

Kyle S. Whipple

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Education

University of Minnesota, Twin Cities:

- PhD in STEM Education. Projected Graduation May 2018. GPA: 3.956/4.0

Truman State University, Kirksville, MO:

- Master of Arts in Education. Graduated August 1996. GPA: 3.77/4.0

Northeast Missouri State University, Kirksville, MO:

- Bachelor of Arts in Mathematics. Graduated May 1994. GPA: 3.40/4.0

Academic Honors:

- Graduated with Mathematics/Computer Science Division Honors. May 1994.
- Dean's List. May 1993, December 1993.

State of Missouri Certification

Professional Classification II:

- Mathematics (7-12)
- General Science (7-9)

Administrative Experience

GOALS 2000 MATHEMATICS Project:

- Project Administrator. September 1998-July 2000.
 - Performed the administrative duties of the project.
 - Instructor for MATH240 Concrete Behavioral Foundations of Mathematics.
- Executive Assistant. June 1998-August 1998.
 - Performed the administrative duties of the project including making requisitions, expense reports, typing various documents, etc.

Instructional Experience

Higher Education:

- Assistant Professor: University of Wisconsin Eau Claire. August 2018-Present.
 - ES 203 Exploring Schooling in Grades 1-8. Professor of course focusing on an introduction to education and the Middle Child, Early Adolescent education program and the University of Wisconsin Eau Claire.
 - ES 306 Mathematics Curriculum and Instruction in Grades 1-8. Professor of course focusing on elementary and middle school mathematics methods.
 - ES 381 Technology in Education. Professor of course focusing on technology uses and implementation in elementary schools.
 - ES 415 Assessment and Evaluation in Grades 1-8. Professor of course focusing on assessment and evaluation for all subject areas.
 - Equity, Diversity, and Inclusion Workshop: *Understanding, Motivating, and Engaging iGen Students*. Attended Winterim 2019.
 - Middle Child, Early Adolescent Committee member (Education Studies Department). Participated in revising the handbook and the Admissions Subcommittee. Participated in the general meetings.
 - Inclusive Excellence Committee member (College of Education and Human Sciences). Participated in the general meetings.

- Teacher Excellent Committee member (College of Education and Human Sciences). Helped facilitate the fall retreat. Participated in general meetings.
- Queer and Trans Action Committee member (University of Wisconsin Eau Claire). Participated in the Facilities Subcommittee and general meetings.
- Wrote curriculum for course preparation for ES 317 and ES 381. June 1 - August 31, 2019.
- Wrote curriculum for course preparation for ES 203, ES 306, and ES 415 from August 1- August 31, 2018.
- Instructor for STEMTeach: University of Wisconsin River Falls. July 2017-July 2018.
 - UTCH 702 Knowing and Learning in STEM. Instructor of course focusing on educational psychology and the research of learning.
 - UTCH 706 Functions and Modeling. Instructor of course focusing on functions and mathematical modeling as a method to teach algebraic concepts and the pedagogy associated with inquiry and problem solving.
 - UTCH 707 Perspectives in Math and Science. Instructor of course focusing on the history of pedagogy, and its cultural development, in mathematics and science instruction.
 - UTCH 704 Project Based Instruction. Co-instructor of course focusing on pedagogy associated with project based instruction.
 - UTCH 708 Apprentice Teaching Seminar. Substitute instructor for a course focusing on curriculum and pedagogy, reflection and growth through a student teaching field experience, and teacher certification.
 - UTCH 709 STEM Apprentice Teaching for Secondary and Middle Grades. Substitute instructor for a course focusing on a student teaching field experience.
- Graduate Research Assistant. University of Minnesota.
 - CI 1806 College Algebra through Modeling. Instructor of course focusing on mathematical modeling as a method to teach algebraic concepts as well as probability and statistics. June 2015-Present.
 - Collaborative Research: Network Retention in Noyce Communities of Practice. Conducted research with inservice teachers including survey collection and interviews. September 2017-Present.
 - e^3 Algebra. Assistant to Dr. Lesa Clarkson. Performed various duties including the coaching of teachers as they use iPads to develop mathematics and algebra lessons. June 2016-Present.
 - EngrTEAMS: Engineering to Transform the Education of Analysis, Measurement, and Science in a Team-Based Targeted Mathematics-Science Partnership. Coached six elementary classroom teachers in STEM curriculum creation and implementation. June 2015-August 2017.
 - Prepare2Nspire. Assistant to Dr. Lesa Clarkson. Performed various duties including the tutoring of secondary students in mathematics. June 2015-August 2017.
 - Supervisor of high school mathematics student teachers. Coached teacher candidates during their spring semester student teaching experience. January 2016-May 2016.
- Instructor for STEM 608G Management of Instruction. Truman State University. August 2014-May 2015.
 - Secondary science and mathematics methods, curriculum, and instruction. Supervised 8 week field experience at Kirksville Senior High.

