

Jessica H. Hunt

North Carolina State University – College of Education | 528G Poe Hall | 2310 Stinson Drive, Campus
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Education

Post-Doctoral Fellow 2012	The University of Texas at Austin , Austin, TX <u>Research Project:</u> <i>Exploratory Study of Informal Strategies for Equal Sharing Problems of Students with Learning Disabilities</i> Advisor: Susan Empson <u>Research Project:</u> <i>Supplemental Mathematics Intervention: How and Why Special Educators Intensify Intervention for Students with Learning Disabilities</i> Advisor: Diane Bryant
Ph.D., Education 2011	University of Central Florida , Orlando, FL <u>Dissertation:</u> <i>The Effects of a Ratio-Based Teaching Sequence on Equivalency Performance for Students with Mathematics Learning Disabilities</i> Chair: Lisa Dieker
M.A., Mathematics Education 2006	University of Central Florida , Orlando, FL
B.S., Business Administration 2002	Youngstown State University , Youngstown, OH

Professional Experience

8/16 – present	North Carolina State University – Associate Professor, Mathematics and Special Education.
7/14 – 8/16	The University of Texas at Austin - Assistant Professor, STEM Education, Tenure Track
8/12 - 5/14	Utah State University - Assistant Professor, Special Education, Tenure Track
8/11-8/12	The University of Texas at Austin – Post-Doctoral Fellow, Special and Mathematics Education
8/08-8/11	University of Central Florida - Director of Mathematics Instruction/Resident Scholar, Toni Jennings Research and Teaching Clinic
2005-2008	Inclusion Mathematics Teacher – Ocoee Middle School

Honors/Awards/Fellowships

2014 - 2019	National Science Foundation (NSF) Early CAREER Award: <i>Fraction Activities and Assessments for Conceptual Teaching.</i>
2011-2012	Post-Doctoral Fellow: The University of Texas at Austin
2008-2011	Scholar in Residence: Toni Jennings Exceptional Education Institute
2008-2011	Scholar: Project LEAD
2009	Induction as Member: Delta Epsilon Iota National Honor Society
2008-2009	Provost Fellow: University of Central Florida
2008	Induction as Member: Phi Kappa Phi National Honor Society
2002	Induction as Member: Beta Gamma Sigma International Honor Society
2000	Induction as Member: Gold Key International Honor Society

External and Internal Funding Awards

\$783,196 funded	<u>Principal Investigator, National Science Foundation (NSF) CAREER Award:</u> <i>Fraction Activities and Assessments for Conceptual Teaching. (2014-2019)</i>
\$20,000 funded	Collaborating Faculty, Utah State University: <i>Captivated! Young Children's Learning Interactions with iPad Mathematics Apps</i> with Principal Investigator Patricia Moyer-Packenham, Co-PI Cathy Maahs-Fladung, and the Virtual Manipulatives Research Group (2013-2014).
\$4,463 funded	Principal Investigator, Utah State University: <i>Assessment Based on Learning Trajectories in Rational Number Concepts for Students with Learning Disabilities</i> (2013-2014).

Publications

* = doctoral student

- Hunt, J.H.**, Westenskow, A., & Moyer-Packenham, P.S. (2017). Variations of reasoning in equal sharing of children who experience low achievement in mathematics: Competence in context. *Education Sciences*, 7(1), 37.
- Thronsdon, J., MacDonald, B., & **Hunt, J.H.** (2017). A kindergartener's reasoning when developing cardinality of number. *Australian Primary Mathematics Classroom*, 22(2), 21-25.
- Lynch, S., **Hunt, J. H.**, & Lewis, K. (accepted for publication). Productive struggle for all: Planning with differentiated instruction in mind. *Mathematics in the Middle School*.

- Hunt, J.H., *Welch-Ptak, J., & *Silva, J.** (2016). Initial understandings of fraction concepts evidenced by students with learning disabilities and difficulties: A framework. *Learning Disabilities Quarterly*, 39(4), 213-225.
- Hunt, J.H., Tzur, R., & Westenskow, A.** (2016). Evolution of unit fraction conceptions in two fifth-graders with learning disability: An exploratory study. *Mathematical Thinking and Learning*, 18(3), 182-208.
- Hunt, J.H., Westenskow, A., *Silva, J., & *Ptak, J.W.** (2016). Levels of participatory conception of fractional quantity along a series of equal sharing tasks: Stu's trajectory. *The Journal of Mathematical Behavior*, 41, 45-67.
- Hunt, J.H., *Valentine, C.A., Bryant, D.P., Pfannenstiel, K., & Bryant, B.** (2016). Supplemental mathematics interventions: How and why special educators intensify interventions for students with learning disabilities. *Remedial and Special Education*, 37(2), 78-88.
- Tzur, R., & **Hunt, J.H.** (2015). Iteration: Unit fraction knowledge and the French fry tasks. *Teaching Children Mathematics*, 22(3), 149-157.
- Hunt, J.H.** (2015). Understanding the diverse mathematical thinking of learners. *Australian Primary Mathematics Classroom*, 20(2), 15-21.
- Hunt, J.H.** and Empson, S. (2015). Exploratory student of informal strategies for equal sharing problems of students with learning disability. *Learning Disabilities Quarterly*, 38(4), 208-220.
- Hunt, J.H.** (2015). Notions of equivalence through ratios: Students with and without learning disability. *Journal of Mathematical Behavior*, 37, 94-105.
- Hunt, J.H. & Little, M.E.** (2014). Intensifying interventions for students by identifying and remediating conceptual understandings in mathematics. *Teaching Exceptional Children*, 46(6), 187-196.
- Hunt, J.H.** (2014). Effects of a supplemental intervention focused in equivalency concepts for students with varying abilities. *Remedial and Special Education*, 35(3), 135-144.
- Vasquez, E., Powell, S., Rodriguez, J., **Hunt, J. H.**, McKinney, T., Straub, C., Walker, Z., & Vince-Garland, K. (2014). Using E-Cove to increase the efficiency of pre-service teacher observations. *Ed Technology Ideas*.
- Hunt, J.H., & Vasquez, E.** (2013). An exploratory study of the effects of conceptual strategy intervention on knowledge of ratio equivalence for middle school students with mathematics learning disability. *The Journal of Special Education*, 47(3), 1-11.

- Hunt, J.H.,** Powell, S., Little, M.E., & Mike, A. (2013). The effects of e-mentoring on beginning teacher competencies and perceptions. *Teacher Education and Special Education*, 36(4), 286-297.
- Andreasen, J.A. & **Hunt, J.H.** (2012). Using math stations for common sense inclusiveness. *Teaching Children Mathematics*, 19(4), 238-246.
- Walker, Z. & **Hunt, J.H.** (2011). Teaching social skills to students with disabilities in middle school mathematics classrooms. *Mathematics Teaching in the Middle School*, 17(5), 296-301.
- Hunt, J.H.,** & Andreasen, J.A. (2011). Beyond accommodations: Universal design for learning in mathematics. *Mathematics Teaching in the Middle School*, 17(3), 166-173.
- Hunt, J.H.,** & Hu, B. (2011). Theoretical factors affecting parental roles in children's mathematical learning in American and Chinese born mothers. *The School Community Journal*, 21(2), 119-142.
- Hunt, J.** (2010). Implementing effective co-teaching in middle school geometry. *Mathematics Teaching in the Middle School*, 16(3), 154-161.
- Hunt, J.,** & Akuyz, D. (2009). The inner relatedness of area formulas for common figures. *National Council of Teachers of Mathematics: Online Journal for School Mathematics* (ON-MATH), 7(1).
- Hunt, J.** (2009). Prime or composite? Using area models and the factor game to provide a visual framework. *National Council of Teachers of Mathematics: Online Journal for School Mathematics* (ON-MATH), 7(1).
- Hunt, J.** (2006). Dancing triangles and their areas. *National Council of Teachers of Mathematics: Online Journal for School Mathematics* (ON-MATH), 5(1).

