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SPECIALIZATION AREAS:

Mathematics Education Computer Assisted Instruction Cognition and Instruction Evaluation

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I. <u>EDUCATIONAL HISTORY</u>

DEGREE	UNIVERSITY	AREA
B.S. 1978	University of Utah, Elementary Education	Mathematics Education
M.Ed. 1986	University of Utah, Educational Studies	Mathematics Education
Ph.D. 1989	University of Illinois at Urbana-Champaign	Educational Psychology

II. <u>PROFESSIONAL HISTORY</u>

Post-Doctoral Positions

Professor for the Department of Urban Education at the University of Houston - Downtown. Houston, Texas. 2011 - .

Faculty Senator for Education at the University of Houston. Houston, Texas. 2015 – 2016.

Director of Center for the Professional Development of Teachers at the University of Houston-Downtown. Houston, Texas. 2009 - 2013.

Associate Professor for the Department of Urban Education at the University of Houston - Downtown. Houston, Texas. 2008 - 2011.

Chair of the College of Education Faculty Executive Committee at the University of Houston. Houston, Texas. 2006-2007.

Chair-elect of the College of Education Faculty Executive Committee at the University of Houston. Houston, Texas. 2005-2006.

Program Area Chair for Mathematics Education at the University of Houston. Houston, Texas. 1995-2001 and 2003-.

Faculty Senator for Education at the University of Houston. Houston, Texas. 1995 – 2005.

Associate Professor for the Department of Curriculum and Instruction at the University of Houston. Houston, Texas. 1995 – 2008.

Director of the Center for Mathematics, Science and Technology at the University of Houston. Houston, Texas. 1995 – 1998.

Assistant Professor for the Department of Educational Studies at the University of Utah. Salt Lake City, Utah. 1989-1994.

Pre-Doctoral Positions

Graduate research assistant for the Institute for Research on Human Development, 51 Gerty Drive, University of Illinois at Champaign- Urbana. 1988-1989.

Graduate research assistant for the Learning and Development Program, Center for the Study of Reading, University of Illinois at Champaign- Urbana. 1986- 1988.

Fifth Grade Instructor, Jordan School District, Sandy, Utah. 1985-1986.

Adjunct instructor for the Department of Educational Studies. University of Utah, Salt Lake City, Utah. 1985-1986.

Director of <u>Productivity Project in Contemporary Curriculum</u>. Utah State Office of Education/Garfield School District. 1983-1985.

Co-Director of <u>Tele-Learning Project</u>. Utah State Office of Education/Garfield School District. 1983-1985.

Adjunct Instructor for Southern Utah State College. Cedar City, Utah. 1981-1984.

Fifth Grade Instructor, Garfield School District, Panguitch, Utah. 1981-1983.

Mathematics in-service instructor for Salt Lake City School District. Salt Lake City, Utah. 1980.

Mathematics teacher for Salt Lake City School District's Gifted and Talented Program. Salt Lake City, Utah. 1979-1980.

Sixth Grade Instructor, Salt Lake City School District, Salt Lake City, Utah. 1979-1981.

Teaching Assistant for three teaching methods courses: two in mathematics, one in science. Department of Educational Studies. University of Utah, Salt Lake City, Utah. 1977-1979.

III. HONORS AND AWARDS

Best Paper Award from the Mathematics Education SIG of the Society for Instructional Technology and Teacher Education (SITE) for <u>Stamping function: A Technology Immune Technology Enabled problem</u> within and Action on Objects framework. 2017.

Recognition Award for being the *person who made a difference* to a graduating senior at the University of Houston-Downtown. 2015-2016.

Nominated for the College of Education Research Excellence Award. University of Houston. 2003-2004.

Recognition Award for editorial contributions and division leadership from the Society for Instructional Technology and Teacher Education (SITE). 2002.

Recognition Award for editorial contributions and division leadership from the Society for Instructional Technology and Teacher Education (SITE). 2001.

Recognition Award for editorial contributions from the Society for Instructional Technology and Teacher Education (SITE). 2000.

Nominated for the College of Education Research Excellence Award. University of Houston. 1999-2000.

Recognition Award for editorial contributions from the Society for Instructional Technology and Teacher Education (SITE). 1999.

Recognition Award for editorial contributions from the Society for Instructional Technology and Teacher Education (SITE). 1998.

Recognition Award for editorial contributions from the Society for Instructional Technology and Teacher Education (SITE). 1997.

Recognition Award for outstanding contributions from the Society for Instructional Technology and Teacher Education (SITE). 1996.

Distinguished Paper Award of the Association of Teacher Educators (ATE) for <u>True collaboration: An</u> analysis of a conceptual change program in elementary mathematics. 1994.

Outstanding Achievement Award of the Society for Technology and Teacher Education (STATE) for best work in putting theory in practice. 1993.

Best Paper Award of the Society for Technology and Teacher Education (STATE) for <u>Teaching</u> instructional design using technology. 1993.

Mathematics Teacher of the Year Award for Garfield County. Utah Association of Teachers of Mathematics. 1982-1983.

IV. SCHOLARLY PUBLICATIONS AND ACTIVITIES

Texts

Hart, S, Mace, B., Harnisch, D. L., & Connell, M. L. (1998). <u>Leonardo's Multi-Media Toolbos: Teacher's</u> <u>Guide</u>. NECSYL:San Diego, CA.

Edited Works

Wentworth, N., Earle, R., & Connell, M. L. (Eds.). (2004). <u>Process and products of change: Professors</u> <u>integrating information technology into teacher education</u>. Binghamton, NY:Hawarth Press.

Mathematics section editor of <u>Technology and Teacher Education Annual 2002</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Mathematics section editor of <u>Technology and Teacher Education Annual 2001</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Mathematics section editor of <u>Technology and Teacher Education Annual 2000</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Mathematics section editor of <u>Technology and Teacher Education Annual 1999</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Mathematics section editor of <u>Technology and Teacher Education Annual 1998</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Mathematics section editor of <u>Technology and Teacher Education Annual 1997</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Associate editor of <u>Technology and Teacher Education Annual 1996</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Mathematics section editor of <u>Technology and Teacher Education Annual 1996</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Research section editor of <u>Technology and Teacher Education Annual 1996</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Co-Section editor of <u>Diversity and International</u> in D. Willis, B. Robin, & J. Willis (General Eds.), <u>Technology and Teacher Education Annual 1995</u>. Charlottesville, VA:Association for the Advancement of Computing in Education

Co-Section editor of <u>Hypermedia/Multimedia</u> in D. Willis, B. Robin, & J. Willis (General Eds.), <u>Technology and Teacher Education Annual 1995</u>. Charlottesville, VA:Association for the Advancement of Computing in Education.

Harnisch, D. L. & Connell, M. L. (1991). <u>An introduction to educational information technology</u>. 3rd <u>Edition</u>. NEC Technical College:Kawasaki, Japan.

Harnisch, D. L. & Connell, M. L. (1990). <u>An introduction to educational information technology</u>. 2nd <u>Edition</u>. NEC Technical College:Kawasaki, Japan.

Harnisch, D. L. & Connell, M. L. (1990). An <u>introduction to educational information technology. 1st Edition</u>. NEC Technical College:Kawasaki, Japan.

Chapters

Connell, M. L., Abramovich, S, & Sack, J. (Accepted for Publication). Teaching and learning mathematics in technology intensive classrooms. In Nath, J. L., & Chen, I. <u>Technology in the classroom: For now and the future</u>. 2nd Edition. Dubuque, IA: KendallHunt Publishing Company (pp. 73-92).

Connell, M. L., & Abramovich, S. (2017). Stamping functions: A *Technology Immune Technology Enabled* problem within an *Action on Objects* framework. In L. Liu, & D. Gibson (Eds.), <u>Research Highlights in</u> <u>Technology and Teacher Education 2017</u>. (pp. 55-63). Waynesville, NC:Association for the Advancement of Computing in Education (AACE).

Connell, M. L., & Abramovich, S. (2017b). STEM Teaching and Learning via Technology-Enhanced Inquiry. In I. Levin, & D. Tsybulsky (Eds.), <u>Digital Tools and Solutions for Inquiry-Based STEM</u> Learning. (pp. 221-251). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-2525-7.ch009

Abramovich, S., and Connell, M. L. (2016). Sociocultural aspects of the impact of computing technology on the preparation of K-12 mathematics teachers. In I. S. Gibbs (Ed.), <u>Teacher Education: Assessment</u>, <u>Impact and Social Perspectives</u> (pp. 41-75). New York: Nova Science Publishers.

