

Stacy Reeder, Ph.D.

Professor, Mathematics Education
Interim Dean, Jeannine Rainbolt College of Education
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EDUCATION

- Ph.D. Instructional Leadership and Academic Curriculum, Mathematics Education. July 2002. University of Oklahoma. Dissertation: *Emergent Mathematics Curriculum: A Case Study of Two Teachers*.
- M.Ed. Secondary Education, Mathematics. July 1996. University of Central Oklahoma. Thesis: *Mathematics Manipulatives: Teaching Middle School Students for Understanding*.
- B.S. Ed. Secondary Mathematics. May 1993. Oklahoma Baptist University.

PROFESSIONAL EXPERIENCE

- 2019 – Present **Interim/Acting Dean**, Jeannine Rainbolt College of Education, University of Oklahoma, Norman, OK.
- 2019 – Present **Professor**, Instructional Leadership and Academic Curriculum, Mathematics Education, University of Oklahoma, Norman, OK.
- 2013 – 2020 **Chair**, Department of Instructional Leadership and Academic Curriculum.
- 2009 – 2019 **Associate Professor**, Instructional Leadership and Academic Curriculum, Mathematics Education, University of Oklahoma, Norman, OK.
- 2005 – 2009 **Assistant Professor**, Instructional Leadership and Academic Curriculum, Mathematics Education, University of Oklahoma, Norman, OK.
- 2002 – 2005 **Assistant Professor**, School of Teaching and Curriculum Leadership, Mathematics Education; Reading and Math Center Coordinator (2004 – 2005). Oklahoma State University, Stillwater, OK.
- 1998 – 2002 **Research Assistant and Graduate Teaching Assistant**, Instructional Leadership and Academic Curriculum, University of Oklahoma, Norman, OK. Courses taught: Secondary Mathematics Methods, Intermediate Mathematics Methods, Primary Mathematics Methods, and Teaching Mathematics (K-8).
- 1995 – 1998 **Middle School Mathematics Teacher**, Shawnee Public Schools, Shawnee, OK. Courses taught: Honors Algebra I and Pre-Algebra.
- 1993 – 1995 **Junior High Mathematics Teacher**, Choctaw Nicoma Park Public Schools, Choctaw, OK. Courses taught: Honors Geometry and Algebra I.

AWARDS AND HONORS

Pedersen Excellence in Graduate Mentoring Award, University of Oklahoma, Jeannine Rainbolt College of Education, April 27, 2018.

University of Oklahoma Regents Award for Superior Teaching, University of Oklahoma, April 9, 2015.

Teaching and Advising Award, University of Oklahoma, Jeannine Rainbolt College of Education, March 28, 2014.

Pedersen Excellence in Graduate Mentoring Award, University of Oklahoma, Jeannine Rainbolt College of Education, March 28, 2014.

Outstanding Service, Oklahoma Council of Teachers of Mathematics, June 12, 2010.

Junior Faculty Award, University of Oklahoma, College of Education, April 20, 2007.

STANDARDS DOCUMENTS AND CURRICULUM

Oklahoma Academic Standards for Mathematics Writing Team, Chair (2015-16). Oklahoma City, Oklahoma. Oklahoma State Department of Education and Oklahoma Regents for Higher Education.

Oklahoma Elementary Mathematics Specialist (2013). Test item assessment. Oklahoma City, Oklahoma. National Assessment Systems and the Oklahoma Commission for the Preparation of Teachers.

Oklahoma Elementary Mathematics Specialist Standards Writing and Competency Setting Team, Member (2009-12). Oklahoma City, Oklahoma. Oklahoma State Regents for Higher Education.

PROGRAM DEVELOPMENT AND MAINTAINANCE

ILAC Department Academic Program Review, (2018), Author.

NCTM/CAEP folio for Mathematics Education, (2016), Author.

NCTM/CAEP folio for Elementary Mathematics Education Specialists, (2015), Author.

NCTM/NCATE folio for Mathematics Education, (2007), Author.

Elementary Mathematics Specialist University of Oklahoma Program and Curriculum (18 hours of Graduate Coursework), (2013-14), Developer.

Program Modifications and Changes for ILAC Doctoral and Master's Programs.

Updated master's degree programs for ILAC Department.

Updated doctoral degree programs for ILAC Department.

Produced a variety of program materials for Norman campus and Europe (brochures, program sheets, checklists, website maintenance).

Program Modifications and Changes for Mathematics Education Program, Program Chair.

PROFESSIONAL PUBLICATIONS (REFEREED – JOURNAL ARTICLES AND BOOK CHAPTERS)

- Utley, J., Reeder, S., & Sanogo, A. (2020). Envisioning my mathematics classroom: Validating the draw-a-mathematics-teacher-test rubric. *School Science and Mathematics*, 120(6), 345-355.
- Che, S. M., Utley, J., & Reeder, S. (2020). Reasoning and sense making in high school mathematics with two-ways. *Mathematics Teacher: Learning and Teaching PK-12*, 113(11), 940-944.
- Raymond, K. & Reeder, S. (2020). Failure to launch: Oklahoma's academic standards in mathematics, *Investigations in Mathematics Learning*, 12(2), 82-95.
- Raymond, K. & Reeder, S. (2018). Exploring the world using proportional reasoning: If our classroom were the world. *Mathematics Teaching in the Middle School*, 24(2), 112-115.
- Reeder, S. & Utley, J. (2017). What is a fraction? Developing fraction understanding in prospective elementary teachers. *School Science and Mathematics*, 117(7-8), 307-316.
- Reeder, S. & Utley, J. (2017). Elementary mathematics specialist program: One state's story of development and implementation. *Journal of Mathematics Education Leadership*, 18(2), 15-27.
- Reeder, S. (2017). Deep understanding of fractions supports student success in algebra. In Stewart, S. (Ed). *And the Rest is Just Algebra*. (pp. 79-93). Springer International Publishing.
- Stewart, S., & Reeder, S. (2017). Algebra underperformances at college level: What are the consequences? In Stewart, S. (Ed) *And the Rest is Just Algebra*. (pp. 3-18). Springer International Publishing.
- Reeder, S. & Bateiha, S. (2016). Prospective elementary teachers' conceptual understanding of integers. *Investigations in Mathematics Learning*, 8(3), 16-29.
- Bateiha, S. & Reeder, S. (2014). Transforming preservice teachers' perceptions of mathematical knowledge for and through social understanding. *International Journal of Education for Social Justice*, 3(1), 71-86.
- Utley, J. & Reeder, S. (2012). Prospective elementary teachers' development of fraction number sense. *Investigations in Mathematics Learning*, 5(2), 1-13.
- Reeder, S. (2012). Cleared for takeoff: Paper airplanes in flight. *Mathematics Teaching in the Middle School*, 17(7), 402-408.
- Reeder, S. & Abshire, G. (2012). Talking about the Greek Cross. *Mathematics Teaching in the Middle School*, 17(9), 558 – 563.
- Turegun, M. & Reeder, S. (2011). Exploring students' conceptual understanding of statistical measures of spread. *Community College Journal of Research and Practice* 45(5), 410-426.
- Reeder, S., Utley, J. & Cassel, D. (2009). Using metaphors as a tool for examining preservice elementary teachers' beliefs about mathematics teaching and learning. *School Science and Mathematics Journal*, 109(5), 290-297.
- Reeder, S. & Utley, J. (2008). Elementary teacher candidates' understanding of the No Child Left Behind Legislation. *Teacher Education and Practice*, 21(1), 89-102.
- Moseley, C., Reeder, S., & Armstrong, N. (2008). I don't eat white: The journey towards

- transformational learning of three student teachers in Latin America. *Curriculum and Teaching Dialogue*, 10(1 & 2), 55-72.
- Reeder, S. (2007). Are we golden?: Investigations with the golden ratio. *Mathematics Teaching in the Middle School*, 13(3), 150-155.
- Reeder, S. (2007). Bubbles, bubbles: Integration and investigation with floating spheres. *Science Activities*, 44(1), 6-9.
- Reeder, S., Cassel, D., Reynolds, A., & Fleener, M. J. (2006). Doing something different: Envisioning and enacting mathematics curriculum alternatives. *Curriculum and Teaching Dialogue*, 8 (1&2), 51-68.
- Reeder, S. & Moseley, C. (2006). Oh deer: Investigating math and science through integrated activities. *Science Activities*, 43(3), 9-16.
- Fleener, M. J. & Reeder, S. (2006). Teaching etcetera. In M. Evans & G. Allan (Eds.), *A different three R's of education: Reason, rationality, rhythm*. (pp. 141-154). Radopi, New York, NY.
- Reeder, S. (2005). Classroom dynamics and emergent curriculum. In M. J. Fleener, W. Doll, & J. St. Julien (Eds.), *Chaos, complexity, curriculum, and culture*. (pp. 247-260). Peter Lang. New York.
- Fleener, M. J., Carter, A., & Reeder, S. (2004). Language games in the mathematics classroom: Learning a way of life. *Journal of Curriculum Studies*, 36(4), 445-468.
- Fleener, M. J., Reeder, S., Young, E., & Reynolds, A. M. (2002). History of mathematics: Building relationships for teaching and learning. *Action in Teacher Education*, XXIV(3), 73-84.