Teaching

2017	Education of Children with Exceptionalities
	Specific Numeracy Techniques for Students with Mild Disabilities
2014-2016	Elementary Mathematics Methods
2012-2014	Teaching Mathematics to Students with Mild Disabilities
2012-2014	Practicum: Teaching Mathematics to Students with Mild Disabilities
2012	Principles of Effective Instruction (observed)
2012	Instructional Adaptations II (guest lecture)
2011	Teaching Diverse Populations (guest lecture)
2011	Trends and Issues in Learning Disabilities and Behavior Disorders
2011	Teaching Exceptional Children
2011	Disabilities in School and Society

Advising

- 1 Doctoral Committee as Co-Chair
- 4 Doctoral Committees as Member
- 2 Masters Committees

Peer Reviewed Conference Proceedings

* = doctoral student

- Hunt, J.H.** & Stein, M.K. (April 2017). *Coaching and mathematical goal setting*. National Council of Teachers of Mathematics Research Pre-session, San Antonio, TX.
- Hunt, J.H.** & *Silva, J. (April 2017). *Unit coordination and partitioning activity of one child with mathematics learning disability: A case study*. American Education Research Association, San Antonio, TX.
- Hunt, J.H.**, Westenskow, A., & Moyer-Packenham, P. (April 2017). *Progressions in fraction partitioning and quantification evidenced by children who experience low achievement in mathematics*. American Education Research Association, San Antonio, TX.
- Hunt, J.H.**, *Welch-Ptak, J., & *Silva, J. (April 2016). *Initial understanding of fractions: Children with learning disabilities and difficulties*. Paper presented at the National Council of Teachers of Mathematics Research Conference (NCTM-R), San Francisco, CA.
- Hunt, J.H.**, Westenskow, A., *Silva, J. & *Welch-Ptak, J. (2015). *Stu's initial and evolving conceptions of unit fractions*. Paper presented at the 37th Conference of the International Group for the Psychology of Mathematics Education North America (PME-NA), East Lansing, MI.
- Tzur, R., **Hunt, J.H.**, and Westenskow, A. (November 2015). *Nature and utility of teacher questioning: A case study of constructivist oriented math intervention*. Paper presented at the 37th Conference of the International Group for the Psychology of Mathematics Education North America (PME-NA), East Lansing, MI.
- Hunt, J.H.**, Tzur, R., & Westenskow, A. (2014). *Intermediate participatory stages in constructing the concept of unit fractions: Students with learning disabilities*. Paper presented at the 38th Conference of the International Group for the Psychology of Mathematics Education (PME), Vancouver, B.C.
- Hunt, J.H.** (2012). Multiplicative thinking and strategy usage after tier two intervention: A student with mathematics learning disability. In Lo J., & Zoest, L. (Eds.). (2012). *Proceedings of the 34th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Kalamazoo, MI: University of Michigan.

Hunt, J.H. (2011). Exploring the effects of ratio based fraction intervention on middle school children identified as having a mathematics learning disability. In Wiest, L. R., & Lamberg, T. (Eds.). (2011). *Proceedings of the 33rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Reno, NV: University of Nevada, Reno.

Book Chapters

Hunt, J.H. & Lewis, K. (in preparation). Improving conceptual understanding of fractions: Extending students' knowledge of fractions as relational quantities In D.P. Bryant (Ed.), *Intensifying mathematics interventions for students who struggle learning mathematics*. New York, NY: Guilford Press.

Bryant, D. P., Pfannenstiel, K. H., Bryant, B.R., **Hunt, J.**, & Shin, M. (2014). Tailoring interventions for students with mathematics difficulties. In J. T. Mascolo, D. P. Flanagan, & V. C. Alfonso (Eds), *Essentials of planning, selecting, and tailoring interventions for the unique learner*. Hoboken, NJ: Wiley.

Dieker, L. A., Maccini, P., Strickland, T. & **Hunt, J.** (2011). Minimizing the weaknesses and maximizing the strengths of students with disabilities through reasoning and sense-making. In M. Strutchen & H. Kepner *Focus on high school students: Making mathematical reasoning and sense making a reality for all*. Washington, DC: National Council of Teacher of Mathematics.

Invited Presentations

Hunt, J.H., Lewis, K., Velasquez, D., & Powell, S. (2017). Symposium on mathematics disabilities research. National Council of Teachers of Mathematics Research pre-session, San Antonio, TX.

Conference Presentations

* = doctoral student

Hunt, J.H. (2017). *Impairments and "Dis/Ability": Advances and constraints of Jim's concept of unit fractions*. Hawaii International Conference on Education, Honolulu, HI.

Hunt, J.H. (2016). *Informal understandings of fractions evidenced by students with mathematics difficulties*. Pacific Rim Conference on Disability and Diversity, Honolulu, HI.

Hunt, J.H., *Silva, J., & *Welch-Ptak, J. (2016). *Initial understanding of fractions: Children with learning disabilities and difficulties*. National Council of Teachers of Mathematics, San Francisco, CA.