Connell, M. L., Abramovich, S, & Sack, J. (2015). Teaching and learning mathematics in technology intensive classrooms. In Nath, J. L., & Chen, I. <u>Technology in the classroom: For now and the future</u>. Dubuque, IA: KendallHunt Publishing Company (pp. 73-92).

Connell, M. L., Lowery, N. V., Shull, R. M., & Lamb, C. E. (2011). Preparing to teach mathematics in Texas. In Nath, J. & Ramsey, J. (Eds.) <u>Preparing to teach Texas content areas EC-6</u>. Pearson (pp. 97-163).

Connell, M. L. (2009). Teaching Mathematics. In Saha, L J. & Dworkin, A. G. (Eds.) *The New International Handbook of Teachers and Teaching*. Springer Publishers (pp. 947-954).

Connell, M. L., Klein, R, & Harnisch, D. L. (2007). Technology uses in the special education mathematics classroom. Bazik, E. (Ed.) [Monograph]. *Leadership to Math Success for All.* 5, 54-63.

Connell, M. L. & Johnson, D. L. (2004). The View from outside: 2000-2003. In Wentworth, N., Earle, R., & Connell, M. L. (Eds.). <u>Process and products of change: Professors integrating information technology</u> <u>into teacher education</u> (pp. 165-183). Binghamton, NY:Hawarth Press. Connell, M. L (2001). Actions upon objects: A metaphor for technology enhanced mathematics instruction. In D. Tooke & N. Henderson (Eds). <u>Using information technology in mathematics</u> (pp. 143-171). Binghamton, NY:Hawarth Press.

Connell, M. L., Peck, D. M., Buxton, W., & Kilburn, D. (1994). True collaboration: An analysis of a conceptual change program in elementary mathematics. In S. Odell & M. O'Hair (Eds.), Teacher <u>Education Yearbook: Partnerships in Education II</u> (pp. 255-279). New York:Harcourt Brace and Javonovich.

Connell, M. L. (1989). Educational outcomes. In D. L. Harnisch & A. T. Fisher (Eds.), Transition <u>literature review: Educational, employment, and independent living outcomes. Vol. III</u> (pp. 55-72). Champaign, IL: The Transition Institute at Illinois.

Harnisch, D. L., Fisher, A. T., & Connell, M. L. (1989). Research methods in transition literature. In D. L. Harnisch & A. T. Fisher (Eds.), Transition <u>literature review: Educational, employment, and independent</u> <u>living outcomes. Vol. III</u> (pp. 23-54). Champaign, IL: The Transition Institute at Illinois.

Tu, J., Shi, S., Harnisch, D. L., & Connell, M. L. (1989). Database System. In D. L. Harnisch & A. T. Fisher (Eds.), <u>Transition literature review : Educational, employment, and independent living outcomes.</u> <u>Vol. III</u> (pp. 7-22). Champaign, IL: The Transition Institute at Illinois.

Campione, J. C., Brown, A. L., & Connell, M. L. (1988). Metacognition: On the importance of understanding what you are doing. In R. I. Charles & E. Silver (Eds.), <u>Teaching and assessing</u> <u>mathematical problem solving. Volume 3</u> (pp. 93-114). Reston, Va: National Council of Teachers of Mathematics.

Connell, M. L. (1988). Using microcomputers in providing referents for elementary mathematics. In M. Miller-Gerson (Ed.), <u>The emerging frontier: Interactive video, artificial intelligence and classroom</u> <u>technology</u> (pp. 55-60). Phoenix, Az: Arizona State University.

Articles and Refereed Publications

Connell, M. & Abramovich, S. (2017). Burning the candle: A Technology Immune Technology Enabled problem within an Action on Objects framework. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2017.* (pp. 1724 -1730). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Abramovich, S., & Connell, M. (2017). Revisiting Mathematical Activities for Secondary Teachers through the lens of Modern Digital Tools. *Open Mathematical Education Notes*, 7(2017), 9-28, DOI: 10.7251/OMEN1701001V.

Connell, M. & Abramovich, S. (2017). A Technology Immune Technology Enabled problem within an Action on Objects framework: Stamping Functions. *Journal of Computers in Mathematics and Science Teaching*, 36(2), 117-127.

Abramovich, S., & Connell, M. (2017). Problem solving in the digital age: New ideas for secondary mathematics teacher education. *Journal of Computers in Mathematics and Science Teaching*, 36(2), 106-116.

Connell, M. & Abramovich, S. (2017). Stamping functions: A Technology Immune Technology Enabled problem within an Action on Objects framework. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2017* (pp. 1323-1329). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Abramovich, S., & Connell, M. (2017). TITE problem solving: Integrating computing and proving in secondary mathematics education. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2017* (pp. 1316-1322). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Connell, M. & Abramovich, S. (2016). Promoting Technology Uses in the Elementary Mathematics Classroom: Lessons in Pedagogy from Zoltan Dienes. *Journal of Educational Media and Hypermedia*. 25(3) 213-227.

Connell, M. & Abramovich, S. (2016). Promoting Technology Uses in the Elementary Mathematics Classroom: Lessons in Pedagogy from Zoltan Dienes. In *Proceedings of EdMedia: World Conference on Educational Media and Technology 2016* (pp. 1018-1025). Association for the Advancement of Computing in Education (AACE).

Abramovich, S & Connell, M. (2015). Digital fabrication and hidden inequalities: Connecting procedural, factual and conceptual knowledge. *International Journal of Technology in Teaching and Learning*. 11(2) 76-89.

Connell, M. (2015). Hybrid vs. Online: Research findings from an elementary evaluation course. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2015* (pp. 1222-1226). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Connell, M. & Abramovich, S. (2015). Teaching and learning mathematics in technologically intensive classrooms. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2015* (pp. 2389-2394). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Connell, M. & Abramovich, S. (2015). Digital Fabrication and Aunt Sarah: Enabling Quadratic Explorations Via Technology. In D. Slykhuis & G. Marks (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2015*(pp. 3583-3590). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Slough, S., Connell, M. & Chamblee, G. (2015). Looking for Learners: The Legacy of Technogogical Content Knowledge (TCK). In *Proceedings of Society for Information Technology & Teacher Education International Conference 2015* (pp. 3041-3047). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Abramovich, S., & Connell, M. (2014). Using technology in elementary teacher education: A sociocultural perspective. *ISRN (International Scholarly Research Network) Education*, Article ID 245146, 9 pages, doi: 10.1155/2014/345146.

Connell, M. L., & Slough, S. (2005). Technology's Promise for Science and Mathematics Learning. In Crawford, C., Carlsen, R., Gibson, I., McFerrin, K., Price, J., Weber, R & Willis, D. (Eds.) <u>Information</u> <u>Technology and Teacher Education Annual 2005</u>. (pp. 1910-1917). Norfolk, VA: Association for the Advancement of Computing in Education.

Connell, M. L. and Johnson, D. L. (2004). The View from outside: Lessons from PT3. <u>Computers in the</u> <u>Schools. 21(1/2)</u>, 165-183.

Connell, M. L., & Harnisch, D. L. (2004). SP Charts: Creating a longitudinal view of a technology enabled intervention. In Ferdig, R, Crawford, C, Carlsen, R., Davis, N, Price, J., Weber, R & Willis, D. (Eds.) <u>Information Technology and Teacher Education Annual 2004</u>. (pp. 951-954). Norfolk, VA: Association for the Advancement of Computing in Education.

Curry, J, Samara, J., & Connell, M. L. (2004). The Curry/Samara Model[®]:Curriculum, instruction and technology yield statistically significant results. In Ferdig, R, Crawford, C, Carlsen, R., Davis, N, Price, J., Weber, R & Willis, D. (Eds.) <u>Information Technology and Teacher Education Annual 2004</u>. (pp. 2075-2082). Norfolk,VA: Association for the Advancement of Computing in Education.

Williams, N. L., Connell, M., White, C. S., & Kemper, J. (2003). Real boats rock: A transdisciplinary approach for teacher preparation. Action in Teacher Education, <u>24</u> (4). 95-101.

Connell, M. L. (2003). Preparing teachers for object-oriented and technology-enhanced classrooms. In Crawford, C., Davis, N., Price, H., Weber, R., and Willis, D. <u>Information Technology and Teacher</u> <u>Education Annual 2003</u>. (pp. 2877-2883). Norfolk, VA:Association for the Advancement of Computing in Education.

