

CURRICULUM VITAE – VILMA MESA

October 2014

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EDUCATION

- Ph.D. 2000 Mathematics Education, University of Georgia, Athens, GA.
M.A. 1996 Mathematics Education, University of Georgia, Athens, GA.
B.S. 1987 Mathematics, University of Los Andes, Bogotá, Colombia.
B.S. 1986 Computer Science, University of Los Andes, Bogotá, Colombia.

PROFESSIONAL EXPERIENCE

- 2014-present Associate Professor, Mathematics Education, School of Education, University of Michigan, Ann Arbor.
- 2014-present Faculty Associate, Center for the Study of Higher and Post-Secondary Education, University of Michigan, Ann Arbor
- 2007-2014 Assistant Professor, Mathematics Education, School of Education, University of Michigan, Ann Arbor.
- 2005-2007 Assistant Professor and Research Scientist, Mathematics Education, School of Education, University of Michigan, Ann Arbor.
- 2003-2005 Instructional Consultant, Science-Technology-Engineering-Mathematics (STEM) disciplines, Center for Research on Learning and Teaching, University of Michigan, Ann Arbor.
- 2001-2003 Coordinator, Master's of Curriculum Development, School of Education, University of Michigan, Ann Arbor.
- 2000-2002 Postdoctoral Research Fellow, School of Education, University of Michigan, Ann Arbor.
- 1999-2000 Graduate Research Assistant, College of Education, Michigan State University, East Lansing, Michigan.
- 1998-1999 Graduate Student Instructor, College of Education, University of Georgia, Athens, GA.
- 1996-1998 Graduate Research Assistant, College of Education, University of Georgia, Athens, GA.
- 1996-present Research Consultant, “una empresa docente,” University of Los Andes, Bogotá, Colombia.
- 1988-1995 Research Scientist, “una empresa docente,” University of Los Andes, Bogotá, Colombia.
- 1985-1995 Lecturer, Mathematics Department, University of Los Andes, Bogotá, Colombia.
- 1989-1994 Systems Advisor for Strategic Planning, Pedro Gómez y Cía. S. A., Bogotá

- 1988-1989 Director, Technical Support Group, Centro Distrital de Sistematización y Servicios Técnicos, SISE, Bogotá.
- 1987-1988 Research Assistant, Centro Distrital de Sistematización y Servicios Técnicos, SISE, Bogotá, Colombia.
- 1986-1987 System Programmer, Ministry of Finances and Taxes, Bogotá, Colombia.

HONORS AND AWARDS

- 2010 Evan G. Pattishall and Helen Geib Pattishall Faculty Enhancement Award, School of Education, University of Michigan.
- 2009 Undergraduate Research Opportunity Program Outstanding Mentor Award, University of Michigan
- 1999 Doctoral Dissertation Award, Graduate School, University of Georgia.
- 1998 Graduate School Enhancement Award, University of Georgia.
- 1997 AERA Grants Program, Institute on Statistical Analysis for Educational Policy.
- 1997 Del Jones Memorial Scholarship Award, College of Education, University of Georgia.
- 1995-1996 American Association of University Women International Fellow.

FUNDED AND PENDING GRANTS

- 2015-2019 Co-Principal Investigator, National Science Foundation, Watch What You Say: Effects of Automated Feedback and Video-Based Professional Development on Elementary Mathematics Instruction and Student Learning. (Under review, \$2,306,459. Co-PIs: Kevin Miller, Kai Cortina, Mark Hoover, U-Michigan)
- 2015-2019 Co-Principal Investigator, Institute for Education Sciences, Watch What You Say: Improving Classroom Mathematics Discussion Through Automated Feedback and Professional Development. (Under review, \$2,824,762. Co-PIs: Kevin Miller, Kai Cortina, Mark Hoover, U-Michigan)
- 2013 summer Principal Investigator, Rackham Summer Student Fellowships (\$6,000).
- 2012-2014 Co-Principal Investigator, *Mathematical Association of America, Characteristics of Successful Programs in College Calculus* (\$110,988, Mathematical Association of America, NSF subcontract).
- 2012-2013 Principal Investigator, Mathematics Department, U-M, *Documenting the impact of the Inquiry Based Learning Project* (\$4,500).
- 2011-2012 Principal Investigator, Mathematics Department, U-M, *Documenting the impact of the Inquiry Based Learning Project* (\$4,500).
- 2011-2013 Principal Investigator, Educational Advancement Foundation, *Learning to Teach College Mathematics with Inquiry Based Learning* (\$45,504).
- 2010-2013 Co-Principal Investigator, Institute of Educational Sciences, *Making Room for Student Thinking: Using automated feedback, video-based professional development, and evidence-based recommendations to improve mathematical discussions*. Co-PIs: Kevin Miller, Kai Cortina, and Mark Thames (\$1,440,586).

- 2009 Principal Investigator, National Science Foundation, CAREER Award Supplement: *Teaching Mathematics Well in Community Colleges: Studying the Impact of Standards-Based Instructional Reform* (\$145,893).
- 2008-2013 Principal Investigator, National Science Foundation, CAREER Award: *Teaching Mathematics Well in Community Colleges: Studying the Impact of Standards-Based Instructional Reform* (\$698,158).
- 2008-2009 Principal Investigator, Mathematics Department, U-M: *Documenting the impact of the Inquiry Based Learning Project* (\$14,000).
- 2007-2008 Principal Investigator, Rackham School of Graduate Studies, Student Summer Support (\$4,000).
- 2007-2009 Principal Investigator, Mathematics Department, U-M: *Documenting the impact of the Inquiry Based Learning in Selected Courses in the Department* (\$14,000).
- 2007-2008 Co-Principal Investigator, College of Engineering, U-M: *Studying the impact of the Applied Honors Calculus course (Math 156) on the academic performance of College of Engineering students*. Co-PI, Cindy Finelli. (\$4,000).
- 2006-2007 Principal Investigator, Office of the Vice-President for Research, *Understanding the Role of Resources in Developing Collegiate Teaching Expertise: The Case of Mathematics Textbooks* (\$13,800).
- 2006 Rackham School of Graduate Studies Faculty Fellowship, *Is this the answer? Is this what I was supposed to do? Control structures in introductory calculus textbooks* (\$7,000).
- 2006 Association of Women in Mathematics. Travel grant (\$912).
- 2001-2002 Principal Investigator, Center for Research on Learning and Teaching, U-M, *Teachers' Use of High-School Mathematics Curriculum Materials*. Lecturer's Grant Award (\$2,000).

OTHER RESEARCH COLLABORATIONS

- 2006-present *Evaluation of Inquiry-Based Learning (IBL) courses*. PI: Ralph Spatzier, Mathematics Department, University of Michigan. I collect data on instruction in all sections that use IBL in teaching.
- 2005-2010 *Evaluation of the Douglass Houghton Scholars Program (DHSP)*. PI: Robert Megginson, LSA, University of Michigan. I collected data to assess the impact of the program.
- 2004-2006 *Survey of Factors Influencing Student Selection of Freshman Math Courses*. Co-PI Robert Krasny, Mathematics Department, University of Michigan. I collected and analyzed data to assess the impact of the program.
- 2000 *Uses of Cases of Mathematics Education to Enhance Instruction, (COMET)*. PIs: Margaret Smith, Edward A. Silver, and Mary Kay Stein. I assessed content of case studies.
- 2001 *Analysis of mathematics portfolios submitted by early adolescence teachers seeking National Board for Professional Teaching Standards (NBPTS) certification*. PIs: Edward A. Silver and Gail P. Baxter. I led the analysis team for this project.
- 2001 *Research on the uses of curriculum materials in high-school algebra*. I collected data on one high school algebra teacher using traditional methods.