PROFESSIONAL PUBLICATIONS (REFEREED CONFERENCE PROCEEDINGS)

- Kornelson, K. A., Moore-Russo, D., Reeder, S. L. "Minding the gaps: Algebra skills of university calculus students." *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education*, 338-347. Boston, MA.
- Wells, C. & Reeder, S. (2019). Nontraditional teaching approaches in mathematics: a case study of mathematics teachers. In Brandl, R., Cobbs, G., & Shores, M. (Eds.). (2019). *Proceedings of the 118th annual convention of the School Science and Mathematics Association* (Vol. 6). Salt Lake City, (pp. 33-40). UT: SSMA.
- Reeder, S., Stewart, S., Raymond, K., Troup, J., & Melton, H. (2019). Analyzing the nature of university students' difficulties with algebra in calculus: Students' voices during problem solving. In Weinberg, A., Moore-Russo, d., Soto, H., and Wawro, M. (Eds.), *Proceedings of the 22nd Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 501-508). Oklahoma City, OK.
- Reeder, S., Stewart, S., Raymond, K., & Troup, J. (2018). An analysis of student challenges with algebra in calculus. In Hodges, T.E., Roy, G. J., & Tyminski, A. M. (Eds.), *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 612-615). Greenville, SC: University of South Carolina & Clemson University.
- Stewart, S., Reeder, S., Raymond, K. & Troup, J. (2018). Could algebra be the root of problems in calculus courses? In (Eds.) A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, and S. Brown, *Proceedings of the 20th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 1023-1030). San Diego, CA.
- Stewart, S. & Reeder, S. (2017). Common algebraic errors in calculus courses. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, and S. Brown (Eds.), *Proceedings of the 20th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 937-944). San Diego, CA.
- Reeder, S. & Stewart, S. (2016). The existence, persistence, and significance of common algebra

- errors on student success in university mathematics. 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. 705). Tucson, AZ: The University of Arizona.
- Utley, J. & Reeder, S. (2016). Developing leadership capacity: The impact of an elementary mathematics specialists program. 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. 440). Tucson, AZ: The University of Arizona.
- Stewart, S., & Reeder, S. (2016). Common algebra errors in university courses: Existence, persistence and significance. In C. Csikos, A. Rausch, & J. Szitanyi (Eds.). *Proceedings of the 40th Conference of the International Group for the Psychology of Mathematics Education*, Vol I, pp. 241, Szeged, Hungary, August 3-7.
- Reeder, S. & Bates, R. (2013). Mathematics teacher candidates' understanding of function. In Reeder, S. and Matney, G. (Eds.). *Proceedings of the 40th Annual Meeting of the Research Council on Mathematics Learning*. Tulsa, Ok.
- Harper, M. & Reeder, S. (2013). Fostering pre-service teachers' mathematical empowerment: examining mathematical beliefs in a mathematics content course. In Reeder, S. and Matney, G. (Eds.). *Proceedings of the 40th Annual Meeting of the Research Council on Mathematics Learning*. Tulsa, Ok.
- Reeder, S. & Bateiha, S. (2011). The role of listening in teacher transformation and pedagogic practice. In Wiest, L. R. & Lamberg, T. (Eds.). *Proceedings of the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Reno, NV.
- Bateiha, S. & Reeder, S. (2011). A transformation of preservice teachers' perceptions of their beliefs of mathematics and social issues. In Wiest, L. R. & Lamberg, T. (Eds.). *Proceedings of the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Reno, NV.
- Utley, J. & Reeder, S. (2011). Prospective elementary teachers' development of fraction number sense. In Wiest, L. R. & Lamberg, T. (Eds.). *Proceedings of the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Reno, NV.
- Reeder, S. & Bateiha, S. (2010). Examining prospective elementary teachers' conceptual understanding of integers. In Brosnan, P., Erchick, D. B., & Flevares, L. (Eds.). *Proceedings of the 32nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Columbus, OH: The Ohio State University.
- Turegun, M. & Reeder, S. (2010). Developing and assessing students' conceptual understanding in introductory statistics. In Brosnan, P., Erchick, D. B., & Flevares, L. (Eds.). *Proceedings of the 32nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Columbus, OH: The Ohio State University.
- Reeder, S. & Utley, J. (2007). Developing fraction understanding in prospective teachers. In Lamberg, T. & Weist, L. R. (Eds.), *Proceedings of the 29th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*.
- Reeder, S. (2006). Developing future mathematics teachers: Creating "spaces of difference." In Alatorre, S., Cortina, J.L. & Mendez, A. (Eds.), *Proceedings of the 28th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*.
- Reeder, S. (2002). The role of listening in one teacher's envisioning and implementations of an emergent mathematics curriculum. Abstract published in the *Proceedings of the 24th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*.
- Fleener, M. J., Adolphson, K. V., & Reeder, S. (2002). Robotics activities and constructed problem solving: Creating spaces for learning/doing. In A. D. Cockburn & E. Nardi (Eds.), *Psychology of Mathematics Education- Volume 2*, 361-367.

PROFESSIONAL PUBLICATIONS (INVITED AND OTHER)

- Reeder, S. (2018). Oklahoma's children deserve better. Op Ed in *The Oklahoman*, November 2, 2018 <https://newsok.com/article/5613669/point-of-view-oklahomas-children-deserve-better>.
- Reeder, S. (Spring, 2018). President's Address. *The Math – Science Connector*. School Science and Mathematics Association newsletter.
- Reeder, S. (2018). If you can read this, thank a teacher. Op Ed in *Tulsa World*, March 16, 2018 and *The Oklahoman*, March 21, 2018. http://www.tulsaworld.com/opinion/readersforum/stacy-reeder-thank-a-teacher-then-pay-them-appropriately/article_a38fae17-d0bd-56bb-8608-d476308c04f3.html and <http://newsok.com/article/5587802/point-of-view-if-you-can-read-this-thank-a-teacher>.
- Reeder, S. (Fall, 2017). President's Address. *The Math – Science Connector*. School Science and Mathematics Association newsletter.
- Reeder, S. (Spring, 2017). President's Address. *The Math – Science Connector*. School Science and Mathematics Association newsletter.
- Reeder, S. (2016). Oklahoma mathematics standards. Webinar presented and published on April 15, 2016. Posted on the Oklahoma Council of Teachers of Mathematics. <http://www.okctm.org/>
- Reeder, S. (2016). It all adds up: Oklahoma's new math standards. Op Ed in the *Tulsa World* and *The Oklahoman*, February 26, 2016. http://www.tulsaworld.com/opinion/readersforum/stacy-reeder-it-all-adds-up-oklahoma-s-mathematics-standards/article_2e2e6009-85d8-5a61-9b65-dcffabd001e6.html and <http://newsok.com/article/5481214>.
- Reeder, S. (Fall, 2016). President's Address. *The Math – Science Connector*. School Science and Mathematics Association newsletter.
- Reeder, S. (2014). Cleared for takeoff: Paper airplanes in flight. Reprinted in Virginia Mathematics Teacher, 41(1), 24-27.
- Reeder, S. (2013). Cleared for takeoff: Paper airplanes in flight, (2013). *Real World Math: Articles, Lesson Plans, and Activities for the Middle Grades*. National Council of Teachers of Mathematics. Reston, VA. <http://www.nctm.org/publications/worlds/content.aspx?id=34029>.
- Reeder, S. (2013). Common Core Mathematics in a PCL at Work [Review of the book *Common Core Mathematics in a PCL at Work*, Kanold, T. & Larson, M.]. *Mathematics Teacher*, 107(2), 157.
- Reeder, S. & Biddy, Q. (2013). *Are we golden?* <http://k20alt.ou.edu/subject/middle-school-math>.
- Reeder, S. (2003). Mathematics education terms and definitions (4). In J. W. Collins III & N. P. O'Brien (Eds.), *The Greenwood Dictionary of Education*.

PROFESSIONAL PUBLICATIONS (IN PROCESS)

- Utey, J., Reeder, S. & Che, Megan. (book under contract). *Math Talk: Number Talks (and beyond) to Open Your Mathematics Class Successfully*. Math Solutions.
- Wells, C. & Reeder, S. (under review). The other first days of school: A case study of two teachers in an urban school setting. *Learning Environments Journal*.
- Stewart, S. & Reeder, S. (under review). Common school algebra difficulties in university mathematics courses: Progress toward understanding an old problem. *Educational Studies in Mathematics*.