Bouniaev, M. & Connell, M. L. (2003). Teaching and learning actions in mathematics: What we do and what we do it upon. In Crawford, C., Davis, N., Price, H., Weber, R., and Willis, D. <u>Information</u> <u>Technology and Teacher Education Annual 2003</u>. (pp. 2884-2891). Norfolk,VA:Association for the Advancement of Computing in Education.

Campbell, J. O. & Connell, M. L. (March, 2003). Making teacher education a continuing process. In Crawford, C., Davis, N., Price, H., Weber, R., and Willis, D. <u>Information Technology and Teacher</u> <u>Education Annual 2003</u>. (pp. 1671-1672). Norfolk, VA:Association for the Advancement of Computing in Education.

Connell, M. L. (2002). Knowledge Based Evaluation. <u>Journal of Technology and Teacher Education</u>. <u>10(1)</u>, 17-26.

Connell, M. L., Lowery, N. V., & Harnisch, D. L. (2002). Mathematics. In Willis, D. A., Price, J. & Davis, N. <u>Information Technology and Teacher Education Annual 2002</u>. (pp. 1037). Norfolk, VA: Association for the Advancement of Computing in Education.

Connell, M. L. (2002). Actions on Objects: Useful Internet locations. In Willis, D. A., Price, J. & Davis, N. <u>Information Technology and Teacher Education Annual 2002</u>. (pp. 1071-1072). Norfolk, VA: Association for the Advancement of Computing in Education.

Connell, M. L. (2002). Teaching through tragedy: Use of dynamically created websites to maintain communities of learning. In Willis, D. A., Price, J. & Davis, N. <u>Information Technology and Teacher Education Annual 2002</u>. (pp. 138). Norfolk, VA: Association for the Advancement of Computing in Education.

Harnisch, D. L., Connell, M. L., & Shope, R. J. (2002). Are Teachers "TechReady?" Evaluating the Technology Competencies of Preservice Teachers. In Willis, D. A., Price, J. & Davis, N. <u>Information</u> <u>Technology and Teacher Education Annual 2002</u>. (pp. 1085-1088). Norfolk,VA:Association for the Advancement of Computing in Education.

Freiberg, H. J., Connell, M. L., & Lorentz, J. (2001). Effects of Consistency Management[®] on student mathematics achievement in seven Chapter 1 elementary schools. <u>Journal of Educational Studies on At-Risk Students</u>. <u>6(3)</u>, 249-270.

Connell, M. L (2001). Actions upon objects: A metaphor for technology enhanced mathematics instruction. <u>Computers in the Schools</u>. <u>17(1/2)</u>, 143-171.

Connell, M. L., Lowery, N. V., & Harnisch, D. L. (2001). Mathematics. In Willis, D., Price, J. D., & Willis J. (eds.) <u>Technology and Teacher Education Annual 2001</u>. (pp. 1310-1314). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. (2001). Applications of Knowledge Based Evaluation in educational technology. In Willis, D., Price, J. D., & Willis J. (eds.) <u>Information Technology and Teacher Education Annual 2001</u>. (pp. 3112-3113). Charlottesville, VA:Association for the Advancement of Computing in Education

Connell, M. L. (2000). Of Lions and Goats: Keeping the trans in the disciplines. <u>The Researcher</u>. <u>15(1)</u> 5-7.

Connell, M. L. (2000). Mathematics. In Willis, D., Price, J. D., & Willis J. (eds.) <u>Technology and Teacher</u> <u>Education Annual 2000</u>. (pp. 1000-1003). Charlottesville, VA:Association for the Advancement of Computing in Education

Connell, M. L. (2000). Symbolic Computers and Mathematical Objects. In Willis, D., Price, J. D., & Willis J. (eds.) <u>Technology and Teacher Education Annual 2000</u>. (pp. 1072-1076). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. (2000). Actions on Objects: A theoretical framework for mathematics education. In Willis, D., Price, J. D., & Willis J. (eds.) <u>Technology and Teacher Education Annual 2000</u>. (pp. 1034-1039). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. & Harnisch, D. L. (2000). A Case for Strong Conceptualization in Technology Enhanced Mathematics Instruction. In Willis, D., Price, J. D., & Willis J. (eds.) <u>Technology and Teacher Education</u> <u>Annual 2000</u>. (pp. 1004-1008). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. (1999). Guest Editorial: The Lion and the Goat: New directions for teacher education. <u>The</u> <u>Researcher</u>. <u>13(2)</u>, 12-14.

Connell, M. L. & Kemper, J. (1999). Transdisicplinary science methods: Building contexts for inquiry. <u>The Researcher</u>. <u>13(2)</u>, 40-43.

Connell, M. L. (1999). Transdisicplinary mathematics methods: Moving beyond integration. <u>The</u> <u>Researcher</u>. <u>13(2)</u>, 44-48.

Bouniaev, M. & Connell, M. L. (1999). Constructivism and SSDMA as basis for technology use in mathematics teacher education. In Price, J. D., Willis J., Willis, D., Jost, M, & Boger-Mehall, S. (eds.) <u>Technology and Teacher Education Annual 1999</u>. (pp. 940-944). Charlottesville, VA:Association for the Advancement of Computing in Education

Connell, M. L. & Abramovich, S. (1999). New tools for new thoughts: Effects of changing the "Tools-to-Thing-With" on the elementary mathematics methods course. In Price, J. D., Willis J., Willis, D., Jost, M, & Boger-Mehall, S. (eds.) <u>Technology and Teacher Education Annual 1999</u>. (pp. 1052-1057). Charlottesville, VA:Association for the Advancement of Computing in Education

Connell, M. L. & Harnisch, D. L. (1999). Interpretation of SP Charts on Mathematics Applications. In Price, J. D., Willis J., Willis, D., Jost, M, & Boger-Mehall, S. (eds.) <u>Technology and Teacher Education</u> <u>Annual 1999</u>. (pp. 945-949). Charlottesville, VA:Association for the Advancement of Computing in Education

Connell, M. L. (1998). Technology in constructivist mathematics classrooms. <u>Journal of Computers in</u> <u>Mathematics and Science Teaching</u>. <u>17(4)</u>, 311-338.

Connell, M. L., Kemper, J., White, C., & Williams, N. L. (1998). Technology as a Unifying Theme in a Transdisciplinary Teacher Education Program. In McNeal, S., Price, J. D., Boger-Mehall, S, Robin, B, & Willis J. (eds.) <u>Technology and Teacher Education Annual 1998</u>. (pp. 610-612). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. & Bounieav, M. (1997). Shared recommendations of SSDMA and Constructivism upon technology in mathematics education. <u>The Researcher 12(1)</u>, 21-28.

Connell, M. L. (1997). AI or IA: The Choice is Yours! <u>Educational Technology Review</u>, <u>Summer(7)</u>, 27-29.

Connell, M. L., Williams, S. E., & Gannon, R. (1997). Mathematics. In D. Willis, B. Robin, & J. Willis (Eds.), <u>Technology and Teacher Education Annual 1997</u>. (pp. 562-564). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. (1997). Technology in constructivist mathematics classrooms. In D. Willis, B. Robin, & J. Willis (Eds.), <u>Technology and Teacher Education Annual 1997</u> (pp. 601-604). Charlottesville, VA:Association for the Advancement of Computing in Education

Connell, M. L., Williams, S. E., & Reed, P. (1996). Mathematics. In D. Willis, B. Robin, & J. Willis (Eds.), <u>Technology and Teacher Education Annual 1996</u> (pp. 165-166). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L., DeVoogd, G. L., & Blackburn, A. C. (1996). Research. In D. Willis, B. Robin, & J. Willis (Eds.), <u>Technology and Teacher Education Annual 1996</u> (pp. 830-831). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. & Bounieav, M. (1996). Constructivism and SSDMA - Implications of Two Learning Theories on Technology Use in Mathematics Teacher Education. In D. Willis, B. Robin, & J. Willis (Eds.), <u>Technology and Teacher Education Annual 1996</u> (pp. 202-207). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. (1995). A constructivist use of technology in Pre-Algebra. In Douglas Owens (Ed.), <u>Psychology of Mathematics Education</u>. (pp. 187-192). Ohio State University:OH.