- Instructor for MATH 240 Concrete Behavioral Foundations of Mathematics. Truman State University. August 1998-May 2000, January 2011-May 2015.
 - Course covers elementary mathematics content and methods of instruction.
- Instructor for MATH 198 Analytic Geometry with Calculus I. Truman State University. Summer Session: 2014.
- Instructor for MATH 608G Management of Instruction. Truman State University. August 2011-May 2014.
 - Secondary mathematics curriculum and instruction. Supervised 8 week field experience at Kirksville Senior High.
- Graduate Teaching Assistant. Northeast Missouri State University. August 1994-May 1995.
 - Assistant to Calculus I with Maple V lab
 - MATH 156 College Algebra Instructor

Secondary:

- Teacher of Record. Kirksville High School. Kirksville, MO. August 2001-May 2015.
 - Instructed Concepts of Geometry, Honors Algebra II, Honors Geometry, and Dual Credit Calculus I & II (MATH 198 and MATH 263, Truman State University).
 - Data Teams High School Mathematics Leader 2002-2015.
 - High School Technology Mentor 2005-2012.
 - District InfoNow Mentor 2008-2015.
 - District Mathematics Vertical Team Chair 2010-2015.
 - Physics First Mathematics Representative 2010-2015.
 - Instructional Leader Mathematics Chair 2011-2015.
 - High School Professional Development Representative 2012-2013.
 - District Technology Committee Representative 2012- 2014.
 - District Mentoring Committee Representative 2013-2015.
- Teacher of Record. Putnam County High School. Unionville, MO. August 2000-May 2001.
 - Instructed Algebra I, Algebra II, and Applied Mathematics.
- Teacher of Record. LaPlata Junior and Senior High School. La Plata, MO. August 1995-May 1998.
 - Instructed 7th Grade Mathematics, 8th Grade Mathematics, Applied Mathematics I, and Applied Mathematics II.
 - Instructed 7th Grade Life Science, 9th Grade Physical Science.

Educator Honors:

- District Teacher of the Year Nominee. Kirksville High School. 2011
- Teacher Appreciation Selection. University of Missouri, Missouri Scholars Program. 2005, 2007

Middle School:

- Joseph Baldwin Academy. Kirksville, MO.
 - Activities Director. Summer 1994.
 - Responsible for approximately 130 students for six weeks.
 - Produced entire schedule of events including: out of town trips (one overnight stay at a hotel), dances, creative endeavors, and athletics.
 - Preceptor. Summer 1993.
 - Team-taught a self-paced algebra course and supervised students.

Presentations

National, Peer Reviewed

LGBTQQ++ Responsive Mathematics Teacher Education: Comparing Experiences Across Contexts

- Association of Mathematics Teachers (AMTE). National Conference. February 2020.

LGBTQ Secondary Mathematics Teachers: Their Identities and Their Classrooms

- Association of Mathematics Teacher Educators (AMTE). National Conference. February 2019.
 - Presented a case study conducted with one gay and one lesbian high school teacher focusing on their implementation of inclusive mathematics curriculum and pedagogy.

Using Vignettes to Prepare Mathematics Teachers to Advocate for LGBTQ+ Students, Families, and Colleagues

- Association of Mathematics Teacher Educators (AMTE). National Conference. February 2019.
 - Presented vignettes to teacher educators to demonstrate LGBTQ+ inclusion in mathematics pedagogy and curriculum.

