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PERSONAL: Born in Buenos Aires, Argentina. Permanent resident in the United States since 1987

EDUCATION

- 1987-1996 Ph.D. in Sociology, Graduate Center of the City University of New York.
Thesis: "Math fictions: Elementary mathematics education and the modern pedagogical paradigm." Specialization fields: classical and contemporary social theory; sociology and philosophy of education; sociology of knowledge and culture; mathematics education; and mathematics teacher education
- 1980-1986 Licenciatura (Masters) in Educational Sciences, University of Buenos Aires, Argentina. General foundations of education, including philosophy, history and sociology of education in Latin America and in Argentina; special education; curriculum theory and design; and research methods.
Preparation for teaching at the middle school, high school, and college levels
- 1978-1980 Studies in Mathematics and Physics, University of Buenos Aires. Completed five mathematics courses for the Licenciatura in Exact Sciences (up to Calculus II)

FELLOWSHIPS AND AWARDS

- Fall 2007 Tow Travel Fellowship
- Spring 2005 CUNY Faculty Fellowship Publications Program
- 1993-1994 Spencer Foundation Dissertation Fellowship for Research Related to Education

TEACHING EXPERIENCE

- January 2007 Member of the Consortial Faculty at the Ph.D. Program in Urban Education, City University of New York, Graduate Center
- Sept.02 - Present Assistant Professor, School of Education, Middle Childhood Mathematics Program. Brooklyn College of New York
- Jan 02-April 02 Adjunct Professor, BETLA, Bank Street College. Course: Curriculum development for mathematics leaders
- Sept. 00-Aug. 02 Assistant Professor, School of Education, Department of Elementary Education. City College of New York

- Sept. 99–Aug. 00 Co-Director of the Mathematics in the City Calendar of Events, a project that provided professional development for elementary as well as middle school teachers
- July 99, 98, 97, 96 Instructor, Mathematics in the City Summer Institute, in collaboration with Freudenthal Institute staff and project teachers
- July 97 - Aug. 99 Project Associate of Mathematics in the City, an in-service, NSF-funded teacher enhancement project directed by Cathy Fosnot (CCNY) in collaboration with Maarten Dolk and Willem Uitenbogaard (Freudenthal Institute, Utrecht)

PUBLICATIONS

- 2009 Zolkower, B., and Perez, S. (2009), “El rompecabezas de 19 piezas.” *Novedades Educativas* (Buenos Aires), Forthcoming in the October issue.
- 2009 Haydar, H.N. & Zolkower, B. “Beginning teachers and non-routine problems: A mathematics lesson study group in an urban context.” *Proceedings of the Thirty First Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Atlanta, Georgia: PME-NA.
- 2009 Shreyar, S., Zolkower, B., and Perez, S. “Thinking aloud together: A 6th grade teacher’s mediation of a whole-class conversation about percents.” *Educational Studies in Mathematics* (Published online first).
- 2009 de Freitas, E and Zolkower, B. “Using social semiotics to prepare mathematics teachers to teach for social justice.” *Journal for Mathematics Teacher Education* 12(3): 187-203.
- 2007 Rubel, L. & Zolkower, B. “Arranging blocks, climbing stairs and beyond: Learning about the significance of mathematical representations.” *Mathematics Teacher* 101(5), 340-4.
- 2007 Zolkower, B. and Shreyar, S. “A teacher’s mediation of a thinking aloud discussion in a 6th grade mathematics classroom.” *Educational Studies in Mathematics* 65: 177-202.
- 2006 Zolkower, B. and Bressan, A., “La corriente realista de didáctica de la matemática: Experiencias de un grupo de docentes y capacitadores.” *Yupana: Revista de Matemática de la Universidad del Litoral* (Argentina).
- 2006 Perez, S., Bressan, A., and Zolkower, B. “Las imágenes y las preguntas en la escuela.” *Novedades Educativas* 182 (February), pp. 22-26
- 2004 Bressan, A., Zolkower, B., and Gallego, F. “Los principios de la educación matemática realista.” In *Reflexiones Teóricas para la Educación Matemática*. Edited by Alagia, H. et al. Editorial Libros del Zorzal, Buenos Aires, Argentina, pp. 69-98

- 2003 Martinez Perez, M. L., Da Valle. N., Bressan, A., and Zolkower, B. “La relevancia de los contextos en la resolución de situaciones-problema: Una experiencia para docentes y sus capacitadores.” *Paradigma* (Venezuela), pp. 59-94
- 2002 Zolkower, B. and Shreyar. S. “Shortest pathways: Interaction and semiotic apprenticeship in a 6th grade classroom.” *Proceedings of the 20th PANAMA Conference*, Freudenthal Institute (The Netherlands), pp. 141-162
- 2001 Perez, S., Bressan, A., and Zolkower, B. “¿Es cierto eso, señorita?” *Novedades Educativas* 13(130). Buenos Aires (Argentina)
- 2001 Rabino, A., Bressan, A., and Zolkower, B. “El aprendizaje de los números racionales.” *Novedades Educativas*, Volume 13(129), pp. 16-20
- 1998 Zolkower, B. “Bridging the gap between school mathematics and common sense: A realistic turn.” *The Constructivist* (Summer), 5-14
- 1999 Zolkower, B. “Contextos y modelos en la didáctica realista de la matemática.” *Novedades Educativas* 11(108), pp. 44-7
- 1995 Zolkower, B. “Math fictions: What really solves the problem? In *Technoscience and Cyberculture*. Edited by Stanley Aronowitz et al., New York and London: Routledge.

RESEARCH IN PROGRESS

Engaging beginning mathematics teachers in the study of whole-class interaction texts within a lesson study group context: Tasks, results, and insights from an exploratory study, with Elizabeth de Freitas.

Whole-class interaction as an interpersonal gateway into mathematical meaning-making, with a 7th grade teacher from the Grupo Patagónico de Didáctica de la Matemática (Río Negro, Argentina).

GRANTS AWARDED

- Sept 2008- June 2011 Examining Teacher Discourse and Whole-Class Interaction: A Social Semiotics Model for Mathematics Lesson Study Groups (with Elizabeth de Freitas). Awarded by the National Science Foundation, Discovery Research K-12 (\$439,746)
- Summer 2008 Non-Routine Mathematics Problems and Beginning Middle School Teachers: An Exploratory Inquiry on a Lesson Study Group. Funds provided by the Responsive Research Network MSP (Hunter College) (\$15,000)
- Summer 2008 Teacher Induction Summer Pilot II, in collaboration with Hanna Haydar. Funds provided by the City University of New York for engaging 12 beginning mathematics teachers in a one-month lesson study group (\$16,600)

- Summer 2007 Teacher Induction Summer Pilot I, in collaboration with Hanna Haydar. Funds provided by the City University of New York for engaging 12 beginning mathematics teachers in a one-month lesson study group (\$13,500)
- 2001-2 Bridging the Gap between School Mathematics and Common Sense: The Realistic Approach. PSC-CUNY Research Award Program
- 2000-1 Teachers as Researchers, Teachers as Writers: A Developmental Research Group in Realistic Mathematics Education (PI: Catherine Fosnot, Co-PI/Director: Betina Zolkower), awarded by NSF as supplemental funds to Mathematics in the City (\$74,000)

CONFERENCE PRESENTATIONS

- October 2009 “Guiding students’ progressive mathematizing in whole-class interaction situations: A close up look at the function of language and the teacher’s role.” To be presented at the Realistic Mathematics Education Conference organized by the Freudenthal Institute-US, Boulder, Co.
- November 2009 “Engaging beginning mathematics teachers in the study of whole-class interaction texts within a lesson study group context: Tasks, results, and insights from an exploratory study,” with Elizabeth de Freitas. A poster to be presented at the DR-K12 PI Meeting, EDC, Washington DC.
- April 2009 “Studying paradigmatic didactical-mathematical situations: Design and implementation of an experimental graduate level course for pre-service mathematics teachers and doctoral students,” with Dor Abrahamson, paper accepted for presentation at the annual meeting of the American Educational Research Association, San Diego, CA.
- April 2009 “A social semiotics model for mathematics lesson study groups,” with Elizabeth de Freitas, roundtable, AERA, San Diego, CA.
- April 2009 “Mathematics education research for urban schools: Examples and directions: A symposium with Laurie Rubel and other colleagues from Brooklyn College, to be held at the NCTM Research Pre-Session, Washington DC, April 20-22.
- April 2009 “Disrupting the diagram: Semiotic tools for teachers,” a poster presentation, with Elizabeth de Freitas, NCTM Research Pre-Session, Washington, DC, April.
- November 2008 “Aportes a la Enseñanza de la Matemática desde la línea de la Educación Matemática Realista,” presentation at the Congreso Internacional de la Enseñanza de las Ciencias y la Matemática, Córdoba, Argentina.
- August 2008 Inaugural address at the Third Winter Institute in Didactics of Mathematics organized by the Universidad de la Republica, in Salto (Uruguay), with Ana

- Bressan. In addition, Zolkower presented the paper “Tablas, barras y líneas: Tres herramientas para trabajar con porcentajes que nos propone la corriente realista de didáctica de la matemática: Un racconto acerca de la apropiación de estas herramientas por alumnos de una clase de sexto grado”
- April 2008 “Beginning middle school teachers and non-routine mathematics problems: A modified Lesson Study model,” co-presented with Hanna Haydar at the New England Education Research Organization (Cape Cod, MA, April 10-11)
- March 2008 “Thinking aloud together: The role of a mathematics teacher in mediating a whole-class discussion about percents,” co-presented with Sam Shreyar at the American Education Research Association (New York City, NY, March 24-28)
- January 2008 “Beginning teachers and non routine problems: Modified lesson study group in an urban context,” co-presented with Hanna Haydar at the 12th Annual Conference of the Association for Mathematics Teacher Educators (Tulsa, OK, January 24-26)
- July 2007 “Pensando juntos en voz alta: El papel de una docente de matemática en el manejo de una situación de interacción de toda la clase.” Paper presented at the Winter Institute of Specialized Didactics at the University of San Martín, Buenos Aires (Argentina)
http://www.unsam.edu.ar/escuelas/humanidades/escuela_invierno/programa.htm
- September 2006 “Enseñando a matematizar, aprendiendo a didactizar: Ideas y experiencias en torno a la capacitación de docentes de matemática,” co-presented with Ana Bressan. Conferencia de la REM-UMA, Bahía Blanca, Argentina
- August 2005 “La problemática de la (re)contextualización en la enseñanza-aprendizaje de la matemática.” Paper co-presented with Fernanda Gallego at the Congreso Provincial “Contexto y Prácticas Aulicas.” Mendoza, Argentina
- December 2004 “A social-semiotic approach to interaction in heterogeneous mathematics classrooms.” Paper presented at the Emergent Scholarship in Urban Education Conference, CUNY Graduate Center. Co-presenter: Sam Shreyar
- August 2004 “La educación matemática realista. Principios en que se sustenta.” Presentation at the Winter Institute of Didactics of Mathematics (Buenos Aires, Argentina). Co-presenters: Ana Bressan and Fernanda Gallego
- February 2004 “Una mirada a la didáctica realista de la matemática a través de experiencias de aula de docentes y capacitadores.” Co-presenters: Ana Bressan and Fernanda Gallego. Presented at the Conference: Mente y Cultura. Centro Regional Universitario Bariloche de la Universidad Nacional del Comahue y la Facultad de Psicología de la Universidad Autónoma de Madrid

- July 2002 “La relevancia de los contextos en la resolución de problems de matemática.” Presented at the 4th Meeting of the Association of Mathematics Education of the Southern Cone (SOAREM), Buenos Aires, Argentina, with GPDM teachers
- November 2001 “Shortest pathways: The centrality of writing for the collective production of a mathematics text in a 6th grade classroom,” with Sam Shreyar. Presentation at the 20th PANAMA Conference: Interaction in Mathematics Classrooms, Noordwijkerhout, The Netherlands
- April 2000 “Bookmarks: A realistic geometry lesson in a k/1 classroom,” with Ginger Hanlon (teacher). Presentation at the Conference on Documentation and Design, Early Childhood Laboratory School (UMass, Amherst)
- July 1999 “Mathematizing reality, mathematizing mathematics.” Lecture at the University of Comahue, Bariloche (Río Negro Province, Argentina)
- February 1999 “Realistic geometry: Classroom and in-service activities.” Presentation at the Meeting with Pierre van Hiele on Levels of Thinking, NY Collaborative for Excellence in Teacher Preparation in Mathematics, Science, and Technology (Brooklyn College)
- April 1998 “On the use of picture-based contexts to facilitate mathematizing in the multiplication strand.” Presentation at the 76th NCTM Annual Meeting (Washington D.C.)
- October 1997 “Math fictions: Elementary mathematics education and the modern pedagogical paradigm.” Presentation at the 22nd Meeting of the Social Science History Association (Washington, D.C.)
- June 1997 “In search of a didactics of mathematics, beyond the prescription not to tell.” Presentation at the 4th International Misconceptions Seminar (Cornell University, Department of Education)
- April 1997 “Using contexts to facilitate the learning of mathematics” (with Willem Uittenbogaard, Maarten Dolk, and Mathematics in the City teachers). Mini-conference held at the 75th Annual Meeting of the National Council of Teachers of Mathematics (Minneapolis)
- May 1994 “What is culture to your ears is noise to theirs.” Presentation at the Technoscience and Cyberculture Conference, Center for Cultural Studies (CUNY, Graduate Center)
- April 1994 “Culture as noise: Relations of time and money in the practices of eight Latino schoolchildren.” Presentation at the 1994 Annual Meeting of the American Educational Research Association, New Orleans, LA

COLLOQUIA, SYMPOSIA, INSTITUTES, AND WORKSHOPS

- February 2009 “Shifting con/texts and the guided reinvention of mathematizing: A case study in a 6th grade classroom,” EMST/SESAME Colloquium, Graduate School of Education, University of California at Berkeley

- June 2006 “La matematización de los problemas y el problema de la matematización.” Workshop for k-12 teachers. Neuquén, Argentina
- August 2004 Mathematics Institute for Leadership in Education (MILE), co-taught with Laurie Rubel. A five-day seminar for secondary school mathematics teachers, within MetroMath Center for Teaching and Learning
- August 2003 “Using M.A.K. Halliday’s functional grammar for analyzing transcripts of mathematics lessons with an eye to describing modalities of teacher orchestration of whole-class conversations.” A three-day seminar for members of the GPDM, co-facilitated with Sam Shreyar
- July 2001 “Contributions of realistic mathematics education (RME) to geometry instruction in grades K-9th.” Four-day Winter Institute for elementary and middle school teachers, organized by the GPDM (San Carlos de Bariloche)
- June 2000 “On the teaching of written algorithms, ratio and proportion, fractions, decimals, and percentages: Contributions of RME.” Four-day Winter Institute for elementary and middle school teachers, organized by the GPDM
- July 1999 “Towards closing the gap between school mathematics and common sense.” Four-day Winter Institute for elementary and middle-school teachers (San Carlos de Bariloche)
- April 1999 “Look to the numbers to decide what makes sense! Using strings of bare number computation problems in order to develop flexible mental math strategies.” Workshop at the 77th NCTM Annual Meeting (San Francisco)
- December 1997 “Facilitating student reinvention of algebra in middle-school classrooms.” One-day workshop at Jacob Riis Upper School of PS 126, District 2 (Manhattan). Workshop co-facilitated with Yeuk-Sze Leong, middle school teacher
- November 1997 “Using strings of bare number computation problems to develop efficient strategies for addition and subtraction.” Workshop held at the Annual Conference of the Association for Constructivist Teaching. (City College, CUNY)
- November 1997 “Gathering evidence: From word problems to wor(l)d problems.” Workshop held at the Qualitative Methods in Psychology Conference (Graduate Center, CUNY)

RELATED ACADEMIC EXPERIENCE

- Fall 08-Spring 09 Consultant/Professional Developer for middle school mathematics teachers at Landmark High School, New York City
- Spring 2008 Consultant/Professional Developer for middle school mathematics teachers at the Brooklyn College Academy, Brooklyn

Sept. 05-Present	Consultant/Professional Developer for elementary mathematics teachers at PS 340 (Bronx, NYC)
Sept. 04 – June 06	Consultant/Professional Developer for secondary mathematics teachers at the Manhattan Bridges High School
Feb. 2000-Present	Co-director, with Ana Bressan, of the Grupo Patagónico de Didáctica de la Matemática (GPDM: www.gpdmatematica.org.ar), a developmental research/study group of elementary and middle school teachers in San Carlos de Bariloche, Río Negro Province, Argentina
Aug. 01-May 02	Consultant/Professional Developer for middle school mathematics teachers in Community School District 15 (Brooklyn). Classroom visits, co-teaching, unit training (<i>Mathematics in Context curriculum series</i>), and development of middle school math education staff developers/teacher leaders for the District
July 99-May 01	Consultant/Professional Developer for the <i>Mathematics in Context</i> Consulting Group, a network of mathematics educators seeking to support and promote mathematics reform through the implementation of <i>Mathematics in Context</i>
Sept. 98-May 99	Consultant/Professional Developer for middle school mathematics teachers (District 15, Brooklyn). Facilitated biweekly a study group of teachers and staff developers aimed at increasing teachers' content knowledge in the context of standard-based reform initiatives and help them implement the <i>Mathematics in Context</i> curriculum series
Nov. 97-July 98	Consultant/Evaluator of the Real World Mathematics Initiative Teacher-Led Study Group Project, a professional development program for middle school teachers, jointly organized by New Visions for Public Schools and the NYC Board of Education
Aug. 97- June 98	Consultant, Mathematics Initiative, Community School District Two (Manhattan). In-service professional development for middle school mathematics teachers in the Jacob Riis Upper School of PS 126 in Lower Manhattan
Sept. 95-June 97	Consultant, New York State System Initiative, Urban Network Project for Mathematics, Science, and Technology, Rensselaer Polytechnic Institute. In-service professional development for elementary school mathematics teachers

