

ROBERT J. QUINN

Curriculum Vita

Education

- Ed.D. Curriculum & Instruction, University of Nevada, Las Vegas, NV 1993
M.A.T. Mathematics Education, Boston College, Chestnut Hill, MA 1989
A.B. Mathematics/Physics Boston College, Chestnut Hill, MA 1975

Professional Experience

- 2006-present Professor of Mathematics Education, University of Nevada, Reno
2003-2004 Interim Chair, Department of Curriculum, Teaching, & Learning, University of Nevada, Reno
1998-2006 Associate Professor of Mathematics Education, University of Nevada, Reno
1994-98 Assistant Professor of Mathematics Education, University of Nevada, Reno
1993-94 Assistant Professor of Mathematics Education, University of Alabama
1979-90 Mathematics Teacher, Northfield Mount Hermon School, Northfield, MA.
1977-79 Math/Physics Teacher, Chapel Hill-Chauncy Hall School, Waltham, MA.

Recent Courses Taught

- EDSC 453/653 Teaching Secondary Mathematics
EDSC 459/659 Technology Applications in Secondary Mathematics
EDSC 353 Teaching Secondary Geometry
CTL 721 Evaluation of Classroom Learning
CTL 710 Critical Issues in Math, Science, Technology, and Society
CTL 702 Critical Issues in Secondary Education

Teaching Award

Recipient of the first annual Judith S. Bible Distinguished Teaching Award. College of Education, University of Nevada, Reno, May 2011.

National and International Publications

- Waddell, G., and Quinn, R. J. (2011). Two applications of Venn diagrams. *Teaching Statistics*, 33(2), 46-48.
Balimuttajjo, S., Quinn, R. J. (2010). Innovative Pedagogical Approaches Based on Solving a Disjunctive Probability Problem. *Learning and Teaching Mathematics*, 8, 61-66.
You, Z., Quinn, R. J. (2010). Prospective elementary and middle school teachers' knowledge of linear functions: A quantitative analysis. *Journal of Mathematics Education*, 1(1), 66-76.

- Quinn, R. J., Ball, T. S., You, Z. (2010). Engaging probability students in playing and analyzing a simple card game. *Teaching Statistics*, 32(2), 45-48.
- Quinn, R. J., You, Z. (2010). Improving classroom discussion using an innovative structure. *College Teaching*, 58(3), 116.
- Quinn, R. J., You, Z. (2010). *Balancing traditional and technological approaches to geometric constructions* (pp. 3502-3504). Society for Information Technology and Teacher Education.
- Harootunian, J. A., Quinn, R. J. (2008). Identifying and describing tutor archetypes: The pragmatist, the architect, and the surveyor. *The Clearing House*, 82(1), 15 - 19.
- Ball, T. S., Quinn, R. J., You, Z. (2008). Developing Conceptual Understanding of Conditional Probability Using Fathom. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 4399-4403). Chesapeake, VA: AACE.
- You, Z., Quinn, R. J., Thomas, D. (2008). Exploring Slope, Intercept, and Linear Functions Using Geometer's Sketchpad. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 4625-4629). Chesapeake, VA: AACE.
- Perrin, J. R., and Quinn, R. J., (2008). The power of investigative Calculus projects. *Mathematics Teacher*, 101(9), 640-646.
- Brown, G., and Quinn, R. J. (2007). Investigating the relationship between fraction proficiency and success in algebra. *Australian Mathematics Teacher*, 63(4), 8-15.
- Quinn, R. J., Lamberg, T. D., & Perrin, J. R. (In press). Teacher perceptions of division by zero. *The Clearing House*.
- Brown, G., and Quinn, R. J. (2007). Fraction proficiency and success in algebra: What does research say? *Australian Mathematics Teacher*, 63(3), 23-30.
- Quinn, R. J., and Ball, T. S. (2007). Explore, conjecture, connect, prove: The versatility of a rich geometry problem. *Mathematics Teacher*, 101(1), 8-11.
- Brown, G., and Quinn, R. J. (2006). Algebra students' difficulty with fractions: An error analysis. *Australian Mathematics Teacher*, 62(4), 28-40.
- Quinn, R. J. (2006). Exploring correlation coefficients with golf statistics. *Teaching Statistics*, 28(1), 10-13.
- Quinn, R. J. (2005). A constructivist lesson to introduce arithmetic sequences with patterns. *Australian Mathematics Teacher*, 61(4), 18-21.
- Quinn, R. J. (2005). Exploring correlation coefficients with golf statistics. *Teaching Statistics*, 28(1), 10-13.
- Andrews, B. D., and Quinn, R. J. (2005). The effects of mentoring on first-year teachers' perceptions of support received. *The Clearing House*, 78(3), 110-116.
- Quinn, R. J. (2005). Technology in mathematics education: Breadth versus depth. Published in the proceedings of Society for Information Technology and Teacher Education, Annual Meeting, Phoenix AZ.
- Quinn, R. J., and Ball, T. S. (2005). Teaching mathematics with Logo and Geometer's Sketchpad. Published in the proceedings of Society for Information Technology and Teacher Education, Annual Meeting, Phoenix AZ.
- Andrews, B. D., and Quinn, R. J. (2004). First-year teaching assignments: A descriptive analysis. *The Clearing House*, 78(2), 78-83.
- Andrews, B. D., and Quinn, R. J. (2004). The struggles of first-year teachers: Investigating support mechanisms. *The Clearing House*, 77(4), 164-168.