A Gay Elementary Teacher Engaging Students in Mathematics: What can he teach us?

- Association of Mathematics Teacher Educators (AMTE). National Conference. February 2018.
 - Presented a case study conducted with a gay elementary teacher focusing on his implementation of mathematics through a STEM integrated curriculum and his use of inclusion with 3rd grade students.

Mathematics Teacher Educators' Responsibilities and Roles in Advocating for LGBTQ+ Students, Teachers, and University Colleagues

- Association of Mathematics Teacher Educators (AMTE). National Conference. February 2018.
 - Presented with a team of mathematics teacher educators on preservice LGBTQ+ teachers, inservice LGBTQ+ teachers, and safe spaces.

Teacher Preparation Programs through an LGBTQ Lens: Secondary Mathematics

- Association of Mathematics Teacher Educators (AMTE). National Conference. February 2017.
 - Presented a case study on teacher preparation programs and their inclusion of LGBTQ topics.
 - The case study focuses on the challenges LGBTQ teachers face in education.

Regional, Peer Reviewed

LGBTQ Inclusion in STEM Education: A Workshop

- Upset the Setup, Minneapolis, MN. October 2016.
 - Presented to preservice, inservice, and teacher educators for secondary STEM on the importance of LGBTQ inclusive pedagogies and curriculum.
 - Lead preservice and inservice STEM teachers through the creation of LGBTQ inclusive problems appropriate for secondary mathematics and science courses.

STEM: Mathematics Concepts Explored with Scientific Content and Models

- National Council of Teachers of Mathematics (NCTM). Regional Conference. Minneapolis, MN. November 2015.
 - Co-presented a workshop with Elizabeth Crotty on modeling with mathematics and science.

Local, By Invitation

Diversity Guest Lecturer: Racism and Homophobia

- Presented to an Upward Bound class on racism and homophobia over a two-day, four-hour workshop. University of Minnesota-Twin Cities. July 2019.

Special Education Collaboration: LGBTQ students with special needs

- Presented to a group of special education teachers on LGBTQ identity and the needs of students identifying trans, non-binary, or gender fluid. St. Clair, Mo. May 2019.

Trans/Non-Binary Educator Panel

- Four trans/non-binary educators shared their varied experiences. Each person gave an introduction, including a brief history of their paths to their current work. Following the introductions was an interactive session where the panel responded to questions and prompts from both a facilitator and the audience. University of Minnesota-Twin Cities. January 2019.
 - Share my experiences as both a public-school teacher and a university professor with community members and fellow educators.

Providing Inclusive Instruction for LGBTQ Students in STEM Courses

- STEM Equity and Social Justice, University of Minnesota-Twin Cities. February 2018.
 - Presented to STEM PhD graduate students of LGBTQ inclusive pedagogies and curriculum.
 - Lead students in a discussion on the backlash LGBTQ students are currently facing due to the political climate.

The Pythagorean Theorem of Baseball

- Inquiry STEM Phd course, University of Minnesota Twin Cities. October 2017.
 - Presented a mathematical modeling activity to STEM phd students in order to show an integrated STEM lesson.

A Summary of Teacher Preparation Programs through an LGBTQ Lens

- Emerging Scholars Conference, University of Minnesota. April 2017.
 - Presented an overview of a case study covering teacher preparation programs as viewed by LGBTQ teachers.

Teacher Preparation Programs through an LGBTQ Lens: A Practice Talk

- Queer Theory Brown Bag Talk, University of Minnesota. November 2016.
 - Practiced a presentation covering a case study on teacher preparation programs and their inclusion of LGBTQ topics.
 - The case study focuses on the challenges LGBTQ teachers face in education.

LGBTQ Inclusion in STEM Education

- STEM Methods course, University of Wisconsin River Falls. September 2016.
 - Presented to preservice secondary STEM teachers on the importance of LGBTQ inclusive pedagogies and curriculum.
 - Lead preservice teachers to develop their own LGBTQ inclusive problems for secondary STEM courses.

Queer Theory and Secondary STEM Education Literature Review

- Queer Publics, Queer Praxis [QP]^2. Steven J. Schochet Endowment, University of Minnesota. April 2016.

