

TONY THOMPSON

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CURRICULUM VITA

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ACADEMIC BACKGROUND

PhD, Mathematics Education; Florida State University, 1999

MS, Mathematics; Florida State University, 1992

BS, Mathematics Education; Northwestern State University of Louisiana, 1987

BA, Social Studies Education; Northwestern State University of Louisiana, 1987

Teaching Certificates

North Carolina: Mathematics, Grades 6-12 (2000 – 2005; 2008 - 2018)

Texas: Mathematics, Grades 6-12 (1997 – Life)

Louisiana: Mathematics / Social Studies, Grades 6-12 (1987 – 1990)

PROFESSIONAL EXPERIENCE

2008-Present: Associate Professor, Department of Mathematics, Science, and Instructional Technology Education, East Carolina University, Greenville, NC.

2002-2008: Assistant Professor, Mathematics Education, Department of Curriculum and Instruction, University of Alabama, Tuscaloosa, AL

1999-2002: Visiting Assistant Professor, Department of Mathematics, East Carolina University, Greenville, NC

1998-2000: Mathematics education consultant for the *Center for Science, Mathematics, and Technology Education*, East Carolina University.

1996-1998: Mathematics teacher, Johnston High School, Austin, TX.

1993-1996: Graduate Teaching Assistant, Department of Curriculum and Instruction (Math Education Program), Florida State University, Tallahassee, FL

1990-1992: Graduate Teaching Assistant, Mathematics Department, Florida State University, Tallahassee, FL

1987-1990: Mathematics teacher, St. Mary's School, Natchitoches, LA.

SCHOLARSHIP

Refereed Publications

- Ryang, D., & Thompson, T. (2012). Investigating the sum of positive integer powers. *Mathematics Teacher*, 106(1), 71 – 75.
- Thompson, T (2012). Preparing secondary pre-service mathematics teachers for inclusion. *National Teacher Education Journal*, 5(1), 53 – 62.
- Ryang, D., Thompson, T., & Shwery, C. (2011). Korean mathematics teacher educators' review of the Mathematics Teaching Efficacy Beliefs Instrument. *Research in Mathematical Education*, 15(3), 229 – 250.
- Thompson, T. (2011). An analysis of higher-order thinking on Algebra I End-of-Course tests. *International Journal of Mathematics Teaching and Learning*. (November 7th), 1 – 36.
- Briley, J., Thompson, T., & Iran-Nejad, A. (2009). Mathematical beliefs, self-regulation, and achievement by university students in remedial mathematics courses. *Research in the Schools*, 16(2), 15 – 28.
- Thompson, T. (2008). Mathematics teachers' interpretation of higher-order thinking in Bloom's Taxonomy. *International Electronic Journal of Mathematics Education*, 3(2), 96 – 109.
- Lusk, A., Thompson, T, & Daane, C.J. (2008). Algebra I teachers' perceptions of teaching students with learning disabilities. *Journal of Curriculum and Instruction*, 2(2), 34–51.
- Thompson, T., & Preston, R. (2006). Measurement tasks for the middle grades. *Alabama Journal of Mathematics*, 29(2), 59-64.
- Thompson, T. (2006). Teaching for social mathematics: Exploring the collaborative roles of social studies and mathematics educators. *Social Studies Research and Practice*, 1(2), 268-283.
- Thompson, T., & Sproule, S. (2005). Calculators for students with special needs. *Teaching Children Mathematics*, 11(7), 391-395.
- Preston, R., & Thompson, T. (2004). Integrating measurement across the curriculum. *Mathematics Teaching in the Middle School*, 9(8), 436-441.
- Thompson, T., & Preston, R. (2004). Measurement in the middle grades: Insights from NAEP and TIMSS. *Mathematics Teaching in the Middle School*, 9(9), 514-519.
- Beseler, S., & Thompson, T. (2003). The integration of graph theory into secondary mathematics courses. *Alabama Journal of Mathematics*, 27(1 & 2), 61 - 65.

Thompson, T., & Sproule, S. (2000). Deciding when to use calculators. *Mathematics Teaching in the Middle School*, 6(2), 126-129.

Refereed Conference Proceedings

Thompson, T. (2011). An analysis of thinking skills on Algebra I EOC test items. In S. L. Reeder (Ed.) *Proceedings of the 38th annual meeting of the Research Council on Mathematics Learning*, (pp. 128-135). Cincinnati, OH.