- Quinn, R. J. (2004). Investigating probabilistic intuitions. *Teaching Statistics*, 26(3), 86-88.
- Quinn, R. J. (2003). Exploring the Probabilities of "Who Wants to be a Millionaire?" *Teaching Statistics*, 25(3), 81-84.
- Quinn, R. J. (2002). Gaming. In *Mathematics*, ed. Barry Max Brandenberger, Jr. New York: Macmillan Reference USA.
- Quinn, R. J. (2002). Probability: Experimental. In *Mathematics*, ed. Barry Max Brandenberger, Jr. New York: Macmillan Reference USA.
- Quinn, R. J. (2002). Probability: Theoretical. In *Mathematics*, ed. Barry Max Brandenberger, Jr. New York: Macmillan Reference USA.
- Quinn, R. J. (2002). State Lotteries. In *Mathematics*, ed. Barry Max Brandenberger, Jr. New York: Macmillan Reference USA.
- Robinson, M., Fadali, M. S., Ochs, G., & Quinn, R. J. (2002). How do high school mathematics and science teachers cover engineering and technology? Published in the proceedings of *Frontiers in Education, Annual Meeting*, Boston, MA.
- Quinn, R. J. (2001). Developing conceptual understanding of probability with attribute blocks. *Mathematics Teaching in the Middle School*, 6(5), 290-294.
- Quinn, R. J., & Tomlinson, S. (2001). Random variables: Simulations and surprising connections. *delta - K*, 38(2), 27-33 (reprinted with the permission of the National Council of Teachers of Mathematics, from *Mathematics Teacher* 92(1), 1999).
- Worrall, L. J., & Quinn, R. J. (2001). Promoting Conceptual Understanding of Matrices. *Mathematics Teacher*, 94(1), 27-33.
- Quinn, R. J. (2000). Clinching first place: Calculating the magic number. *Mathematics Teaching in the Middle School*, 6(2), 86-89.
- Quinn, R. J. (2000). Developing an understanding of the Law of Large Numbers. *Australian Mathematics Teacher*, 56(1), 25-27.
- Wiest, L. R., & Quinn, R. J. (2000). Colorful probabilities. *Australian Primary Mathematics Classroom*, 5(2), 19-23.
- Quinn, R. J. (2000). Analyzing a conversion algorithm. *Australian Mathematics Teacher*, 56(2), 40-41.
- Sweeney, E. S., & Quinn, R. J. (2000). Concentration: Connecting fractions, decimals, and percents. *Mathematics Teaching in the Middle School*, 5(5), 324-328.
- Quinn, R. J., & Tomlinson, S. (1999). Random variables: Simulations and surprising connections. *Mathematics Teacher*, 92(1), 4-9.
- Quinn, R. J., & Wiest, L. R. (1999). Reinventing Scrabble with middle school students. *Mathematics Teaching in the Middle School*, 5(4), 210-213.
- Weaver, J. L. & Quinn, R. J. (1999). Geometer's Sketchpad in secondary geometry. *Computers in the Schools*, 15(2), 83-95.
- Quinn, R. J., & Obenchain, K. M. (1999). Exploring gender biases in a general methods class. *The Clearing House*, 73(1), 16-18.
- Wiest, L. R., & Quinn, R. J. (1999) Exploring probability through an evens-odds dice game. *Mathematics Teaching in the Middle School*, 4(6), 358-362.
- Quinn, R. J. (1998). I'll take a double scoop of chocolate, please. *Australian Primary Mathematics Classroom*, 3(4), 9-11.

