

TONYA GAU BARTELL

University of Delaware
School of Education
133C Willard Hall
Newark, DE 19716

Office Tel: (302) 831-1658
Home Tel: (302) 832-6376
Fax: (302) 831- 4110
Email: tbartell@udel.edu

ACADEMIC BACKGROUND

- 2005 Ph.D. in Curriculum and Instruction (Mathematics Education)
University of Wisconsin, Madison, Wisconsin
- 2002 Master of Arts, Curriculum and Instruction (Mathematics Education)
University of Minnesota, Minneapolis, Minnesota
- 1996 Bachelor of Science, Mathematics
St. Cloud State University, St. Cloud, Minnesota
- 1997-2004 Teacher Certification
State of Minnesota Continuing Teaching Certification in Mathematics

GRANTS, FELLOWSHIPS & AWARDS

- Submitted NSF REESE Collaborative Research Grant: "Integrating mathematics and equity – Toward a new model for the professional development of effective mathematics teachers" (\$45,000), submitted January 2007
- 2002-2005 Doctoral Student Fellowship, Diversity in Mathematics Education Center for Learning and Teaching, University of Wisconsin-Madison
- 1996 Allen Brink Award for Outstanding Scholastic Achievement in Mathematics Education, (\$1,500), St. Cloud State University
- 1995 Rowland C. Anderson Award for Outstanding Scholastic Achievement in Mathematics Education, St. Cloud State University

PUBLICATIONS

- In press Bartell, T. & Meyer, M. (in press, 2008). Exploring the equity principle in the mathematics classroom. *Mathematics Teacher*.
- In press Bartell, T.G. & Carpenter, T.P. (in press, 2008). The three Rs of social justice. [Review of the book *Reading and writing the world with mathematics: Toward a pedagogy for social justice*.] *Journal for Research in Mathematics Education*.
- 2007 Diversity in Mathematics Education Center for Learning and Teaching. (2007). Culture, race, power, and mathematics education. In F. Lester (Ed.), *Second Handbook of Research on Mathematics Teaching and Learning* (pp. 405-434). Reston, VA: National Council of Teachers of Mathematics.

- 2006 Bartell, T. (2006). Striving for equity in mathematics education: Learning to teach mathematics for social justice. In S. Alatorre, J.L. Cortina, M. Saiz, & A. Mendez (Eds.), *Proceedings of the twenty-eighth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Merida, Yucatan, Mexico.
- 2006 Bannister, V.R.P., Bartell, T., Battey, D., & Hand, V.M. (2006). Inequity in mathematics education: Moving beyond individual-level explanations of differential mathematics achievement to account for race and power. In S. Alatorre, J.L. Cortina, M. Saiz, & A. Mendez (Eds.), *Proceedings of the twenty-eighth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Merida, Yucatan, Mexico.
- 2005 Gau, T.R. (2005). Learning to teach mathematics for social justice. *Dissertation Abstracts International*, 66 (08), p. 2871.
- 2003 Gau, T. & Rubel, L. (2003). Teachers' beliefs and practices regarding the Black-White Mathematics Achievement Gap. In N.A. Pateman, B.J. Dougherty & J. Zilliox (Eds.), *Proceedings of the 2003 Joint Meeting of the North American Chapter (25th annual meeting) and the International Group (27th annual meeting) for the Psychology of Mathematics Education*. Honolulu, Hawaii.

PRESENTATIONS

- 2007 Bannister, V., Bartell, T.G., Battey, D., Hand, V., & Spencer, J. (April, 2007). *Critiquing the stories, roles, and structures in mathematics education that privilege whiteness*. Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL.
- 2006 Bartell, T. (November, 2006). *Striving for equity in mathematics education: Learning to teach mathematics for social justice*. Paper presented at the twenty-eighth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Merida, Yucatan, Mexico.
- 2006 Bannister, V.R.P., Bartell, T., Battey, D., & Hand, V.M. (November, 2006). *Inequity in mathematics education: Moving beyond individual-level explanations of differential mathematics achievement to account for race and power*. Paper presented at the twenty-eighth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Merida, Yucatan, Mexico.
- 2006 Bartell, T. (April, 2006) *Teaching Mathematics for Social Justice: Getting Personal*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