Ryang, D. & Thompson, T. (2011). Revision of the MTEBI for Korean Preservice Teachers. In S. L. Reeder (Ed.) *Proceedings of the 38th annual meeting of the Research Council on Mathematics Learning*, (pp. 144-150). Cincinnati, OH.

Lusk, A., & Thompson, T. (2007). Algebra teachers' perceptions of teaching students with learning disabilities. In T. Lamberg, & L. R. Wiest, (Eds.) *Proceedings of the 29th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 757 – 760). Reno, NV.

Thompson, T. (2005). Preparing teachers to teach mathematics to students with learning disabilities. In A. Rogerson (Ed) *Proceedings of the eighth annual meeting of the International Conference of the Mathematics Education into the 21st Century Project* (pp. 204-208). Johor Bahru, Malaysia.

Thompson, T., & Newsome, K. (2002). Is state assessment a viable tool for reflection on classroom assessment? In D. Mewborn, et al (Eds), *Proceedings of the twenty-fourth annual meeting of the North American Chapter of the Psychology of Mathematics Education, Volume 2* (pp. 589- 597). Athens, GA.

Thompson, T. (2002). Mathematics standards as political activity. In P. Valero, & Skovsmose (Eds), *Proceedings of the third International Conference on Mathematics Education and Society*, (pp. 515-523). Helsingør, Denmark.

Thompson, T. (2000). The struggle for mathematics standards: Taking a closer look. In M. L. Fernandez (Ed.) *Proceedings of the twenty-second annual meeting of the North American Chapter of the Psychology of Mathematics Education, Volume 2* (pp. 445-449). Tucson, AZ.

Thompson, T., & Jakubowski, E. (1999). Developing mathematics standards: A case study. In F. Hitt, & M. Santos (Eds) *Proceedings of the twenty-first annual meeting of the North American Chapter of the Psychology of Mathematics Education, Volume 2* (pp. 657-661). Cuernavaca, Morelos, Mexico.

Other Publications

Nichols, S., Gilmer, P., Thompson, T., & Davis, N. (1998). Women in science: Expanding the vision. In K. Tobin, & B. Fraser (Eds.) *International handbook of science education* (pp. 967-980). Dordrecht, The Netherlands: Kluwer Publishers.

Coffey, M., Kysh, J., & Thompson, T. (2007). Out of our past. *One hundred years of Mathematics Teacher*, (pp. 4–5). Reston, VA: NCTM.

Thompson, T., & Sproule, S. (2002). Deciding when to use calculators. *Delta-K*, Journal of the Mathematics Council of the Alberta Teachers' Association (Re-print), 39(1), 44-47.

Research (refereed) paper presentations (non-proceedings)

Thompson, T., & Adu-Gyamfi, K. (2014-accepted). *Implementing the CCSS-M: A case study of two high school teachers*. Research Council on Mathematics Learning (March 1), San Antonio, TX.

Thompson, T., & Adu-Gyamfi, K. (2014-accepted). *Implementing the edTPA in Mathematics Education*. Research Council on Mathematics Learning (March 1), San Antonio, TX.

Thompson, T. (2013). *Algebra I teachers and Inclusion*. Research Council on Mathematics Learning (March 2), Tulsa, OK.

Thompson, T. (2012). *Algebra I teachers' perception of inclusion and their use of instructional strategies when teaching students with disabilities*. School Science and Mathematics. (November 8th). Birmingham, AL.

Thompson, T. (2009). *Inclusive preparation for preservice mathematics teachers*. North Carolina – Association of Colleges and Teacher Educators. (September 24), Raleigh, NC

Scherff, L., Komara, C., Matua, K., Satcher, J., & Thompson, T. (2008). *When everyone is "On Board": Service learning as a University- and College-Wide endeavor*. American Association of Colleges for Teacher Education (AACTE) Conference, (February, 2008), New Orleans, LA.

Thompson, T. (2007). *Preparing pre-service teachers to teach mathematics in inclusive classrooms*. Research Council on Mathematics Learning Conference, Cleveland, OH.

Thompson, T. (2006). *Preparing pre-service mathematics teachers for inclusion*. School Science and Mathematics Association Conference, Missoula, MT.

Thompson, T. (2006). *Preparing pre-service teachers to teach mathematics to students with learning disabilities*. Research Council on Mathematics Learning Conference, Las Vegas, NV.