- Quinn, R. J. & Wiest, L. R. (1998). A constructivist approach to teaching permutations and combinations. *Teaching Statistics*, 20(3), 75-77.
- Quinn, R. J. (1998). Technology guidelines for educators. *Think*, 9(2), 10-11.
- Quinn, R. J. (1998). Technology: Preservice teachers' beliefs and the influence of a mathematics methods course. *The Clearing House*, 71(6), 375-377.
- Quinn, R. J. (1998). The influence of mathematics methods courses on preservice teachers' pedagogical beliefs concerning manipulatives. *The Clearing House*, 71(4), 236-238.
- Quinn, R. J. (1997). Anomalous sports performances. *Teaching Statistics*, 19(3), 81-83.
- Quinn, R. J. (1997). Investigating probability with the NBA draft lottery. *Teaching Statistics*, 19(2), 40-42.
- Tomlinson, S., & Quinn, R. J. (1997). Understanding conditional probability. *Teaching Statistics*, 19(1), 2-7.
- Quinn, R. J. (1997). Effects of mathematics methods courses on the mathematical attitudes and content knowledge of preservice teachers. *Journal of Educational Research*, 91(2), 108-113.
- Quinn, R. J. (1997). Developing conceptual understanding of relations and functions with attribute blocks. *Mathematics Teaching in the Middle School*, 3(3), 186-90.
- Quinn, R. J., & Wilson, M. M. (1997). Writing in the mathematics classroom: Teacher beliefs and practices. *The Clearing House*, 71(1), 14-20.
- Quinn, R. J. (1996). Odds that don't add up, revisited. *Teaching Statistics*, 18(1), 12-14.
- Quinn, R. J. (1996). Having fun with baseball statistics. *Mathematics Teaching in the Middle School*, 1(10), 780-785.
- Quinn, R. J. (1996). Modeling statistics lessons with preservice and inservice teachers. *The Clearing House*, 69(4), 246-248.
- Quinn, R. J. (1996). Exploring probability and statistics with preservice and inservice teachers. *School Science and Mathematics*, 96(5), 255-257.
- Scott, B. H., Quinn, R. J., & Daane, C. J. (1996). Are we teaching our students the mathematics skills they need to work in the 21st century? *The Clearing House*, 69(6), 354-357.
- Shearer, K., & Quinn, R. J. (1996). Using projects to implement mathematics standards. *The Clearing House*, 70(2), 73-76.

Presentations (since 2005)

- Assuah, C., Quinn, R. J., School Science and Mathematics, Annual Meeting, "Communication in the Mathematics Classroom: Students' Perceptions of the Learning Process", Reno, Nevada. (October 23, 2009).
- Balimuttajjo, S., Quinn, R. J., School Science and Mathematics, Annual Meeting, "Innovative Pedagogical Strategies to a Complex Probability Problem Based on Student Responses", Reno, Nevada. (October 23, 2009).
- Quinn, R. J., You, Z., School Science and Mathematics, Annual Meeting, "Mathematics Teachers' Planning in the United States and China: A Comparative Study", Reno, Nevada. (October 23, 2009).
- You, Z., Quinn, R. J., School Science and Mathematics, Annual Meeting, "Prospective Middle School Teachers' Knowledge of Linear Functions: Exploring Content Knowledge and Pedagogical Content Knowledge", Reno, Nevada. (October 23, 2009).