Connell, M. L. (1995). Technology and the elementary mathematics methods course: An effort to build a technology enhanced mathematical community. <u>Journal of Technology and Teacher Education</u>. 3(2/3), 251-266.

Wentworth, N., & Connell, M. L. (1995). An investigation of parent perceptions of education, teaching, mathematics, and computers. <u>Computers in the Schools 11(4)</u>, 35-53.

Connell, M. L. (1995). Student use of technology to build links between mathematical variables: Implications for teacher education. In D. Willis, B. Robin, & J. Willis (Eds.), <u>Technology and Teacher</u> <u>Education Annual 1995</u> (pp. 155-159). Charlottesville, VA:Association for the Advancement of Computing in Education

Connell, M. L., & Harnisch, D. L. (1994). Tools for knowledge construction: Toolbook and SPPPC in classroom settings. In D. Kirshner (Ed.), <u>Psychology of Mathematics Education</u>. Lousianna State University:LA.

Wentworth, N. & Connell, M. L. (1994). Parental perceptions of education, technology, and innovative mathematics instruction. In D. Willis, J. Willis, & B. Robin (Eds.), <u>Technology and Teacher Education</u> <u>Annual 1994</u> (pp. 57-60). Charlottesville, VA:Association for the Advancement of Computing in Education

Connell, M. L., & Peck, D. M. (1993). Report of a conceptual change intervention in elementary mathematics. Journal of Mathematical Behavior. <u>12(4)</u>, 329-350.

Stoddart, T., Connell, M. L., Stofflett, R., & Peck, D. M. (1993). Reconstructing elementary teacher candidates' understanding of mathematics and science. <u>Teacher and Teacher Education</u>, *9*, 229-241.

Connell, M. L. (1993). Teaching instructional design using technology. In D. Carey, R. Carey, D. A. Willis, & J. Willis (Eds.), <u>Technology and Teacher Education Annual 1993</u> (pp. 443-447). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. (1993). A constructivist use of technology in elementary mathematics. In D. Carey, R. Carey, D. A. Willis, & J. Willis (Eds.), <u>Technology and Teacher Education Annual 1993</u> (pp. 579-582). Charlottesville, VA:Association for the Advancement of Computing in Education.

Connell, M. L. (1993). Technology enhanced cases. In D. Carey, R. Carey, D. A. Willis, & J. Willis (Eds.), <u>Technology and Teacher Education Annual 1993</u> (pp. 579-582). Charlottesville, VA:Association for the Advancement of Computing in Education.

Welch, M., Sheridan, S. M., Fuhriman, A. J., Hart, A. W., Connell, M. L., & Stoddart, T. (1992). Preparing professionals for educational partnerships. <u>Journal of Educational and Psychological</u> <u>Consultation</u>, <u>3</u>(1), 1-23.

Peck, D. M. & Connell, M. L. (1991). Using physical materials to develop mathematical intuition. <u>Focus</u> on learning issues in mathematics. <u>13</u> (4), 3-12.

Switzer, D. M., & Connell, M. L. (Summer, 1990). Practical applications of student response analysis . Educational Measurement: Issues and Practice, <u>9</u> (2), 15-18.

Harnisch, D. L., Fisher, A. T., & Connell, M. L. (1990). Human judgment and the logic of evidence: A critical examination of research methods in special education literature. <u>International Journal for</u> <u>Educational Research</u>, <u>13</u>, 473-488.

Peck, D. M., Jencks, S. M., & Connell, M. L. (1989). Improving instruction via brief interviews. <u>Arithmetic Teacher</u>. <u>37</u>(3), 15-17. Also reprinted in <u>MART Journal</u>. <u>11</u>(3), 31-35.

Professional Reports

Connell, M. L. & Sack, J. (2010). <u>The Math Cart</u>. An evaluation conducted for the Children's Museum of Houston.

Connell, M. L. (2003). <u>Research and Evaluation into the Curry/Samara Model of Curriculum, Instruction</u> <u>and Assessment</u>. A longitudinal analysis produced for The Curriculum Project (TCP). [Available from: http://www.adwizards.com/cp/Final_Data_Analysis_and_Discussion.pdf]

Waxman, H. C., Connell, M. L., Gray, J. (2002). <u>A quantitative synthesis of recent research on the effects</u> of teaching and learning with technology on student outcomes. A meta-analysis produced for North Central Regional Educational Laboratory (NCREL). [Available from: http://www.ncrel.org/tech/effects/index.html]

Connell, M. L. (2001). <u>Impacts of Learning Technologies On Outcomes within Mathematics Education</u>. An annotated bibliography produced for North Central Regional Educational Laboratory (NCREL).

Professional Papers and Presentations

Connell, M. & Abramovich, S. (2017, October). <u>Burning the candle: A Technology Immune Technology</u> <u>Enabled problem within an Action on Objects framework</u>. Paper presented at the annual meeting of E- Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2017. Vancouver BC, Canada

Connell, M. L. & Abramovich, S. (2017, March). <u>Stamping functions: A Technology Immune Technology</u> <u>Enabled (TITE) problem within and Action on Objects Framework</u>. Paper presented at the Annual Meeting of the Society for Information Technology and Teacher Education International Conference. Austin, TX.

Abramovich, S. & Connell, M. L. (2017, March). <u>TITE Problem solving: Integrating computing and</u> <u>proving in secondary mathematics teacher education</u>. Paper presented at the Annual Meeting of the Society for Information Technology and Teacher Education International Conference. Austin, TX.

Connell, M. & Abramovich, S. (2016, June). Promoting Technology Uses in the Elementary Mathematics Classroom: Lessons in Pedagogy from Zoltan Dienes. Paper presented at EdMedia: World Conference on Educational Media and Technology 2016, Vancouver, CA.

Connell, M. L. (2015. October). Hybrid vs. Online: Research findings from an elementary evaluation course. Paper presented at the Annual Meeting of the World Conference on E-Learning. Kona, HI.

Connell, M. & Abramovich, S. (2015, March). <u>Teaching and learning mathematics in technologically</u> <u>intensive classrooms</u>. Paper presented at the Annual Meeting of the Society for Information Technology and Teacher Education International Conference. Las Vegas, NV.

Connell, M. & Abramovich, S. (2015. March). Digital Fabrication and Aunt Sarah: Enabling Quadratic Explorations Via Technology. Paper presented at the Annual Meeting of the Society for Information Technology and Teacher Education International Conference. Las Vegas, NV.

Slough, S., Connell, M. & Chamblee, G. (2015, March). Looking for Learners: The Legacy of Technogogical Content Knowledge (TCK). Paper presented at the Annual Meeting of the Society for Information Technology and Teacher Education International Conference. Las Vegas, NV.

Sack, J., & Connell, M. (2014, October). <u>Giant Polyhedra, Inside and Out: Hands-on Development of 3-D</u> <u>Concepts</u>. NCTM Regional Conference, Indianapolis, IN, October 29-31, 2014.

Sack, J., & Connell, M. (2014, March). <u>Turning the A, B, and C into meaningful mathematics</u>. New Horizons in STEM Education Conference, San Antonio, TX, March 27-28, 2014.

Redl, T., Quander, R., Leveille, N., Sack, J., & Connell, M. (2014, January). <u>Recruiting and preparing</u> <u>mathematics majors for Houston area classrooms: The University of Houston-Downtown Noyce</u> <u>Mathematics Teacher Scholarship Program</u>. Joint Mathematics Meetings Conference, Baltimore, MA, January 15-18, 2014.

Leveille, N., Sack, J., Quander, R., Redl, T., & Connell, M. (2013, April). <u>This is not your grandfather's</u> <u>geometry</u>. CMS Elias Deeba Memorial Seminar, Houston, TX, April 15, 2013.

Redl, T., Quander, R., Leveille, N., Sack, J., & Connell, M. (2013, January). <u>Recruiting and preparing</u> <u>mathematics majors for Houston area classrooms: The University of Houston-Downtown Noyce</u> <u>Mathematics Teacher Scholarship Program</u>. Joint Mathematics Meetings Conference, San Diego, CA, January, 2013.

Leung, P. & Connell, M. L. (2013, February). <u>Meeting student needs through department and testing</u> <u>center partnership and collaboration</u>. Texas A&M Assessment Conference. Annual meeting, College Station, TX, February 18, 2013, Featured presentation.