- Preston, R., & Thompson, T. (2004). *Measuring measurement: Researching the teaching and learning of measurement in the middle grades*. Association of Mathematics Teacher Educators Conference, San Diego, CA.
- Thompson, T. (2003). *An analysis of an Algebra I end-of-course exam: A case of multiple dimensions and cognitive incongruencies*. American Educational Research Association Conference, Chicago, IL.
- Thompson, T., & Sproule, S. (2003). *Using national and international assessment frameworks to improve mathematics instruction*. The National Council of Teachers of Mathematics Research Pre-Session, San Antonio, TX.
- Thompson, T. (2002). *Higher-order thinking in the mathematics classroom*. School Science and Mathematics Association Conference, Rochester, NY.
- Thompson, T., & Newsome, K. (2002). *Connecting state assessment with classroom assessment*. North Carolina Council of Teachers of Mathematics, Eastern Region Conference, Greenville, NC.
- Thompson, T., & Jakubowski, E. (2002). *Rationales behind the development of a state's mathematics standards*. American Educational Research Association Conference, New Orleans, LA.
- Thompson, T. (2000). *Developing standards for systemic reform*. American Educational Research Association Conference, New Orleans, LA.
- Thompson, T. (1999). *Developing mathematics standards*. School Science and Mathematics Conference, Greensboro, NC.
- Sproule, S., & Thompson, T. (1995). Facilitating prospective teachers modeling and use of children's thinking. *North American Chapter of the Psychology of Mathematics Education*, Columbus, OH.

Professional Presentations

- Thompson, T. (2013). *Real-world math for Earth's sake*. North Carolina Council of Teachers of Mathematics Conference (November 1), Greensboro, NC.
- Ruppert, N., & Thompson, T. (2013). *Introducing the edTPA: Initial experiences of two universities*. North Carolina Council of Teachers of Mathematics Conference (October 31), Greensboro, NC.
- Thompson, T., & Preston, R. (2011). *Teaching measurement in the Common Core State Standards*. North Carolina Council of Teachers of Mathematics Conference (October 28), Greensboro, NC.

- Thompson, T. (2011). *Math lessons for a world of seven billion*. North Carolina Council of Teachers of Mathematics Conference (October 27), Greensboro, NC.
- Thompson, T. (2011). *Preparing interns to teach for higher-order thinking in mathematics*. East Carolina University Clinical Teacher Conference (April 14), Greenville, NC.
- Thompson, T. (2010). *Population Education*. ECU Mathematics Education Conference (February 27), Greenville, NC.
- Thompson, T. (2009). *Mathematics for global citizenship*. North Carolina Council of Teachers of Mathematics Conference (October 30), Greensboro, NC.
- Thompson, T., & Preston, R. (2009). *Essential Measurement*. North Carolina Council of Teachers of Mathematics Conference (October 30), Greensboro, NC.
- Thompson, T., & Preston, R. (2008). *Engaging students in reasoning via measurement*. North Carolina Council of Teachers of Mathematics Conference (October 30), Greensboro, NC.
- Thompson, T., Kysh, J., & Coffey, M. (2007). *Revisiting 100 years of mathematics education through Mathematics Teacher*. The National Council of Teachers of Mathematics Conference, Atlanta, GA.
- Beseler, S., Manley, K., & Thompson, T. (2005). *Utilizing mathematics technology to support mathematics / science connections to the automotive industry*. School Science and Mathematics Association Conference, Fort Worth, TX.
- Beseler, S., Boykin, S., & Thompson, T. (2005). *Automotive applications in high school mathematics*. The National Council of Teachers of Mathematics Regional Conference, Birmingham, AL.
- Thompson, T., & Preston, R. (2004). *Reconciling the teaching and learning of measurement in mathematics and science classrooms*. School Science and Mathematics Association Conference, Atlanta, GA.
- Preston, R., & Thompson, T. (2004). *Measurement for all: Integrating measurement in middle school mathematics*. National Council of Teachers of Mathematics Conference, Philadelphia, PA.
- Preston, R., & Thompson, T. (2004). *Integrating measurement: A tradition revisited*. National Council of Supervisors of Mathematics Conference. Philadelphia, PA
- Thompson, T., & Preston, R. (2003). *Integrating mathematics and science through measurement*. School Science and Mathematics Association Conference, Columbus, Ohio.

Preston, R., & Thompson, T. (2003). *Integrating measurement across the curriculum: A professional development effort*. Association of Mathematics Teacher Educators Conference, Atlanta, GA.