EXTERNAL GRANTS - Total Funded to Date: \$2,301,027

2020	Co-Principal Investigator	<i>Oklahoma Design and Do</i> , U.S. Department of Commerce, Economic Development Administration, Federal, In Review, \$299,434.
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2020	Co-Principal Investigator	<i>Catalyst for Effective School Leaders: A Project Supporting Effective Educator Development in Arkansas and Oklahoma (Project CATALYST)</i> , U.S. Department of Education, Unfunded, \$12,044,822.
2014	Co-Principal Investigator	<i>Elementary STEM Leadership Academy</i> . Oklahoma State Department of Education, Funded, \$82,630.
2014	Co-Principal Investigator	Project PRIME (Promoting Readiness in Mathematics Earlier). U.S. Department of Education. Unfunded, \$3,720,663.
2013	Co-Principal Investigator	<i>OU STEM Nights: A University- Community Partnership in STEM Education</i> . America Honda Foundation, Unfunded, \$58,314.
2013	Principal Investigator	<i>Transforming Our Mathematics Future: Bringing Together Experienced and Pre-service Teachers to Understand the Common Core</i> . Oklahoma Council of Teacher Preparation, Funded, \$5,000.
2013	Co-Principal Investigator	<i>K20 College, Career and Citizenship</i> . Oklahoma State Department of Education, Funded, \$564,000.
2013	Co-Principal Investigator	<i>K20 STEM 2012-2013: Creating STEM ready elementary schools</i> . Oklahoma State Department of Education, Funded, \$300,000.
2012	Principal Investigator	<i>Oklahoma Mathematics Teacher Study</i> . Oklahoma Council of Teacher Preparation, Funded, \$14,000.
2012	Co-Principal Investigator	<i>K20 to the Core</i> . Oklahoma State Department of Education, Funded, \$ 564,000.
2012	Co-Principal Investigator	<i>K20 STEM 2012-2013: Creating STEM ready elementary schools</i> . Oklahoma State Department of Education, Funded, \$ 300,000.
2012	Co-Principal Investigator	<i>Capacity Building for NSF Noyce Teaching Fellowships at the University of Oklahoma</i> . Robert Noyce Teacher Scholarship Program, Unfunded, \$144, 027.
2011	Co-Principal Investigator	<i>K20 SMART (Students Modeling Algebraic Reasoning Together)</i> , Institute for Educational Sciences, Unfunded, \$1,499,884.
2011	Co-Principal Investigator	<i>Capacity Building for NSF Noyce Teaching Fellowships at the University of Oklahoma</i> . Robert Noyce Teacher Scholarship Program, Unfunded, \$144, 027.
2011	Co-Principal Investigator	<i>Improving Outcomes for At-Risk Students in Biology and Mathematics with Authentic Research Experiences Supported by Virtual Collaboration for Teachers [AR+VC]</i> , National Science Foundation, Discovery Research K-12, Unfunded, \$ 2,338, 911.
2010	Co-Principal Investigator	<i>K20 SMART (Students Modeling Algebraic Reasoning Together)</i> , National Science Foundation, Math and Science Partnership, Unfunded, \$5,665,739.
2008	Principal Investigator	<i>Improving Mathematics Pedagogy and Content Knowledge for Teachers in Oklahoma II (IMPACKT in OK II)</i> , No Child Left Behind Act of 2001, Title II, Part A, Workshops Summer 2008, Funded, \$ 64,205.
2007	Principal Investigator	<i>Improving Mathematics Pedagogy and Content Knowledge for Teachers in Oklahoma (IMPACKT in OK)</i> , No Child Left Behind Act of 2001, Title II, Part A, Workshops Summer 2007, Funded, \$ 84,136.

2004	Co-Principal Investigator	<i>Geometry: Visualization and Manipulation for Understanding</i> , No Child Left Behind Act of 2001, Title II, Part A, Workshops Summer 2005, Funded, \$183,804.
2003	Site Director	<i>Geometry: Visualization and Manipulation for Understanding</i> , No Child Left Behind Act of 2001, Title II, Part A, Workshop June 7 -18, 2004, Funded, \$129, 252.
2003	Co-Principal Investigator	<i>Literacy and Mathematics Activity Bags</i> , College of Education Associates, Oklahoma State University, Funded, \$10,000.

INTERNAL GRANTS AWARDED

2014	Principal Investigator	<i>Mathematics Education – Supporting Early Career Teachers</i> . Jeannine Rainbolt College of Education, University of Oklahoma, Funded, \$9,547.
2011	Principal Investigator	<i>Improving Mathematics Teaching and Learning</i> , Jeannine Rainbolt College of Education, University of Oklahoma, Funded, \$6,000.
2002	Principal Investigator	<i>The Evolution of Mathematics Pedagogical Practices and Beliefs of One Preservice Teacher</i> , College of Education, Oklahoma State University, Funded, \$998.

NATIONAL AND INTERNATIONAL CONFERENCE PRESENTATIONS (REFEREED)

- Reeder, S. & Wells, C. (2020). Mathematics for social justice: Course design and resources. Paper presented at the 119th Annual Convention of the School Science and Mathematics Association. Virtual Conference.
- Wells, C. & Reeder, S. (2020). The first days of school. Paper presented at the 119th Annual Convention of the School Science and Mathematics Association. Virtual Conference.
- Reeder, S., Utley, J. & Che, M. (2020). Mathematical routines that will support students' sense making, understanding, and reasoning. Paper presented at the 23rd Annual Conference of the Association of Mathematics Teacher Educators. Phoenix, AZ.
- Wells, C. & Reeder, S. (November, 2019). Nontraditional teaching approaches in mathematics: A case study of mathematics teachers. Paper presented at the 118th Annual Convention of the School Science and Mathematics Association. Salt Lake City, Utah.
- Reeder, S. & Utley, J. (April, 2019). Tasks to develop deep mathematical understanding and procedural fluency. Session presented at the 51st Annual Meeting of the National Council of Supervisors of Mathematics. San Diego, CA.
- Gunter, M. & Reeder, S. (March, 2019). Learning to write mathematics: Revision in the mathematics classroom. Paper presented at the 45th Annual Meeting of the Research Council on Mathematics Learning. Charlotte, N.C.
- Utley, J. & Reeder, S. (February, 2019). Exploring the draw a math teacher test as a reflection tool. Research presented at the 22nd Annual Conference of the Association of Mathematics Teacher Educators. Orlando, FL.
- Reeder, S. & Raymond, K. (November, 2018). An analysis of student challenges with algebra in calculus. Paper presented at the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Greenville, SC.

- Utley, J. & Reeder, S. (October, 2018). Exploring the use of the draw a math teacher test as a reflection tool. Paper presented at the 117th Annual Convention of the School Science and Mathematics Association. Little Rock, AR.
- Reeder, S. & Utley, J. (April, 2018). Professional development for mathematics teachers of all grade levels. Session presented at the 50th Annual Meeting of the National Council of Supervisors of Mathematics. Washington, D.C.
- Utley, J., Weaver, J. & Reeder, S. (April, 2018). Exploring tasks that build procedural fluency from conceptual understanding. Session presented at the 50th Annual Meeting of the National Council of Supervisors of Mathematics. Washington, D.C.
- *Raymond, K. & Reeder, S. (February, 2018). Failure to launch: Teacher perceptions of state standards in mathematics. Paper presented at the 44th Annual Meeting of the Research Council on Mathematics Learning. Baton Rouge, LA.
- Utley, J., Reeder, S. & Redmond-Sanogo, A. (February, 2018). Reflecting on beliefs about teaching mathematics: Draw a mathematics teacher test and rubric. Research presented at the 21st Annual Conference of the Association of Mathematics Teacher Educators. Houston, TX.
- Reeder, S., Utley, J., & Che, M. (November, 2017). Developing deep rational number concepts in a fraction of the time. Paper presented at the 116th Annual Convention of the School Science and Mathematics Association. Lexington, KY.
- Reeder, S. (April, 2017). Engaging students in rich and powerful mathematical tasks. Presentation made at the 2017 National Council of Teachers of Mathematics Annual Meeting. San Antonio, TX.
- Reeder, S. & Utley, J. (April, 2017). Fostering leadership capacity via an elementary mathematics specialist program. Paper presented at the 49th Annual Meeting of the National Council of Supervisors of Mathematics. San Antonio, TX.
- *Reeder, S., Raymond, K., & Stewart, S. (March, 2017). Common algebra errors that plague student success in university mathematics courses. Paper presented at the 44th Annual Meeting of the Research Council on Mathematics Learning. Ft. Worth, TX.
- Utley, J., Reeder, S., & Che, M. (March, 2017). Math starters: High yield algebra tasks that stand the test of time. Session presented at the 44th Annual Meeting of the Research Council on Mathematics Learning. Ft. Worth, TX.
- Reeder, S., Utley, J. & Che, M. (February, 2017). Something old - something new: Rich mathematical tasks that stand the test of time. Session presented at the 21st Annual Conference of the Association of Mathematics Teacher Educators. Orlando, FL.
- Reeder, S. & Stewart, S. (November, 2016). The existence, persistence, and significance of common Algebra errors on student success in university mathematics. Poster presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Tucson, AZ.
- Utley, J. & Reeder, S. (November, 2016). Developing leadership capacity: The impact of an elementary mathematics specialists program. Poster presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Tucson, AZ.
- Che, M., Reeder, S., & Utley, J. (October, 2016). Engaging class openers that enhance students' learning of probability and statistics. Paper presented at the 115th Annual Convention of the School Science and Mathematics Association. Phoenix, AZ.
- Utley, J. & Reeder, S. (April, 2016). High-Yield algebra routines: Building a strong algebra foundation. Presentation made at the 2016 National Council of Teachers of Mathematics Annual Meeting. San Francisco, CA.
- Reeder, S. & Utley, J. (March, 2016). Developing mathematics teacher leaders: Oklahoma's elementary mathematics specialist program. Paper presented at the 43rd Annual Meeting of the Research Council on Mathematics Learning. Orlando, FL.
- *Shobert, N. & Reeder, S. (February, 2016). What factors influence teachers' decisions to pursue an

