

RONALD V. PRESTON

Current Position

Associate Professor of Mathematics Education and Director of Students

Joint Appointment:

Department of Mathematics, Science, and Instructional Technology Education

Department of Mathematics

Contact Information:

East Carolina University

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Professional Preparation

Ph.D., Indiana University, June 1997

MS, University of Southern Indiana, July 1991

BS, Oakland City University, May 1980

Professional Experience

East Carolina University, Associate Professor and Director of Students, 2011 - Present

East Carolina University, Associate Professor, 2009 - 2011

East Carolina University, Department Chair and Associate Professor, 2004 -2009

East Carolina University, Interim Department Chair and Associate Professor, 2003 - 2004

East Carolina University, Assistant Professor, 1997 - 2003

East Carolina University, Visiting Assistant Professor, 1995-1997

Indiana University, Instructor, 1991 - 1994

Oakland City University, Instructor, 1985 – 1991

Wood Memorial High School, Mathematics Teacher, 1983-1991

Select Grant Leadership

Principal Investigator, ECU Mathematics and Science Education Noyce Scholars Program. Five-year NSF-funded grant (2009-2014).

Principal Investigator, Lenoir County Mathematics Initiative. One-year sub-grant from Golden Leaf through Lenoir County Schools (2010-2011).

Co-Principal Investigator (with Michael Swinson, Margaret Wirth, and Heather Ries), Beaufort County Mathematics Initiative, QUEST-funded grant (2009-2011).

Co-Principal Investigator (with Ernie Marshburn and others), TechMath: Real World Math, Technology, and Business Connections. Three-year NSF-funded grant, with one-year extension (2006-2010).

Project Team Member, North Carolina Project in Improving Mathematics (NSF & DOE grant, working with Sid Rachlin, Co-PI). Released 25% of time to develop and teach graduate courses for mathematics teachers and work with facilitators. (2003-2007)

Development Team Member (with David Pugalee, UNC-Charlotte and Pat Shelton, North Carolina C A&T), North Carolina Middle Math Project (2002-2005).

Principal Investigator (with Jason Painter), Essential Classroom Technology for Standards-Based Math Instruction. Eisenhower professional development (2001 - 2003).

Principal Investigator (with Tony Thompson, University of Alabama), Integrating Measurement Across the Curriculum. Eisenhower professional development (2001 - 2003).

Co-Principal Investigator (with Sid Rachlin, ECU), MIDDLE MATH: A Project to Improve the Undergraduate Preparation of Middle Grades Teachers, NSF-Sponsored Grant (1998 - 2000).

Experiences Related to Director of Students Position

Student Advisor (1996-Present) – Advise undergraduate and alternative licensure students

Materials Development – Develop advising and recruiting materials

Undergraduate Coordination: Oversee mathematics education students through Upper Division, Internship, and Graduation

Departmental Representation: Have served on CTE, Enrollment Management Team, University Faculty Committee on Retention

Curriculum Development and Committees: Served on four major curriculum development grants, the MSITE Curriculum Committee, and the College of Education Curriculum Committee

Current Leadership Activity

Past President, Eastern Region of North Carolina Council of Teachers of Mathematics

Member, Executive Committee of the North Carolina Council of Teachers of Mathematics Board

Member, Graduate Council

Member, ECU Calendar Committee

Member, ECU Council for Teacher Education

Member, COE Undergraduate Task Force

Member, Teacher Education Enrollment Management Team

Sampling of Courses Taught in Last Five Years

Teaching Topics in High School Mathematics (undergraduate course for high school teachers)

Early Experience for Prospective Mathematics Teachers (undergraduate course for high school teachers)

Measurement across the Curriculum (Graduate course for middle and high school teachers)

Algebra and Number Foundations (Undergraduate course for middle grades teachers)

Mathematical Modeling: K-5 Leadership (Graduate course for elementary mathematics add-on licensure)

Mathematical Modeling (Capstone course for undergraduate middle grades teachers)

Concepts in Geometry and Measurement (Graduate course for middle grades teacher leaders)

Assessment in Mathematics Education (Graduate course for K-12 teachers)

Graduate Courses Developed

Mathematical Modeling: K-5 Leadership (Graduate course for add-on licensure program)

Statistics and Probability for Teachers (Graduate course for MAT program)

Professional Affiliations

National Council of Teachers of Mathematics

North Carolina Council of Teachers of Mathematics

Association of Mathematics Teacher Educators

Psychology of Mathematics Education – North America

Select Publications

Thompson, T., & Preston, R (2006). Measurement tasks for the middle grades. *Alabama Journal of Mathematics*, 30, 1 & 2, pp. 59-64.