Thompson, T. (2002). *Practical strategies to improve problem solving and reasoning abilities in middle school mathematics*. Alabama Council of Teachers of Mathematics, Montgomery, AL.

Unpublished Research Reports

Thompson, T. (2000). *East Carolina University faculty perspectives on North Carolina's policies for teacher certification*. Unpublished research report. ECU Center for Science, Mathematics, and Technology Education.

Thompson, T. (1999). *Creating a "voice": An analysis of CSMTE's effort to facilitate teacher involvement in educational reform*. Unpublished research report. ECU Center for Science, Mathematics, and Technology Education.

Thompson, T. (1999). A case study of the development of Florida's mathematics standards. (Doctoral dissertation, Florida State University, 1999). *Dissertation Abstracts International* (UMI No. 9939305)

Journal Editor

National Council of Teachers of Mathematics (2007). Discourse in the mathematics classroom (Focus Issue). P. Vicinus, T. Thompson, T., & J. Kysh (Eds). *Mathematics Teacher*, 101(4).

National Council of Teachers of Mathematics (2007) *One hundred years of Mathematics Teacher*. M. Coffey, J. Kysh, & T. Thompson (Eds.), Reston, VA: Author.

UNIVERSITY TEACHING EXPERIENCES

East Carolina University (1999 – 2002; 2008 – Present)

MATH 1065: College Algebra

MATE 1267: Functional Relationships

MATH 2119: Elements of Calculus

MATH 2282: Data Analysis and Probability

MATH 3006: Seminar in Secondary Mathematics Curriculum

MATE 3067: Algebra and Number Foundations

MATE 3167: Geometry and Measurement

MATE 4319: Teaching Mathematics in the Middle Grades

MATE 4323: Teaching of Mathematics in High School

MATH 4324: Internship in Mathematics
MATH 4325: Issues in Mathematics Education
MATE 6371: Teaching and Learning Algebra
MATE 6361: Measurement across the Curriculum
MATE 6211: Research in Mathematics Education
MATE 6323: Issues and Trends in Mathematics

University of Alabama (2002 – 2008)

CEE 380: Teaching Mathematics to Children
CSE 390: Instruction and Accommodation in Secondary Schools
CSE 406: Curriculum in Secondary Mathematics
CSE 483 / 583: Teaching Secondary School Mathematics
CSE 566 / 666: Improving Mathematics Instruction
CSE 595: Practicum in Secondary Education
CSE 670: Research and Theory in Secondary Education
CSE 695: Practicum in Secondary Education
CSE 697: Educational Specialist Degree Research
CSE 699: Dissertation Research
CIE 680: Seminar for Research in Mathematics Education
CIE 694: Directed Independent Study

GRADUATE THESIS / DISSERTATION ADVISING at UA

3 – Doctoral Dissertations - Chair
25 – Doctoral Dissertation Committees - Member
20 – Educational Specialist Theses – Chair
75 – Educational Specialist Theses Committees - Member
2 – Master’s Thesis - Chair

GRANTS AWARDED

2009 - 2013: National Science Foundation (\$900,000). *ECU Mathematics and Science Education Noyce Scholars Program*. Co-PI: R. Preston, T. Thompson, C. Jolls, V. Chalcraft, & F. Crawley.

2006-2007: Alabama State Department of Education: (\$18,000). *Special education collaborative teacher education program*. Co-PI: L. Scherff, J. Siders, & T. Thompson

2003-2006: National Science Foundation: (\$1.6 million) *NSF GK-12 grant: Graduate teaching fellows in middle and high school education*. PI: B. Todd; Co-PI: C. Midkiff, D. Goldston, J. Driver, S. Nichols, T. Thompson, J. Weist, & Z. Wu.

2001-2003: Dwight D. Eisenhower Higher Education Professional Development Program. (\$30,000) *Integrating measurement across the curriculum*. Co-PI: R. Preston, & T. Thompson.

APPOINTMENT AS A REFEREE OR AS A MEMBER OF AN EDITORIAL BOARD, OR AS AN EDITOR OF A SCHOLARLY ACADEMIC OR PROFESSIONAL JOURNAL

- Member of Editorial Board of *Mathematics Teacher* (2004-2007)
- Referee for *Mathematics Teacher Educator* (2012 – present)
- Referee for *Mathematics Teacher* (2000-2004; 2007-present)
- Referee for *Mathematics Teaching in the Middle School* (2010- present)
- Referee for *School Science and Mathematics* (2004 – present)
- Referee for *Journal of Curriculum and Instruction* (2011 – present)
- Referee for *Mathematics Teacher Educator* (2012 – present)
- Co-editor of *Mathematics Teacher* Focus Issue on Classroom Discourse (Nov., 2007)
- Co-editor of special issue, *One Hundred Years of Mathematics Teacher* (Jan., 2007).