- elementary mathematics specialist certification? Poster presented at 20th Annual Conference of the Association of Mathematics Teacher Educators. Irvine, CA.
- McCoy, A., Fennell, F., McCord K., Wray, J., Swartz, B. A., Utley, J., Reeder, S., & Webel, C. (February, 2016). The elementary mathematics specialist movement: maintaining the momentum. Working session conducted at 20th Annual Conference of the Association of Mathematics Teacher Educators. Irvine, CA.
- Stewart, S. & Reeder, S. (January, 2016). Investigating calculus students' struggles with algebra. Paper presented at 2016 Joint Mathematics Meetings (American Mathematical Society & Mathematical Association of America). Seattle, WA.
- Reeder, S. & Utley, J. (October, 2015). Elementary mathematics specialist Program: Developing Teacher leaders. Paper presented at the 114th Annual Convention of the School Science and Mathematics Association. Oklahoma City, OK.
- Reeder, S. (July, 2015). The impact of an elementary mathematics specialists program: Examining stages of teacher leadership. Paper presented at the International Group for the Psychology of Mathematics Education (IGPME) Annual Conference. Hobart, Australia.
- Utley, J., Reeder, S. & Redmond, A. (February, 2015). Development of the draw a mathematics teacher test and rubric. Presentation given at the 42nd Annual Meeting of the Research Council on Mathematics Learning. Las Vegas, NV.
- Reeder, S., Utley, J., Conrady, K., Redmond, A., Cassel, D. & Lucas, C. (February, 2015). The Oklahoma elementary mathematics specialist certification program: From development to implementation. Paper presented at the 19th Annual Conference of the Association of Mathematics Teacher Educators. Orlando, FL.
- Utley, J. & Reeder, S. (February, 2015). Effect of elementary mathematics specialist coursework on elementary teachers' mathematical and leadership beliefs. Paper presented at the 19th Annual Conference of the Association of Mathematics Teacher Educators. Orlando, FL.
- Utley, J. & Reeder, S. (November, 2014). "My mathematics classroom": Validating the Draw-A-Mathematics-Teacher-Test checklist. Paper presented at the 113th Annual Convention of the School Science and Mathematics Association. Jacksonville, FL.
- *Bates, R. & Reeder, S. (April, 2014). Integrating social justice issues can support and promote quantitative literacy. Paper presented at the 2014 Annual Meeting and Exposition of the National Council of Teachers of Mathematics. New Orleans, LA.
- Utley, J. & Reeder, S. (February, 2014). A snapshot of a state's mathematics teacher workforce. Presentation given at the 41st Annual Meeting of the Research Council on Mathematics Learning. San Antonio, TX.
- Conrady, K. & Reeder, S. (February, 2014). Developing and analyzing high cognitive demand tasks with the mathematical practices in mind. Presentation given at the 41st Annual Meeting of the Research Council on Mathematics Learning. San Antonio, TX.
- *Bates, R. & Reeder, S. (February, 2014). Integrating social justice issues: Insights from a graduate mathematics education and undergraduate mathematics courses. Presentation given at the 41st Annual Meeting of the Research Council on Mathematics Learning. San Antonio, TX.
- Reeder, S. (November, 2013). Examining mathematics teacher candidates' understanding of function. Paper presented at the 112th Annual Convention of the School Science and Mathematics Association. San Antonio, TX.
- Reeder, S. & Utley, J. (November, 2013). Examining the Oklahoma elementary mathematics specialist program. Paper presented at the 112th Annual Convention of the School Science and Mathematics Association. San Antonio, TX.
- Laubach, T. A. & Reeder, S. (November, 2013). The effect of a four-year MSP program on middle school teachers' leadership capacity. Paper presented at the 112th Annual Convention of the School Science and Mathematics Association. San Antonio, TX.
- Reeder, S. & Conrady, K. (November, 2013). Transforming preservice teacher preparation: An iPad initiative. Paper presented at the 112th Annual Convention of the School Science and Mathematics Association. San Antonio, TX.

- *Reeder, S. & Bates, R. (February, 2013). Mathematics teacher candidates' understanding of function. Paper presented the 40th Annual Meeting of the Research Council on Mathematics Learning. Tulsa, Ok.
- Reeder, S. & Utley, J. (February, 2013). Elementary math specialists in Oklahoma: Programs and research. Paper presented the 40th Annual Meeting of the Research Council on Mathematics Learning. Tulsa, Ok.
- Reeder, S. (November, 2012). Problem centered learning: A problem solving course for mathematics education graduate students. Paper presented at the 111th Annual Convention of the School Science and Mathematics Association. Birmingham, AL.
- Reeder, S. & Laubach, T. A. (November, 2012). An inquiry into inquiry: Examining middle school mathematics and science teachers' understandings of inquiry. Paper presented at the 111th Annual Convention of the School Science and Mathematics Association. Birmingham, AL.
- Utley, J. & Reeder, S. (November, 2012). Peyton walked $\frac{7}{8}$ of a mile: Examining pre-service Elementary teachers' fractions scenarios. Paper presented at the 111th Annual Convention of the School Science and Mathematics Association. Birmingham, AL.
- Reeder, S. (November, 2011). Prospective elementary teachers' conceptual understanding of integers. Paper presented at the 110th Annual Convention of the School Science and Mathematics Association. Colorado Springs, CO.
- Laubach, T. A. & Reeder, S. (November, 2011). Creating critical connections in mathematics and science. Paper presented at the 110th Annual Convention of the School Science and Mathematics Association. Colorado Springs, CO.
- *Reeder, S. & Bateiha, S. (October, 2011). The role of listening in teacher transformation and Pedagogic practice. Paper presented at the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Reno, NV.
- *Bateiha, S. & Reeder, S. (October, 2011). A transformation of preservice teachers' perceptions of their beliefs of mathematics and social issues. Paper presented at the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Reno, NV.
- Utley, J. & Reeder, S. (October, 2011). Prospective elementary teachers' development of fraction Number sense. Paper presented at the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Reno, NV.
- Reeder, S. & Laubach, T. A. (February, 2011). Creating critical connections in mathematics and Science (C3MS). Paper presented at the 38th Annual Conference of the Research Council on Mathematics Learning. Cincinnati, OH.
- Abshire, G. & Reeder, S. (February, 2011). Developing and sustaining mathematical discourse: The possibility of problematic tasks. Paper presented at the 38th Annual Conference of the Research Council on Mathematics Learning. Cincinnati, OH.
- Reeder, S. (November, 2010). Sustaining mathematical discourse with students: The integrated roles of questioning and listening. Paper presented as the School Mathematics and Science Mathematics Association Annual Conference. Fort Myers, FL.
- Laubach, T. & Reeder, S. (November, 2010). Creating critical connections in mathematics and Science through engineering via guided inquiry. Paper presented as the School Mathematics and Science Mathematics Association Annual Conference. Fort Myers, FL.
- *Reeder, S. & Bateiha, S. (October, 2010). Examining prospective elementary teachers' conceptual understanding of integers. Paper presented at the 32nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Columbus, OH.
- *Turegun, M. & Reeder, S. (October, 2010). Developing and assessing students' conceptual

