Jessica Fitzsimons Riccio Curriculum Vitae

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EDUCATION

2008 Teachers College, Columbia University

EdD

Dissertation Topic: Preservice Science Education and Content Area Literacy

2002 Teachers College, Columbia University

EdM Science Education-NYS Certification Program Permanent Licensure Biology and General Science 7-12

1999 Teachers College, Columbia University

MA Physiology

1997 Hunter College in the City University of New York

BS Human Physiology

ACADEMIC EXPERIENCE AND APPOINTMENTS

9/09-present JFR Science Education Consultant Services Richmond Hill, NY

President

Professional Development, Science Education

Current Clients:

Victory Schools, Kean University, Lutheran School Association

9/08-present Teachers College, Columbia University New York, NY

Lecturer in Science Education

Coordinator Preservice and Inservice Masters Programs

8/08- present Lehman College, City University of NY New York, NY

Adjunct Assistant Professor

Masters Thesis Advisor

• Courses taught: ESC 612, ESC 707, ESC 722

1/07- 9/08 Teachers College, Columbia University New York, NY

Coordinator Preservice Science Education

 Responsible for the admission, advisement and teacher certification of all MA science education students

American Museum of Natural History New York, NY

7/04-9/08 Teachers College, Columbia University Instructor in Science Education

Courses Taught

•	• Spring 2008			
	0	MSTC 4761	Student Teaching in Science	
	0	MSTC 4049	Middle School Living Environment Methods	
•	Fall 2007			
	0	MSTC 4000	Science in Secondary Schools for Preservice Students	
	0	MSTC 4363	Introduction to Science Education Practices	
•	• Summer 2007			
	0	MSTC4049	Middle School Living Environment Methods	
	0	MSTC 4761a	Content Area Literacy Student Teaching	
•	Spring 2007			
		MSTC 4761	Student Teaching in Science	
		MSTC 4761a	Content Area Literacy Student Teaching	
	0	MSTC6401	Internship in Science Education	
•	Fall 2006			
	0	MSTC 4000	Science in Secondary Schools	
	0	MSTC 4363	Introduction to Science Education Practices	
• Summer 2006				
	0	MSTC 4049	Middle School Living Environment Methods Lab	
	0	MSTC 4363	Introduction to Science Education Practices	
• Spring 2006				
	0	MSTC 4761	Student Teaching in Science	
•	Fall 2005			
	0	MSTC 4000	Science in Secondary Schools	
	0	MSTC 4363	Introduction to Science Education Practices	
•		Summer 2005		
	0	MSTC 5044	Middle School Living Environment Methods Lab	
	0	MSTC 4363	Introduction to Science Education Practices	
•	Spring 2005			
	0	MSTC 4761	Student Teaching in Science	
•	Fall 20	Fall 2004		
	0	MSTC 4000	Science in Secondary Schools for Preservice Students	
	0	MSTC 4363	Introduction to Science Education Practices	
•	Summer 2004			
	0	MSTC 4040	Elementary Science Methods Lab	

American Museum of Natural History

9/04-present

Teachers College, Columbia University New York, NY Field Placement Coordinator/University Supervisor Secondary Science Education

• Responsible for the coordination, administration, accreditation, supervision and mentoring of pre-service science education students' observation and student teaching placement requirements for NYS certification (in biology, chemistry, physics and earth science 7-12)

Director Science Education Peace Corps Fellows Program

• Responsible for the mentoring and certification of In-service Science Education students in the pursuit of alternative transitional B NY State Teaching Licensure

9/04-present

US Satellite

Rye, NY

Curriculum Developer/Grant Consultant

• Responsible for writing editing and collaborating with other science developers to create and reform novel science curricula for both independent and sponsored projects, i.e. NASA, NOAA and NSF funded programs

NASA Endeavor Teacher Mentor

- Responsible for teaching online courses to teachers from around the country who are seeking certification in science through this grant
- Bi-weekly mentoring and communication with a cohort of teachers to support their content and pedagogical needs

1/05-6/06

Teachers College, Columbia University School Liaison, Urban Science Education Center

New York, NY

• Responsible for the mentoring and supervision of 10 fellows in Urban Science Education placed in NYC Public Schools. Provided weekly mentoring meetings for collaborating teachers on Transformational Action Research Projects being conducted in their school's classrooms. Conducted weekly research meetings with all of the fellows at the University. Communicated monthly with school administrative staff as to the progress of science in their schools.

