Elizabeth Kersey

Post Doctoral Research Associate Math and Science Teaching (MAST) Institute University of Northern Colorado

1. CONTACT INFORMATION

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University of Northern Colorado

Campus Box 123

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(970) 351-3019

2. EDUCATION

PhD in Mathematics Education – August 2018

Purdue University, West Lafayette, IN

Dissertation Chair: Rachael Kenney

Master of Science in Mathematics – August 2013

Purdue University, West Lafayette, IN

Bachelor of Science in Mathematics, Minor in Theatre Arts – May 2010

University of Puget Sound, Tacoma, WA -Summa Cum Laude, Honors in Mathematics

3. RESEARCH INTERESTS

Gender in STEM education, particularly transgender issues; feminism, queer theory, and other critical perspectives; equity; equity in mathematics curricula; philosophy and history of mathematics; sociological perspectives on mathematics and mathematics education

4. AWARDS

Bilsland Dissertation Fellowship – Spring 2018

Mike Keedy Scholarship in Mathematics Education – 2016-7 academic year

Honorable Mention, Annual Graduate Student Educational Research Symposium (AGSERS) – March 3, 2015

Outstanding Assisted Living Volunteer Award, Westminster Village – April 24, 2014

5. PUBLICATIONS

- Mintos, A., Hoffman, A., Kersey, E., Newton, J., & Smith, D. (2018). Learning about issues of equity in secondary mathematics teacher education programs. *Journal of Mathematics Teacher Education*. <a href="https://link.springer.com/epdf/10.1007/s10857-018-9398-2?author_access_token=zk4j_7ZHngGVv-S1ILhPz_e4RwlQNchNByi7wbcMAY7G9hGZCgjj03pw7_rKxt-anM1h1Uj7Vy3VeZoR8mIiZwGuuy-WS3WoLwsJ88OR1fQ_nIa-2oy_ioXGS3ZRFeEDBhFnj4ecNsuI9cuwL-t9rg%3D%3D
- Kersey, E. (2017). Discourse analysis of South African openly licensed mathematics textbooks. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 160-163). Indianapolis, IN: Hoosier Association of Mathematics Teachers Educators.
- Kersey, E. (2017). Feminist and queer perspectives on mathematics and its teaching and learning. *HAMTE Crossroads*, 7(1). 5-10.
- Kersey, E. (2016). Learning from transgender individuals in STEM education. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli (Eds.), *Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1103-1106). Tucson, AZ: The University of Arizona.
- Kersey, E., Max., B., Akarsu, M., Bloome, L., Suazo, E., & Hoffman, A. (2015). Use of written curriculum in applied calculus. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 112-115). East Lansing, MI: Michigan State University.

6. PRESENTATIONS

- Kersey, E. (2018). Conducting Narrative Inquiry with Transgender Participants. In panel discussion *Implementing narrative inquiry studies in mathematics education: Tensions, challenges, and joys*, at the Congress of Qualitative Inquiry, Urbana-Champaign, IL.
- Kersey, E. (2018). Refracting gender: Transgender students in postsecondary STEM education. Presented at the Annual Graduate Student Educational Research Symposium, West Lafayette, IN.
- Kersey, E. (2018). Refracting gender: Being transgender in STEM fields. Presented at Indiana Mathematics Education Research Symposium, Indianapolis, IN.
- Kersey, E. (2017). Transgender students' experiences in postsecondary STEM education.

 Presented at the School Science and Mathematics Association Convention,

 Lexington, KY.
- Kersey, E. (2017). Queer perspectives on math and science education. Panel discussion at the School Science and Mathematics Association Convention, Lexington, KY.
- Kersey, E. (2017). Feminist and queer perspectives on mathematics and its teaching and learning. Panel discussion at Indiana Mathematics Education Research Symposium, Indianapolis, IN.
- Kersey, E. (2016). Learning from transgender individuals in STEM education. Presented at Indiana Mathematics Education Research Symposium, Indianapolis, IN.
- Kersey, E. (2016). Learning from transgender individuals in STEM education. Presented at the Annual Graduate Student Educational Research Symposium, West Lafayette, IN.
- Hoffman, A. J., He, J., Mintos, A. S., Newton, J. A., Kersey, E., Beckley, J., & Maeda, Y. (2015). Learn to teach algebra: Opportunities in secondary teacher education.