- Understanding in introductory statistics. Paper presented at the 32nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Columbus, OH.
- *Reeder, S. & Bateiha, S. (March, 2010). Blind faith mathematics: Prospective teachers' conceptual understandings of operations with integers. Paper presented at the 37th Annual Conference of the Research Council on Mathematics Learning. Conway, AR.
- Reeder, S. & Utley, J. (April, 2009). Growing your students' algebraic reasoning with hands-on patterns. Workshop presented at the 2009 Annual Meeting and Exposition of the National Council of Teachers of Mathematics. Washington, D.C.
- Reeder, S. (March, 2009). Number sense and number operations: Improving teacher content and pedagogical knowledge in the intermediate and middle grades. Paper presented at the 36th Annual Conference of the Research Council on Mathematics Learning. Athens, GA.
- *Turegun, M. & Reeder, S. (March, 2009). Exploring gender differences in college students' conceptual understanding of spread. Paper presented at the 36th Annual Conference of the Research Council on Mathematics Learning. Athens, GA.
- Utley, J. & Reeder, S. (November, 2008). Strategies to increase student understanding of multiplication and division of fractions. Workshop presented at the School Science and mathematics Association Annual Convention. Raleigh-Durham, NC.
- Reeder, S. & Nicholas, S. (March, 2008). Algebra in the middle grades: Improving teacher content and pedagogical knowledge. Paper presented at the 35th Annual Conference of the Research Council on Mathematics Learning. Oklahoma City, OK.
- *Turegun, M. & Reeder, S. (March, 2008). Exploring students' conceptual understanding of measures of spread. Paper presented at the 35th Annual Conference of the Research Council on Mathematics Learning. Oklahoma City, OK.
- Reeder, S. & Utley, J. (January, 2008). Understanding teacher candidates' beliefs about mathematics teaching and learning through metaphor analysis. Paper presented at the Twelfth Annual Meeting for the Association of Mathematics Teacher Educators. Tulsa, OK.
- *Turegun, M. & Reeder, S. (January, 2008). An exploration of students' understanding of spread. Paper presented at the Inaugural International Forum on World Universities. Davos, Switzerland.
- Utley, J. & Reeder, S. (November, 2007). Perspective elementary teachers' perceptions about fractions. Paper presented at the School Science and Mathematics Association Annual Convention. Indianapolis, IN.
- Reeder, S. & Utley, J. (October, 2007). Developing fraction understanding in prospective teachers. Paper presented at the 29th Annual Meeting of the Psychology of Mathematics Education – North American Chapter, Stateline (Lake Tahoe), NV.
- Reeder, S. & Moseley, C. (April, 2007). The transformational learning of three student teachers in Latin America: A case study. Paper presented at the American Education Research Association Annual Meeting. Chicago, IL.
- Cassel, D., Reeder, S., & Utley, J. (March, 2007). Sharing research results from a middle school geometry grant. Presentation at the 34th Annual Conference of the Research Council on Mathematics Learning. Cleveland, OH.
- Utley, J. & Reeder, S. (March, 2007). Exploring pre-service elementary teachers' fraction sense. Paper presented at the 34th Annual Conference of the Research Council on Mathematics Learning. Cleveland, OH.
- Reeder, S. (November, 2006). Developing future mathematics teachers: Creating “spaces of difference.” Paper presented at the 28th Annual Meeting of the Psychology of Mathematics Education – North American Chapter, Merida, Yucatan, Mexico.
- Reeder, S. (October, 2006). The role of listening in one teacher's story of transformation and enactment of an emergent mathematics curriculum. Paper presented at the 13th Annual Conference of the American Association for Teaching and Curriculum, Charlotte, NC.
- Reeder, S. & Utley, J. (April, 2006). Unlearning fractions: Developing number sense with

- prospective teachers. Presentation at the 2006 Annual Meeting and Exposition of the National Council of Teachers of Mathematics, St. Louis, MO.
- Abshire, G. & Reeder, S. (April, 2006). Investigating the Greek cross: An exploration in algebra and geometry. Workshop presented at the 2006 Annual Meeting and Exposition of the National Council of Teachers of Mathematics, St. Louis, MO.
- Cassel, D., Reeder, S., & Utley, J. (April, 2006). "Mummy math:" Using literature to discover 3-D shapes and characteristics. Workshop presented at the 2006 Annual meeting and Exposition of the National Council of Teachers of Mathematics, St. Louis, MO.
- Reeder, S. & Utley, J. (February, 2006). Unlearning fractions: Working with teacher candidates to build fraction number sense. Paper presented at the 33rd Annual Conference of the Research Council on Mathematics Learning. Las Vegas, NV.
- Reeder, S. & Utley, J. (October, 2005). Elementary teacher candidates' understanding of the No Child Left Behind Act. Paper presented at the 2005 Annual Meeting of the American Association for Teaching and Curriculum. Austin, TX.
- Moseley, C., Armstrong, N., & Reeder, S. (October 2005). Enhancing teaching quality: Facilitating perspective transformation through international experiences. Paper presented at the 2005 Annual Meeting of the American Association for Teaching and Curriculum. Austin, TX.
- Reeder, S. & Cassel, D. (April, 2005). Are we golden?: Investigation and problem solving with the golden ratio. Paper presented at the 2005 Annual Meeting and Exposition of the National Council of Teachers of Mathematics. Anaheim, CA.
- Cassel, D. & Reeder, S. (April, 2005). Using children's literature for discovering geometric relationships. Presentation at the 2005 Annual Meeting and Exposition of the National Council of Teachers of Mathematics. Anaheim, CA.
- Reeder, S. & Cassel, D. (February, 2005). Listening as an integral part of an emergent mathematics curriculum. Paper presented at the 32nd Annual Conference of the Research Council on Mathematics Learning. Little Rock, AR.
- *Cassel, D., Reeder, S., & Bolin, P. (February, 2005). Geometry: Visualization and manipulation for understanding. Presentation at the 32nd Annual Conference of the Research Council on Mathematics Learning. Little Rock, AR.
- Reeder, S., Fry, P., Scott, M., & Hyle, A. (January, 2005). Enhancing teacher quality through experiences abroad. Paper presented at the 2005 Holmes Partnership Annual Conference. Philadelphia, PA.
- Fleener, M. J. & Reeder, S. (April, 2004). Teaching etcetera: Beyond the limits of curriculum presents as explored through postructural perspectives. Paper presented at the American Education Research Association Annual Meeting. San Diego, CA.
- Reeder, S. (February, 2004). Developing future mathematics teachers: One pre-service teacher's story. Paper presented at 31st Annual Conference of the Research Council on Mathematics Learning. Oklahoma City, OK.
- Fleener, M. J., Reynolds, A., Reeder, S., Cassel, D., & Adolphson, K. (February, 2003). Emergent curriculum: Classroom cultures, argumentation, and technology. Paper presented at 30th Annual Conference of the Research Council on Mathematics Learning. Tempe, AZ.
- Reeder, S. (October, 2002). The role of listening in one teacher's envisioning and implementation of an emergent mathematics curriculum. Poster presented at the 24th Annual Meeting of the International Group for the Psychology of Mathematics Education. Athens, GA.
- Adolphson, K. & Reeder, S. (February, 2002). Robotics: Developing opportunities for emergent mathematics. Paper presented at the 29th Annual Meeting of the Research Council on Mathematics Learning. Memphis, TN.
- Adolphson, K. & Reeder, S. (November, 2001). BOTS: Emergent mathematics understanding and robotics. Paper presented at the 100th Anniversary and Annual Conference of the School Science and Mathematics Association. Chicago, IL.
- Adolphson, K. & Reeder, S. (April, 2001). Robotics, Legos, and meaningful mathematical

- connections. Paper presented at the 79th Annual Meeting of the National Council for Teachers of Mathematics. Orlando, FL.
- Fleener, M. J., Reeder, S., Young, E., & Reynolds, A. (February, 2001). History of mathematics: Building relationships for learning. Paper presented at the 28th Annual Meeting of the Research Council on Mathematics Learning. Las Vegas, NV.
- Reeder, S. & Cassel, D. (February, 2000). A study of preservice teachers' metaphors for mathematics learning. Paper presented at the 27th Annual Meeting of the Research Council on Mathematics Learning. Las Vegas, NV.

*Presentations with students

REGIONAL PRESENTATIONS FOR NATIONAL ORGANIZATIONS (REFEREED)

- Laubach, T., Reeder, S., Patterson, J., & Melton, B. (October, 2010). Save the penguins in Oklahoma: Looking at the proposed framework of the new science education standards through an integrated unit on heat transfer [PowerPoint slides]. Paper presented at the annual meeting of the Southwest Region of the Association for Science Teacher Education, Stillwater, OK.
- Reeder, S. (September, 2008). Grow your students' algebraic reasoning with hands-on growth patterns. Paper presented at the NCTM Regional Conferences and Exposition, Oklahoma City, OK.
- Reeder, S., & Sparks, H. (September, 2008). Robots and graphing calculators: Developing mathematical concepts through hands-on experiences. Workshop presented at the NCTM Regional Conferences and Exposition, Oklahoma City, OK.
- Reeder, S., Moseley, C., & Armstrong, N. (October, 2004). Enhancing teacher quality: A case study of student teaching experiences in Costa Rica. Paper presented at the Annual Meeting of the Rocky Mountain Educational Research Association. Tulsa, OK.
- Reeder, S., Cassel, D., & Utley, J. (October, 2003). Using metaphors as a tool for examining prospective elementary teachers' beliefs about teaching and learning. Paper presented at the Annual Meeting of the Rocky Mountain Educational Research Association. Edmond, OK.
- Reeder, S. (February, 2002). Teacher questioning that supports student construction of knowledge. Paper presented at the Southern Regional Conference of the National Council of Teachers of Mathematics. Oklahoma City, OK.
- Adolphson, K. & Reeder, S. (February, 2001). Developing mathematical understanding through the use of robotics in authentic problem solving activities. Paper presented at the Southern Regional Conference of the National Council of Teachers of Mathematics. Oklahoma City, OK.