SERVICE

Institutional Service – East Carolina University

- COE Assessment and Accreditation Committee (2012 – present)
- Assessment coordinator for Mathematics Education (2012- present)
- COE Curriculum Committee (2012 – present)
- Chair, MATE representative for departmental Executive Advisory Council (2011-2014)
- COE Scholarship Committee (2012 - 2013)
- COE representative on Graduate School Administration Board (2010 – 2011)
- Graduate coordinator for Mathematics Education (2009 – 2012)
- Department Personnel Committee (2009 – present)
- Department Promotion & Tenure Committee (2008 – present)
- Chair, Department Curriculum Committee (2008 – 2009)
- Master of Arts of Teaching in Mathematics development committee (2008 – 2010)

- Co-advisor for the ECU Mathematics Education Club (Gamma Chapter for NCCTM) (2010 – 2012)
- Undergraduate Math Education secondary program revision committee (2012 – 2013)

Institutional Service –University of Alabama

- Member of COE Academic Bankruptcy Committee (2007-2008)
- Member of Alternative Certification Committee (2006-2008)
- C&I representative for Alabama DOE Special Education Collaborative (2005-2008)
- Member of COE Exceptions Review Board (2005-2008)
- United Way representative for C&I Department (2005)
- Member of COE Undergraduate Scholarship Committee (2004-2008)
- Coordinator of the Secondary Mathematics Education program (2003-2008)
- Member of six faculty search committees (2003-2008)
- Liaison between C&I and Math Department (2002-2008)
- Pre-Intern & Intern Supervisor (2002-2007)
- Advisor on joint ITEST NSF Grant, Preliminary Proposal (2002-2003)
- Member of collegiate EdS program committee (2003-2005)
- Secondary math education advisor (academic advising, TEP interviews / writing, doctoral screenings, proctoring Master's comps, supervision of pre-interns; program of study committees; doctoral pre-dissertation advising, etc.) (2002-2008)

Service to the Community

- *MathCounts* Middle School Mathematics Competition, Grader (1999 – 2002; 2009 – 2011, 2013)
- East Carolina Mathematics Fair, Judge (1999 – 2002; 2009)
- Mathematics Curriculum Consultant for the Center for Science, Mathematics, and Technology Education at East Carolina University (1998-02)
- Unpaid consultant: Leon County Schools (FL); Pitt County Schools (NC); Greene County Schools (NC); Lenoir County Schools (NC); Wayne County Schools (NC) [Wayne School of Engineering]; Tuscaloosa City Schools (AL); Tuscaloosa County Schools (AL); Hale County Schools (AL)

Reviewer for conference presentation proposals

- American Educational Research Association (2000-2004; 2006, 2008)
- Psychology of Mathematics Education (NA chapter) (1996 – 2012)
- Mid-South Educational Research Association (2006-2007)
- National Council of Teachers of Mathematics (2002 – 2004; 2005 - 2008)
- National Council of Supervisors of Mathematics (2006 – 2008)

Current Memberships in Professional Societies

- North America Chapter of the Psychology of Mathematics Education
- National Council of Teachers of Mathematics
- National Council of Supervisors of Mathematics
- School Science and Mathematics Association
- Research Council on Mathematics Learning
- American Educational Research Association
- Association of Mathematics Teacher Educators
- North Carolina Council of Teachers of Mathematics

Leadership Roles in Professional Societies

- North Carolina Council of Teachers of Mathematics (NCCTM) Conference Co-Chair (2014 – 2015)
- North Carolina Council of Teachers of Mathematics (NCCTM) Vice-President of Colleges – Eastern Region (2012 – 2013)
- Program Committee for 2007 National Council of Supervisors of Mathematics Conference (2006 – 2007)
- Member of Editorial Panel – *Mathematics Teacher* (2004 – 2007)
- West Alabama Council of Teachers of Mathematics, Vice-President (2003 – 2007)
- NCTM Delegate Representative for the West Alabama Council of Teachers of Mathematics (2003 – 2007)