- Sinicrope, R., Eron, M., Rachlin, S., Preston, R., Johnson, C., Hoekstra, M., & Ajose, S. (2005). Case Study: East Carolina University. In M. B. Eron and S. L. Rachlin (Eds.) *Middle Math: Improving the Undergraduate Preparation of Teachers of Middle Grades Mathematics*. AMTE, Vol 2, pp. 59-72.
- Thompson, T., & Preston, R. V. (2004). Measurement in the middle grades: Insights from NAEP and TIMSS. *Mathematics Teaching in the Middle School*, 10, 514-19.
- Preston, R. V., & Thompson, T. (2004). Integrating measurement across the curriculum. *Mathematics Teaching in the Middle School*, 9, 436-441.
- Preston, R. V., & Garner, A. S. (September 2003). Representation as a vehicle for solving and communicating. *Mathematics Teaching in the Middle School*.
- Pugalee, D. K., Frykholm, J., Johnson, A., Slovin, H., Malloy, C., & Preston, R. (2002). *Navigating through geometry in grades 6-8*. Reston, VA: National Council of Teachers of Mathematics.
- Preston, R. V. (2000). Using a research and development model to create an undergraduate mathematics course. Abstract in the *Proceedings of the Fifth Annual Conference on Research in Undergraduate Mathematics Education*. Chicago, IL.
- Preston R. (2000). The anatomy of a number/algebra course for preservice middle grades teachers of mathematics. *Proceedings of the Fourth Annual Meeting of the Association of Mathematics Teacher Educators*. Charlotte, NC.
- Preston, R. V. (1999). Research and development of a first course in an undergraduate mathematics concentration. *Proceedings of the Fourth Annual Research in Undergraduate Mathematics Education Conference*. Chicago, IL.
- Lester, F. K., Lambdin, D. V., & Preston, R. V. (1997). A new vision of the nature and purposes of assessment in the mathematics classroom. In G. D. Phys (Ed.), *Handbook of classroom assessment: Learning, achievement, and adjustment*. San Diego, CA: Academic Press.

Recent Scholarly Presentations

- Thompson, A, and Preston, R. (2014). *Teaching the Language of Mathematics*. Presentation given at the Eastern Region Conference of the North Carolina Council of Teachers of Mathematics, 15 February 2014, Wilmington NC.
- Winsor, M., Barker, D., Preston, R., Casey, S., & Enderson, M. (2014). *Research on Secondary Mathematics Teacher Preparation*. Working group conducted at the Annual Meeting of the Association of Mathematics Teacher Educators, 6 February 2014, Irvine CA.
- Winsor, M., Barker, D., Casey, S., Enderson, M., Preston, R., Smith, R., & Wilson, P. (2013). *Research on Secondary Mathematics Teacher Preparation: Understanding how Teachers Learn*. Working group conducted three times at the Annual Meeting of the Psychology of Mathematics Education – North America, 15-17 November 2013, Chicago IL.
- Preston, R. (2013). *Reading & Writing CCSS Mathematics*. Presentation given at the North Carolina Council of Teachers of Mathematics, 31 October 2013, Greensboro NC.
- Preston, R. (2013). Modeling Across the Curriculum. Presentation given at the annual meeting of the North Carolina Council of Teachers of Mathematics, 31 October 2013, Greensboro NC.
- Preston, R. Bondurant, D., Kuhel, K., & Mann, M. (2013). *Preparing Pre-Service Teachers for Mathematical Modeling in the CCSS* as part of “*In-Service and Pre-Service Teacher Training and Preparation for Common Core State Standards*. College Board Southern Regional Forum. 8March 2013, Atlanta, GA.
- Preston, R. (2013). “CCSSM Assessment: Focus on Grades K-2. Presentation given at the North Carolina Council of Teachers of Mathematics Eastern Region, 23 February 2013, Greenville NC.