Leung, P. & Connell, M. L. (2012, November). <u>Collaboration and Partnership with an Academic</u> <u>Department to Increase Revenue and Student Performance</u>. Texas Assessment Conference. Annual meeting, Austin, TX, November 29, 2012, Featured presentation. Sack, J., & Connell, M. (2012, October). <u>Giant polyhedra, inside and out: Hands-on development of 3-D</u> <u>concepts</u>. Regional Meeting of the National Council of Teachers of Mathematics (NCTM), Dallas, TX, October 10-12, 2012.

Sack, J., & Connell, M. (2012, June). <u>Robots, Giant Triangles and 3D Cubes: Learning Mathematics</u> <u>Creatively</u>. American Society for Engineering Education's K-12 Workshop on Engineering Education, San Antonio, TX, June 9, 2012, Workshop presentation.

Sack, J., & Connell, M. (2012, April). <u>Giant polyhedra, inside and out: Hands-on development of 3-D</u> <u>concepts</u>. Annual Meeting of the National Council of Teachers of Mathematics (NCTM), Philadelphia, PA, April 25-28, 2012.

Sack, J., & Connell, M. L., (2012, March). <u>Giant polyhedral, inside and out: Rigorous, hands-on</u> <u>mathematics experiences</u>. Presentation at the Department of Mathematics, Prairie View A & M, Prairie View, TX.

Nath, J. L., Cohen, M, Connell, M. L., Hill, L. (2012, February). <u>WE think they work: What do students</u> really think about electronic portfolios. Paper presented at the annual meeting of the Association of Teacher Educators, San Antonio, TX.

Quandar, R, Reidl, T, Connell, M. L., Sack, J. (2011, October). <u>Thinking outside the building: CMS and</u> <u>Urban Education Collaborations</u>. Presentation at the Department of Mathematics and Computers Science, University of Houston-Downtown, Houston, TX.

Connell, M. L., Sack, J. (2011, September). <u>Transforming mathematics courses for pre-service teachers</u>. Presentation at the New Developments in Mathematics Education: College and Career Readiness Institute Faculty Collaborative Conference, Round Rock, TX.

Connell, M. L., Sack, J & Beane, S. (2010, January). <u>Cross-Institutional Collaborative Seminar on</u> <u>Mathematics Teacher Preparation</u>. Presentation at the Mathematics Cross-Instructional Collaborative Seminar, Houston, TX.

Hutchinson, L. F., Warner, A., Houston, R., Connell, M. L., & Meuth, A. (2008, August). <u>Mentoring the Teacher Candidate</u>. Paper presented at the Summer meeting of the Association of Teacher Educators, Washington, D.C.

Hutchinson, L. F., Warner, A., Houston, R., Connell, M. L., & Meuth, A. (2007, August). <u>Recruit Them,</u> <u>Select Them, Train Them to be Successful</u>. Paper presented at the Summer meeting of the Association of Teacher Educators, Milwaukee, WI.

Warner, A., Houston, R., Hutchinson, L. F., Connell, M. L., & Meuth, A. (2007, August). <u>How Do We Keep Them? Recruitment challenges from the Q-TRAC program</u>. Paper presented at the Summer meeting of the Association of Teacher Educators, Milwaukee, WI.

Hutchinson, L. F., Connell, M. L., Meuth, A. & Warner, A. (2007, October). <u>Where to find them? How Do</u> <u>We Keep Them?</u> Paper presented at the annual meeting of the Consortium of State Organizations for Texas Teacher Education, El Paso, TX.

Hutchinson, L. F., Connell, M. L., Meuth, A. & Warner, A. (2006, October). <u>Streamlining the preparation</u> and <u>Certification of Post-Baccalaurate Mathematics and Science Teachers</u>. Paper presented at the annual meeting of the Consortium of State Organizations for Texas Teacher Education, Corpus Christi, TX.

Connell, M. L., Klein, R, & Harnisch, D. L. (2006, April). <u>Technology uses in the special education</u> <u>mathematics classroom</u>. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. Slough, S. L. & Connell, M. L. (2006, March). <u>Technology Supported Actions in Science and Mathematics</u> <u>Learning</u>. Paper presented at the Seventeenth Society for Information Technology and Teacher Education International Conference, Orlando, FL.

Bos, B. & Connell, M. L. (2005, March). <u>TI-InterActive! An Action on Object Approach to Learning</u>. Poster session presented at the Sixteenth Society for Information Technology and Teacher Education International Conference, Phoenix, AR.

Connell, M. L., & Slough, S. L. (2005, March). <u>Technology's Promise for Science and Mathematics</u> <u>Learning</u>. Paper presented at the Sixteenth Society for Information Technology and Teacher Education International Conference, Phoenix, AR.

Connell, M., & Mullenix, C. (2004, July). <u>Object-Based Mathematics Instruction for the Elementary</u> <u>Classroom as the Basis for Higher Mathematics</u>. Paper presented at the Conference for the Advancement of Mathematics Teaching, San Antonio, TX.

Connell, M. L., & Harnisch, D. L. (2004). <u>SP Charts: Creating a longitudinal view of a technology enabled</u> <u>intervention</u>. Paper presented at the Fifteenth Society for Information Technology and Teacher Education International Conference. Atlanta, GA.

Curry, J, Samara, J., & Connell, M. L. (2004). <u>The Curry/Samara Model[®]</u>:<u>Curriculum, instruction and technology yield statistically significant results</u>. Paper presented at the Fifteenth Society for Information Technology and Teacher Education International Conference. Atlanta, GA.

Connell, M., & Mullenix, C. (2003, July). <u>Object-Based Mathematics Instruction for the Elementary</u> <u>Classroom</u>. Paper presented at the Conference for the Advancement of Mathematics Teaching, Houston, TX.

Connell, M. L. (March, 2003). <u>Preparing teachers for object-oriented and technology-enhanced classrooms</u>. Paper presented at the Fourteenth Society for Information Technology and Teacher Education International Conference. Albuquerque, NM.

Bouniaev, M. & Connell, M. L. (March, 2003). <u>Teaching and learning actions in mathematics: What we do and what we do it upon</u>. Paper presented at the Fourteenth Society for Information Technology and Teacher Education International Conference. Albuquerque, NM.

Campbell, J. O. & Connell, M. L. (March, 2003). <u>Making teacher education a continuing process</u>. Paper presented at the Fourteenth Society for Information Technology and Teacher Education International Conference. Albuquerque, NM.

Connell, M. L. (March, 2002). <u>Actions on Objects: Useful Internet locations</u>. Paper presented at the Thirteenth Society for Information Technology and Teacher Education International Conference. Nashville, TN.

Connell, M. L. (March, 2002). <u>Teaching through tragedy: Use of dynamically created websites to maintain</u> <u>communities of learning</u>. Paper presented at the Thirteenth Society for Information Technology and Teacher Education International Conference. Nashville, TN.

Harnisch, D. L., Connell, M. L., & Shope R. J. (March, 2002). <u>Are Teachers "TechReady?" Evaluating</u> the <u>Technology Competencies of Preservice Teachers</u>. Paper presented at the Thirteenth Society for Information Technology and Teacher Education International Conference. Nashville, TN.

Connell, M. L. (March, 2001). <u>Applications of Knowledge Based Evaluation in educational technology</u>. Paper presented at the Twelfth Society for Information Technology and Teacher Education International Conference. Orlando, FLA.

Connell, M. L. & Harnisch, D. L. (June, 2000) <u>From data to functions: New tools and new thoughts</u>. Invited paper presented at the University of Nebraska's Celebration of Mathematics Conference. Lincoln, NB.

Connell, M. L. (March, 2000). <u>Symbolic Computers and Mathematical Objects</u>. Paper presented at the Eleventh Society for Information Technology and Teacher Education International Conference. San Diego, CA.

Connell, M. L. (March, 2000). <u>Actions on Objects: A theoretical framework for mathematics education</u>. Paper presented at the Eleventh Society for Information Technology and Teacher Education International Conference. San Diego, CA.

Connell, M. L. & Harnisch, D. L. (March, 2000). <u>A Case for Strong Conceptualization in Technology</u> <u>Enhanced Mathematics Instruction</u>. Paper presented at the Eleventh Society for Information Technology and Teacher Education International Conference. San Diego, CA.

Harnisch, D. L. & Connell, M. L. (October, 1999). <u>Critical Issues facing Higher Education: Teacher</u> preparation for 21st century. Paper presented at the 1999 NIME Fall Symposium. Tokyo:Japan.