2002 *Validation project of the Connecticut BEST program for certification of mathematics teachers (Connecticut)*. PI: Pamela Moss. I rated student portfolios.

PUBLICATIONS – JOURNALS (* INDICATES REFEREED JOURNALS)

1. *Gueudet, G., Buteau, C., **Mesa, V.**, & Misfeldt, M. (2014). Technologies, resources, and instruments in university mathematics education. *Research in Mathematics Education*. 16(2), 139-155. doi: 10.1080/14794802.2014.918349
2. *White, N. J., & **Mesa, V.** (2014). Describing cognitive orientation of calculus I tasks across different types of coursework. *ZDM Mathematics Education* 46(4), 675-690. doi: 10.1007/s1185801405889
3. ***Mesa, V.**, Wladis, C., & Watkins, L. (2014). Research problems in community college mathematics education: Testing the boundaries of K-12 research. *Journal for Research in Mathematics Education* 45, 173-193.
4. ***Mesa, V.**, Celis, S., & Lande, E. (2014). Teaching approaches of community college mathematics faculty: Do they relate to classroom practices? *American Educational Research Journal* 52, 117-151.
5. *Bressoud, D. M., Carlson, M., **Mesa, V.**, & Rasmussen, C. L. (2013). The calculus student: Insights from the MAA national study. *International Journal of Mathematical Education in Science and Technology*. doi: 10.1080/0020739X.2013.798874
6. ***Mesa, V.**, Suh, H., Blake, T., Whittemore, T. (2013). Examples in college algebra textbooks: Opportunities for students' learning. *Problems, Resources, and Issues, in Undergraduate Mathematics Studies*, 23 (1), 76-105.
7. Sitomer, A., Ström, A., **Mesa, V.**, Duranczyk, I., Nabb, K., Smith, J., & Yannotta, M. (2012). Moving from anecdote to evidence: A proposed research agenda in community college mathematics education. *MathAmatyc Educator*, 4(1), 34-39.
8. ***Mesa, V.** (2012). Achievement goal orientation of community college mathematics students and the misalignment of instructors' perceptions. *Community College Review*, 40(1), 46-74. DOI: 10.1177/0091552111435663
9. ***Mesa, V.**, & Griffiths, B. (2012). Textbook mediation of teaching: An example from tertiary mathematics instructors. *Educational Studies in Mathematics*, 79 (1), 85-107.
10. ***Mesa, V.** (2011). Similarities and differences in classroom interaction between remedial and college mathematics classrooms in a community college. *Journal of Excellence in College Teaching*, 22 (4) 21-56.
11. Finelli, C. J., Bergom, I., & **Mesa, V.** (2011). Student teams in the engineering classroom and beyond: Setting up students for success. *CRLT Occasional Papers*, 29, 1-12.

12. ***Mesa, V.**, & Herbst, P. (2011). Designing representations of trigonometry instruction to study the rationality of community college teaching. *ZDM International Journal of Mathematics Education* 43, 41-52.
13. *Meyer, J., Elsey, M., & **Mesa, V.** (2010). Students' perceptions of lesson objectives in introductory mathematics courses taught by teaching assistants. *Studies in Graduate and Professional Student Development* 13, 103-121.
14. ***Mesa, V.** (2010). Examples in textbooks: Examining their potential for developing metacognitive knowledge. *MathAmatyc*, 2(1), 50-55.
15. ***Mesa, V.**, & Chang, P. (2010). The language of engagement in two highly interactive undergraduate mathematics classrooms. *Linguistics and Education*, 21, 83-100.
16. ***Mesa, V.** (2010). Student participation in mathematics lessons taught by seven successful community college instructors. *Adults Learning Mathematics* 5, 64-88.
17. ***Mesa V.** (2010). Strategies for controlling the work in mathematics textbooks for introductory calculus. *Research in Collegiate Mathematics Education* 16, 235-265.
18. *Charalambous, C., Delaney, S., Hsu, A., & **Mesa, V.** (2010). The addition and subtraction of fractions in the textbooks of three countries: A comparative analysis. *Mathematical Thinking and Learning*, 12 (2), 117-151.
19. Elsey, M., Meyer, J., **Mesa, V.** (January, 2010). *Teaching time savers: Thinking about activities that make every minute count. MAA Focus*, p. 12
20. ***Mesa, V.**, Jaquette, O., & Finelli, C. (2009). Measuring the impact of a course on students' success. *Journal of Engineering Education*, 98(3), 349-359.
21. *Silver, E. A., **Mesa, V.**, Morris, K., Star, J., & Benken, B., (2009). Teaching for understanding: An analysis of mathematics lessons submitted by teachers seeking NBPTS certification. *American Educational Research Journal*, (46), 501-531.
22. **Mesa, V.** (2008). Solving problems on functions: The role of the graphing calculator. *Revista PNA*, 2(3), 109-135.
23. ***Mesa, V.** (2007). Solving problems on functions: The role of the graphing calculator. *Focus on learning problems in mathematics* 29, (3), 30-54.
24. **Mesa, V.** (2004). JRME in the global village: Parlez vous français? Habla ud. Español? *Journal for Research in Mathematics Education*, 35, 2-4.
25. ***Mesa, V.** (2004). Characterizing practices associated with functions in middle school textbooks: An empirical approach. *Educational Studies in Mathematics*, 56, 255-286.
26. **Mesa, V.**, & Valero, P. (2003). Two doctoral programs in mathematics education. *Revista EMA: Investigación e innovación en educación matemática*, 9, 10-27.

27. **Mesa, V.** & Valero, P. (2001). Dos experiencias de formación doctoral: Objetivos, disciplinariedad, enfoques y estrategias [Two experiences in doctoral preparation: Objectives, disciplinarity, perspectives, and strategies]. In L. Rico (Ed.) *Iniciación a la investigación en didáctica de la matemática: Homenaje al profesor Mauricio Castro* (pp. 39-56). University of Granada: Departamento de Didáctica de la Matemática.
28. **Mesa, V.** (2000). De viva voz: Instantes en el quehacer docente de maestros [With their own voice: Snapshots of teachers' daily practice]. [Review of the book *Implementing standards-based mathematics instruction*, by M. K. Stein, M. S. Smith, M. Henningsen, & E. A. Silver]. *Revista Educación Matemática*, 6, 56-68.
29. **Mesa, V.** (1998). What activities would I like to promote in a doctoral program? In T. Lingefjärd & G. Dahland (Eds.), *Research in mathematics education: A report from a follow-up conference after PME 1997* (pp. 73-79). Gothenburg University: Gothenburg.
30. **Mesa, V.** & Valero, P. (1998). Dilemas de la formación de investigadores en educación matemática [Challenges for the preparation of researchers in mathematics education]. *Revista Educación Matemática*, 3, 133-146.
31. **Mesa, V. M.** (1995). Lo bueno, lo malo y lo feo de un curso de precálculo con calculadoras gráficas [The good, the bad, and the ugly of a precalculus course using graphing calculators]. *Revista Educación Matemática*, 1, 115-124.