- Preston, R. (2013). "CCSSM Assessment: Focus on Grades 3-5. Presentation given at the North Carolina Council of Teachers of Mathematics Eastern Region, 23 February 2013, Greenville NC.
- Preston, R. (2013). "CCSSM Assessment: Focus on Grades 6-8. Presentation given at the North Carolina Council of Teachers of Mathematics Eastern Region, 23 February 2013, Greenville NC.
- Preston, R. (2013). "CCSSM Assessment: Focus on Grades 9-12. Presentation given at the North Carolina Council of Teachers of Mathematics Eastern Region, 23 February 2013, Greenville NC.
- Preston, R., & Sinicrope, R. "*Preservice Teachers of High School Mathematics: Predicting Success and Studying Persistence when Facing Mathematical Adversity*. Presentation given at the Annual Meeting of the Association of Mathematics Teacher Educators, 24 January 2013, Orlando FL.
- Sinicrope, R., & Preston, R. (2012). *Mathematics, the Workplace, and CCSSM*, Presentation given at the Annual Meeting of the North Carolina Council of Teachers of Mathematics, 26 October 2012, Greensboro, NC..
- Preston, R. (2012). *Mathematical Modeling and the Common Core*. Presentation given at the Annual Meeting of the North Carolina Council of Teachers of Mathematics, 26 October 2012, Greensboro, NC.
- Preston, R., Adu-Gyamfi, K., & Bossé, M. (2012). *Mathematical Modeling and the Common Core*. Presentation at the Annual Meeting of the National Council of Teachers of Mathematics, 27 April 2012, Philadelphia, PA.
- Thompson, A., & Preston, R. (2011). *Teaching Measurement in the New Common Core State Standards*. Presentation given at the Annual Meeting of the North Carolina Council of Teachers of Mathematics, 28 October 2011, Greensboro, NC.
- Preston, R., and Knies, A. (2011). *Helping Students Read and Understand Mathematics*. Presentation given for the North Carolina Council of Teachers of Mathematics, Greensboro, NC, 27-28 October 2011. (Presented two times)
- Sinicrope, R., & Preston, R. (2011). *Number Sense with Whole Numbers and Fractions*. Presentation given at the Annual Meeting of the North Carolina Council of Teachers of Mathematics, 27 October 2011, Greensboro, NC.
- Bossé, M., Adu-Gyamfi, K., & Preston, R. (2011). *Stop Teaching and Let Students Learn*. Presentation given at the Annual Meeting of the National Council of Teachers of Mathematics, 15 April, 2011, Indianapolis, IN.
- Preston, R. (2010). *Modeling Problem Solving in the Middle Grades*. Invited presentation at the North Carolina Council of Teachers of Mathematics, October 2010, Greensboro NC.
- Adu-Gyamfi, K. & Preston, R. (2010). *Connecting Mathematical Concepts to Student Interpretations of Mathematical Representations*. Presentation given at the National Council of Teachers of Mathematics, 22 April 2010, San Diego, CA.
- Adu-Gyamfi, K., Bossé, M., & Preston, R. (2010). *Connecting Mathematical Concepts to Student Interpretations of Mathematical Representations*. Presentation given for the Association of Mathematics Teacher Educators, 29 January 2010, Irvine, CA.
- Morge, S., Lynch-Davis, K., & Preston, R. (2010). *Developing a Statewide Program of Study for Elementary Mathematics Specialists: North Carolina's Story*. Presentation given at the Annual Meeting of the Association of Mathematics Teacher Educators, 27 January 2010, Irvine CA.
- Preston, R., & Thompson, A. (2009). Presentation given at the Annual Meeting of the North Carolina Council of Teachers of Mathematics. *Essential Measurement*. Friday, 30 October

2009, Greensboro NC.

Preston, R., & Adu-Gyamfi, K. (2010). *Innovative and Creative Uses of Geometer's Sketchpad and Graphing Calculators in Middle Grades Mathematics*. Presentation given at the North Carolina Council of Teachers of Mathematics Eastern Regional, 27 February 2010, Greenville NC.

Preston, R., Bossé, M., & Crawley, F. (2009). *Preparing Mathematics and Science Teachers for the Challenges of Tomorrow*. Presentation given at the ECU Clinical Teachers Conference, 24 March 2009, Greenville NC.

Bossé, M., Adu-Gyamfi, K., & Preston, R. (2009). *Learning Mathematics as a Second Language*. Presentation given for the Association of Mathematics Teacher Educators, 6 February 2009, Orlando FL.