- 2006 Bartell, T. (April, 2006) *Teaching Mathematics for Social Justice: Achieving a balance*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- 2006 Bartell, T., Battey, D., Franke, M., Hand, V., Martin, D., Pitts, V., Spencer, J. (April, 2006). *The Untapped Potential of Mathematics Education Research to Address Equity*. Paper presented at the research pre-session of the annual meeting of the National Council of Teachers of Mathematics, St. Louis, Missouri.
- 2005 Gau Bartell, T. (April, 2005). *Why they fail: Unpacking everyday explanations of the achievement gap within research on differential mathematics achievement*. Paper presented as part of the Diversity in Mathematics Center for Learning and Teaching Symposium at the Annual Meeting of the American Educational Research Association, Montreal, Canada.
- 2005 Gau Bartell, T. (April, 2005). *Equity in Mathematics Education: What Can We Do to Achieve It?* Presentation at the National Council of Teachers of Mathematics Annual Meeting and Exposition, Anaheim, CA.
- 2005 Gau Bartell, T. & McQuillen, L. (April, 2005). *Addressing the Achievement Gap: A District/University Professional Development Program Designed to Promote Equity in Mathematics Education*. Presentation at the National Council of Supervisors of Mathematics Annual Conference, Anaheim, CA.
- 2005 Gau Bartell, T. (April, 2005). *The Equity Principle: Teachers' Evolving Conceptions of Equity*. Poster presentation at the National Council of Teachers of Mathematics Annual Meeting Research Pre-session, Anaheim, CA.
- 2004 Gau, T. (February, 2004). *Teachers' Evolving Conceptions of Equity*. Poster presented at the National Science Foundation Centers for Learning and Teaching Meeting, Washington, DC.
- 2003 Gau, T. & Rubel, L. (July, 2003). *Teachers' beliefs and practices regarding the Black-White mathematics achievement gap*. Short oral presentation at the joint annual meeting of the North American Chapter (25th annual meeting) and the International Group (27th annual meeting) for the Psychology of Mathematics Education. Honolulu, Hawaii.
- 2003 Gau, T. (April, 2003). *The Emergent Culture of Mathematics in a Bilingual Classroom*. Paper presented as part of the symposium entitled Diversity in Mathematics Education: Cross-disciplinary Perspectives on a Shared Case, at the annual meeting of the American Educational Research Association, Chicago, IL.

TEACHING EXPERIENCE

Graduate Courses

- EDUC 838: Research Issues in Mathematics Education
School of Education, University of Delaware
Fall 2006
- EDUC 636: Teaching Mathematics in the Middle School
School of Education, University of Delaware
Spring 2006
- EDUC 075: The Achievement Gap in Mathematics Education
School of Education, University of Delaware
Fall 2005
- C&I 390: Teaching Mathematics for Social Justice
Department of Curriculum and Instruction, University of Wisconsin-Madison
Spring 2005

Undergraduate Courses

- MATH 251: Mathematics for K-8 Teachers: Number and Operations
School of Education, University of Delaware
Fall 2006
- MATH 253: Mathematics for K-8 Teachers: Geometry, Algebra, & Measurement
School of Education, University of Delaware
Fall 2005
- C&I 393: The Teaching of Secondary School Mathematics I
Department of Curriculum and Instruction, University of Wisconsin-Madison
Spring 2005

In-Service Teacher Professional Development

- Co-Instructor, The Equity Principle in School Mathematics
Secondary Teachers, University of Wisconsin & Madison Metropolitan Schools
Fall 2003 – Spring 2004
- Co-Instructor, District/University Summer School Professional Development Program
Middle School Teachers, University of Wisconsin & Madison Metropolitan Schools
Summer 2003

K-12 Teaching Experience

- High School Mathematics Teacher & Math Independent Study Program Coordinator
Dassel-Cokato Alternative School, Cokato, MN
1999 – 2002

- High School Mathematics Teacher
Dassel-Cokato High School, Cokato, MN
1996 - 1999

ADVISING & SUPERVISION

- 2007 M.Ed. Comprehensive Exam Committee Member
Randi Amalfa
Patricia Valencia
School of Education, University of Delaware
- 2007 Advisor, University of Delaware
Brian Bowen, Ph.D. candidate
Joseph Diaco, Ed.D. candidate
Annette Roskam, Ph.D. candidate
Robert Weiman, Ph.D. candidate
- 2005-present Co- Advisor, University of Delaware
Delayne Johnson, Ph.D. candidate
- 2006 M.Ed. Comprehensive Exam Committee Member
Matthew Phelps
School of Education, University of Delaware
- 2004 Supervisor of Secondary Mathematics Education Practicum Students
University of Wisconsin-Madison

SERVICE

- 2006-present Volunteer Mathematics Tutor
William Penn High School, New Castle, DE
- 2006-2007 Ph.D. Program Coordinator, Mathematics Education
School of Education, University of Delaware
- 2006-2007 Committee on Undergraduate Studies in Education (CUSE)
School of Education, University of Delaware
- 2006-present Practitioner Journal Reviewer, *Mathematics Teacher*, *Mathematics Teaching in the Middle School*
- 2006 Program Reviewer, American Educational Research Association Annual Meeting, International Group for the Psychology of Mathematics Education (North American chapter)

PROFESSIONAL AFFILIATIONS

AERA	American Educational Research Association
SIG-RME	Special Interest Group Research in Mathematics Education
SIG	Critical Educators for Social Justice
NCTM	National Council of Teachers of Mathematics
PME-NA	Psychology of Mathematics Education, North American Chapter