PUBLICATIONS – CHAPTERS IN EDITED BOOKS

32. **Mesa, V.** (in press). *Ruminations on the generated curriculum and reform in community college mathematics: An essay in honor of Jeremy Kilpatrick*. In E. A. Silver & C. Keitel, (Eds.) *Pursuing excellence in mathematics education: A festschrift to honor Jeremy Kilpatrick*. Dordrecht, The Netherlands: Springer.
33. **Mesa, V.,** & Leckrone, L. (2014). Assessment of mathematics teacher knowledge. In S. Lerman (Ed.), *Encyclopedia of mathematics education* (pp. 48-51). Dordrecht, The Netherlands: Springer.
34. **Mesa, V.,** & Lande, E. (in press). Methodological considerations in the analysis of classroom interaction in community college trigonometry. In Y. Li, E. A. Silver & S. Li (Eds.), *Transforming math instruction: Multiple approaches and practices*. The Netherlands: Springer.
35. **Mesa, V.,** Gómez, P., & Cheah, U. (2013). Impact of international studies of student achievement on mathematics teaching and learning. In M. A. Clements, A. Bishop, C. Keitel, J. Kilpatrick & F. Leung (Eds.), *Third international handbook of mathematics education*. (pp. 861-900) New York: Springer.
36. Gómez, P., **Mesa, V.,** & González, M. J. (2011). Negotiation of meaning in outside of the classroom group assignments. In S. Sbaragli (Ed.), *La matematica e la sua didattica, quarant'anni di impegno [Mathematics and its didactics, forty years of commitment]* (pp. 111-114). Bologna: University of Bologna.

37. **Mesa, V.**, & Megginson, R. (2011). Equity and quality in a program for under-represented students at an elite university. In B. Atweh, M. Graven, W. Secada & P. Valero (Eds.), *Mapping equity and quality agendas in mathematics education*, (pp. 569-584). New York: Springer.
38. Silver, E. A., & **Mesa, V.** (2011). Highly accomplished teachers of mathematics and effective instructional practice: Probing the intersection. In Y. Li & G. Kaiser, *Expertise in mathematics instruction: An international perspective*, (pp. 63-84). New York: Springer.
39. Kilpatrick, J., **Mesa, V.**, & Sloan, F. (2007). U.S. algebra performance viewed internationally. In T. Loveless (Ed.), *Lessons learned: What international assessments tell us about math achievement* (pp. 85-126). Washington, DC: Brookings Institution Press.
40. Mesa V., & Kilpatrick, J. (1998, September). *The content of mathematics education around the world*. Paper prepared for the second committee meeting of the National Academy of Sciences' project on Mathematics and Science Education Around the World: Continuing to Learn from TIMSS, Woods Hole, MA.

PUBLICATIONS – BOOKS

41. Bressoud, D., Mesa, V., Rasmussen, C. (under review). Findings from the *Characteristics of Successful Programs in College Calculus*, an MAA-Notes volume.
42. **Mesa, V.** (2009). *Conceptions of function in textbooks from eighteen countries: An empirical analysis of middle school textbooks from the Third International Mathematics and Science Study*. Saarbrücken, Germany: VDM Verlag Dr Müller Atkiengesellschaft.

PUBLICATIONS - TEXTBOOKS

43. Gómez, P., & **Mesa, V. M** (Eds.) (1996). *Situaciones problemáticas en pre-cálculo* [Problematic situations in Pre-calculus]. Mexico & Bogotá: Editorial Iberoamérica & una empresa docente.
44. Perry, P., **Mesa, V.**, Fernández, F. & Gómez, P. (1996). *Matemáticas, azar, sociedad: Conceptos básicos de estadística*. [Mathematics, chance, and society: Basic statistics concepts]. Mexico & Bogotá: Editorial Iberoamérica & una empresa docente.
45. Fernández, F., **Mesa, V.**, Gómez, P., & Perry, P. (1993). *Estadística y sociedad* [Statistics and society]. Bogotá: una empresa docente.

MANUSCRIPTS UNDER REVIEW

46. **Mesa, V.**, (2014). *Mathematics education in community colleges*. Chapter for the third Handbook in Research in Mathematics Education. National Council of Teachers of Mathematics, Editor: Jinfu Cai.

47. **Mesa, V.**, Burn, H., White, N. (2014). Basic good teaching in the *Characteristics of Successful Programs in College Calculus*. For MAA-Notes volume, Findings from the *Characteristics of Successful Programs in College Calculus*. Editors: David Bressoud, Vilma Mesa, Chris Rasmussen.
48. Burn, H., **Mesa, V.** (2014). Curriculum in the *Characteristics of Successful Programs in College Calculus*. For MAA-Notes volume, findings from the *Characteristics of Successful Programs in College Calculus*. Editors: David Bressoud, Vilma Mesa, Chris Rasmussen.
49. Delaney, S., Hsu, H.-Y., **Mesa, V.**, & Charalambous, C. (2010). *Parts of the whole: What we can learn from mathematics textbooks in other countries*. Manuscript submitted for publication.
50. Wang, Z., Miller, K., Cortina, K.S., Hoover, M., **Mesa, V.**, Chamberlain, L. (2014). Watch what you say: using speech-processing to promote student discussion in the classroom. Manuscript under review (*Learning and Instruction*)

MANUSCRIPTS IN PROGRESS

51. **Mesa, V.**, Cawley, A. (2014). *Faculty knowledge of teaching in context in inquiry-based learning mathematics*. University of Michigan, Ann Arbor, MI.
52. **Mesa, V.**, Cox, R., Reason, R., Lattuca, L., (2014). *Investigating student learning in higher education: Where is the learning?* University of Michigan, Ann Arbor, MI.
53. **Mesa, V.**, & Goldstein, B. (2013). *An analysis of conceptions of inverse trigonometric functions*. University of Michigan, Ann Arbor, MI.
54. **Mesa, V.**, & Leckrone, L. (2013). *Cognitive processes and knowledge in examples in community college trigonometry lessons*. University of Michigan, Ann Arbor, MI.
55. White, N., Blum, C., & **Mesa, V.** (2013). *Task analysis across different contexts in calculus I*. University of Michigan, Ann Arbor, MI.
56. **Mesa, V.**, & Celis, S. (2013, April). *Investigating professional obligations in teaching trigonometry in community colleges*. University of Michigan, Ann Arbor.
57. **Mesa, V.** (2008). *Instruction and success in community colleges*. University of Michigan, Ann Arbor, MI.

