# MAURA VARLEY GUTIÉRREZ

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#### **EDUCATION**

PhD, Department of Language, Reading and Culture, Focus on Mathematics **Education, May 2009** University of Arizona, Tucson, AZ.

> **Dissertation:** "I thought this U.S. place was supposed to be about freedom": Young Latinas speak to equity in mathematics education.

EdM, Human Development and Psychology: Risk and Prevention, June 2003 Harvard Graduate School of Education, Cambridge, MA.

> **Thesis:** "Let's get serious": Student perceptions of discipline policy and practice and how they contribute to the school to prison pipeline.

**BA, Biological Anthropology**, May 1999 University of Michigan, Ann Arbor, MI.

### **CURRENT POSITION**

**Assistant Professor of Practice,** University of Arizona, Tucson, AZ 08/17-Present Supervise and support cohorts of Dual-Language and ESL pre-service teachers. Coordinate the elementary school classroom site and instructors, field experience and student teaching placements within several elementary schools, and facilitate communication. Nurture and maintain the TLS relationships with principals and teachers in the elementary schools. Supervise a subset of Dual-Cats during their student teaching semester. Teach courses within the Elementary Education track, such as: TLS 428 (Curriculum and Instruction in Bilingual Settings), TLS 326 and 336 (Teaching Elementary Mathematics Part 1 and 2) and TLS 401 (Sustaining Family, School and Community Partnerships).

### PROFESSIONAL EXPERIENCE

**Director of Teaching and Learning, Elsie Whitlow Stokes Community Freedom Public** Charter School, Washington, DC 08/11-06/17

Supervise teaching staff of a small (350) public charter, dual-language immersion elementary school in diverse, urban setting. Lead and develop the language immersion based academic program, including professional development, International Baccalaureate and student-centered curricular transitions, and family engagement.

Adjunct Assistant Professor, The University of Arizona, Tucson, Arizona, 08/09–06/11 Coordinate a pilot project (involving both research and practice) whose aim is to reform the University of Arizona Elementary Teacher Preparation Program. Cofacilitate (NSF funded) research on the new model for preservice teacher preparation and serve as the primary liason between the school district and the university. Cofacilitate in-service teacher professional development with a focus on teaching mathematics for understanding through problem solving. Supervise preservice teachers in their elementary classroom practicum, which they take along with their methods courses. Teach mathematics methods to 25 pre-service teachers. Integrate themes of equity, diversity and second language learners.

## PROFESSIONAL EXPERIENCE, continued

Pre-service Teacher Instructor, University of Arizona, Tucson, AZ, 08/06 – 06/09 Teach (two semesters) and co-taught (three semesters) Elementary Mathematics Methods for pre-service teachers to 17-30 undergraduate students, including 7 bilingual certification program participants. Integrate explicit focus on equity, diversity and social justice.

In-service Teacher Instructor, University of Arizona, Tucson, AZ, Summer 09 & 10 Developed and taught a course entitled, "Equity in Mathematics Education" for inservice elementary and middle school mathematics teachers in a grant-supported Master's program through the Mathematics Department. Course development involved selecting readings, designing in and out of class activities (such as an equity analysis of their own teaching), and selecting video cases for analysis. Course also taught by Dr. Marta Civil.

Course Development Technical Expert, University of Arizona, Tucson, AZ, 01/09-08/09 Collaborated with a colleague at University of Illinois at Chicago to develop a professional development course based on a CEMELA short course taught by CEMELA faculty. Involved communication with course instructors, packaging of course materials in a format to be shared on the CEMELA website. Cross-disciplinary course content: Investigating Latino Family Contexts for Mathematics Teaching and Learning.

Classroom Teacher, Elsie Whitlow Stokes Community Freedom Public Charter School, Washington, District of Columbia, 08/03 - 07/05

Taught between 40 and 55 fifth and sixth grade students. Involved in all aspects of the design of mini-middle school, middle school transition and study tour programs, in an urban public charter school serving majority low income and EL students of color. Organized school-wide activities such as graduation and Heritage Day Celebration. Developed theme-based, inclusive curriculum within a dual-language immersion program. Supervised student teachers in developing lessons and classroom practice.