STATE AND LOCAL CONFERENCE PRESENTATIONS

- Reeder, S. (June, 2019). Rich tasks that promote procedural fluency. Session presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Del City, OK.
- Reeder, S., Brugar, K., & Beach, S. (March, 2019). The devastating impact of the Oklahoma teacher shortage. Session presented at the University of Oklahoma Education Funding Summit. Norman, OK.
- Reeder, S. & Utley, J. (June, 2017). Wow, these tasks have long legs! Rich mathematical tasks that

- span the grade levels. Session presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Del City, OK
- Glinsmann, R. & Reeder, S. (June, 2016). What's new: An overview of the Oklahoma mathematics standards. Session presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Tulsa, OK.
- Reeder, S. & Weinand, S. (July, 2015). Oklahoma academic standards for mathematics: Town hall meeting. Session presented twice at the Engage OK Summer Education Event, Oklahoma City, OK.
- Reeder, S. & Weinand, S. (July, 2015). Coming soon! Oklahoma academic mathematics standards. Session presented twice at the Engage OK Summer Education Event, Oklahoma City, OK.
- Reeder, S. (June 2015). Fractions, fractions, oh my!: Using children's literature and manipulatives to develop student understanding of fractions. Session and workshop presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Oklahoma City, OK.
- Reeder, S. & Bates, R. (July, 2014). Supporting qualitative literacy through integrating social justice issues. Session presented at the Vision 2020 Annual Conference, Oklahoma City, OK.
- Reeder, S. & Utley, J. (June, 2013). Meg and Jason ate $\frac{4}{5}$ of 2 pizzas: Helping students understand multiplication and division of fractions. Session and workshop presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Oklahoma City, OK.
- Utley, J. & Reeder, S. (June, 2013). Developing the CCSS-M mathematical practices through construct and describe problems. Session and workshop presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Oklahoma City, OK.
- Hess, P. & Reeder, S. (June, 2013). Apply ever matter: Using the iPad to engage students in mathematics. Session and workshop presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Oklahoma City, OK.
- Laubach, T. A. & Reeder, S. (November, 2011). Creating critical connections in mathematics and science. Session presented at the Oklahoma Science Teachers Fall Conference, Edmond, OK.
- Reeder, S. (September, 2011). Growing your students' algebraic reasoning with patterns. Session and workshop presented at the Fifth Annual Early Childhood Leadership Institute, Tulsa, OK.
- Reeder, S. & Utley, J. (June, 2010). Hands-on growth patterns: Growing your students' algebraic reasoning. Session and workshop presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Oklahoma City, OK.
- Utley, J. & Reeder, S. (June, 2009). Exploring ways to enhance student spatial sense and reasoning skills. Session and workshop presented at the Oklahoma Council of Teachers of Mathematics Annual Conference, Oklahoma City, OK.
- Reeder, S. & Nicholas, S. (November, 2007). Improving mathematics pedagogy and content knowledge for teachers in Oklahoma (IMPACKT in OK). Presentation at the Joint Fall Conference of OACTE, OATE, & OCTP. Stillwater, OK.
- Cassel, D. & Reeder, S. (November, 2004). Impacting teachers' geometry content knowledge through a No Child Left Behind Grant. Presentation at the Annual Conference of the Oklahoma Association of Colleges of Teacher Education. Norman, OK.
- Adolphson, K. & Reeder, S. (November, 2001). Robotics and mathematical problem solving: What students gain and overcoming teachers' challenges. Paper presented at the fall conference of the Oklahoma Association of Teachers Educators. Norman, OK.
- Adolphson, K. & Reeder, S. (November, 2001). Robotics and meaningful mathematics: Making the connection with middle school students through authentic activities. Presented at the graduate Student Research Poster Session, University of Oklahoma. Norman, OK.

INVITED PRESENTATIONS

- Reeder, S. (January, 2020). The beauty of mathematics and patterns. Virginia Commonwealth Qatar, Qatar.
- Reeder, S. (September, 2017). Consider being a teacher – We need you! Session presented at Kaiserlautern Military Community, Germany.
- Reeder, S. (October, 2016). NCTM CAEP program report compiler training – NCTM CAEP standards 2012. Oklahoma Association for Colleges of Teacher Educators. Norman, OK.
- Reeder, S. (September, 2015). Why you should consider teaching and why we need you! Session presented at Kaiserlautern Military Community, Germany.
- Reeder, S. (January, 2015). Teaching – We need you! Session presented at Stuttgart Army Base, Germany.
- Reeder, S. (March, 2014). Leadership – Building the strengths of others. Lunch and learn session presented at Lakenheath-Mildenhall Military Base, England.
- Reeder, S. (March, 2014). Reading your way to strong mathematics understanding. Session presented at Lakenheath-Mildenhall Military Base, England.
- Reeder, S. & Baines, L. (September, 2013). Curiouser and curiouser: Foster life-long learning through education. Session presented at the OU Advanced Programs Conference. Kaiserslautern Military Community, Germany.
- Fleener, M. J. & Reeder, S. (January, 2001). Curriculum pushing the boundaries: Doll's curriculum matrix and complex emergence. Paper presented at "In Praise of the Postmodern" conference. Baton Rouge, LA.

COURSES TAUGHT

- Undergraduate:
- Teaching Mathematics at the Intermediate Level, 4-8
 - Teaching Mathematics at the Intermediate Level, 4-8 (ExCEL)
 - Elementary Mathematics Methods
 - Primary Mathematics Methods, N-3
 - Problem Centered Learning, N-8
 - Fundamental Concepts and Methods of Teaching Mathematics, 7-12
 - Developing Problem Solving Environments in the Secondary Mathematics Classroom
 - Teaching and Learning of Mathematical Reasoning and Proof
- Graduate:
- Problem Centered Learning in Mathematics
 - History of Mathematics for Educators
 - Integrated Mathematics and Science Applications
 - Middle School/Secondary Mathematics Curriculum Theory
 - Technology in the Teaching of Mathematics
 - Theory and Research in Mathematics Education
 - Systems Theory
 - Theory and Research in Education
 - Teaching Mathematics for Social Justice/Social Justice by the Numbers
 - Geometry, Spatial Reasoning and Learning Trajectories at the Elem. Level
 - Rational Number Concepts, Proportional Reasoning, and Classroom Interactions at the Elementary Level
 - Elementary Mathematics Leadership and Coaching
 - Introduction to Teaching
 - US and China: Perspectives on Education in the Information Age (OU Presidential Dream Course – Fall 2014)

DOCTORAL DISSERTATIONS CHAIRED

- Hoffpauir, Ryan. (November, 2019). *Perceptions And Implementations Of Standards For Mathematics Teacher Preparation Programs*. ILAC – Mathematics Education.
- McAnally, Alana. (April, 2019). *Impact of Co-Requisite Mathematics Remediation on Students' Perceptions of Mathematics*. ILAC – Mathematics Education.
- Cross, Mackinley. (April, 2019). *Understanding the Motivations and Experiences of Teachers Who Change Schools*. ILAC – Elementary Education.
- Wells, Cacey. (April, 2019). *Mathematics Teaching in an Urban School: A Case Study of Two Teachers*. ILAC – Mathematics Education.
- Gunter, Melissa. (November, 2018). *College in The High School: An Alternative Remediation Model*. ILAC – Mathematics Education.
- Gunter, Devon. (October, 2018). *An Examination of the Genesis, Maintenance, and Manifestation of the Pedagogical Beliefs of a Novel Instructor: A Case Study*. ILAC – Mathematics Education.
- Raymond, Kate. (November, 2017). *Making Meaning of Algebra 2 Teachers: A Case Study of One School*. ILAC—Mathematics Education.
- Bowman, Elaine. (April, 2017). *Effecting Change on the Mathematics Teaching Efficacy of Preservice Elementary Teachers*. ILAC – Mathematics Education.
- Nicolescu, Radu. (November 2015). *The Analysis of Self-Efficacy for Students Enrolled in a Calculus I Course at a Community College*. ILAC – Mathematics Education.
- Bates, Rachel. (November, 2014). *A Phenomenological Exploration of Problem-Based Learning among College Level Mathematics Students*. ILAC – Mathematics Education.
- Howard, Paul. (November, 2013). *Using Hermeneutic Phenomenology to Investigate Pre-Service Secondary Mathematics Teachers' Beliefs about Mathematics and the Teaching and Learning of Mathematics*. ILAC –Mathematics Education.
- Harper, Mary. (September, 2012). *Influence of a Non-Traditional Mathematics Content Course on Preservice Teachers' Beliefs*. ILAC –Mathematics Education.
- Prugh, Lindsay. (April, 2012). *Spatial Reasoning in Undergraduate Mathematics: A Case Study*. ILAC – Mathematics Education.
- Koehn, Ron. (March, 2012). *The Perceptions of Remedial Mathematics Students of Web-Based Instruction Supplemented with Instructor Presented Instruction*. ILAC – Mathematics Education.
- Turegun, Mikhail. (February, 2011). *A Model for Developing and Assessing Community College Students' Conceptions of the Range, Interquartile Range, and Standard Deviation*. ILAC – Mathematics Education.
- Bateiha, Summer. (May, 2010). *Mathematics for Critical Numeracy: A Case Study of a Social Justice Mathematics Course for Elementary Teachers*. ILAC – Mathematics Education.
- Utey, Juliana. (August, 2004). *The Impact of a Non-traditional Geometry Course on Prospective Elementary Teachers' Attitudes and Efficacy*. STCL, OSU - Mathematics Education.