Technical Reports

58. Hsu, E., **Mesa, V.**, & The Calculus Case Collective. (2014). *Synthesizing measures of institutional success*. CSPCC-Technical Report #1. Mathematical Association of America. Washington D.C.
59. Monroe, X., & **Mesa, V.** (2013). *Inquiry Based Learning Project: Summary of focus groups, Winter 2014*. Technical Report. University of Michigan, Ann Arbor, MI.

60. Monroe, X., & **Mesa, V.** (2013). *Inquiry Based Learning Project: Summary of focus groups, Fall 2013*. Technical Report. University of Michigan, Ann Arbor, MI.
61. Bull, R., & **Mesa, V.** (2013). *Inquiry Based Learning Project: Summary of focus groups, Winter 2013*. Technical Report. University of Michigan, Ann Arbor, MI.
62. Bull, R., & **Mesa, V.** (2012). *Inquiry Based Learning Project: Summary of focus groups, Fall 2012*. Technical Report. University of Michigan, Ann Arbor, MI.
63. **Mesa, V.**, Ström, A., Sitomer, A., & Yannota, M. (2012). *Moving from anecdote to evidence: The need for a research agenda in community college mathematics education*. Ann Arbor: University of Michigan, DeepBlue Collection.
64. Marshall, S., **Mesa, V.**, & Whittemore, T. (2012). *Inquiry Based Learning Project: Summary of focus groups, Winter 2012*. Technical Report. University of Michigan, Ann Arbor, MI.
65. Marshall, S., **Mesa, V.**, & Whittemore, T. (2011). *Inquiry Based Learning Project: Summary of focus groups, Fall 2011*. Technical Report. University of Michigan, Ann Arbor, MI.
66. Lattuca, L. R., & **Mesa, V.** (2011). *Report of the external evaluation team, Year 2 NSF-PRISM: Mathematics in Life Science, University of Missouri*. Ann Arbor, MI: University of Michigan.
67. Whittemore, T., & **Mesa, V.** (2011). *Inquiry Based Learning Project: Summary of focus groups, Winter 2011* (Technical Report). Ann Arbor, MI: University of Michigan.
68. Whittemore, T., & **Mesa, V.** (2010). *Inquiry Based Learning Project: Summary of focus groups, Fall 2010* (Technical Report). Ann Arbor, MI: University of Michigan.
69. **Mesa, V.**, & Whittemore, T. (2011). *Inquiry Based Learning Project: Mathematics 176, 351, 389, 489, Winter 2010* (Technical Report). Ann Arbor, MI: University of Michigan.
70. **Mesa, V.**, & Whittemore, T. (2010). *Inquiry Based Learning Project: Mathematics 176, 351, 389, 489, Winter 2010* (Technical Report). Ann Arbor, MI: University of Michigan.
71. **Mesa, V.**, & Cheng, A. (2009). *Inquiry Based Learning Project at the Math Department, University of Michigan: Analysis of data from Fall 2004 to Winter 2008* (Technical Report). Ann Arbor, MI: University of Michigan.
72. **Mesa, V.** (2009). *Inquiry Based Methods Project: Mathematics 175, 351, and 385, Fall 2008*. University of Michigan.
73. **Mesa, V.** (2008). *Evaluation of the Douglass Houghton Scholars Program: Second year report*. Ann Arbor: University of Michigan.
74. **Mesa, V.** & Cheng, A. (2008). *Inquiry Based Methods Project: Mathematics 175 and 385, Fall 2007*. University of Michigan.
75. **Mesa, V.** (2007). *Evaluation of the Douglass Houghton Scholars Program: First year report*. Ann Arbor: University of Michigan.

76. **Mesa, V.**, & Megginson, R. (2006). *Evaluation of the Douglass Houghton Scholars Program* (Project Description). Ann Arbor: University of Michigan.
77. Krasny, R., & **Mesa, V.** (2006). *Survey of factors influencing student selection of freshman math courses: Follow-up*. Ann Arbor: University of Michigan
78. Krasny, R., & **Mesa, V.** (2005). *Survey of factors influencing student selection of freshman math courses at the University of Michigan*. Ann Arbor: University of Michigan.

Papers in Conferences and in Conference Proceedings:

79. Burn, H., **Mesa, V.**, White, N. (November, 2014). The MAA-CSPCC study: Two-year colleges case study findings. *Paper presented at the Annual AMATYC Conference*, Nashville, TN.
80. **Mesa, V.**, Burn, H., White, N. (October, 2014). Characteristics of Successful Programs in College Calculus project: Findings from the two-year colleges case studies. *Paper presented at the Transforming Institutions in STEM Conference*, Indianapolis, IN.
81. **Mesa, V.**, Burn, H., White, N. (October, 2014). "Good teaching" in the national study of Calculus project. *Paper presented at the Annual MichMATYC Conference*, Benton Harbor, MI.
82. **Mesa, V.**, Cawley, A., & Ko, I. (June, 2014). Inquiry-Based Learning in mathematics classrooms: Faculty concerns with small group work. *Paper presented at the R. L. Moore Legacy Conference*, Denver, CO.
83. **Mesa, V.**, White, N., Burn, H. (February, 2014). Academic and social integration revealed in characteristics of successful programs in college calculus project: the two-year college context. *Seventeenth Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education Conference on Research in Undergraduate Mathematics Education*. Denver, CO.
84. White, N., **Mesa, V.**, Blum, C. (February, 2014) Characterizing mathematical complexity of tasks in Calculus I. *Seventeenth Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education Conference on Research in Undergraduate Mathematics Education*. Denver, CO.
85. Ko, I. & **Mesa, V.** (February, 2014). Investigating instructors' concerns about assessments in Inquiry-Based Learning methods courses. *Seventeenth Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education Conference on Research in Undergraduate Mathematics Education*. Denver, CO.
86. Whittemore, T., & Mesa, (February, 2014). Assessment in undergraduate Inquiry-Based Learning mathematics courses. *Seventeenth Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education Conference on Research in Undergraduate Mathematics Education*. Denver, CO.
87. **Mesa, V.** & Goldstein, B. (February, 2014). Conceptions of inverse trigonometric functions in community college lectures, textbooks, and student interviews. *Seventeenth Special Interest*

Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education Conference on Research in Undergraduate Mathematics Education. Denver, CO.