9/01-9/04

Life Sciences Secondary School Regents Science Teacher

New York, NY

- designed strategies to infuse literacy, cooperative learning and inquiry/problem based learning in mind of professional development experiences
- collaborated with faculty to ensure interdisciplinary curricula development
- participated in school-based initiatives for transformative education of urban youth
- participated actively as extra-curricular/committee member

Curriculum Writing Team

Gala Committee

Debate Coach

Literacy Committee

New Teacher Mentor

Professional Development Committee

School Based Option Teacher Hiring Committee

School Leadership Team

<u>Teacher Curriculum Center Development Team</u>

GRANTS

2010 State of New Jersey Math, Science Partnership Program at Kean University EVALUATOR: Improving Teacher Quality in Math and Science 2010-2012 \$1.715 million

2009 Provost Investment Fund, Teachers College Columbia University SCIENCE FACULTY: Interdisciplinary Science and Social Studies "Content Driven Literacy" \$10,000

2008-9 Provost Investment Fund, Teachers College Columbia University SCIENCE FACULTY: Interdisciplinary Science and Social Studies "Content Driven Literacy" \$20,000

2008-9 Carnegie Corporation of New York SCIENCE FACULTY: Interdisciplinary Science and Social Studies "Content Driven Literacy" \$20,000

Carnegie Corporation of New York
MEMBER FACULTY LEARNING COMMUNITY/PRESERVICE SCIENCE COORDINATOR
PI Dolores Perin, PhD
2005-2007

Enhancing teacher preparation for adolescent literacy through interdisciplinary learning communities. Two years, \$100,000. Teachers College

O Members of a preservice initiative at Teachers College's (TC) are creating two interdisciplinary learning communities focused on adolescent literacy, one for preservice teachers, the other for university faculty. The group of students enrolled in Science Education, Social Studies Education and the Reading Specialist Program who will form the preservice teacher community are taking two courses together over one academic year-an adolescent literacy course and a secondary school teaching seminar. The faculty learning community, which parallels the student group, is designing, implementing, evaluating and working to sustain the teacher preparation model. The initiative is partnering with the National Academy for Excellent Teaching-an academy within TC that focuses on preparing teachers to work with low-income, urban, minority youth with high literacy needs-to help plan, implement and test the model.

NASA Endeavor Science Teaching Certificate Project in Partnership with the Urban Science Education Center at Teachers College CO-AUTHOR/CURRICULUM DEVELOPER/CONSULTANT PI Glen Schuster 2008-2013 \$2,500,000 US Satellite

The NASA Endeavor Science Teaching Certificate Project awards one-year fellowships each year to over 40 current and prospective teachers. Funding authorization for the Project is provided through the NASA Endeavor Teacher Fellowship Trust Fund as a tribute to the dedicated crew of the Space Shuttle Challenger. The Project is administered by U.S. Satellite Laboratory, Inc. In partnership with State Departments of Education, Endeavor Fellows take five graduate courses in an innovative, LIVE (online) format from the comfort of their home or school. They learn to apply research-based pedagogical strategies and cutting-edge STEM (Science, Technology, Engineering and Mathematics) content to their classroom contexts while becoming a part of a special network of like-minded educators across the Nation.