Hunt, J.H., *Silva, J., & *Welch-Ptak, J. (2016). *Trajectories of fractions quantities: Students with learning disabilities and difficulties*. Research pre-session, National Council of Teachers of Mathematics, San Francisco, CA.

- Hunt, J.H.,** Tzur, R., and Westenskow, A. (2015). *Teacher questioning: Goals and sub goals during a constructivist-oriented teaching experiment*. Council for Exceptional Children, San Diego, CA.
- Hunt, J.H.** (2014). *Constructing the concept of unit fractions for students with learning disabilities*. Council for Exceptional Children, Philadelphia, PA.
- Powell, S., **Hunt, J.H.,** Little, M.E., and Mike, A. (2013). *Electronic mentoring of novice teachers in special education*. Council for Exceptional Children- Teacher Education Division, Ft. Lauderdale, FL.
- Hunt, J.H.** (2013). *Strategies and representations used in equal partitioning problems by students with high incidence disabilities*. Council for Exceptional Children, San Antonio, TX.
- Hunt, J.H.,** Bryant, D.P., & Bryant, B. (2013). *Mathematics intervention to support learning of students in special education: Lesson scaffolds*. Council for Exceptional Children, San Antonio, TX.
- Hunt, J.H.** (2012). *Teacher-infused supports in Tier 3 Mathematics Lessons: Implications for Change in Teacher Preparation*. Council for Exceptional Children- Teacher Education Division, Ann Arbor, MI.
- Bryant, B., Bryant, D.P., **Hunt, J.H.,** and Valentine, C. (2012). *Design experiments in special education tiered research*. Council for Learning Disabilities, Austin, TX.
- Hunt, J.H.** (2011). *Mathematics knowledge for teaching and mathematics learning disability: Essential content knowledge for special educators*. Council for Exceptional Education, Teacher Educator Division, Austin, TX.
- Hunt, J.H.** (2011). *Teaching fraction equivalency through the ratio interpretations: Performance of students with mathematics learning disabilities*. North American Chapter of the International Society for the Psychology of Mathematics Education, Reno, NV.
- Hunt, J. H.** (2011). *Teaching fraction equivalency through ratios and performance of students with MLD*. Council for Learning Disabilities, Austin, TX.
- Hunt, J.H.** (2011). *Beyond accommodations: Common sense differentiation and universal design for learning*. National Council of Teacher of Mathematics (NCTM), Indianapolis, IN.

- Andreasen, J.A., **Hunt, J.H.**, & Straub, C. (2011). *Creating inclusive environments through accessible curriculum: Universal design for learning*. National Council of Teachers of Mathematics (NCTM), Indianapolis, IN.
- Hunt, J.** (2010). *Understanding fractions through the ratio subconstruct: Old habits and new perspectives*. Council for Exceptional Children; Teacher Education Division. St. Louis, MO.
- Dieker, L.A., Grillo, K., & **Hunt, J.H.** (2010). *So you think you can dance: Looking back and moving forward in the role of special education as dance partners in middle and high school STEM inclusionary classes*. Council for Exceptional Children, Teacher Education Division. St. Louis, MO.
- Hines, R., Combes, B., Vince-Garland, K., Walker, Z., **Hunt, J.**, McKinney, T., Powell, S., Rodriguez, J., & Straub, C. (2010). *Must have technology: Increasing effectiveness in preservice teacher education*. Council for Exceptional Children, Teacher Education Division, St. Louis, MS.
- Hunt, J.** (2010). *Instruction in fractions: What do special educators need to know?* Presented at the Council for Exceptional Children (CEC), Nashville, TN.
- Hunt, J.** (2010). *Differentiating mathematics instruction and practice for inclusive environments: Math stations*. Presented at the National Council of Teacher of Mathematics (NCTM), San Diego, CA
- Hunt, J.** (2009). *Mathematics performance in number sense of students with and without high incidence disabilities in Florida*. Presented at the Teacher Educator Division (TED), Council for Exceptional Children (CEC), Charlotte, N.C.
- Dieker, L., Moorehead, T., Grillo, K., & **Hunt, J.** (2009). *What do secondary special educators need to know about science and mathematics?* Presented at the Teacher Educator Division (TED), Council for Exceptional Children (CEC), Charlotte, N.C.
- Little, M., Martin, S., **Hunt, J.**, & Straub, C. (2009). *Bridging schools and universities to improve math and science*. Presented at the Teacher Education Division (TED), Council for Exceptional Education (CEC), Charlotte, N.C.
- Dieker, L., & **Hunt, J.** (2009). *Behavioral and instructional techniques for middle and high school students with mild disabilities in mathematics*. Presented at the National Council for Teachers of Mathematics (NCTM), Washington, D.C.
- Little, M., Robertson, S., & **Hunt, J.** (2009). *Implementing the concrete to representational to abstract approach to increase rigor in mathematics classrooms*. Presented at the National Council of Teachers of Mathematics (NCTM), Washington, D.C.