88. Leckrone, L. & **Mesa, V.** (February, 2014). Mathematical tasks and cognitive demands in trigonometry lessons. *Seventeenth Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education Conference on Research in Undergraduate Mathematics Education. Denver, CO.*
89. **Mesa, V.,** & Celis, S. (2013, April). *Investigating professional obligations in teaching trigonometry in community colleges.* Paper to be presented at the American Educational Research Association Annual Meeting, San Francisco, CA.
90. **Mesa, V.,** & The Teaching Mathematics in Community Colleges Research Group. (2012, July). *Using community college students' understanding of a trigonometric statement to study their instructors' practical rationality in teaching.* Paper presented at the International Congress of Mathematical Education, Seoul, South Korea.
91. **Mesa, V.,** Lande, E., & Whittemore, T. (2012, July). *On the analysis of classroom interaction in community college trigonometry classes.* Paper presented at the 36th Conference of the International Group for the Psychology of Mathematical Education, Taipei, Taiwan.
92. **Mesa, V.,** Lande, E., & Whittemore, T. (2012, July). *Methodological considerations in the analysis of classroom interaction in community college trigonometry.* Paper presented at the 12th International Congress on Mathematical Education, Seoul, Korea.
93. **Mesa, V.** (2012). *Instructors' practical rationality in community college trigonometry.* Paper presented at the 36th Conference of the International Group for the Psychology of Mathematical Education, Taipei, Taiwan.
94. Whittemore, T., **Mesa, V.,** & Sully, M. (2012, June). *Instructors' concerns about teaching Inquiry-Based Learning math courses: A preliminary report.* Paper presented at the 15th Annual Legacy of R. L. Moore Conference, Austin, TX.
95. **Mesa, V.** (2012). *Using community college students' understanding of a trigonometric statement to study their instructors' practical rationality in teaching.* Paper presented at the Annual Conference of the SIG/MAA Research in Undergraduate Mathematics Education Portland, Oregon.
96. Aaron, W., **Mesa, V.,** & Herbst, P. (2012). *Challenges and tools in the facilitation of combined professional development and research sessions: The case of community college instructors.* Paper presented at the Annual Conference of the SIG/MAA Research in Undergraduate Mathematics Education Portland, Oregon.
97. **Mesa, V.** (2011, April). *Achievement goal orientation of community college mathematics students and the misalignment of instructors' perceptions.* Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
98. **Mesa, V.,** & Celis, S. (2011, April). *Teaching approaches of community college mathematics faculty: Do they relate to classroom questioning practices?* Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.

99. **Mesa, V.,** & Celis, S. (2011, February). *Teaching approaches of community college mathematics faculty: Do teaching approaches relate to classroom practices?* Paper presented at the 14th Annual Conference on Research on Undergraduate Mathematics Education, Portland, Oregon.
100. **Mesa, V.,** & Herbst, P. (2011, February). *Using animations of teaching to probe the didactical contract in community college mathematics.* Paper presented at the 14th Annual Conference on Research on Undergraduate Mathematics Education, Portland, Oregon.
101. **Mesa, V.,** Suh, H., Blake, T., & Whittemore, T. (2011, February). *An analysis of examples in college algebra textbooks for community colleges: Opportunities for student learning.* Paper presented at the 14th Annual Conference on Research on Undergraduate Mathematics Education, Portland, Oregon.
102. Suh, H., **Mesa, V.,** Blake, T., & Whittemore, T. (2011, April). *Cognitive demand and opportunity to learn strategies for 'controlling the work' in examples in college algebra textbooks.* Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
103. **Mesa, V.,** Ström, A., Thompson, P. W., & Shaughnessy, M. (2010, November). *Investigating teaching practices through systematic inquiry.* Paper presented at the Annual Meeting of the American Mathematical Association of Two-Year Colleges, Boston, MA.
104. **Mesa, V.,** & Lande, E. (2010, November). *Math remediation in the US: Recent results.* Paper presented at the Pre-Conference Workshop, Entering College without Mathematics Prerequisites, Boston, MA.
105. **Mesa, V.,** Krevisky, S., & Cleaves, C. (2010, November). *Entering college without mathematics pre-requisites.* Paper presented at the Pre-Conference Workshop, Annual Meeting of the American Mathematical Association of Two-Year Colleges International Education Subcommittee, Boston, MA.
106. Suh, H., **Mesa, V.,** Blake, T., & Whittemore, T. (2010, October). *An analysis of examples in college algebra textbooks: Opportunities for student learning.* Paper presented at the Annual Meeting of the Michigan Chapter of the American Mathematical Association of Two-Year Colleges.
107. **Mesa, V.** (2009, November). *Similarities and differences in classroom interaction between pre-college and developmental mathematics classrooms in a community college.* Paper presented at the Association for the Study of Higher Education, Vancouver, BC.
108. **Mesa, V.** (2009, November). *Opportunity to learn, grades, and success in mathematics at community colleges.* Paper presented at the Association for the Study of Higher Education, Vancouver, BC.
109. **Mesa, V.** (2009, November). *Investigating instruction in pre-STEM mathematics courses at a community college.* Paper presented at the Association for the Study of Higher Education, Vancouver, BC.
110. **Mesa, V.,** & Chang, P. (2009, April). *The language of engagement in two highly interactive undergraduate mathematics classrooms.* Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.

111. **Mesa, V.** (2009, April). *Analysis of classroom interaction in mathematics classrooms in a community college*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
112. **Mesa, V.,** & Chang, P. (2008). Instructors' language in two undergraduate mathematics classroom. In O. Figueras, J. L. Cortina, S. Alatorre, T. Rojano & A. Sepúlveda (Eds.), *32nd International Meeting of the Psychology of Mathematics Education Group* (Vol. 3, pp. 367-364). Morelia, Mexico: Centro de Investigación y Estudios Avanzados del IPN.
113. **Mesa, V.,** Boyle-Heimann, K., Mosher, B., Rhea, K., & Megginson, R. (2007, April). *The Douglass Houghton Scholars Program: Lessons learned in the first year*. Paper presented at the Diversity Summit, Educating a STEM Workforce: New Strategies for U-M and the State of Michigan, University of Michigan, Ann Arbor.
114. Delaney, S., Charalambous, C., Hsu, A., & **Mesa, V.** (2007). The treatment of addition and subtraction of fractions in Cypriot, Irish, and Taiwanese textbooks. In J.-H. Woo, H.-C. Lew, K.-S. Park & D.-Y. Seo (Eds.), *31st International Meeting of the International Group of the Psychology of Mathematics Education* (Vol. 2, pp. 193-200). Seoul, Korea.
115. Kilpatrick, J., **Mesa, V.,** & Sloan, F. (2006, November). *U.S. algebra teaching and learning viewed internationally*. Paper presented at the Second IEA International Research Conference, Brookings Institution, Washington, DC.
116. Finelli, C. J., Gottfried, A. C., Kaplan, M. L., **Mesa, V. M.,** O'Neal, C. M., & Piontek, M. E. (2006, June). Evaluating methods to improve teaching in engineering. *Proceedings of the 2006 ASEE Annual Conference and Exposition*. Chicago, IL.
117. **Mesa, V.** & Saunders, S. (2003). Integrating equity and complex social problems in mathematics teacher education. In J. Zilox, N. Pateman, & B. Dogherty (Eds.). *Proceedings of the 27th Conference of the International Group of the Psychology of Mathematics Education*. Oahu, Hawaii: University of Hawaii.
118. **Mesa, V.,** & Wilson, P. (2003, January). *Two approaches to a history of mathematics course for future mathematics teachers*. Paper presented at the Joint Meeting of the Mathematical American Association and the American Mathematical Society, Baltimore, MD.
119. **Mesa, V.** (2002). Uses of curriculum materials in high-school algebra: The case of an "old-fashioned" teacher. In D. Mewborn (Ed.) *Proceedings of the 25th Conference of the Psychology of Mathematics Education-North American Chapter*. Athens, GA: University of Georgia.
120. **Mesa, V.,** & Saunders, S. (2002). Crafting experiences within a social justice perspective for teachers in urban settings. In D. Mewborn (Ed.), *Proceedings of the 25th Conference of the Psychology of Mathematics Education-North American Chapter* (Vol. 1, pp. 159-162). Athens, GA: University of Georgia.
121. Silver, E. A., **Mesa, V.,** Benken, B., Mairs, A., Morris, K., & Star, J. (2002, April). *Characterizing teaching and assessing for understanding in middle grades mathematics: An examination of best practice portfolio submissions to NBPTS*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