Connell, M. L., & Abramovich, S. (March, 1999). <u>New tools for new thoughts: Effects of changing the</u> <u>"Tools-to-Think-With" on the elementary mathematics methods course</u>. Paper presented at the Tenth Society for Information Technology and Teacher Education International Conference. San Antonio, TX.

Connell, M. L. & Harnisch, D. L. (March, 1999). <u>Interpretation of SP Charts on Mathematics Applications</u>. Paper presented at the Tenth Society for Information Technology and Teacher Education International Conference. San Antonio, TX.

Bouniaev, M. & Connell, M. L. (March, 1999). <u>Constructivism and SSDMA as basis for technology use in</u> <u>mathematics teacher education</u>. Paper presented at the Tenth Society for Information Technology and Teacher Education International Conference. San Antonio, TX.

Connell, M. L. (December, 1998). <u>Is it meatloaf or a chocolate chip cookie?</u> <u>Transdisciplinary</u> <u>mathematics instruction</u>. Paper presented at the annual meeting of National Reading Congress. Austin, TX.

Williams, N. L., White, C. S., & Connell, M. L. (December, 1998). <u>Learning about teaching through</u> <u>Language: The role of literacy within transdisciplinary methods for preservice teachers.</u> Paper presented at the annual meeting of National Reading Congress. Austin, TX.

Connell, M. L., Kemper, J., White, C., & Williams, N. L. (June, 1998). <u>Use of the National Standards in a Transdisciplinary Teacher Education Program</u>. Paper presented at the National Academy on the Alignment of Standards and Teacher Development for Student Learning. Washington:D.C.

Connell, M. L., Kemper, J., White, C., & Williams, N. L. (March, 1998). <u>Technology as a Unifying Theme</u> <u>in a Transdisciplinary Teacher Education Program</u>. Paper presented at the Ninth Society for Information Technology and Teacher Education International Conference. Washington:D.C.

Connell, M. L., & Harnisch, D. L. (March, 1998). <u>Using Leonardo in teacher education methods courses</u>. Paper presented at the annual meeting of Society for Information Technology and Teacher Education. Washington:D.C.

Connell, M. L. (April, 1997). <u>Technology in constructivist mathematics classrooms</u>. Paper presented at the Eighth Society for Information Technology and Teacher Education International Conference. Orlando:FL.

Connell, M. L. (1997). AI<u>or IA: The choice is yours!</u> Paper presented at the Eighth Society for Information Technology and Teacher Education International Conference. Orlando:FL.

Freiberg, H. J., Connell, M. L., & Lorentz, J. (March, 1997). <u>The effects of socially constructed classroom</u> <u>management on student mathematics achievement in seven elementary schools</u>. Paper presented to the annual meeting of American Educational Research Association. San Francisco:CA.

Connell, M. L. (March, 1996). <u>Teaching prenumeration with "off the shelf" software</u>. Paper presented at the Sixth Society for Information Technology and Teacher Education International Conference. Phoenix, AZ.

Connell, M. L. & Bounieav, M. (March, 1996). <u>Constructivism and SSDMA - Implications of Two</u> <u>Learning Theories on Technology Use in Mathematics Teacher Education</u>. Paper presented at the Sixth Society for Information Technology and Teacher Education International Conference. Phoenix, AZ.

Connell, M. L. & Harnisch, D. (March, 1996). <u>A Multimedia Evaluation of an Innovative Middle School</u> <u>Technical Education Program</u>. Paper presented at the Sixth Society for Information Technology and Teacher Education International Conference. Phoenix, AZ.

Connell, M. L. (November, 1995). <u>A constructivist use of technology in Pre-Algebra</u>. Paper presented at the 18th annual meeting of the International Working Group for the Psychology of Mathematics Education. Columbus:OH.

Connell, M. L. (April, 1995). <u>Building a virtual mathematics community for elementary teacher</u> <u>candidates</u>. Paper presented to the annual meeting of American Educational Research Association. San Francisco:CA.

Connell, M. L. (April, 1995). <u>Building links between mathematical variables</u>. Invited roundtable presented at the annual meeting of American Educational Research Association. San Francisco:CA.

Connell, M. L. (March, 1995). <u>Student use of technology to build links between mathematical variables:</u> <u>Implications for teacher education</u>. Paper presented at the Fifth Society for Information Technology and Teacher Education International Conference. San Antonio, TX.

Connell, M. L., & Harnisch, D. L. (November, 1994). <u>Tools for knowledge construction: Toolbook and</u> <u>SPPPC in classroom settings</u>. Paper presented at the 17th annual meeting of the International Working Group for the Psychology of Mathematics Education. Baton Rouge:LA.

Connell, M. L. (September, 1994). <u>Making Mathematics: Teaching and learning mathematics in a</u> <u>technologically rich environment</u>. Paper presented to the 75th anniversary research symposium of the University of Illinois at Champaign Urbana. Champaign:IL

Buxton, W. M., & Connell, M. L. (April, 1994). <u>Elementary mathematics reform: A sociocultural</u> <u>analysis</u>. Paper presented to the annual meeting of American Educational Research Association. New Orleans:LA.

Harnisch, D. L., Sato, T., Zheng, P., Yamagi, S, & Connell, M. L. (April, 1994). <u>Concept mapping</u> <u>approach and its applications in instruction and assessment</u>. Paper presented to the annual meeting of National Council of Measurements in Education. New Orleans:LA.

Wentworth, N. & Connell, M. L. (March, 1994). <u>Parental perceptions of education, technology, and</u> <u>innovative mathematics instruction</u>. Paper presented at the Fourth Society for Information Technology and Teacher Education International Conference. Washington, D.C.

Connell, M. L., Peck, D. M., Buxton, W., Kilburn, D. (February, 1994). <u>True collaboration: An analysis of a conceptual change program in elementary mathematics</u>. Invited chapter presented to the annual meeting of the Association of Teacher Educators. Atlanta:GA.

Connell, M. L., Peck, D. M., Buxton, W. F., & Hess, N. (April, 1993). <u>Creating a mathematical culture in the elementary school</u>. Paper presented to the annual meeting of American Educational Research Association. Atlanta:GA.

Wentworth, N. & Connell, M. L., (April, 1993). <u>Parental folk theories about innovative mathematics</u> <u>instruction</u>. Paper presented to the annual meeting of American Educational Research Association. Atlanta:GA.

Connell, M. L. (March, 1993). <u>Teaching instructional design using technology</u>. Paper presented at the Third Society for Information Technology and Teacher Education International Conference. San Diego:CA.

Connell, M. L. (March, 1993). <u>A constructivist use of technology in elementary mathematics</u>. Paper presented at the Third Society for Information Technology and Teacher Education International Conference. San Diego:CA.

Connell, M. L. (March, 1993). <u>Technology enhanced cases</u>. Paper presented at the Third Society for Information Technology and Teacher Education International Conference. San Diego:CA.

Connell, M. L. (March, 1993). <u>Instructional design and technology</u>. Paper presentation at the Utah Technology Conference. Salt Lake City, Utah.

Connell, M. L., Peck, D. M., Buxton, W. F., & Kilburn, D. (April, 1992). <u>True collaboration: An analysis</u> of an elementary school project in mathematics. Paper presented to the annual meeting of American Educational Research Association. San Francisco:CA.

Connell, M. L. (April, 1992). <u>How do they know? An investigation into student mathematical conceptions</u> <u>and beliefs</u>. Paper presented to the annual meeting of American Educational Research Association. San Francisco:CA.

Stoddart, T., & Connell, M. L. (April, 1991). <u>The reciprocal relationship between content and pedagogy in learning and teaching mathematics and science</u>. Paper presented to the annual meeting of American Educational Research Association. Chicago: IL.

Connell, M. L., Peck, D. M. (April, 1991). <u>Report of a conceptual change intervention in elementary</u> <u>mathematics</u>. Paper presented to the annual meeting of American Educational Research Association. Chicago: IL.

Connell, M. L., Peck, D. M. (April, 1991). <u>Developing a pedagogically useful content knowledge in</u> <u>elementary mathematics</u>. Paper presented to the annual meeting of American Educational Research Association. Chicago: IL.

Stoddart, T., Connell, M. L., Stofflet, R. (April, 1991). <u>Restructuring teacher candidates views of teaching</u> <u>and learning</u>. Paper presented to the annual meeting of American Educational Research Association. Chicago: IL.

Connell, M. L., Kilburn, D., Peck, D. M., & Stoddart, T. (January, 1991). <u>Thoughts on university - school</u> <u>district collaboration and research</u>. Presentation to the National Meeting of the Holmes Group. Washington, D.C.

