011.
- 6. RCYildiz, F., **Fazarro**, D. & Coogler, K. (2009). Self-Sufficient, Energy-Efficient House Design (AC2009-1073). Proceedings of The 2009 American Society of Engineering Education (ASEE), June 14-17, 2009.
- 7. RCKornegay, A. **Fazarro**, D. & Hoffa, D. (2008). Biotechnology: Gearing up to Manufacture Biofuels Including Ethanol and Biodiesel (Paper 012, ENT 204), Proceedings of The 2008 IAJC-IJME International Conference, ISBN 978-1-60643-379-9, November 18-22, 2008.

Books

Fazarro, D., Trybula, W., Hanks, C., Tate, J., &Sayes, C. (Eds.).(2023). NANO-SAFETY: What workers need to know, 2nd Ed. DeGruyter: Germany. ISBN-978-3-11-078182-3

Fazarro, D., Trybula, W., Hanks, C., Tate, J.(Eds.).(2017). NANO-SAFETY: What workers need to know. DeGruyter: Germany. ISBN-978-3-11-037375-2

Fazarro. D. (2015). (Editorial Advisory Board) Impact of diversity on organization and career development. Hershey, PA: IGI Global. Edited Book.

Book Chapters (n=6)

- 1. Nanotechnology Certification (Chapter 15). In Nanotechnology Safety Education by R. Asmatulu, Elsevier: Holland.
- 2. NSE Trybula, W., Newberry, D., **Fazarro**, D. & Hanks, C., (2020). Minimizing Negative Long-term Occurrences in Nanotechnology Development. (Chapter 11), pp. 189-209. *In Intellectual Property Issues in Nanotechnology*, CRC Press: Boca Raton, FL.
- 3. NSE Trybula, W., Newberry, D. & **Fazarro** D. (2018). Nanotechnology Health, Safety, Environment Overview (Chapter 35). In Nanopackaging: Nanotechnologies and Electronics Packaging, (2nd Ed.) by James E. Morris, Springer: Switzerland.
- 4. NSETrybula, W., **Fazarro**, D., Hanks, C., Tate, J. (2016). Nanotechnology safety education. In *Global Perspectives of Nanoscience and Engineering Education* (223-235), by Winkelmann, Kurt, & Bhushan, Bharat (Eds.), Springer: Switzerland.
- 5. NSE **Fazarro**, D. & Fitzimmons, V. (2013). *Nanotechnology Certification* (Chapter 15). In Nanotechnology Safety Education by R. Asmatulu, Elsevier: Holland.
- 6. NW **Fazarro**, D. (2010). Lateral diffusion of nanoeducation: Developing the new workforce. In Nanoscience education, workforce training, and k-12 resources, by Aznar, M.F. & Lightfeather, J. CRC: Press, Boca Raton, FL.

Practitioner Publications

Lau, M., Beverly, M., Stutts, K, & **Fazarro**, D. (2008). State park visitor survey: Statewide report. Texas Parks and Wildlife Department Assessment Report.

Fazarro, D. (2008). Industry division shifting focus for 21st century. IT Insider, 10(2), 6.

Other Print Publications

Mass Media Materials being interviewed as an expert in the subject area of nanotechnology safety

Bloomberg BNA-Occupational Safety & Health Reporter, (2013). U.K. safety agency releases nanotechnology guide. 43(14), 313-332.

Bloomberg BNA-Occupational Safety & Health Reporter, (2013). NIOSH seeks guidance on priorities for nanotechnology research through 2016. 43(5), 89-112.

GRANTS

Federal Funded -(Total: \$ 451,769) (Total Amount-\$ 489,569)

Year	Title	Amount/Type	Awarding Agency	Role/ Position			
2014	Nanotechnology Environment, Health, and Safety Awareness	\$5,992 (Supplement)	National Science Foundation (Nanotechnology Education Division)	Co-PI			
2014	NanoTRA -Texas Regional Alliance to Foster Nanotechnology Environment, Health, and Safety Awareness	\$10,000 (Research Education Teaching)	National Science Foundation (Nanotechnology Education Division)	Co-PI			
2012	NanoTRA -Texas Regional Alliance to Foster Nanotechnology Environment, Health, and Safety Awareness	\$199,777	National Science Foundation (Nanotechnology Education Division)	Co-PI			
2010	Technical Approach and Program Design: Project for Nano-Safety Education and Training	\$236,000	Susan Hardwood Grant Training Grant Program	Co-PI Internal Evaluator			
State Funded (Total: \$ 19,000)							
Year 2008	Title State Park On-Site Visitor Survey Assessments	Amount/Type \$19,020	Awarding Agency Texas Parks and Wildlife Department	Role/ Position Co-PI			

University Faculty Research Incentive (Total: \$ 18,800)

Year	Title	Amount/Type	Awarding Agency	Role/Position
2019	Molecular Mechanisms of Growth Factor Receptor Activation by Bacterial Protease: Application and Education of Nanocarrier Biotechnology	\$17,000	The University of Texas at Tyler	Co-PI
2006	Investigation of the Learning Preferences of Biology and Chemistry students	\$600	The University of Arkansas at Pine Bluff	PI
2003	Learning Style Research- STEM majors	\$1,200	The University of Arkansas at Pine Bluff	PI

PRESENTATIONS

NSE=Scholarship in Nanotechnology Safety Education
LS=Scholarship in Learning Style
NW=Scholarship in Nanotechnology Workforce
RC=Scholarship in Research Collaboration
WD=Scholarship in Workforce Development

Presentations aligned with research topics (n=70)

- 1. NSE Wright, J., Johnson, G., Scott, D., & **Fazarro**, D. (2024). Resolving submicron features in forensic evidence through atomic force microscopy and PDMS negatives. *Association of Technology, Management, and Applied Engineering (ATMAE)*, Las Vegas, NV., October 27-31, 2024. (Poster)
- 2. NSE **Fazarro**, D., Johnson, G., Scott, D. & Wright, J. (2023). AFM characterization of latent prints: The introduction of polymers and AFM imaging for more precise identification markers and debris in dactyloscopy. *Association of Technology, Management, and Applied Engineering (ATMAE)*, Atlanta GA., October 25-27, 2023. (Poster)
- 3. NSE Wright, J., Scott, D., **Fazarro**, D. & Johnson, G. (2022). Physical nanotechnology applications for forenics: Development of nano-features from latent fingerprints. *Association of Technology, Management, and Applied Engineering (ATMAE)*, Louisville KY., November 9-11 2022. (Poster)
- 4. NSE **Fazarro**, D. (2022). AI Enhanced Materials for the Future of Aerospace. Association of Technology, Management, and Applied Engineering (ATMAE), Louisville KY., November 9-11 2022.
- 5. NSE Wright, J. & **Fazarro**, D. (2021). Working towards a Texas nanotechnology hub-and-spoke degree network. *Association of Technology, Management, and Applied Engineering (ATMAE)*, Orlando FL., November 3-5, 2021.(Poster)
- 6. NSE **Fazarro**, D. & Trocino, M. (2020). Enhancing safety education in Nanomaterial safety: The hands-on approach. *Association of Technology, Management, and Applied Engineering (ATMAE)* & International Association of Journals *and Conferences (IJAC) Virtual Conference*, November 4-6, 2020.

- 7. RCMosley, I. & **Fazarro**, D. (2017). Putting military skills to good use: Veterans in STEM. 50th *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cincinnati, OH., November 1-3, 2017.
- 8. NSE**Fazarro**, D. (2016). Current skillsets for working in NANO-SAFETY, *2016 San Antonio Nanotechnology Forum*, University of Texas at San Antonio, November 16, 2016.
- 9. RCMiller, M., Lawrence, H., Donaldson, S., & **Fazarro**, D. (2016). The ATMAE lean six sigma prep course: Affordable training just a click away. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Orlando FL., November 2-5, 2016.
- 10. RCLawrence, H., Miller, M., Donaldson, S., & **Fazarro**, D. (2016). The defined measured, analyzed, and improved ATAME lean six sigma exam. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Orlando FL., November 2-5, 2016.
- 11. RCDonaldson, S., Miller, M., Lawrence, H., & **Fazarro**, D. (2016). The unintended consequences resulting from superior preparation of students in technology for industry: Diverting the pipeline away from advanced degrees and academic careers. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Orlando FL., November 2-5, 2016.
- 12. NSE **Fazarro**, D., Ewert, D., Miller, M. & Trybula, W. (2015). Development of nano/advanced materials safety certification. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Pittsburg, PA, November 11-14, 2015.
- 13. NSEHanks, C., Tate, J. **Fazarro**, D. & et. al. (2014). Infusing ethical, safety, health, and environmental education in engineering and technology curricula. *New Horizons in Texas STEM Education Conference*, San Antonio, TX, March 27-28, 2014.
- 14. NSF **Fazarro**, **D**., Tate, J., & et. al. (2014). NSF-NUE: NanoTRA-Texas alliance to foster nanotechnology environment, health, and safety awareness in tomorrow's engineering and technology leaders. *ASEE Annual Conference*, Indianapolis, IN., June 15-18, 2014.
- 15. NSEHanks, C., Tate, J. **Fazarro**, D. & et. al. (2014). The continuing shock of then New: Some thoughts on why law, regulation, and codes are not enough to guide emerging technologies. *ASEE Annual Conference and Exposition*, Indianapolis, IN, June 15-18, 2014.
- 16. NSEHanks, C., Tate, J. **Fazarro,** D. & et. al. (2014). A multi-disciplinary, multi-institutional approach to teaching ethical, social, health, safety, and environmental issues in nanotechnology. *IEEE International Symposium on Ethics in Engineering, Science, and Technology*, Chicago, IL, May 23-24, 2014.
- 17. NSE **Fazarro**, D., Tate, J., & et. al. (2014). Preparing the nano workforce: A look at educating undergraduate students in nano-safety. *2014 Micro Nanotechnology Conference (MNT)*, Albuquerque, MN June 4-6, 2014.
- 18. RCFazarro, D. & Kornegay A. (2014). Advanced Manufacturing: Increasing innovation technologies through industry-academic partnerships. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, St Louis, Mo., November 19-22, 2014.
- 19. RCFazarro, D., Tate, J., & et. al. (2014). We are seed planters: A look at teaching students' nanotechnology, environmental, health, and safety. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, St Louis, Mo., November 19-22, 2014.

- 20. NSE Miller, M., **Fazarro**, D., & Lawrence, H. (2013). The genesis of a nanotechnology Workforce: How it impacts manufacturing and curricula. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, New Orleans, LA, November, 20-23, 2013.
- 21. NSE **Fazarro**, D. (2013). The future of nanotechnology: Developing skills set for a new workforce. *Association of Career and Technical Education Vision (ACTE)*, Las Vegas, NV, December 2-7, 2013.
- 22. NSE Fazarro, D. & Steinke, L. (2012). Equipping ATMAE programs with nanotechnology courses: Developing the new white collar workforce. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Nashville, TN, November, 14-17, 2012.
- 23. NSE **Fazarro**, D. (2012). NanoSafety Training: Being proactive to train workers to handle nanomaterials. *MicroNano Technology Conference*, Penn State, PA, May, 7-9, 2012.
- 24. RCMiller, M., Lawrence, H., & **Fazarro**, D., (2012). The ATMAE lean six sigma certification exam: Who, what and why? *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Nashville, TN, November, 14-17, 2012.
- 25. RCKornegay, A, Wright, J., & **Fazarro**, D. (2012). Strengthen our connections: Academia and industry working together. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Nashville, TN, November, 14-17, 2012.
- 26. NSE **Fazarro**, D. (2012). Introduction to nanotechnology. *Inaugural 2012 San Antonio Nanotechnology Forum*, San Antonio, TX, October 18, 2012.
- 27. RCLawrence, H., **Fazarro**, D., & Miller, M. (2012). Why and how to rejuvenate and ATMAE student chapter: What's in it for me? *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Nashville, TN, November, 14-17, 2012.
- 28. NSEMiller, M., Lawrence, H., & **Fazarro**, D. (2011). Where does nanotechnology fit into a general technology program's curriculum? *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cleveland, OH, November, 9-12, 2011.
- 29. NSE **Fazarro**, D. & Trybula. W. (2011). Lateral diffusion of nanotechnology safety education: Preparing nanotechnology workers to handle nanoparticles. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cleveland, OH, November, 9-12, 2011.
- 30. NSE **Fazarro**, D. (2011). Taking the first step: Introducing nanotechnology in high schools. *STEM 2011: Bridging Research and Practice*. Austin, TX, January 19-21, 2011.
- 31. NSE **Fazarro**, D. & McWhorter, R. (2011). Educating the millennial student in nanotechnology: developing the new workforce. *Journey to Nanotech*. Applied Nanotech, Inc., Austin, TX, June 30, 2011.
- 32. NSE**Fazarro**, D. & Trybula. W. (2011). Empowering academia to look into the future: Nanotechnology safety education-creating the workforce that you will need. *The IEEE Conference*, Portland, OR, August, 15-18, 2011.
- 33. RCFazarro, D., Kornegay, A., & Miller, M. (2011). Learning through skits: A pilot study using contextual learning to achieve learning outcomes in safety education. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cleveland, OH, November, 9-12, 2011.

- 34. RCWright, J. & **Fazarro**, D. (2011). World class environment health and safety. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cleveland, OH, November, 9-12, 2011.
- 35. NSE **Fazarro**, D. & Trybula, W. (2010). The Evolution of Nanotechnology Education: Lateral diffusion for the 21st Century Workforce. *National Association of Workforce Development Professionals (NAWDP)*, Albuquerque, MN, May 2-5, 2010.
- 36. RCKornegay, A., Fazarro, D., & Bethea, M. (2010). A joint fortune 500 manufacturing company/doctoral Research-intensive university collaborate to develop a 40-hour school of technology lean manufacturing academy. Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Panama City Beach, FL, October 27-30, 2010.
- 37. RCMiller, M., **Fazarro**, D., & Lawrence, H. (2010). Increasing graduate enrollment: Generalizing industrial curricula to attract all majors. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.
- 38. RCFazarro, D. & Keren, N. (2010). Students' perspective on safety education using second life as a tool for effective learning. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.
- 39. RCMiller, M., **Fazarro**, D., & Lawrence, H. (2010). The technology certification exam: Development, content, and implications. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.
- 40. RCFazarro, D. & Steinke, L. (2010). Creating nanotechnology courses using the DACUM approach: Linking academia and industry to creating programs for the 21st century. Association of Career and Technical Education (ACTE), Las Vegas, NV, December 2-4, 2010.
- 41. RCFazarro, D. & Field, D. (2010). Scholarly publishing: Overcoming the fear factor and how to be productive in the field. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.
- 42. RCYildiz, F., **Fazarro**, D. & Coogler, K. (2009). Self-sufficient, energy-efficient house design. *American Society of Engineering Education (ASEE)*, Austin, TX, June 14-17, 2009
- 43. .RCKornegay, A. & Fazarro, D. (2009). The next migration of improved manufacturing efficiency: A Manufacturing execution system (MES). Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Louisville, KY, November 10-14, 2009
- 44. RCFazarro, D., Patrick, C, & Freeman, S. (2009). Scholarly publishing: Overcoming the fear factor and how to be productive in the field. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Louisville, KY, November 10-14, 2009.
- 45. NSE **Fazarro**, D. (2009). Future Shock: What would a nanotechnology curriculum look like? *Texas Career Education Conference*, Houston, TX, July 13-16, 2009.
- 46. RCFazarro, D. & Caso, R. (2008). Empowering faculty to conduct student-learning-centered program evaluation with course-embedded assessment and virtual data room. 9th Annual Texas A&M University Annual Assessment Conference, College Station, TX, February 21-25, 2008.
- 47. NSE**Fazarro**, D. (2008). The evolution of nanotechnology education: Lateral diffusion for the 21st century workforce. *NanoTx Conference*, Dallas, TX, October 2-3, 2008.

- 48. NSE Trybula, W. & **Fazarro**, D. (2008). Developing a need for nano-safety: Presenting the unknowns, *National Association of Industrial Technology (NAIT) Conference*, Nashville, TN, November 18-22, 2008.
- 49. RCSteinke, L. & **Fazarro**, D. (2008). Implementing problem-based learning into multimedia courses, *National Association of Industrial Technology (NAIT) Conference*, Nashville, TN, November 18-22, 2008.
- 50. RCHoffa, D., **Fazarro**, D., & Kornegay, A. (2008). The national training and consulting database initiative, *National Association of Industrial Technology (NAIT) Conference*, Nashville, TN, November 18-22, 2008.
- 51. RCKornegay, A. Hoffa, D., & **Fazarro**, D. (2008). Biotechnology: Gearing up to manufacture alternative fuels, *National Association of Industrial Technology (NAIT) Conference*, Nashville, TN, November 18-22, 2008
- 52. NSE **Fazarro**, D. & Kornegay, A. (2008). Future Shock: What would a nanotechnology curriculum look like? *Association of Career and Technical Education (ACTE)*, Charlotte NC, December 4-6, 2008.
- 53. RCSteinke, L., **Fazarro**, D., & Putnam, A.R. (2008). Implementing problem-based learning into technology education: Reinforcing industries' needs, *Association of Career and Technical Education (ACTE)*, Charlotte, NC, December 4-6, 2008.
- 54. RCPavelock, D., Ullrich, D., Kingman, D. & Fazarro, D. (2007). Using service activities to recruit students for higher education: An effective means of time and effort? *The Clute Institute Teacher and Learning Conference*, Las Vegas, NV, October 1-4, 2007.
- 55. RCKornegay, T., **Fazarro**, D. & Kornegay, A. (2007). Training and development of a nanomanufacturing workforce. *National Association of Industrial Technology Conference*, Panama City Beach, FL, October 23-27, 2007.
- 56. RCFazarro, D. & Caso, R. (2007). Empowering faculty using embedded assessment for program evaluation and intuitively understandable displays of assessment evidence for accreditation. *The Clute Institute Teacher and Learning Conference*, Las Vegas, NV, October 1-4, 2007.
- 57. RCFazarro, D. & Kornegay, A. (2007). Virtual data room: empowering industrial technology programs to prepare for NAIT accreditation. *National Association of Industrial Technology Conference (NAIT)*, Panama City Beach, FL, October 23-27, 2007.
- 58. LSFazarro, D. (2006). Learning Styles: What do we need to do to improve the learning environment? *Association of Career and Technical Education Conference (ACTE)*, Atlanta, GA, Nov 28-Dec 2, 2006.
- 59. LSFazarro, D. & Martin, B. (2005). The use of learning style preferences in selected majors at a historically black university. *American Education Research Association (AERA)*, Montreal, Canada, April 11-15, 2005.
- 60. RCFazarro, D. & Colen, C. (2005). Recruiting minority students in the industrial technology program at the University of Arkansas at Pine Bluff through the Science, Technology, Engineering, and Mathematics (STEM) Program. *National Association of Industrial Technology (NAIT) Conference*, St. Louis, MO, November 16-19, 2005.

- 61. LS Fazarro, D. & Martin, B. (2005). The comparisons of learning style preferences of vocational-technical programs. *American Education Research Association (AERA)*, Montreal, Canada, April 11-15, 2005.
- 62. LS Fazarro, D & Martin, B. (2005). The use of learning style preferences in selected majors at a historically black university. *American Education Research Association (AERA)*, Montreal, Canada, April 11-15, 2005.
- 63. ^{LS}Fazarro, D. & Martin, B. (2004). The comparison of learning style preferences of African American freshman students by parent structure and socio-economic status at a Historically Black Colleges and Universities (HBCU). *American Education Research Association (AERA)*, San Diego, CA, April 12-16, 2004.
- 64. ^{LS}Fazarro, D. (2004). An investigation of learning style preferences based on socio-economic status of African American college students at a historical black university in the delta Region of south-central United States. *The 4th International Conference of Knowledge, Culture, and Change in Organizations*, University of Greenwich, London, England, August 3-6, 2004.
- 65. ^{LS}Fazarro, D & Martin, B. (2004). The comparison of learning style preferences of African American freshman students by parent structure and socio-economic status at a Historically Black Colleges and Universities (HBCU). *American Education Research Association (AERA)*, San Diego, CA, April 12-16, 2004.
- 66. LSFazarro, D. & Martin, B. (2003). Comparative study of learning styles of Agriculture, Human Sciences, and Industrial Technology majors. *Association of Career and Technical Education (ACTE)*, Orlando, FL, December 10-14, 2003.
- 67. ^{LS}Fazarro, D. (2003). Motivating African American students in technology at predominately white institutions. *The National Higher Education Students of Color Conference*, Minneapolis, MN, October 27-30, 2003.
- 68. RCFazarro, D., Colen, C., & Duffy, O.C. (2003). Industrial mentoring program: A proactive program to mold industrial technology students for industry. *National Association of Industrial Technology Conference (NAIT)*, Nashville, TN, November 19-22, 2003.
- 69. ^{LS}**Fazarro**, D. & Martin, B. (2003). Comparative study of learning styles of Agriculture, Human Sciences, and Industrial Technology majors. *Association of Career and Technical Education (ACTE)*, Orlando, FL, December 10-14, 2003.
- 70. LSFazarro, D. & Sommerville-Allen, L. (2002). Learning Styles: What We Need to Know. 2002 Iowa State Conference on Race and Ethnicity. Ames, IA, March 1, 2002.

Invited Presentations in Various Research Areas

Member of Panel Discussions

Advances in Nanotechnology in Engineering and biomedical Applications, University of Texas at San Antonio, November 16, 2016

Nanotechnology Safety and Education. 2008 Nano TX Conference, Dallas TX, October 2-3, 2008.

A Parent and Community Empowerment Summit: Our Children-Our Responsibility "No Child Left Behind": Linking Quality Workforce and Career Education to College Preparation. Little Rock, AR, December 7, 2003.

Webinars

Horiba Webinars (August 21, 2014) NANO-SAFETY: What Workers Need to Know. Horiba, Inc., Edison, NJ (25 attendees)

TEACHING & CURRICULUM DEVELOPMENT EXPERIENCE

My teaching focuses on preparing graduates with the necessary skills sets to cope with the challenges of a knowledge-based economy. My course and curriculum development stresses innovation and preparedness for the 21st century workplace.

Programs/Certificate Programs Developed

- Industrial Safety Management, Sam Houston State University-Approved by the Texas Higher Education Coordinating Board, Spring 2009
- Nano/Advanced Material Safety Certificate- Association of Technology, Management, and Applied Engineering

Courses Developed

Course Name (Taught at University of Texas at Tyler) 2010-Present	Credit	
TECH`5380 Management of Nano-Scaled Materials	3	
TECH 4313 Risk Management of Nanomaterials	3	
TECH 3303 Introduction to Nanotechnology	3	
Course Name (Taught at Sam Houston State University) 2007-2010		
ETDD 3310 Product Design and Development	3	
IT 469 Leadership Energy and Environmental Development (LEED)	3	
IT 467 Engineering Materials Technology	3	
IT xxx Nanotechnology Safety	3	
ETDD 3310 Product Design and Development	3	
Course Name (Taught at University of Arkansas at Pine Bluff) 2002-2007		
TECH 3302 Advanced Design*	3	

EXTERNAL DOCTORAL CONSULTANT ACTIVITIES

External Methodological Consultant

- Mentored eight University of Arkansas-Little Rock doctoral students (Education Leadership Ph.D. program) (2004-07)
- Explained various research methods and statistical analysis that are suitable for research topics at various universities (2004-10)
- Assisted students in preparing PowerPoint defense presentations at various universities (2004-2010)
- Facilitated a dissertation boot camp-Nova University, Palm Beach, FL. (July 2004)

Doctoral/Masters' Thesis Committees

Doctoral

- Doctoral Committee Member-University of Texas at Tyler (Jaclyn Pedersen), Graduated 2022
- Doctoral Committee Member-University of Texas at Tyler (Shannon Rodriguez), Graduated 2022

- Doctoral Committee Member-Salisbury University (Ethae Johnson), Graduated 2021
- Doctoral Committee Member-University of Arkansas Medical School (Marion Evans), Graduated 2010
- Doctoral Committee Member/Methodologist-Sam Houston State University (Edna Kingsley), Graduated 2010
- Doctoral Committee Member-University of Central Florida (Wanda Holmes), Graduated 2010

Masters

- Masters Committee Chair-University of Texas at Tyler (Racquel Lovelace), Graduated Summer 2016
- Masters Committee Chair-Sam Houston State University (Mariana Freties), Graduated Spring 2010

PROFESSIONAL AFFILIATIONS

IEEE: Advancing Technology for Humanity (Senior Member)-Nanotechnology Council

Association of Technology, Management, Applied Engineering (ATMAE)

Epsilon Pi Tau Honor Society (EPT)

National Industry Advisory Council (NIAC)

Association for Career and Technical Education (ACTE)

Association of Career and Technical Education Research (ACTER)

National Association of Workforce Development Professionals (NAWDP)

SERVICE

National

ATMAE By-Laws and Ethics Committee Chair

ATMAE Accreditation Visitation Team

ATMAE Foundation Board (Chair) (2020-2023)

IEEE Nanotechnology Council (NTC) Standards Committee

2018 ATMAE Awards Committee

Region 4 Director-Epsilon Pi Tau Honorary Society (2018-2021)

U.S. National Committee (USNC) Technical Advisory Group-IEC TC 113 (Nano-Electrotechnologies)

ATMAE Board of Directors (Vice Chair) (2015-2017)

2015 NSF Reviewer (Nanotechnology Undergraduate Education Division)

2014 ASTM International Nanotechnology E56 National Committee

2013 ACTER-Research Paper Reviewer

2013 ACTER-Research Conference-Session A-1 Discussant

2013 ATMAE Conference, OSHA-10 facilitator

2013 NSF-NUE Review Panel (July 8-9, 2013)

Founder-Nanotechnology Focus Group (ATMAE) (2011)

President Industry Division (ATMAE) (2009-2010)

Nomination Chair (ATMAE) (2009-2010)

Vice Chair-Executive Board (ATMAE) (2009-2010)

Chaired -Member of the National Visiting Committee-National Science Foundation Grant (Omaha, NB) (March 2008)

President Elect-Industry Division (ATMAE) (2007-2009)

Association for Career and Technical Education (ACTE)-Engineering and Technology Education Division (2010-2013) Policy Chair

Association for Career and Technical Education (ACTE)-Engineering and Technology Education Division (2007-2010) Post-Secondary Representative

Member of the National Visiting Committee-National Science Foundation Grant (Omaha, NB) (2006-2008)

Chairperson of Awards Committee- Engineering and Technology Education Division (ACTE) (2004-2007)

Representative -ACTE Public Information Standing Committee (2004-2006)

State

Texas-Israel CoC Nanotech Committee (2011)

Advisory Board-Centers of NANO-SAFETY-Texas State University (2008-2010)

Co-founded the Texas State University System Nanotechnology Task Force (2008-10)

Local

Board of Trustees-University of Texas at Tyler University Academy (2021-Present)

Technology Committee-Tyler Chamber of Commerce (2011-2012)

University

Soules College of Business P&T Committee (2025) (UT-Tyler)

Department of Technology Search Committee Chair 2024-2025

MMI Interviewer (UT Tyler-School of Medicine) 2024

Faculty Seante (Faculty-At-Large) 2024

Chair-Soules College of Business Award Committee 2024

Research Council (2022-2024) (UT-Tyler)

Strategic Planning Committee- Soules College of Business (UT-Tyler)

Outside Committee Member—School Improvement Doctoral Program

(College of Education & Psychology) (2020-Present) (UT-Tyler)

Soules College of Business—Dean Search Committee (2021) (UT-Tyler)

Soules College of Business—Dean Search Committee (2019) (UT-Tyler)

Soules College of Business P&T Committee (2019-2022) (UT-Tyler)

Faculty Senate (2019-2025) (UT-Tyler)

Graduate Curriculum and Standards Committee (2018) (UT-Tyler)

Undergraduate Curriculum and Standards Committee (2014-2018) (UT-Tyler)

Soules College of Business--Governance (2019-2021) (UT-Tyler)

Chapter Advisor-Veterans Association (2017-2018) (UT-Tyler)

Chapter Advisor-IEEE Nanotechnology Student Chapter (1st in Texas, 2nd in the world)

Full Faculty Graduate Status (UT-Tyler)

Faculty Recognition Subcommittee-(UT-Tyler) (2011-2013)

Graduation Marshall -UT-Tyler (2010-Present)

COBT Faculty Awards Development Team (2011-2013) (UT-Tyler)

Undergraduate Education Committee-College of Business and Technology (2010-2012) (UT-Tyler)

Trustee-Epsilon Pi Tau (Delta Gamma Chapter) (2010-Present) (UT-Tyler)

Presenter -2010 University Development Conference UT Touch Conference (UT-Tyler)

University Faculty Awards Planning Committee (2011-2013) (UT-Tyler)

UT Tyler Mentor Program (2011-2012)

Search Committee Chair – Industrial Technology Program (SHSU) (2009)

Associate Graduate Faculty Status (SHSU) (2007-2009)

NAIT Student Chapter Advisor (SHSU) (2007-2009)

Curriculum Committee (SHSU) (2007-2009)

NCATE Standard 2 (Assessment)-Committee (UAPB) (2006)

NSF/HBUC-UP STEM Program-Data Manager (UAPB) (2005-2007)

2004 Keynote speaker (Assessment Conference at UPAB)

Ronald McNair Faculty Mentor (UAPB) (2003-2006)

Editorial Appointments

Journal of Technology, Management, and Applied Engineering (JTMAE) Editorial Board-Chairperson

Editorial Board-International Vocational Education and Training

Special Issue Editor- (Nanotechnology Safety Education) /IEEE Magazine (2020)

JTMAE Editorial Board-Vice Chairperson (2014-2015)

Editorial Advisory Board - Impacting of Diversity on Organizational and Career Development (2014)

External Book Reviewer-Impacting of Diversity on Organizational and Career Development (2014)

Column Editor-IEEE Nanotechnology Magazine (2011-2012)

Reviewer-Workforce Education Forum (2011)

Editorial Board-Journal of Workforce Development (2005-2011)

Editorial Review Board-International Journal of Engineering Research and Innovation (IJERI) (2009-2017)

Editorial Board -Journal of sTEm Teacher Education (JsTEm) (2008-2011)

Editor and Chief -Journal of Technology Studies (2008-2010)

Editor-Special Issue "Evaluating Workforce Education"- Online Journal for Workforce Education and Development Vol. 3 Number 4 (2007)

Editorial Board-Online Journal for Workforce Education and Development (Southern Illinois University) (2006-Present)

Reviewer- JTMAE (2003-Present)

Conference Assignments

2013 ACTER Conference- Discussant

2013 AHRD Proposal Reviewer

Conference Committee Member- Texas Israel CoC NanoSafety & Regulatory Symposium (2012)

IEEE Nanotechnology Council Paper Reviewer (2011)

Co-Session Chair-Nanotechnology Education Division of IEEE (2011)

ACTER Paper Reviewer (2010-Present)

International Journal of Engineering Research and Innovation (IJERI) (2009-2017)

ACTE Paper Reviewer (2006-2013)

ATMAE Paper Reviewer (2005-Present)

HONORS & AWARDS

2020 ATMAE Senior Fellow

2016 National Academy of Engineering-Exemplars of Engineering Ethics Education

2015-2016 UT at Tyler Certificate of Achievement for Scholarship and Creativity

2015 EPT Distinguished Service Citation

2014 Warner Professional Practice Award (Region 4)-Epsilon Pi Tau

2013 ATMAE White Paper Award (Developing the Future Workforce Theme)

2013 UT-Tyler College-Wide Research Award (College of Business & Technology)

2013 Latino American Who's Who

2010 Sar Levitan Award Recipient (National Recognition-Workforce Education and Development)

2010 ATAME Faculty Award for Academic Excellence (first recipient of new award)

2009 Outstanding Service Award-Engineering & Technology Education Division/Association for Career and Technical Education (ACTE)

2009 Faculty/Staff Recognition (SHSU)

2008 Faculty/Staff Recognition (SHSU)

2007 Epsilon Pi Tau Laureate Citation

2007 Who's Who Among American Teachers

2007 Distinguished Service Award (ACTE)

2006 NAITTE-G. Harold Silvius Outstanding Young Teacher Educator Award

2005 Outstanding Service on the Public Information Committee (ACTE)

2004 Service Award-Technology Education Division/Association for Career and Technical Education (ACTE)

2003-04 Research Article of the Year-Journal of Industrial Teachers Education (JITE)

1998 International Who's Who of Professional Management

CERTIFICATIONS

ATMAE Certified Senior Technology Manager

OSHA 511 General Industry OSHA 30 Hour General Industry

OSHA 501-Authorized Outreach Trainer

PROFESSIONAL DEVELOPMENT

OSHA 511 General Industry-Texas A&M Engineering Extension Service, Bryan, TX.

OSHA 30 Hour General Industry-Workforce Development Risk Management Institute, Kilgore, TX.

OSHA 501 Authorized Outreach Trainer- Texas A&M Engineering Extension Service, Mesquite, TX. January 27, 2012)

Certificate-Penn State Center for Nanotechnology Education and Utilization (September 2014)

Nanotechnology Course Resources I: Safety, Processing & Materials Applications (Penn State University-NACK Center, September 14-18, 2014)

Webinar-Ways of Introducing Nanotechnology into Your Program: (Penn State University-NACK Center, January 27, 2012)

Nanotechnology Course Resources II: Patterning Characterization & Applications (Penn State University-NACK Center, October 3-6, 2011)

CREATIVE WORKS

Scott, D. **Fazarro D**., Johnson, G, & Wright, J. (2025). *Examining Latent Fingerprints Using Atomic Force Microscopy* (WO2025174552 Patent No. PCT/US2025/012683) World Intellectual Property Organization.

Use of Atomic Microscopy to Examine Latent Fingerprints (2024)-U.S. 63/552,964 (Patent Pending)