- Assuah, C., Quinn, R. J., Northern Rocky Mountain Educational Research Association, "Enhancing Students' Mathematical Understanding through Communication", Jackson, Wyoming. (October 9, 2009).
- Balimuttajjo, S. (Presenter & Author), Quinn, R. J., Northern Rocky Mountain Educational Research Association, "Exploring Concept Images of College Students in STEM Related Disciplines", Jackson, Wyoming. (October 9, 2009).
- Quinn, R. J., You, Z., Northern Rocky Mountain Educational Research Association, "Planning Perspectives of Mathematics Teachers in the United States and China", Jackson, Wyoming. (October 9, 2009).
- You, Z., Quinn, R. J., Northern Rocky Mountain Educational Research Association, "Prospective Elementary and Middle School Teachers' Knowledge of Linear Functions", Jackson, Wyoming. (October 9, 2009).
- Assuah, C., Quinn, R. J., Association of Teacher Educators, "Communication for Effective Teaching in the Mathematics Classroom", Reno, Nevada. (August 4, 2009).
- Quinn, R. J., You, Z., Association of Teacher Educators, "The Planning Process: An International Study of Teachers in the United States and China", Reno, Nevada. (August 4, 2009).
- Ball, T. S., Quinn, R. J., You, Z., Society for Information Technology and Teacher Education. Developing Conceptual Understanding of Probability Using Fathom. Las Vegas, NV. March 5, 2008.
- You, Z., Quinn, R. J., Thomas, D., Society for Information Technology and Teacher Education, Academic. Exploring Slope, Intercept, and Linear Functions Using Geometer's Sketchpad. Las Vegas, NV. March 6, 2008.
- Lamberg, T. D., Quinn, R. J., Balimuttajjo, S., Northern Rocky Mountain Educational Research Association. Implementing professional development using a design research approach: Impact on student learning and teacher knowledge. Lake Tahoe, Nevada. October 9, 2008.
- Quinn, R. J., Ball, T. S., Assuah, C., National Council of Teachers of Mathematics, Regional Meeting. Explore, Conjecture, Connect, Prove: The Versatility of a Rich Geometry Problem. Reno, Nevada. November 6, 2008.
- Perrin, J. R., Quinn, R. J., National Council of Teachers of Mathematics, Regional Meeting. The Power of Investigative Calculus Projects. Reno, Nevada. November 7, 2008.
- Lamberg, T. D., Brancamp, D. J., Quinn, R. J., Balimuttajjo, S., National Council of Teachers of Mathematics, Regional Meeting. Implications and Impact of the Northeastern Nevada Mathematics Project. Reno, Nevada. November 7, 2008.
- Quinn, R. J., and Perrin, J. R., Research Council on Mathematics Learning Annual Meeting, Academic, "Division by zero", Research Council on Mathematics Learning, Las Vegas, Nevada. February 25, 2006.
- Lamberg, T. D., and Quinn, R. J., Research Council on Mathematics Learning Annual Meeting, "Northeastern Nevada Math Project", Research Council on Mathematics Learning, Las Vegas, Nevada. February 24, 2006.
- Quinn, R. J. (2005). Exploring empirical experiences and probabilistic intuitions. National Council of Teachers of Mathematics, Annual Meeting, Research Presession, Anaheim, CA. April 4-6, 2005
- Quinn, R. J. (2005). Technology in mathematics education: Breadth versus depth. Society for Information Technology and Teacher Education, Annual Meeting, Phoenix AZ. March 1-5, 2005
- Quinn, R. J., and Ball, T. S. (2005). Teaching mathematics with Logo and Geometer's Sketchpad. Society for Information Technology and Teacher Education, Annual Meeting, Phoenix AZ. March 1-5, 2005.
- Quinn, R. J. (2005). Investigating probabilistic intuitions. Research Council on Mathematics Learning Annual Meeting. Little Rock AK. February 24-26, 2005.
- Quinn, R. J. (2005). Analyzing solution strategies among different populations to a constructivist pattern problem. Research Council on Mathematics Learning Annual Meeting. Little Rock AK. February 24-26, 2005.

Quinn, R. J. (November 11, 2005). Exploring student's intuitions of probabilistic events. National Council of Teachers of Mathematics' Regional Meeting, Denver, CO. November 10-12, 2005.

Quinn, R. J., & Andrews, B. D. (November 12, 2005). Exploring diverse solution strategies to a constructivist pattern problem. National Council of Teachers of Mathematics' Regional Meeting, Denver, CO. November 10-12, 2005.

Grant Activity

2011 Mathematics Instructor, International Research and Exchanges Board, Teaching Excellence and Achievement Program.

2005-2007 Assessment Director, Northeastern Nevada Mathematics Project.

2002 Module author, National Numeracy Network, a Woodrow Wilson Fellowship Foundation Grant.

1998-1999 Instructor and co-author. Technological Enhancement of Secondary Mathematics.

Selected Service

Reviewer for National Council of Teachers of Mathematics journals: *Mathematics Teacher* and *Mathematics Teaching in the Middle School*, 1995 to present.

Committee Member, Standards Setting for Nevada High School Proficiency Examination in Mathematics, 2010.

Member, Content Validation Committee for the Nevada High School Proficiency Examination in Mathematics. (2009).

Committee Member, Review Panel for NeCoTIP Grants. (2008).

Committee Member, Validation Process for Nevada High School Proficiency Examination in Mathematics, 2006.

Committee Member, State of Nevada, Committee to revise Mathematics Requirements for attaining a Nevada teaching license in Mathematics, 2005.

Member, Technical Advisory Board for the High School Proficiency Examinations in Mathematics, Reading, Writing, and Science, 1997-2000.

Member, Criteria Committee for Mathematics Master Teachers in State of Nevada, 1997-1999.

Member, Board of Directors, Northern Nevada Mathematics Council, 1998-2000.

Member, Washoe County School District Board to review Nevada State Math Standards, 1997-1998