Connell, M. L., Peck, D. M. (October, 1990). <u>Developing a school district- university collaboration in</u> <u>preservice teacher education</u>. Paper presented to the Fall Meeting of the Holmes Group. Seattle: WA.

Connell, M. L. (July, 1990). <u>Using cases to restructure pedagogical and content knowledge in elementary</u> <u>mathematics</u>. Paper presented to the Mathematics Case Methods Roundtable sponsored by Far West Laboratory for Educational Research and Development. San Francisco: CA. Connell, M. L. (June, 1990). <u>Using networks of computers to maintain networks of people</u>. Paper presented to the IBM Seminar for Deans of Schools of Education. Salt Lake City: UT.

Connell, M. L. (April, 1990). <u>A difficulty in division: Evidence for a preliminary screening frame</u>. Paper presented to the annual meeting of American Educational Research Association. Boston: MA.

Connell, M. L. (November, 1989). <u>Suggested approaches for creating microcomputer referents</u>. Paper presented at the annual meeting of the Illinois Computing Educators. Tinley Park: IL.

Connell, M. L. (April, 1989). <u>Microcomputer referents in elementary mathematics: A sample approach</u>. Paper presented to the annual meeting of International Association of Computers in Education. San Francisco: CA.

Switzer, D. M., & Connell, M. L. (April, 1989). <u>Practical applications of student response analysis</u>. Paper presented at the annual meeting of National Council on Measurement in Education. San Francisco: CA.

Harnisch, D. L., Switzer, D. M., & Connell, M. L. (April, 1989). <u>Computerized assessment profiles for</u> <u>evaluating learner goals</u>. Paper presented at the annual meeting of International Association of Computers in Education. San Francisco: CA.

Harnisch, D. L., Switzer, D. M., & Connell, M. L. (February, 1989). <u>A reporting system for local</u> <u>assessment</u>. Paper presented to The role of technology in education conference: Emerging technologies. Arlington Heights: IL.

Harnisch, D. L., Switzer, D. M., & Connell, M. L. (November, 1988). <u>A reporting system for local</u> <u>assessment programs</u>. Paper presented to the annual meeting of the Illinois Computing Educators. Tinley Park: IL.

Connell, M. L. (April, 1988). <u>What counts in mathematical evaluation?</u> Paper presented at the annual meeting of the American Educational Research Association. New Orleans: LA.

Connell, M. L. & Ravlin, S. B. (April, 1988). <u>The flagpole factory: Providing a referent for linear</u> <u>equations</u>. Paper presented at the annual meeting of the International Association of Computers in Education. New Orleans: LA.

Keynotes and Invited Addresses

Connell, M. L. (November, 2016). <u>Mentoring Minds: Strategies to help students think critically</u>. Keynote address presented to the Mentoring Minds Seminar, University of Houston-Downtown.

Connell, M. L. (August, 2012). <u>Aligning High School Curriculum and Student Performance Expectations</u>. Keynote address presented to the Mathematics Summer Institute, University of Texas at Brownsville.

Connell, M. L. (June, 2012). <u>Cross-Disciplinary Suggestions for Post-Secondary Success</u>. Keynote address presented to the Partnerships for Post-Secondary Success Conference, University of Texas at Brownsville.

Connell, M. L. (February, 2005). <u>Action on Objects: A Model for Technology Enhanced Mathematics</u> <u>Instruction</u>. Keynote address presented to the Houston Community College/Houston Independent School District (HCC/HISD) Mathematics Leadership Group.

Connell, M. L. (September, 2002). <u>Using data to prepare students for the mathematics SAT</u>. Invited address to Aldine Independent School District.

Connell, M. L. (October, 2001). <u>Preparing teachers for tomorrow's technology enhanced classrooms</u>. Keynote address presented to the University of Nevada/Reno's PT³ conference.

Connell, M. L. & Stake, R. L. (April, 1996). Co-Discussants for <u>The revolution starts here: An evaluation</u> of a middle school technical education program. AERA Session #43.60

Connell, M. L. (October, 1996). <u>Teaching for Meaning in Mathematics</u>. Invited address presented to the Mathematics Teachers Summit sponsored by the Aldine Independent School District (AISD). Houston:TX.

Connell, M. L. (September, 1996). <u>Supporting Mathematical Thinking</u>. Keynote address presented to the Principals Summit sponsored by the Houston Independent School District (HISD). Houston:TX.

Connell, M. L. (October, 1995). <u>Teaching Meaningful Mathematics in the Middle School</u>. Invited address presented to the Southwest District Summit sponsored by the Houston Independent School District (HISD). Houston:TX.

Connell, M. L. (September, 1992). <u>Technology enhanced cases.</u> Invited address presented to the Using Cases In Teacher Education Conference co-sponsored by the University of Utah and Far West Labs. Snowbird:UT.

Connell, M. L. (June, 1992). <u>Faculty uses of ToolBook</u>. Invited workshop presented at I.B.M.'s annual meeting for Academic Information Systems (ACIS). San Diego:CA.

Blankenship, C., Cunningham, J., Connell, M. L., & Drew, C. (June, 1992). <u>Teacher preparation grant</u> <u>programs: Achievements and Aims</u>. Invited multimedia presentation at I.B.M.'s annual meeting for Academic Information Systems (ACIS). San Diego:CA.

Blankenship, C., Connell, M. L., & Drew, C. (October, 1991). <u>Teaching tomorrow's teachers with</u> <u>tomorrow's tools: The mission of the University of Utah Graduate School</u>. Invited multimedia presentation to IBM/OERI. Washington:D.C.

Connell, M. L., Kilburn, D., O'Keefe, P., Peck, D. M., & Stoddart, T. (November, 1990). <u>Developing a</u> <u>university - school district collaboration in preservice teacher education</u>. Invited address presented to the annual meeting of the Utah Association for Supervision of Curriculum Development. Salt Lake City: UT.

Connell, M. L. (1988). <u>Alternative grouping practices for teaching mathematics</u>. Invited address presented to the Urbana Schools 11th Annual Midwinter Conference. Urbana, Illinois. 1988.

Connell, M. L. (1985). <u>Educational pedagogy, philosophy, and computer usage</u>. Training seminar taught as part of the Utah State Office of Education: Garfield School District - Productivity Project.

Connell, M. L. (1984). <u>The Productivity Project: Creating a computer managed curriculum</u>. Invited presentation at the annual conference for Utah Small Rural Schools. Manti, Utah.

Connell, M. L. (1984). <u>The Tele-Learning Project: Progress and underlying idea</u>s. Invited presentation at the annual conference for Utah Small Rural Schools. Manti, Utah.

Connell, M. L. (1983). <u>Development of structural linkages in elementary mathematics</u>. Invited address presented to the Annual meeting of the Utah Association of Teachers of Mathematics. Salt Lake City, Utah, 1983.

Connell, M. L. (1983). <u>Conceptual testing and student placement in mathematics</u>. Invited address presented to the mathematics teachers summit of Granite School District.

Editorial Contributions and Reviews

<u>Open Mathematical Education Notes</u>. Editorial Advisory Board. (since 2016). <u>Computers in the Schools</u>. Mathematics Editor. (since 2015). <u>Journal of Family Strengths</u>. Book Review Editor. (since 2015). <u>Computers in the Schools</u>. Editorial Review Board. (since 2003). Journal of Technology and Teacher Education. Editorial Review Board. (1995-2004).

<u>Journal for Research in Mathematics Education</u>. Reviewer. (since 2000). <u>Journal of Educational Computing Research</u>. Reviewer. (since 1996). <u>Journal of Technology and Teacher Education</u>. Reviewer. (since 1995). <u>Focus on Learning Problems in Mathematics</u>. Reviewer. (since 1990).

<u>World Scientific Publishing Co.</u> Book Reviewer. (since 2014). <u>Wm. C. Brown Publishing Co</u>. Reviewer. (since 1991). <u>Allyn and Bacon Publishing Co</u>. Reviewer. (since 1992).

GRANTS

Recruiting and Preparing UHD Mathematics Majors for Houston-Area Classrooms: The UHD Noyce <u>Mathematics Teacher Scholarship Program</u>. (2011-2016). \$1,079,257. National Science Foundation. Evaluator.

<u>Transforming Mathematics Courses for Urban Pre-Service Teachers (TMC-UPT)</u>. (2010-2011). \$10,000. Texas College and Career Readiness Initiative. Co-Project Principal.

<u>Collaborative Research: Online Statistics Education: An Interactive Multimedia Course of Study II.</u> National Science Foundation. External Evaluator

<u>Quality Teacher Recruitment and Aid Consortium (Q-TRAC)</u>. (2006-2009). \$1,600,000. U.S. Department of Education Teacher Quality Enhancement Grants Program. Co-Project Principal.

<u>Middle School Mathematics Initiative</u>. (2005-2006) Sid W. Richardson Foundation. \$150,000. Co-Project Principal.

<u>Middle School Mathematics Program, Part 1</u>. (2003-2004). Teacher Quality Grant (CFDA 84.367B). \$300,000. Co-Project Principal.

<u>Middle School Mathematics Program, Part 2</u>. (2003-2004). Teacher Quality Grant (CFDA 84.367B). \$300,000. Co-Project Principal.

Expanding Pathways to Success in Science at University of Houston-Downtown and San Jacinto Community College. (2001-2006). STEP-Type I Grant. NSF 03-548. \$1,965,428. Senior Project Evaluator.

<u>Great Cities Universities Urban Educator Community Plan Grant for the Recruitment and Tracking of</u> <u>Middle School Teachers</u>. (2003-2004). \$17,000. Data Analyst.

<u>Great Cities Universities Urban Educator Community Plan Extension Grant for the Recruitment and</u> <u>Tracking of Middle School Teachers</u>. (2004-2005). \$53,750. Data Analyst.

Brigham Young University's Preparing Tomorrows Teachers to Use Technology (PT3) Grant. Senior Evaluator.

T.E.A.M.S. Collaborative teaching for collaborative teachers. University of Houston grant for instructional improvement. (1997–1998). Co-Project Principal

Indonesian Mentorship Program for Mathematics. Grant for Indonesian Textbook creation. (1997-1998). Content Specialist.

Indonesian Teacher Development Program for Mathematics. Indonesian Government Grant for Teacher Development. (1997-1998). Content Specialist.

Houston Independent School District (HISD) / University of Houston Middle School Mathematics Project. Director and Instructor. (1995-199). Project Principal.

University of Illinois / NEC SuperYuki Evaluation Team. (1995-1999). Co-Evaluator.

<u>University of Illinois / Pitsco, Inc., Synergistics Evaluation Project</u>. (1995-1998). Leader of CD-ROM Development Team.

Malaysian Mentorship Program for Mathematics. (1995). Content Specialist

Garfield School District's Educational Technology Initiative Program. (1991-1996). Senior Evaluator.

GSE Educational Technology Initiative. (1990-1992). Coordinator.

IBM-University of Utah Technology Grant. (1990-1991). Co-Principal.

<u>Hyper-Card Math = learning high order mathematical thinking skills</u>. Utah State Office of Education/Morgan School District. (1991-1992). Co-Principal.

<u>A shift in focus to meaningful mathematics education</u>. Utah State Office of Education/Salt Lake City School District. (1991-1993). Co-Principal.

<u>Valley Crest Computer Project</u>. Utah State Office of Education/Granite School District. (1989-1990). Co-Principal.

<u>Productivity Project in Contemporary Curriculum</u>. Utah State Office of Education/Garfield School District. (1983-1985). Principal.

<u>Tele-Learning Project</u>. Utah State Office of Education/Garfield School District. (1983-1985). Co-Principal.

VI. PROFESSIONAL SERVICE

Programs, Institutions and Professional Organizations

Society for Information Technology and Teacher Education (SITE).

(1993–2002)	Mathematics Council Chair.
(1995–2002)	Governance Board Member.
(1995–2004)	Program Committee.

 National Council of Teachers of Mathematics (NCTM),

 (2013-2015)
 Indianapolis Regional Conference Program Committee

National Council for Measurements in Education (NCME), (2000-2003) Web-Advisory Board.

Teacher Education Internet Server (TEIS)					
(1994-2000) Mathematics Curator.					
United States Congressional Office of Technological Assessment					
(1992-1993) Member of the evaluation team for the international study of information					
technology in teacher education.					
National Advisory Board for Courseware					
(1992-1994) IBM Corporation EduQuest Division. Atlanta, GA.					
Utab Council for Computers in Education (UCCE)					
Utah Council for Computers in Education (UCCE) (1985-1986) Region 11 Director.					
(1985-1986) Region 11 Director.					
University					
<u>University</u>					
University of Houston Faculty Senate. Senator. (1995-2005).					
<u>Oniversity of Houston Faculty Senate</u> . Senator. (1995-2005).					
University of Houston-Downtown Faculty Senate. Senator. (2015-2017).					
Legislative Affairs Committee.					
Faculty Affairs Committee.					
Director, Center for the Professional Development of Teaching UHD					
Chair of the Policy Committee.					
Member of the Unit Plan Committee.					
Member of the Rank and Tenure Committee.					
Member of the Curriculum Committee.					
Member of the Lesson Plan Ad Hoc Committee.					
Attended presentation of tenure track searches.					
Member of University Faculty Development Projects Committee.					
Member of the Department of Urban Education Impact Council					
Program Area Chair for Mathematics Education					

Retention, Promotion and Tenure Committee. (Served four times, chaired once)

Chair-Elect of the Faculty Executive Committee

Assessment and Institutional Effectiveness Committee.

Quantitative Methods Committee Early Childhood – 4th Implementation Task Force Infrastructure Strategic Planning Team. (2015-2016).

Constitutional Reform Committee NCATE Accreditation Committee

VII. <u>TEACHING EXPERIENCE</u>

University¹

Department	#	Level	Description	<u>University</u>
Educational Psychology	640	Grad	Collaborative Problem Solving in Education	Utah
Educational Studies	408	Under	Mathematics in Elementary Schools	Utah
Educational Studies	622	Grad	Theories of Instruction	Utah
Educational Studies	643	Grad	Mathematics in Elementary Schools	Utah
Educational Studies	667	Grad	Educational information technology	Utah
Educational Studies	680	Grad	Computer assisted instructional design	Utah
Educational Studies	684	Grad	Seminar in Education	Utah
Educational Studies	601	Grad	Teaching and learning strategies	Utah
Mathematics	405	Under	Mathematics for Elementary School Teachers I	Utah
Mathematics	406	Under	Mathematics for Elementary School Teachers II	Utah

Department	#	Level	Description	University
Elementary Education	4315	Under	Teaching Mathematics in the Elementary Grades	Houston
Curriculum & Instruction	6334	Grad	Mathematics for Young Children	Houston
Curriculum & Instruction	6335	Grad	Mathematics Methods for Elementary School	Houston
Curriculum & Instruction	6397	Grad	Topics in Middle School Mathematics	Houston
Curriculum & Instruction	6397	Grad	Theoretical Models of Mathematics Cognition	Houston
Curriculum & Instruction	7332	Grad	Models of Teaching and Learning Mathematics	Houston
Curriculum & Instruction	7340	Grad	Issues in Mathematics Education	Houston
Curriculum & Instruction	7341	Grad	Error Diagnosis and Evaluation in Mathematics	Houston
Curriculum & Instruction	7342	Grad	Evaluation of Mathematics Programs	Houston
Curriculum & Instruction	7344	Grad	Teaching Problem Solving with Computers	Houston
<u>Department</u>	#	Level	Description	<u>University</u>
EED	3312	Under	Teaching Mathematics in the Elementary Grades	UH-D
SOSE	3320	Under	Assessment and Evaluation of Children	UH-D
MAT	5311	Grad	Mathematics Methodology EC-6	UH-D
MAT	5316	Grad	Mathematics Methodology 4-8	UH-D

Public School

UHD

Grade	District	City, State	Years
5 th Grade	Jordan School District	Sandy, Utah	1985-1986.
5 th Grade	Garfield School District	Panguitch, Utah	1981-1983.
Gifted/Talented Math	Salt Lake City School District	Salt Lake City, Utah.	1979-1980.
6th Grade	Salt Lake City School District	Salt Lake City, Utah.	1979-1981.
Math In-service	Salt Lake City School District	Salt Lake City, Utah.	1980.

Freshman Seminar: Argument and Reasoning

1308 Under

¹ I have taught at three universities as a professor: The University of Utah, The University of Houston, and The University of Houston-Downtown. As each university uses a different course numbering system I have indicated the department, level and description of each course.