MASTERS PROJECTS CHAIRED

- Prise, Julia. (May, 2019). *Why Charlie Brown's teacher never could teach math*. ILAC – Mathematics Education.
- Lindsay Hawkins. (December 2018). *Fostering and developing student's mindset in mathematics*. ILAC – Mathematics Education.
- Amber Stokes. (December 2018). *Social justice curriculum in a remedial mathematics classroom*. ILAC – Mathematics Education.

- Ryan Whitlock. (July, 2017). *Building effective mathematics curriculum: Problem based learning and real-life contexts in the mathematics classroom*. ILAC – Mathematics Education.
- Jordan Stanfill. (December, 2016). *Teaching mathematics effectively: A problem centered approach*. ILAC – Mathematics Education.
- Megan Moore. (July, 2016). *Differentiated instruction in mathematics: Addressing needs and advancing potentials*. ILAC – Mathematics Education.
- Amanda Coffin. (May, 2016). *Mathematics remediation: Our current state and recommendations for the future*. ILAC – Mathematics Education.
- Carye Chapman. (May, 2015). *Technology for the teaching of mathematics*. ILAC – Mathematics Education.
- Tracy Huntley. (December, 2014). *Elementary mathematics*. ILAC – Elementary Education.
- Pat Morgan. (December, 2014). *Literacy strategies in the mathematics classroom*. ILAC – Mathematics Education.
- Amanda Jakubovitz. (December, 2014). *Implementing common core mathematics*. ILAC – Elementary Education.
- Dawn Carmen. (December 2014). *Mathematics intervention*. ILAC – Mathematics Education.
- Cynthia Bothwell. (May, 2014). *Effective mathematics teaching of ELL students*. ILAC – Mathematics Education.
- Heather Daniels Twitchell. (December, 2013). *Problem-centered learning -A practical approach to teaching mathematics*. ILAC – Mathematics Education.
- Damiean Johnson. (December, 2013). *Integrating Technology into Mathematics Classroom Activities in Support of a Constructivist Pedagogy*. ILAC – Mathematics Education.
- David Winkler. (May, 2013). *Learning, teaching and mathematics education*. ILAC – Mathematics Education.
- Jane Guffey. (May, 2013). *Helping students learn mathematics*. ILAC – Mathematics Education.
- Alex Poppino. (May, 2013). *Reaching diverse learners through the multiple intelligences in mathematics*. ILAC – Mathematics Education.
- Elizabeth Auld. (December, 2012). *Teaching multiplication with learners in mind*. ILAC – Elementary Education.
- Mallory Meuwly. (December, 2012). *Mathematic interventions in the classroom*. ILAC – Elementary Education.
- Diana Sutton. (July, 2012). *Mathematics education for the twenty-first century: The importance of an integrated approach to teaching mathematics*. ILAC – Mathematics Education.
- Melissa Gunter. (May, 2012). *Problem centered learning: The how and the why*. ILAC – Mathematics Education.
- Qingua Luo. (May, 2012). *Constructivist learning theory, technology, and mathematics teaching*. ILAC – Mathematics Education.
- Donta Stepany. (May, 2012). *A study of the use of the cell phone as a study tool in high school classrooms*. ILAC – Mathematics Education.
- Cullen Birney. (May, 2012). *Problem solving in Geometry*. ILAC – Mathematics Education.
- Kristi Hartman. (May 2012). *Differentiating up! Using data to meet the needs of high achieving math students*. ILAC – Mathematics Education.
- Michell Eike. (May 2012). *Revision of spiral curriculum in middle school mathematics*. ILAC – Mathematics Education.
- Sara Snodgrass. (December, 2011). *Looking back to the future: Lesson learned from my first year in teaching*. ILAC – Mathematics Education.
- Ashley White. (December, 2011). *Passionate and compassionate teaching*. ILAC – Mathematics Education.
- Brooke Daugherty. (May, 2011). *Connections in mathematics*. ILAC – Mathematics Education.
- Cami George. (May, 2011). *Integrating mathematics in real-world scenarios*. ILAC – Mathematics Education.
- Cacey Wells. (December, 2010). *Fostering community in the classroom*. ILAC – Mathematics Education.
- Julie Bonner. (May, 2010). *Improving attitudes towards mathematics and improving mathematics performance*.

- ILAC – Mathematics Education.
- Heather Weilacher. (May, 2010). *Integration in the mathematics classroom*. ILAC – Mathematics Education.
- Narayan Thapa. (May, 2010). *Teaching calculus using and integrated inquiry model with technology*. ILAC – Mathematics Education.
- Levi Patrick. (December, 2009). *Perspectives, outcomes, and implications of post-modern mathematics curricula and a model of democratic-thematic mathematics curriculum for 21st century high schools*. ILAC – Mathematics Education.
- Ali Shaqlaih. (December, 2009). *Constructivism and technology in teaching mathematics*. ILAC – Mathematics Education.
- Sharon Christensen. (December, 2009). *Creating an environment for a more equitable secondary mathematics education*. ILAC – Mathematics Education.
- Rick Neuman. (May 2009). *Mathematics education program development*. ILAC – Mathematics Education.
- Austin Ferguson. (December, 2008). *The effects of poverty on education*. ILAC – Mathematics Education.
- Nicole Shobert. (July, 2008). *A look at models of professional development*. ILAC – Mathematics Education.
- Jodie Burnett. (May, 2008). *Single gender education: Improving classrooms for students and teachers*. ILAC – Instructional Leadership and Academic Curriculum.
- Michele Netzler. (May, 2007). *The teacher's role in today's changing algebra classroom*. ILAC – Mathematics Education.
- Yalcin White. (December, 2006). *Creating a safety net program for inner-city, low income schools in order to relieve testing pressure in the classroom*. ILAC – Mathematics Education.

UNDERGRADUATE HONORS PROJECTS SUPERVISED

- Claire Lambert. (December, 2020). *Culturally relevant pedagogy*. EDMA 3980.
- Amanda Pruett. (May, 2012). *Reasoning, problem solving, and proof in secondary education: The importance of reshaping the curriculum*. EDMA 3980.
- Diana, Davis. (May, 2008). *The effects of poverty on mathematics education*. EDMA 3980.
- McSpadden, Suzanne. (December, 2007). *Problem-centered learning in upper-level high school mathematics classrooms*. EDMA 3980.
- Barmore, Dayna. (December, 2004). *An interactive geometry resource: Webpage and current research*. Project conducted as part of CIED 4153 - Teaching Mathematics at the Intermediate Level.
- Meyers, Deanna. (December, 2003). *A study of mathematical thinking in second grade students*. Project conducted as part of CIED 4153 - Teaching Mathematics at the Intermediate Level.

PROFESSIONAL SERVICE (NATIONAL & INTERNATIONAL ORGANIZATIONS) (2005 to Present)