122. **Mesa, V.** (2001). Functions in middle school mathematics textbooks: Implications for a functional approach to algebra. In H. Chick, K. Stacey, Jill Vincent, & John Vincent (Eds.), *Proceedings of the 12th International Committee on Mathematics Instruction (ICMI) Study Conference: The future of the teaching and learning of algebra* (Vol. 2, pp. 454-461). University of Melbourne, Melbourne, Australia.
123. **Mesa, V.** (2001, April). *Conceptions of function present in seventh- and eighth-grade textbooks from fifteen countries*. Paper presented at the American Educational Research Association, Seattle, WA.
124. **Mesa, V.** (2001). Prototypical uses of function present in seventh- and eighth-grade textbooks from fifteen countries. In M. v. Heuvel-Panhuizen (Ed.), *Proceedings of the 25th conference of the International Group for the Psychology of Mathematics Education* (Vol. 3, pp. 367-374). Utrecht: Freudenthal Institute.
125. **Mesa, V.** (1998, April). *A review of literature on under achievement of minorities in mathematics*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA. (ERIC Document Reproduction Service No. ED 428 113)
126. **Mesa, V.** & Herbst, P. (1997). A problem solving session designed to explore the efficacy of similes of learning and teaching mathematics. In J. Dossey, J. Swafford, M. Parmantie, & A. Dossey (Eds.), *Proceedings of the 19th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 331-338). Bloomington, Illinois: Illinois State University.
127. **Mesa, V. M.** (1997). The use of the graphing calculator in solving problems on functions. In E. Pehkonen (Ed.), *Proceedings of the 21st Conference of the International Group for the Psychology of Mathematics Education* (Vol. 3, pp. 240-247). Lahti, Finland: University of Helsinki.
128. **Mesa, V.** & Gómez, P. (1996). Graphing calculators and pre-calculus: An exploration of some aspects of students' understanding. In L. Puig & A. Gutiérrez (Eds.), *Psychology of Mathematics Education*, (Vol. 3, pp. 391-398). Valencia: University of Valencia.
129. Perry, P. **Mesa, V.**, Fernández, F. & Gómez, P. (1995, August). *Mathematics, chance, and society: An experiment on the teaching and learning of undergraduate statistics*. Paper presented at the Ninth Inter-American Conference of Mathematics Education. Santiago de Chile.
130. Carulla, C., Gómez, P. & **Mesa, V.** (1995, August). *A priori and a posteriori analysis of didactic situations in the mathematics classroom*. Paper presented at the Ninth Inter-American Conference of Mathematics Education. Santiago de Chile.

TALKS & WORKSHOPS [* DENOTES AN INVITED PRESENTATION]

131. ***Mesa, V.** & Celis, S. (2013, April). *Obligaciones profesionales en la enseñanza de la trigonometría en "community colleges"* [Professional obligations in teaching trigonometry in community colleges.] Conferencias Virtuales del Grupo de Educación Matemática y Análisis Didáctico, Universidad de Los Andes, Bogotá, Colombia.

132. ***Mesa, V.** & Celis, S. (2013, January). *Investigating professional obligations in teaching trigonometry in community colleges*. Learning Sciences Research Colloquium, College of Education, University of Haifa, Israel.
133. ***Mesa, V.** (2012, November). *Studying instructional interactions in community colleges: Lessons from mathematics classrooms*. Presidential Panel, Annual Meeting of the Association for the Study of Higher Education, Las Vegas, NV.
134. ***Mesa, V.,** & The Teaching Mathematics in Community Colleges Research Group. (2012, October). *Making sense of teaching: Different ways to look at the mathematics classroom*. Keynote address delivered at the Annual Meeting of MichMATYC, Monroe Community College, MI.
135. ***Mesa, V.** (2012, July). *Investigating the rationality of teacher decisions: Mathematics in community colleges*. Paper presented at the Second Conference on Transforming Research in Undergraduate STEM Education, St Paul, MN.
136. Sully, M., **Mesa, V.,** & Whittemore, T. (2012, April). *Concerns about teaching mathematics with inquiry-based learning methods*. Paper presented at the 24th Annual University of Michigan UROP Spring Research Symposium, Ann Arbor, MI.
137. Kasal, E., & **Mesa, V.** (2012, April). *Developing a rubric to analyze concept maps*. Paper presented at the 24th Annual University of Michigan UROP Spring Research Symposium, Ann Arbor, MI.
138. ***Mesa, V.** (2012, March). *Making sense of teaching: Attending to classroom interaction in mathematics*. Paper presented at the Webinar for the American Mathematical Association of Two-Year Colleges, Sponsored by the Research in Mathematics Education Committee.
139. ***Mesa, V.** (2010, June). *Lessons learned from analyses of mathematics textbooks*. Integrating science and Mathematics Education Research into Teaching. University of Maine, Orono, ME.
140. **Mesa, V.** (2010, June). *Analyzing instructors' rationality behind classroom interaction in community colleges mathematics classes*. Second Representations of Teaching Conference. University of Michigan, Ann Arbor.
141. *Finelli, C., **Mesa, V.,** Daly, S. (2010, May). *Introduction to research in engineering education*. Center for Research on Learning and Teaching-North, University of Michigan, Ann Arbor.
142. **Mesa, V.** (2009, November). *What can we learn from studying how we talk in the classroom?* Paper presented at the Annual Meeting of the American Mathematical Association of Two-Year Colleges.
143. **Mesa, V.,** Lande, E., & John, G. (2009, October). *Preliminary findings of a study of teaching at community colleges*. Paper presented at the MichMATYC Conference 2009, Dearborn, MI.
144. Cheng, A., & **Mesa, V.** (2009, April). *Inquiry Based Learning—An analysis of its impact on students*. Poster presented at the Annual Undergraduate Research Opportunities Research Forum. Ann Arbor, MI: University of Michigan.

145. ***Mesa, V.** (2009, January). *Dialogical engagement in two interactive mathematics lessons*. Joint Meeting of the American Mathematical Society and the Mathematical Association of America. Washington, D.C.
146. ***Mesa, V.**, Finelli, C., Jacquette, O. (2008, October). *Measuring the impact of an individual course on students' success*. Third Annual Poster Session on Research and Scholarship in Engineering Education. College of Engineering, University of Michigan.
147. **Mesa, V.** & Chang, P. (2008, July). *Instructors' language in two undergraduate mathematics classrooms*. Paper presented at the 32nd Meeting of the International Group of the Psychology of Mathematics Education, Morelia, Mexico.
148. **Mesa, V.** (2008, July). *Classroom participation in pre-college mathematics courses in a community college*. Paper presented at the International Congress of Mathematics Education-DG 23, Monterrey, Mexico.
149. **Mesa, V.** (2008, July). *Researching mathematics instruction in community colleges*. Paper presented at the International Congress of Mathematics Education-TSG 8, Monterrey, Mexico.
150. **Mesa, V.**, & Chang, P. (2008, February). *Analysis of stance in two interactive mathematics lessons*. Paper presented at the Conference of the Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education, San Diego State University, San Diego, CA.
151. **Mesa, V.**, & Chang, P. (2008, March). *Classroom interaction patterns in undergraduate mathematics classrooms*. Paper presented at the Conversations among Colleagues, Western Michigan University, Kalamazoo, MI.
152. **Mesa, V.**, & Cheng, A. (2008, May 2-3). *Classroom interaction in community college mathematics classrooms*. Paper presented at the 80th Annual Meeting, Michigan Section MAA/MichMATYC, Grand Valley State University, Grand Valley, MI.
153. ***Mesa, V.** (2007, October). *Researching and sustaining mathematics teaching in community colleges*. Invited talk presented at the MSU Mathematics Education Colloquium, East Lansing, MI, October 3, 2007.
154. ***Mesa, V.** (2007, November). *Mathematics teaching in community colleges*. CSHPE Brown Bag Series, University of Michigan, Ann Arbor, November 28, 2007.
155. ***Mesa, V.**, & Mosher, B. (2007, April). *The Douglass Houghton Scholars Program*. Talk given during the Teaching of Mathematics Seminar, organized by the Math Department.
156. **Mesa, V.** (2007, April). *Collegiate mathematics textbooks, control structures, and instruction*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago.
157. Charalambous, C., Delany, S., Hsu, H.-Y., & **Mesa, V.** (2007, April). *Opportunities to learn mathematics in Cyprus, Ireland, and Taiwan: What can we learn from analyzing mathematics textbooks*

- used in different countries?* Poster presented at the Annual Meeting of the American Educational Research Association, Chicago.
158. **Mesa, V.** (February, 2007). *Insights from instructors using textbooks for teaching mathematics.* Paper presented at the Tenth Research in Undergraduate Mathematics Education Conference, San Diego.
159. **Mesa, V.** (January, 2007). *Controlling the work in solving initial value problems: Contrasting introductory calculus textbooks.* Paper presented at the Joint Meeting of the Mathematical American Association and the American Mathematical Society, New Orleans.
160. **Mesa, V.** (2006, July 5-8). *Control structures in mathematics textbooks for introductory calculus.* Paper presented at the Third International Conference on the Teaching of Mathematics, Istanbul.
161. **Mesa, V.** (2006, February 23-26). *Control structures in introductory calculus textbooks.* Session presented at the 9th Conference on Research in Undergraduate Mathematics, New Jersey.
162. **Mesa, V.** (2006, March 9). *What counts as an answer? Contrasting undergraduate calculus textbook content.* Session presented at the Thinking about Mathematics Education Series, University of Haifa, Israel.
163. **Mesa, V.** (2006, March 27). *What is the answer? Contrasting undergraduate calculus textbook content.* Session presented at the Teaching of Mathematics Seminar Group. Mathematics Department, University of Michigan, Ann Arbor.
164. **Mesa, V., & Wright, M.** (2003, October). *Resources for departmental graduate student instructor training programs.* Session presented at the annual meeting of the Professional and Organizational Development Network in Higher Education. Denver, CO.
165. ***Mesa, V.** (1999, October 6-10). *Methodologies for Teaching Elementary School Mathematics.* “una empresa docente” & University of Los Andes, Bogotá, October 6-7, 1999.
166. Allexsaht-Snyder, M. & **Mesa, V.** (1998). *Intersections: Mathematics, Culture, and Language.* AERA Annual Meeting, San Diego, CA.
167. ***Mesa, V.** (1998). *Colombian girls and mathematics education: An international perspective on creating an equitable school experience in mathematics for girls in K-12.* 76th NCTM Annual Meeting, Washington, DC.

TEACHING EXPERIENCE

Undergraduate Teaching

- F13, F14 Teaching Methods for Secondary Mathematics Teachers (EDUC 413). School of Education, U. Michigan
- F98 Algebra in Middle School, College of Education, U. Georgia.
- W98 Problems of Secondary School Mathematics Teaching, College of Education, U. Georgia.

- W97, S97 History of Mathematics from a Multicultural Perspective, College of Education, U. Georgia.
- W96 Mathematics for Elementary Teachers, College of Education, U. Georgia.
- 1985-1995 Probability for Social Sciences, Statistics for Social Sciences, Pre-Calculus, Calculus. Mathematics Department, U. Los Andes.

Graduate Teaching, Master's Level

- F02 Curriculum Development and Evaluation (EDUC 609). School of Education, U. Michigan.
- S07, F07, F08, F09,
F10, S13 Research and Educational Practice (EDUC 695). School of Education, U. Michigan.
- F06 Contemporary Approaches to Educational Assessment (EDUC 737). School of Education, U. Michigan.

Graduate Teaching, Doctoral Level

- F06, W09 Research in Mathematics Education (EDUC 711). School of Education, U. Michigan.
- W06, F08, F10 College Teaching (EDUC 737). School of Education, U. Michigan.
- F05, F07, F09,
F01 Curriculum in Mathematics Education (EDUC 737). School of Education, U. Michigan.
- W12, W14 Mathematics Curriculum: Research and Development (EDUC 783). School of Education, U. Michigan.
- W07, W11, W14 Qualitative Methods for Research in Education (EDUC 792). School of Education, U. Michigan.
- W03 Curriculum Theory and Practice (EDUC 809). School of Education, U. Michigan.
- W06, 08-09, 10-11,
11-12 Professional Development Seminar (EDUC 898). School of Education, U. Michigan.

FACULTY DEVELOPMENT WORKSHOPS

- W09 Observing classes to give feedback to faculty. Washtenaw Community College.
- F03, W04, F04 Problem Solving and Critical Thinking, CRLT, University of Michigan.
- W04, F04 Managing Student Teams, CRLT, University of Michigan.
- F04 Using Concept Maps for Teaching and Assessing Students' Learning, CRLT, University of Michigan.
- F03, S04, F04 Classroom Assessment Techniques, CRLT, University of Michigan.
- W04 Best Practices in College Teaching, CRLT, University of Michigan.
- S03, S04 Facilitating Practice Teaching, CRLT, University of Michigan.

F04 Observing Classes and Collecting Student Feedback, CRLT, University of Michigan.

SERVICE, SCHOOL OR UNIVERSITY

2012-2015 Executive Committee, School of Education
2012-2015 Steering Committee, Women of Color in Academia Project, *Center for the Education of Women*, University of Michigan, Ann Arbor, MI.
2014 Internal Review Committee for the *Center for Research on Learning and Teaching*, University of Michigan, Ann Arbor, MI.
2012 Advisor for the Rising Scholar Award, *Becoming Educators of Tomorrow*.
2012, March Reactor for students' presentations during the GSCO-BET Graduate Student Conference
2011 Evaluator, Mark Conger's portfolio promotion to Lecturer II, Comprehensive Studies Program, U-M.
2011 Advisory Board Member, Comprehensive Studies Program, U-M.
2011-2012 Member, SoE Task Force, Qualitative Research Methods
2007, 2011 Fulbright U-M Applications Reviewer
2009-present Educational Studies Executive Committee, School of Education, U. Michigan.
Ongoing Review of applications for the new master's program
Ongoing Review of applications for the PhD in mathematics education
2008-present Collaboration with Gavin Larose, Al Taylor, Hyman Bass, Karen Rhea, and Mark Thames in planning the monthly Mathematics Teaching Seminar offered by the Mathematics Department.
2007-2009 Graduate Affairs Committee, School of Education, U. Michigan.
1997-1998 NCTM representative for the Mathematics Education Student Association, University of Georgia.