Classroom Intern, Harvard-Kent Elementary School, Boston, Massachusetts, 09/02 –

Taught and supported a social skills curriculum in a Special Education classroom for children with behavioral and emotional disorders in a Boston elementary school.

**Counselor Trainer,** High Schools, Belize City, Belize, 06/00 - 07/02

Worked closely with Belizean counterparts to design and develop school counseling programs as a Peace Corps Volunteer. Designed and conducted peer counselor training, wrote manual and obtained grant funds to publish it locally. Planned and implemented workshops, interventions, and education campaigns for school and neighborhood communities to encourage positive youth outcomes. Conducted bilingual trauma rehabilitation assessment and interventions for rural children and families, designed and conducted art therapy sessions for children and teacher training in classroom activities in affected areas.

### PROFESSIONAL EXPERIENCE, continued

Bilingual Support Personnel, Northport Public School, Northport, Michigan, 08/99 –

Tutored and mentored in classrooms and in an after-school program for Native American Students. Tutored Latino students under the Northwest Michigan Migrant Program. Helped inaugurate special cross-cultural interventions in small (K-12=280) rural school during dramatic demographic shift in student population.

### RESEARCH EXPERIENCE

**Doctoral Student,** The University of Arizona, Tucson, Arizona, 08/05 – 07/09 Conducted participant observation and participatory action research with seven, fifth grade Latinas in an after-school mathematics club for my dissertation. Designed and facilitated mathematics club activities and all phases of research and dissertation writing. Research focused on how the young Latinas experienced critical mathematics education connected to community and social change.

**Research Fellow**, The University of Arizona, Tucson, Arizona, 08/05 - 07/09Involved in all phases of developing collaborative research on mathematics education for the University of Arizona CEMELA (Center for the Mathematics Education of Latino/as) site of a National Science Foundation sponsored Center for Learning and Teaching grant.

Conducted ethnographic, participant observation research for CEMELA in an afterschool mathematics club and in classrooms at a local elementary school. Collected and analyzed field notes, surveys, interviews and student work. Collaborated on research and practitioner presentations and publications related to community-based and social justice oriented mathematics learning with Latina/o students. Developed and managed a community-based after school mathematics club for Latinas in an urban elementary school.

Participated in a cross-Center for Learning and Teaching research dissemination grant, Learning in Out of School Time (LOST). Actively participated in collaborative planning and publication of related research.

**Research Participant,** The University of Arizona, Tucson, AZ, 05/06-05/08 Collaborated with mathematics educators across the United States on a research project entitled: Connecting Children's Mathematical Thinking to Funds of Knowledge in Elementary Methods Courses. Collaboratively designed, conducted and analyzed research investigating teacher educators who support pre-service teachers in connecting children's mathematical thinking with family and community funds of knowledge in the context of elementary mathematics methods courses.

Research Assistant, Harvard Graduate School of Education, Cambridge, Massachusetts, 09/02 - 06/03.

Conducted ethnographic research for a study on discipline practices and the school-toprison pipeline in diverse Boston High Schools involving field notes, interviews and focus groups. Transcribed and analyzed data.

### AWARDS AND DISTINCTIONS

- CEMELA Graduate Fellowship August 2005- May 2009
- Women's Studies Advisory Council Travel Stipend, Spring 2008
- College of Education Travel Award, Fall 2006 and Fall 2008
- Jacqueline A. Morris Travel Award, Spring 2007
- Elsie Whitlow Stokes Community Freedom Public Charter School Teacher of the Year 2005
- Harvard Graduate School of Education Community Service Grant, Fall 2002-Spring 2003

### PROFESSIONAL ACTIVITIES

- Committee member for the Elementary Education Revision Committee and the College of Education Bilingual Education Committee, Department of Teaching, Learning and Sociocultural Studies
- Committee member for the Language Reading and Culture Operations Committee
- Co-Organizer, Department of Language, Reading and Culture Annual Graduate Student Colloguy, 2007
- CEMELA Annual Summer School, participant and presenter
- CEMELA Annual Research Symposium, participant and presenter

### PROFESSIONAL ORGANIZATIONS

- National Association of Multicultural Education
- National Council of Teachers of Mathematics
- Radical Math
- Rethinking Schools
- TODOS: Mathematics for All

### SPECIAL SKILLS

- Languages: Fluent in Spanish, Understanding of French and Belizean Creole.
- Lived in Latin America: Guatemala, Peru, Dominican Republic, Costa Rica; Africa: Kenya, Niger, Mauritania; Caribbean: Belize.

#### **PUBLICATIONS**

- Varley Gutiérrez, M. & Blay, G. (2017). Developing advocacy for equitable approaches to teaching mathematics from within. In, S. Celedon-Pattichis, D. White, &, M. Civil (Eds.), Access and Equity: Promoting High Quality Mathematics in Grades PreK-2. Reston, VA: National Council of Teachers of Mathematics.
- Varley Gutiérrez, M. (2016). Supporting a Teacher's Shift from Deficits to Funds of Knowledge: A Commentary on Foote's Case. In, D. White, S. Crespo, M. Civil(Eds.), Cases for Teacher Educators: Conversations About Inequities in Mathematics Education. Association of Mathematics Teacher Educators and Information Age Publishing.
- Simic-Muller, K., Varley Gutiérrez, M. & Gutiérrez, R. (2012). Stand and Deliver: Twenty years later. In. J. K. Sklar & E. S. Sklar (Eds.), Mathematics and popular culture. Jefferson, NC: McFarland Publishing.
- Turner, E., Varley Gutiérrez, M., and Gutiérrez, R. (2012). "This project opened my eyes": Pre-service elementary teachers learning to connect school, community and mathematics. In, L.J. Speilman & J. Mistele (Eds.), Mathematics education and the public interest: Preservice teachers' engagement with and reframing of mathematics. Charlotte, NC: Information Age Publishing.
- Varley Gutiérrez, M., Willey, C. & Khisty, L.L., (2011). (In)equitable schooling and mathematics of marginalized students: Through the voices of urban Latinas/os in the U.S. Journal of Urban Mathematics Education, 4 (2).
- Varley Gutiérrez, M. (January, 2010). "I thought this U.S. place was supposed to be about freedom": Young Latinas engage in mathematics and social change to save their school. Rethinking Schools, 24 (2).
- Turner, E. E., Varley Gutiérrez, M., & Díez-Palomar, J. (2011). Latino/a bilingual elementary students pose and investigate problems grounded in relevant community contexts. In, K. Téllez, J. N. Moschkovich, & M. Civil (Eds.), Latinos and mathematics education: Research on learning and teaching in classrooms and communities. Charlotte, NC: Information Age Publishing.
- Turner, E. E. & Varley Gutiérrez, M. (2012). Hybrid spaces in elementary and middle school math. In, E. Tan, A. Calabrese Barton (Eds.), Empowering science and math in urban communities: Creating hybrid spaces for meaningful learning. Chicago, IL: University of Chicago Press.
- Vomvoridi-Ivanović, E., Varley, M., Viego, G. Simic-Muller, K., Licón Khisty, L. (2013). Teacher development in after-school mathematics contexts: Insights from projects that capitalize on Latinas/os' linguistic and cultural resources. In, B. Bevan P.K. Bell, R. Stevens & A. Razfar (Eds.), LOST Learning: Learning about out-ofschool-time learning opportunities. Springer Publishing.

# **PUBLICATIONS**, continued

- Turner, E.E., Varley Gutiérrez, M., Simic-Muller, K., & Díez-Palomar, J. (2009). "Everything is math in the whole world": Integrating critical and community knowledge in authentic mathematical investigations with elementary Latina/o students. Mathematical Thinking and Learning, 11(3), 136 - 157.
- Simic-Muller, K., Turner, E.E., & Varley, M. (November, 2009). Math Club problem posing. Teaching Children Mathematics, 16 (4).
- Díez-Palomar, J., Simic, K., & Varley, M. (2007). "Math is everywhere": Connecting mathematics to students' lives. [Electronic version]. *Journal of Mathematics and Culture, 1(2).*
- Díez-Palomar, J., Simic, K., & Varley, M. (2007). El club de matemáticas. Una experiencia cultural de matemáticas de la vida cotidiana, para la diversidad. UNO. Revista de didáctica de las matemáticas, 45.
- Díez-Palomar, J., Varley, M., & Simic, K. (2006). Children and adults talking and doing mathematics: A study of an after-school math club. In S. Alatorre, J.L. Cortina, M. Sáiz, & A. Méndez (Eds.), Proceedings of the Twenty Eighth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (Vol. 2, 450-456). Mérida, Mexico: Universidad Pedagógica Nacional.

# PRESENTATIONS and PROFESSIONAL DEVELOPMENT

- Presented at the Mathematics Educators Appreciation Day. Presentation Title: Making Mathematics Curriculum More Culturally Responsive: A Classroom Example with Folklorico. Tucson, AZ, January 2019.
- Professional Development developed and provided to 70+ district teacher leaders on Culturally Responsive Elementary Mathematics Instruction, Tucson Unified School District. Developed and provided 3 full days of professional development. including the development of modules which the teacher leaders provided to their school staff.
- Professional Development provided to staff of Sunrise Elementary School on the Teaching and Learning of Fractions. Two 1.5 hour sessions, Spring 2018.
- Developed and provided Professional Development on Student-Centered Mathematics Instruction for Emergent Bilinguals. Davis Bilingual Elementary School, Tucson Unified School District. 1.5 days, June 2018.
- Presented at the National Council of Teachers of Mathematics Annual Research Pre-session. Title: Middle grade students critically investigating their schools and communities in after school mathematics clubs. Presented in the symposium titled: Students' experiences in critical mathematical learning environments. San Diego, CA, April 2010.
- Presented at the TODOS: Mathematics for All, and Center for the Mathematics Education of Latinas/os (CEMELA) Conference. Title: Margarita's living theory informing a feminist, critical mathematics education. Tucson, AZ, March 2010.

### PRESENTATIONS, continued

- Presented a Dissertation Talk at the DIME (Diversity in Mathematics Education) Annual Retreat. Title: "I thought this U.S. place was supposed to be about freedom": Young Latinas speak to equity in mathematics education, Evanston, IL, July 2009.
- Presented at the American Educational Research Association's Annual Conference as a panelist. Title: Latina/o student insights on mathematics learning and the role of language in mathematics. Presented in the symposium titled: Tensions, contestations, and relations: Latina/o mathematical meaning making in hybrid spaces, San Diego, CA, April 2009.
- Presented at the National Council of Teachers of Mathematics Annual Research Pre-session. Title: Young Latinas engaging in community change in the borderlands: Understanding the potentials of critical mathematics education. Presented in the symposium titled: Mathematics education for immigrant families and borderland communities. Washington, DC, April 2009
- Invited Presenter at the Transformative Education Conference. Title: Save Our School! Critical Mathematics Education and Social Change, Tucson, AZ, July 2008.
- Presented at the CEMELA Summer School. Title: Young Latinas Speaking to Equity in Mathematics Education and Society, Tucson, AZ, June 2008.
- Presented at the American Educational Research Association's Annual Conference as a panelist. Title: Fostering critical mathematics agency among upper elementary Latino/a youth, New York, NY, April 2008.
- Presented at the American Educational Research Association's Annual Conference as a panelist. Title: Latino/a bilingual elementary students pose and investigate problems grounded in relevant community contexts, New York, NY, April 2008.
- Presented at the Penn Graduate School of Education Ethnography in Education Forum. Title: Teacher development in after-school mathematics contexts: Insights from projects that capitalize on Latinas/os' linguistic and cultural resources, Philadelphia, PA, February, 2008.
- Presented at the American Educational Research Association's Annual Conference as a panelist. Title: Teaching mathematics for social justice with elementary Latina/o students in an after-school setting, Chicago, IL, April 2007.
- Presented at the American Educational Research Association's Annual Conference as a panelist. Panel Title: The After-school: Shifting paradigms for Latinas/os learning mathematics, Chicago, IL, April 2007.
- Presented at the American Anthropological Association Annual Conference as a panelist. Paper Title: An immigrant Latina's mathematics learning experience in two settings, Nov 2006.
- Presented at the Harvard Graduate School of Education Student Research Conference. Paper Title: Let's get serious: Student perceptions of discipline policy and practice and how they contribute to the school to prison pipeline, Feb 2003.