 Presented at American Education Research Association Annual Meeting, Chicago, IL.
- Kersey, E., Max, B., Akarsu, M., Bloome, L., Suazo, E., & Hoffman, A. (2015). Use of written curriculum in applied calculus. Presented at Indiana Mathematics Education Research Symposium, Indianapolis, IN.

- Kersey, E. (2015). Analysis of a South African openly-licensed mathematics textbook and its evolution. Presented at the Annual Graduate Student Educational Research Symposium, West Lafayette, IN.
- Kersey, E. (2014). Sociomathematical norms and engagement in small-group interactions. Presented at the Indiana Mathematics Education Research Symposium, Indianapolis, IN.
- Kersey, E. (2014). Sociomathematical norms and engagement in small-group interactions. Poster presented at the Annual Graduate Student Educational Research Symposium, Lafayette, IN.

7. PROFESSIONAL EXPERIENCE

Post Doctoral Research Associate, University of Northern Colorado, MAST Institute, College of Natural and Health Sciences, 2018 – present

Conduct independent research; collaborate on research projects with faculty; contribute to HHMI Inclusive Excellence program; teach mathematics content courses for preservice elementary teachers

E-Portfolio Coordinator, Purdue University, Education IT, College of Education, 2014 – 2018

Provide support for the university education community in the use of TaskStream, including creating programs, implementing rubrics, evaluating work, uploading work, and handling account issues

Tutor, Purdue University, Athletic Department, 2014

Provide assistance to student athletes in mathematics and statistics courses in one-onone tutoring

Co-Instructor, Purdue University, Mathematics Education, Department of Curriculum and Instruction, 2013-2014

Collaborate on lesson planning; lead classes on select topics; facilitate discussions; grade assignments.

Courses Taught:

Teaching of Mathematics in Middle School (EDCI 426)

Teaching of Mathematics in Secondary Schools (EDCI 425/512)

Graduate Teaching Assistant, Purdue University, Mathematics Department, 2010 –2013

Teach undergraduate courses in calculus and algebra; prepare and deliver lectures; write, administer, and grade quizzes and midterm exams; hold office hours.

Courses Taught:

Introductory Analysis I (MA 223) – Differential calculus with applications to management and economics

Plane Analytic Geometry and Calculus I (MA 161) – Introduction to differential and integral calculus of one variable, with applications

Introductory Analysis II (MA 224) – Integral calculus; partial derivatives; differentials; introduction to differential equations. Applications to management and economics Algebra and Trigonometry I (MA 153) – Exponents and radicals; algebraic and fractional expressions; equations and inequalities; systems of linear equations; polynomial, exponential, and logarithmic functions

Multivariate Calculus (MA 261) – Planes, lines, and curves in three dimensions; differential calculus of several variables; multiple integrals; introduction to vector calculus

Mathematics Tutor, University of Puget Sound, Center for Writing, Learning, and Teaching, 2009-2010

Mathematics Tutor, University of Puget Sound, Mathematics Department, 2008-2010

8. SERVICE

College of Education Diversity Committee, Purdue University, 2017- 2018

Student Representative

PME-NA 2017, National Conference, Indiana, IN – 2017

Volunteer for the Local Organizing Committee

PME-NA, Reviewer, 2016-7

Reviewed conference proposals

MATHCOUNTS, Indiana State Competition, 2017

Graded exams and ran slideshow for final Countdown Round

School Science and Mathematics, Reviewer, 2016-present

Reviewed journal submissions

Mathematics Education Social Committee, Purdue University, 2015-2016

Westminster Village, Assisted Living Facility, 2012-2015

Volunteered weekly to help with movie nights and bingo nights

9. PROFESSIONAL MEMBERSHIPS

National Council of Teachers of Mathematics (NCTM)

American Educational Research Association (AERA)

North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)

School Science and Mathematics Association (SSMA)

10. REFERENCES

Rachael Kenney, Ph.D., rhkenney@purdue.edu, (765)464-4868

Associate Professor, Mathematics Education, Department of Curriculum and Instruction, Department of Mathematics, Purdue University

Brenda Capobianco, Ph.D., <u>bcapobia@purdue.edu</u>, (765)494-9635

Professor, Science Education, Department of Curriculum and Instruction, Purdue University

Laura Bofferding, Ph.D., <u>lbofferding@purdue.edu</u>, (765)494-0491

Associate Professor, Mathematics Education, Department of Curriculum and Instruction, Purdue University

Jill Newton, Ph.D., janewton@purdue.edu, (269)214-0103

Associate Professor, Mathematics Education, Department of Curriculum and Instruction, Purdue University