2018 – 2019	Past President, School Science and Mathematics Association.
2016 – 2018	President, School Science and Mathematics Association.
2018 – present	Reviewer, Papers submitted to <i>Journal of Mathematics Education Leadership</i> .
2018	Reviewer, Papers submitted to PMENA.
2017 – present	Editorial Board, Investigations in Mathematics Learning.
2016	Reviewer, Papers submitted to PMENA.
2015 – 2016	President-Elect, School Science and Mathematics Association.
2015	Program Co-chair, School Science and Mathematics Association Annual Convention, Convention held in Oklahoma City, OK.
2014 – 2017	Member, Program Committee, Association of Mathematics Teacher Educators.
2013	Member, Executive Director Search Committee, School Science and Mathematics Association.
2012 – 2015	Member, Executive Board, School Science and Mathematics Association.
2010 – 2012	Reviewer, NCATE/NCTM program review team.
2011 – 2014	Member, Membership Committee, School Science and Mathematics Association.
2010 – 2013	Editor, Research Council on Mathematics Learning 2011, 2012 & 2013 Conference Proceedings.
2010 – 2012	Vice President for Conferences, Research Council on Mathematics Learning.
2010 – present	Reviewer, Papers submitted to <i>School Science and Mathematics Journal</i> .
2010	Reviewer, Papers submitted for the 32 nd Annual Meeting of the International Group for the Psychology of Mathematics Education.
2008	Co-Program Chair, 35 th Annual Meeting of the Research Council on Mathematics Learning, Conference held in Oklahoma City, OK.
2007 – present	Reviewer, Papers submitted to <i>Mathematics Teaching in the Middle School</i> for publication.
2008 – 2010	Member, Awards Committee, Association of Mathematics Teacher Educators.
2008 – 2010	Member, Awards Committee, School Science and Mathematics Association.
2008	Member, Local Conference Organization Committee, 12 th Annual Meeting for the Association of Mathematics Teacher Educators. Tulsa, OK.
2006 – 2009	Member, Conference Committee, Research Council on Mathematics Learning.
2006 – present	Reviewer, Papers submitted to <i>Action in Teacher Education</i> for publication.
2007	Reviewer, Papers submitted for the 2007 Annual Meeting of the American Educational Research Association.
2006	Reviewer, Papers submitted for the 28 th Annual Meeting of the International Group for the Psychology of Mathematics Education.
2004 – 2006	Reviewer, Papers submitted to <i>Focus on Learning Problems in Mathematics</i> for publication.
2006	Reviewer, Papers submitted for the 13 th Annual Conference of the American Association for Teaching and Curriculum.
2006	Reviewer, Papers submitted for the 2006 Annual Meeting of the American Educational Research Association.

PROFESSIONAL SERVICE (UNIVERSITY, COLLEGE & DEPARTMENT) (2005 to Present)

2018 – 2020	Member, Provost's Advisory Committee on Community Engagement
2018	Member, Service Learning Task Force, OU
2017 – present	Member, Elementary Education Certification Committee
2017	Member, ELPS Department Chair Search Committee, COE. (resulted in the hiring of S. Vaught)
2017	Member, Graduate College Dean Search Committee, OU. (resulted in the hiring of R. Hughes)
2017	Book Discussion Leader, <i>Unfinished Business</i> , COE.
2014 – 2019	Member, CEDaR Advisory Board
2013 – present	Member, Advanced Programs Executive Board, OU
2013 – 2014	Member, Climate Committee, COE
2013 – 2014	Member, Social Studies Search Committee, ILAC
2013 – 2014	Co-Chair, Elementary Education Search Committee, ILAC
2012 – present	Member, Undergraduate Scholarship Committee, COE
2012 – 2013	Member, Mathematics Pedagogy Search Committee, Math Department
2011 – present	Chair, Elementary Mathematics Specialist Certification Committee
2011 – 2012	Chair, Mathematics Education Search Committee, ILAC (resulted in the hiring of K. Conrady)
2011 - 2012	Member, Jeannine Rainbolt College of Education Dean's Search Committee (resulted in the hiring of G. Garn)
2011 - 2012	Chair, Awards Committee, COE
2010 - 2012	Member, ILAC Committee A
2010 - 2012	Member, Expanded Ad Council
Fall 2010	Race to Nowhere Documentary Screening Planning Committee
2009 - 2011	Member, Elementary Education Search Committee, ILAC
2009 - 2012	Member, ILAC Awards Committee (Chair 2011-2012)
2007 - 2010	ILAC Representative, OU Faculty Senate
2008 - Present	Member, Ethics Committee, COE
2008 - Present	Member, STEM Education Certification Committee
Spring 2008	Member, STEM program Task Force, ILAC
2007 - Present	Member, ILAC Chair Search Committee, ILAC
Spring 2007	Member, Elementary Education Task Force, ILAC
2006 – 2010	Member, Graduate Studies Committee, ILAC
2006	Member, Undergraduate Scholarship Committee, COE
2006 – 2010	Member, Curriculum Committee, COE
2005 – 2006	Co-Chair, Mathematics Education Search Committee, ILAC (resulted in the hiring of S. Nicholas)
2005 – present	Member, Education Professional Development Committee, COE
2005 – present	Chair, Mathematics Education Certification Committee
2005 – present	Member, Elementary Education Certification Committee
2005 – 2006	Member, Mentoring Task Force, COE
2005 – present	Member, Undergraduate Student Petition Task Force, COE

PROFESSIONAL SERVICE (STATE ORGANIZATIONS)

2015 – 2016	Co-Chair, Oklahoma Academic Standards for Mathematics Writing Team, Oklahoma State Department of Education and Oklahoma Regents for Higher Education.
2015	Moderator, Math and Science Education – Developing an Effective STEM Pipeline sessions. 2105 Governor’s STEM Summit, Oklahoma State Department of Education and Oklahoma Regents for Higher Education.
2015 – 2017	Oklahoma State Program Area Review Board, Oklahoma Office of Education Quality Assessment.
2014	Program Chair, Annual Meeting of the Oklahoma Council of Teachers of Mathematics, Conference held July, 2014, Tulsa, OK.
2009 – present	Editor, Oklahoma Journal for School Mathematics (OkJSM).
2008 – 2012	Editor, Oklahoma Council of Teachers of Mathematics Newsletter, published four times annually.

PROFESSIONAL SERVICE TO SCHOOLS (WORKSHOPS CONDUCTED)

Keep Educating Yourself (KEY) Conference. Professional development conference for Oklahoma teachers. April 2019.

Immersing Middle School Teachers in Research Experiences in Math and Science (IMSTREMS). No Child Left Behind Act of 2001, Title II, Part B, Two-week Institute held Summer 2014 with 4 follow-up days throughout the academic year (2014-15).

Writing in Mathematics Class. Professional development workshop session presented for Shawnee Public Schools. January 2014.

Mathematics the “Write” Way. Professional development workshop session presented at Norman Public Schools Get Fit Conference, October 2013.

Mathematics the “Write” Way. Professional development workshop session presented for Shawnee Public Schools. January 2013.

Immersing Middle School Teachers in Research Experiences in Math and Science (IMSTREMS). No Child Left Behind Act of 2001, Title II, Part B, Two-week Institute held Summer 2013 with 4 follow-up days throughout the academic year (2013-14).

Immersing Middle School Teachers in Research Experiences in Math and Science (IMSTREMS). No Child Left Behind Act of 2001, Title II, Part B, Two-week Institute held Summer 2012 with 4 follow-up days throughout the academic year (2012-13).

Developing Mathematical Fluency with Middle School Students. Professional development workshop session presented at Norman Public Schools Get Fit Conference, October 2011.

Creating Critical Connections in Mathematics and Science ($C^3[M+S]$). No Child Left Behind Act of 2001, Title II, Part B, Two-week Institute held Summer 2011 with 4 follow-up days throughout the academic year (2011-12).

Creating Critical Connections in Mathematics and Science ($C^3[M+S]$). No Child Left Behind Act of 2001, Title II, Part B, Two-week Institute held Summer 2010 with 4 follow-up days throughout the academic year (2010-11).

Creating Critical Connections in Mathematics and Science through Engineering ($C^3[M+S]-E$). No Child Left Behind Act of 2001, Title II, Part B, Two-week Institute held Summer 2009 with 4 follow-up days throughout the academic year (2009-10).

Algebra I – Leadership. Half-day Professional Development Workshop conducted with K20 Alternative Education, February 11, 2008.

Improving Mathematics Learning in the Middle Grades. Three full-day Professional Development Workshops conducted with Duncan Public Schools, 2006-2007.

Geometry: Hands-on and Experiential Learning. Half-day Professional Development Workshop conducted with Shawnee Public Schools, January 20, 2005.

Mathematical Thinking and Problem Centered Learning. Full-day Professional Development Workshop conducted with Bartlesville Public Schools, January 19, 2004.

Problem Centered Learning. 2-hour Professional Development Workshop conducted with American International School, San Jose, Costa Rica, February 3, 2004.

Brain Research and Problem Centered Learning. Full-day Professional Development Workshop conducted with Western Heights Public Schools, April 12, 2004.

OTHER PROFESSIONAL SERVICE (NATIONAL)

2020 Served as an external reviewer for 2 promotion candidates.

2018 Served as an external reviewer for a tenure and promotion candidate.

2017 Served as an external reviewer for 2 tenure and promotion candidates.

2016 Served as an external reviewer for a tenure and promotion candidate.

2015 Served as an external reviewer for a tenure and promotion candidate.

2013 Served as an external reviewer for a tenure and promotion candidate.

2011 Served as an external reviewer for 2 tenure and promotion candidates.

PROFESSIONAL ORGANIZATIONS

Association of Mathematics Teacher Educators
 National Council for Teachers of Mathematics
 International Group for the Psychology of Mathematics Education, North American Chapter
 Research Council on Mathematics Learning
 School Science and Mathematics Association
 Oklahoma Council for Teachers of Mathematics

TEACHING CERTIFICATIONS

Oklahoma Standard Certificate in Secondary Mathematics Education with additional certifications in: Calculus, Trigonometry, Math Analysis, Computer Applications, Statistics, Linear Algebra, Geometry, General Mathematics, and Middle School Mathematics.