NOAA Environmental Literacy Grant CO-AUTHOR/CURRICULUM DEVELOPER/CONSULTANT PI Glen Schuster

2006-2009 \$600,000. US Satellite

The components of *Signals of Spring* – ACES will promote ocean environmental literacy among students. The stakeholders who will benefit in formal education at the middle and high school level include teachers, students, and parents, all of whom will be impacted and engaged in field studies and internet-based work. Teachers, accountable to administrators, will receive the classroom materials, including assessments and rubrics, and the standards documentation to show how requirements of their state and national standards are met. *Signals of Spring* – ACES, hereinafter referred to as 'ACES,' will be a new expansion of the award-winning *Signals of Spring* project, a curriculum-based program formerly funded by a competitive grant by NASA from late 1999 to 2002.

NASA Project 3D View CO-AUTHOR/CURRICULUM DEVELOPER/CONSULTANT PI Glen Schuster 2004-2009, \$2, 100, 000. US Satellite

1200 teachers will be trained nationally over five years. Partners include Stanford University, National Geographic and U.S. urban school districts. In the program, simple web interfaces will be projected on computer screens or an 8-foot "VIEW-Wall" in schools. Students will explore, create, manipulate and navigate 3D-VRML [Virtual Reality

views of Earth. A curriculum-based program with hands-on activities, NASA data interpretation and manipulation, and "fly-overs" highlight the program.

NSF Project SPRINTT- Student Polar Research with IPY National and International Teacher Training CURRICULUM DEVELOPER/CONSULTANT PI Glen Schuster 2007-2009, \$977,573 US Satellite

Students around the world research current polar problems including the fate of polar animal species and how carbon is contributing to climate change on Earth. Through the lens of northern indigenous peoples including Alaskans and Inuit, students analyze cutting-edge science data and draw their own conclusions in SPRINTT (Student Polar Research with IPY National and International Teacher Training). Trained teachers facilitate authentic student research. SPRINTT students build their own web pages and prepare to participate in an international student symposium online or in New York in 2009. Partners include the Alaska Native Science Commission, Stanford University, nearly two dozen international scientific organizations and educators across the United States, Korea, Australia and Canada.

NYC Department of Education, Georgia Institute of Technology/National Science Foundation PI Ann Rivet 2007 \$40,000
GRADUATE ASSISTANT
Project-Based Inquiry Science 6th Grade Pilot

The Hearst Foundation
PI Ann Rivet
2005-2006 \$200,000
GRADUATE ASSISTANT I USE Science, for Teachers College's Urban Science Education Center

Marrero, M.E., Riccio, J. F., Woodruff, K.A., Schuster, G. S., (2010). *Live, Online Short-courses: A case study of innovative professional development.* International Review of Research on Open and Distance Learning 11, (1).

Marrero, M., **Riccio, J.F.**, and Schuster, G. (2010) Building an Online Community of Practice: A case study of the NASA Endeavor Fellows. Presentation at the National Association of Research in Science Teaching (NARST), Philadelphia, PA.

Perin, D., Crocco, M., Marri, A., **Riccio, J.**, Rivet, A. and Chase, B. (2009). Integrating literacy in content classrooms. *Academic Exchange Quarterly*, 13 (2), 97-105.

Riccio, J. (2009). Perennial Issues in Science Teacher Preparation: Challenges that Student Teachers Face and How Teacher Educators can Reflect and Act to Overcome Them. Paper presented at the International Meeting of the Association for Science Teacher Education (ASTE). January 2009: Hartford, CT.

Riccio, J. (2009). Developing New Ways of Thinking: Preservice Teachers' Misconceptions About the Utility of Content Area Literacy in the Science Classroom. Paper presented at the International Meeting of the Association for Science Teacher Education (ASTE). January 2009: Hartford, CT.

Rivet, A., Petzoldt, M., **Riccio, J.**, Ingber, J. (2008). Science Teachers' Characterizations of Inquiry: Identifying Challenges to Curriculum Reform. Paper to be presented at the annual meeting of National Association for Research in Science Teaching (NARST). April 2008: Baltimore, MD.

Riccio, J. (2008). Becoming Equipped to Teach: Literacy as a pedagogical tool in the preservice teacher's toolbox. Paper presented at the International Meeting of the Association for Science Teacher Education (ASTE). January 2008: St. