# Anthony M. Perry

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# **Educational Background**

Texas Tech University, Lubbock, Texas

Ph.D., Curriculum & Instruction, Concentration: STEM Education

Dissertation: Conceptualizing and Investigating Student Pathways into Secondary

STEM-CTE Concentrations

Northwestern University, Evanston, Illinois

M.S., Education-Secondary Science: Physics

University of Wisconsin, Madison, Wisconsin B.S. Astronomy-Physics

2007

# **Academic Appointments**

**University of North Dakota,** Grand Forks, North Dakota

Assistant Professor, STEM Education; College of Education and Human Development

Massachusetts Institute of Technology, Cambridge, Massachusetts Postdoctoral Associate; Institute for Data, Systems, and Society

2021-2023

# **Courses Taught**

- 1. EFR 512 Survey Design and Analysis (graduate, asynchronous)
- 2. HE 569 Diversity Systems and Policy in Education (graduate, asynchronous)
- 3. TL 339 Teaching with Technology (undergraduate, in-person)

## **Publications**

\*\*\* Student Researcher

## 1. Juried/Refereed

- 1. Zhang, H., **Perry, A.**, Lee, I. (2024). Developing and Validation of Artificial Intelligence Literacy Concept Inventory Assessment: An instrument to assess artificial intelligence literacy among middle school students. *Journal of Artificial Intelligence in Education*. (forthcoming)
- 2. McBride, R., **Perry**, **A.** &, Kinsinger, B. (2024) Leveraging faculty learning communities to spark cultures of innovation across technical programs. *Journal of Applied Research in the Community College*, 31(3), p. 199-213.
- 3. **Perry, A. M.** (2023). Mutually beneficial school-industry partnerships in STEM education: An aspirational case study. In J. L. Spott, L. J. Sobrehad, & R. L. Hite (Eds.), *Developing and*

- sustaining STEM programs across the K-12 education landscape (pp. 232–252). IGI Global. https://doi.org/10.4018/978-1-6684-7771-7
- Zhang, H., Couch, S., Perry, A., Estabrooks, L., Kalainoff, M. (2023), Role models' influence on student interest in and awareness of career opportunities in life sciences. *International Journal of Science Education, Part B* (2023), 13(4), p.381-399. https://doi.org/10.1080/21548455.2023.2180333
- Perry, A. (2022). Why computing? Motivation and mathematics to pursue postsecondary CIS education. *Journal of Research in Technical Careers*, 6(1), 12-28. https://doi.org/10.9741/2578-2118.1112
- Ewell, E., Haglid, H., Truszkowski, E., Walicki, C., DeMeulder, P., DeMeulder, M., Stephens, T., Zhuang, X., Trama, C., Hamilton, A., Mo, D., Wohner, J., Furrey, R., Perry, A., Hu, S., Labowsky, H. (2022). From high school chemistry to real-world problem-solving by invention. *Journal of Chemical Education*, 99(5) 2012-2019. <a href="https://doi.org/10.1021/acs.jchemed.2c00135">https://doi.org/10.1021/acs.jchemed.2c00135</a>
- 7. **Perry, A.** (2022). Student engagement, no learning without it. *Creative Education*, 13(4), 1312-1326. <a href="https://doi.org/10.4236/ce.2022.134079">https://doi.org/10.4236/ce.2022.134079</a>
- 8. Zhang, H., Estabrooks, L., and **Perry, A.** (2019). Bringing invention education into middle school science classrooms: A case study. *Technology & Innovation*, 20(3), 235-250. <a href="https://doi.org/10.21300/20.3.2019.235">https://doi.org/10.21300/20.3.2019.235</a>
- 9. Perry, A., & Estabrooks, L. (2019). Let's invent! The Science Teacher, 86(6), 37–43.

# 3. Non-juried/non-refereed

- 1. Estabrooks, L., Zhang, H., **Perry, A.**, & Chung, A.-M. (2019). Where's the CS in invention? An exploration of computer science in high school invention projects. Lemelson-MIT Program and CSforALL. Retrieved from: https://doi.org/10.35542/osf.io/tsk9w
- 2. Invention Education Research Group. (2019). Researching invention education: A white paper. Retrieved from The Lemelson Foundation website: <a href="https://inventioneducation.org/wp-content/uploads/2020/02/Researching-Invention-Education-White-Paper.pdf">https://inventioneducation.org/wp-content/uploads/2020/02/Researching-Invention-Education-White-Paper.pdf</a>

#### 4. Invited

1. Hong, E.\* and **Perry, A.** Planting the seed: Growing community-based PBL teachers with BLOSSOMS. *Journal of STEM Education: Innovations and Research, 31*(2), 31-35.

## **Professional Presentations**

- Perry, A. and Motoya, J. (April 2024) What's the Value? Motivations to Pursue Secondary Computing CTE Concentrations. [roundtable presentation] American Education Research Association Conference, Philadelphia, Pennsylvania. <a href="https://aera24-aera.ipostersessions.com/Default.aspx?s=56-C3-D8-BD-E2-AF-56-F0-DC-76-BE-60-C1-CC-D9-84">https://aera24-aera.ipostersessions.com/Default.aspx?s=56-C3-D8-BD-E2-AF-56-F0-DC-76-BE-60-C1-CC-D9-84</a>
- 2. **Perry, A.** (April 2024). Designing Student-Industry Partners in Secondary STEM Education: A Comparative Case Study. [paper presentation] American Education Research Association Conference, Philadelphia, Pennsylvania.
- 3. **Perry**, **A.** Kinsinger, B., & McBride, R. (November 2023). Infusing Entrepreneurship in Postsecondary CTE Through Learning Communities. [poster presentation] Association for Career and Technical Education Research, Phoenix, Arizona.
- 4. **Perry, A.** Gottlieb, J., & Childers, G. (April 2023). What counts as STEM (and for whom)? The case of secondary CTE-engineering courses. [paper presentation] American Education Research Association Conference, Chicago, Illinois.
- 5. **Perry, A.**, Montoya, J., Ecton, W., Hughes, A., & Martino, L. (November 2022). From multidisciplinary to interdisciplinary: Looking toward a future of integrative CTE research. [symposium]. Association for Career and Technical Education Research, Las Vegas, Nevada.
- 6. **Perry, A.** (November 2022). Mutually beneficial school-industry partnerships: Comparing urban, suburban, and rural settings. 108<sup>th</sup> Mississippi Valley Technology Teacher Education / Southeastern Technology Education Conference, Nashville, Tennessee.
- 7. **Perry, A.,** Childers, G., Gottlieb, J., & Kelly, D. (April 2022). Policy windows for federal STEM-CTE: Historical perspectives and future directions [poster presentation]. American Education Research Association Conference, San Diego, California.
- 8. **Perry, A.** (December 2021). Motivational pathways into postsecondary computer and information systems [abstract paper presentation]. Association for Career and Technical Education Research, New Orleans, Louisiana. \*Conference award for most outstanding abstract paper presentation
- 9. Couch, S., Kalainoff, M., Estabrooks, L., **Perry, A.**, Zhang, H., Ayele, A., Marvelle, A., Haney, C., and Cameron, A. (April 2021) Responsive (re)design in problem-based education: the Biotech-in-Action program. America Education Research Association, online.
- 10. Estabrooks, L., Zhang, H. **Perry, A.** Couch, S., and Chung, A. (April 2021) Developing computational thinking skills through technological invention. Presented at America Education Research Association, online.
- 11. Couch, S., Kalainoff, M., Estabrooks, L., **Perry, A.**, Zhang, H. Ayele, A., Marvelle, A., Hanley, C., and Cameron, A. (April 2021) Integrating authentic learning with career role models to promote student interest in biosciences. Presented at NARST Annual International Conference, online.

- 12. **Perry, A.** & Jeffers, M. (March 2021) Organizational habitus and postsecondary career and technical pathways. Association for Education Finance and Policy, online.
- 13. **Perry. A.** (December 2020). Is Engineering Technology a STEM-CTE Pathway for all? The Association for Career and Technical Education Research, online. \*Conference award for most outstanding research poster
- 14. Zhang, H., Estabrooks, L., and **Perry**, **A.** (April 2020). Integrating invention education into STEM coursework: Teachers' perspectives and experiences. American Education Research Association, online.
- 15. **Perry, A.** (November 2018). Technical, vocational, and practical education: epistemological beliefs of career changers. Association for Career and Technical Education Research, San Antonio, Texas.

### **Grants and Contracts Funded**

- 1. Integrating Entrepreneurship in Postsecondary CTE Education. ECMC Foundation Postsecondary CTE Collaborative Mini-Grants. 2022-2024. **PI: Anthony M. Perry.** Co-PIs: Rosemary McBride (University of Wyoming) & Bradley Kinsinger (Kirkwood Community College). \$5,000.
- 2. ECMC Foundation Postsecondary CTE Doctoral Research Fellowship. 2020-2021. \$10,000.

## Honors/Awards

- 1. ACTER Conference Most Outstanding Paper (December 2021)
- 2. ACTER Conference Most Outstanding Poster (December 2020)

#### Service

- 1. ACTER Conference Co-Chair (2024)
- 2. Grand Forks Public Schools Work-Based Learning Committee (2023-present)
- 3. Career and Technical Education Research Editorial Board (2022-present)

# **Related Professional Experience**

<b>Lemelson-MIT Program,</b> MIT School of Engineering, Cambridge, Massachusetts <i>Invention Education Coordinator</i>	2015-2021
Sarah E. Goode STEM Academy, Chicago, Illinois Founding Science Teacher	2012-2015
Museum of Science and Industry, Chicago, Illinois Senior Coordinator, Guest Experiences	2009-2011