Hines, R., & **Hunt, J.** (2009). *Co-teaching in the mathematics classroom*.
Presented at the pre-session of the Association of Mathematics Teacher Educators
(AMTE), Orlando, FL.

Service

Professional

Reviewer

Journal for Research in Mathematics Education
Journal of Mathematical Behavior
Learning Disabilities Research and Practice
Learning Disabilities Quarterly
Mathematics Teacher Educator
Mathematics Teaching in the Middle School
Mathematical Thinking and Learning
National Science Foundation, DRK-12 Competition
Psychology of Mathematics Education (PME)
Teaching Children Mathematics

Member- Reframing Interventions Working Group, PME-NA (2016- present)

Co-Founder and Facilitator- Special Education Working Group, PME and PME-NA
(2012- present)

Facilitator - National Science Foundation Teaching and Learning Video Showcase:
“Improving Science, Math, Engineering, and Computer Science Education” (2015, 2016)

Planning/Convention Committees- International Council for Learning Disabilities
(2011)

Facilitator- Council for Exceptional Children: “Must Have Technology- Increasing
Effectiveness in Preservice Teacher Education” (2010)

Advisory Panel- Office of Special Education Personnel Preparation Grant, University of
Central Florida (2010)

Volunteer Facilitator- Office of Special Education Programs Project Director’s Meeting,
Washington, D.C. (2010)

Volunteer- National Association of Multicultural Education (2010).

Convention Committee- Association of Mathematics Teacher Educators (2009).

University and College

Member- Task Force, NCSU Teacher Education and Learning Science New Hires (2016)

Member- University of Texas Equity Council (2016)

Member- University of Texas STEM Education Faculty Council (2014-2016)

Member- University of Texas Curriculum and Instruction Faculty Council (2014-2016)

Interviewer- University of Texas Hiring Committee for SMART Research Post Doc (2015)

Guest Lecturer- Equity in STEM Education (2015)

Guest Lecturer- Mixed Methods Design Research (2015)

Department Liaison- University Undergraduate Honor Program (2012-2014)

Guest Lecturer- Seminar, Research in Mathematics Education (2014)

Guest Lecturer- Critical Issues in Special Education (2011)

Facilitator- Elements of Design Based Research, Meadows Center for Presenting Educational Risk (2011)

Guest Lecturer- Programming for Secondary Students with Disabilities (2010)

Interventionist- Assessment Clinic, University of Central Florida (2009-2010)

State

Professional Developments

Texas Regional Collaborative, The University of Texas at Austin (2015, 2016)

Cook Elementary School, Austin, TX (2014, 2015)

Effective Practices Conference, State of Utah (2013, 2014)

Logan City Schools, Logan, UT (2012, 2013)

Response to Intervention Conference, State of Texas (2011)

Shenandoah Elementary School, Orange County, FL (2011)
Co Teaching and Universal Design, Atlanta, GA (2010)
RtI/Teaching Learning Connections, Orlando, FL (2009)
Literacy Symposium, Orlando, FL (2009)
NCTM Standards in Depth, Orlando, FL (2008)
Special Olympics Volunteer, Orlando, FL (2008)
Co-Author/Creator, county-wide task analysis and order of instruction for
mathematics, Orange County Public Schools, Orlando, FL. (2007)
Curriculum reviewer for mathematics intervention materials; Orange County Public
Schools, Orlando, FL. (2007-2008)
Lead Coach, Middle School Mathematics Competition, Orange County Public Schools,
Orlando, FL. (2005-2008)

Memberships

American Education Research Association (AERA)
North American Chapter for the Psychology of Mathematics Education (PME-NA)
National Council for Teachers of Mathematics (NCTM)
Council for Exceptional Children (CEC)