Student Advisees {* denotes student graduated}

Doctoral Advisees, U. Michigan: Anne Cawley, Amy Jeppsen*, Elaine Lande, Linda Leckrone, Tim Whittimore.

Post-doctoral Advisee: Nina White

Dissertation Chair/Co-Chair, U. Michigan:

Amy Jeppsen*. Dissertation title: *Choosing and using mathematics curricula for future teachers: The role of the teacher*, 2010.

Ravin Pan*. Dissertation title: *Teaching algebra in an inner-city classroom: Conceptualization, tasks, & teaching*, 2008.

Brett Griffiths. Dissertation title: *Instruction in context: An investigation of the teaching approaches of instructors of first-year writing at community colleges*. Expected defense: Summer 2014.

Elaine Lande. *Why teachers teach the way they do: Investigating community college trigonometry instructors' professional obligations*. Expected defense: Fall 2014.

Dissertation Reader, U. of Aalborg, Denmark:

Carola Hernandez. Dissertation title: *Introducing Student-Centered Approaches in University Physics Education: Perspectives on PO-PBL*. 2013.

Doctoral Committees, University of Michigan

School of Education: Leann Kang, Imani Masters*, Jenny Sealy*, Helen Seidel*, Christie Toth.

Mathematics Department: Mahesh Agarwal*, Sara Lapan*, Kyun-Yong Lee*, Michele Lee*, Aaron Magid*, Johanna Mangahas*, Jeff Meyer*, Craig Spencer*, Giancarlo Urzua*, Liz Vivas*, Nina White*

Chemistry Department: Ahleah Rohr*

Master of Arts Advisees

School of Education, U. Michigan: Andreea Dersidaan*, Ryan Holmes*, Shu Jun Lee*, Heejoo Suh*, Kathy Spiess*, Xiaodan Tang, Tim Whittemore*.

University of Los Andes: Cristina Carulla*.

SERVICE PROFESSIONAL COMMUNITY

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|--------------|--|
| 2014-2016 | AMATYC Committee on Revision of the Beyond Crossroads Standards document. Chair: Rob Farinelli. |
| 2014-2015 | Advisory Board, <i>2025 Common Vision</i> , PIs: Karen Saxe (Macalester College) and Linda Braddy (Mathematical Association of America) |
| 2012 | Advisory Council convened by Dr. Rose B. Bellanca, President Washtenaw Community College |
| 2011-2014 | Advisory board member, Preparing to Teach Algebra, NSF funded project to Sharon Senk (Michigan State University), Yuyiko Maeda and Jill Newton (Purdue). |
| 2009-present | Midwest Research Representative, American Mathematical Association of Two-Year Colleges |
| 2010-present | Editorial Board, Educational Studies in Mathematics |
| 2009-2012 | Editorial Board, American Educational Research Journal-TLHD |
| 2007-2010 | Advisory Board, U-M Instructional Development and Educational Assessment [IDEA] Institute |
| 2007-present | Editorial Board, Revista <i>PNA, Didáctica de la Matemática: Pensamiento Numérico</i> Journal of the Andalusian Numerical Thinking Research Group, University of Granada, Spain |
| 2006-present | Member of the Program Committee, Conference of the Research in Undergraduate Mathematics Education. |
| 2000-2004 | Associate Editor, <i>Journal for Research in Mathematics Education</i> . |
| 1997-1998 | Editor, <i>The Mathematics Educator</i> , Journal of the Mathematics Education Student Association (MESA), University of Georgia. NCTM representative for the Mathematics Education Student Association, University of Georgia. |

- 1995-present Editorial Board, *Educación Matemática*, Journal of the Association of Teachers of Mathematics in Colombia.
- Reviewer *American Educational Research Journal*
Educational Studies in Mathematics
Focus—On Learning Problems in Mathematics
International Journal of Science and Mathematics Education
Issues in Teacher Education
Journal of Mathematics Teacher Education
Journal for Research in Mathematics Education
Journal of the Learning Sciences
Review of Educational Research
To Improve the Academy. Journal of the Professional and Organizational Development Network in Higher Education
AERA annual meeting: Curriculum Studies (B), Learning and instruction (C), Education in the Professions (I), Postsecondary Education (J), Teaching and Teacher Education (K), SIG-Research in Mathematics Education, and SIG-International Studies)
Annual Meeting of the Association for the Study of Higher Education, 2008, 2009
International Conference of the Learning Sciences, 2008
International Group of the Psychology of Mathematics Education [PME]
PME- North American Chapter, 2012
Institution of Education Sciences. NCER Centers - Cognition & Adult Literacy, 2012, 2013
National Science Foundation's Teachers Professional Continuum and Instructional Materials Development programs, EHR-ESIE; Math-Science Partnerships, 2006.

SERVICE: CONSULTING

- 2013-2015 Evaluation of the NSF- TUES-1 project, *Transforming Developmental Mathematics Education in Partnership with Teacher Preparation*. PIs: Pavel Sikorskii, Kristen Bieda, Raven McCrory and Beth Herbel-Eisenmann. College of Education, Michigan State University.
- Spring 2011 Evaluation of the NSF-PRISM: *Mathematics in Life Science*. PI: Dix Petey, Mathematics Department, University of Missouri.
- Fall 2011 Two-year institutions consultant to the Mathematical Association of America, *Characteristics of Successful Programs in College Calculus*. PIs: David Bressoud, Chris Rasmussen, Marilyn Carlson, and Mike Pearson.

COMMUNITY SERVICE

- 2011-present Mathcounts Coach, Forsythe Middle School.
- 2011-2013 Club de Lectura, En Nuestra Lengua (Literacy program for heritage Spanish speakers).

MEMBERSHIP IN ORGANIZATIONS

AAUW (American Association of University Women); AMATYC (American Association of Two-Year Colleges); AWM (Association of Women in Mathematics); AERA (American Educational Research Association); AMS/MAA SIG on RUME (Research in Undergraduate Mathematics); EMA (Educación Matemática Colombia); MAA (Mathematical Association of America); MichMAA (Michigan Section of the Mathematical Association of America); MichMATYC (Michigan Section of the American Association of Two-Year Colleges); NCTM (National Council of Teachers of Mathematics); NSSE (National Society for the Study of Education); PME (International Group for the Psychology of Mathematics Education); and SIG/RME (SIG-Research in Mathematics Education)

LANGUAGE SKILLS

English and Spanish: reading, speaking, and writing. German, Portuguese, and French: reading.