A Summary of STEM: Mathematics Concepts Explored with Scientific Content and Models

- Research Day Curriculum and Instruction, University of Minnesota. April 2016.
 - Presented an overview of a workshop on modeling with mathematics and science.

Professional Development

Social Justice in Mathematics Education Workshop

- Facilitated workshop for inservice teachers on social justice issues and inclusive pedagogy and curriculum for mathematics. November 2018.
 - Breaking the myths of poverty in our mathematics classrooms.
 - Racial and gender inclusion in our mathematics classrooms.
 - LGBTQ inclusion in our mathematics classrooms.

College Algebra with Modeling Workshop

- Led instruction for University of Minnesota College in the Schools teachers on questioning techniques and inclusion in mathematical modeling. August 2017. October 2017.

EngrTEAMS Workshops

- Co-led instruction for elementary teachers working with an integrated STEM curriculum. July 2016. July 2017.
 - Worked through an integrated STEM unit that the teachers implemented during the 2016-2017 school year.
 - Facilitated discussions and editing of the unit.

e3Algebra Workshops

- Mathematics instruction for elementary and middle school teachers. July 2016. June 2017.
 - Assisted PreK-8 inservice teachers while they completed activities designed to improve mathematics understanding and instruction.
 - Helped PreK-8 inservice teachers create integrated mathematics and technology lessons.

Stats Boot Camp Workshop

- Co-led a preview of educational statistics for 1st year PhD students in the University of Minnesota STEM Education program. August 2016.
 - Instructed the students on the statistical program R including detailed coding examples.
 - Reviewed basic statistics including testing the assumption of normality and t -tests.

Service

University of Wisconsin-Eau Claire

- Inclusive Excellence Committee. 2018-Present.
- MCEA Committee. August 2018-Present. Served on Admissions subcommittee.
- oSTEM Mentoring. July 2019-Present. Served as a mentor for a queer identified mathematics educator at the University of Washington.
- Q'nnect Mentoring. August 2018-Present. Meet with queer identified students once per month.
- Queer and Trans Action Committee. August 2018-Present.

University of Wisconsin-River Falls

- STEMTeach Steering Committee. Member. January 2019-May 2019.

University of Minnesota-Twin Cities

- Office of Equity and Diversity. Student Advisory Board Member. August 2016- May 2018.

Publications

Whipple, K.S., Staats, S., & Harrison, K.C. (2019). A mathematical modeling activity: Using inclusive pronouns. In Woolley, S. and Airton, L. (Eds.) *K-12 How to Teach About Gender Diversity: Teacher Tested Lesson Plans for K12 Classrooms*. Toronto, Ontario Canada, Canadian Scholars Press.

Whipple, K.S. (2018). *LGBTQ Secondary Mathematics Educators: Their Identities and Their*

- Classrooms. Retrieved from the University of Minnesota Digital Conservancy, <http://hdl.handle.net/11299/200210>.
- Whipple, K.S. (2017). LGBTQ inclusion in mathematics classrooms: Making it explicit, June. GLSEN guest blogger.
- Siverling, E. A., Mathis, C. A., Moore, T. J., Suazo-Flores, E., Guzey, S. S., & Whipple, K. S. (2017). *Middle school students' engineering discussions: What initiates evidence-based reasoning? (Fundamental)*. Paper presented at the 2017 ASEE Annual Conference & Exposition, Columbus, OH.
- Staats, S.K., Laster, L.A., & Whipple, K.S. (2018). *Storytelling, validation and legitimation in social justice*. Paper presented at the 2018 PME Annual Conference. Umea, Sweden.
- Derrington, K. (1995). A genetic algorithm applied to a problem in coding theory. *The Pentagon*, 54(2), 23-31.

Professional Organizations

Association of Mathematics Teacher Educators (AMTE) 2016-Present
National Council of Teachers of Mathematics (NCTM) 1994-Present
American Educational Research Association (AERA) 2015-Present

References

Advisor: Dr. Lesa Clarkson. Associate Professor STEM Education, Mathematics. University of Minnesota.

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Advisor: Dr. Bhaskar Upadhyay. Associate Professor STEM Education, Science. University of Minnesota.

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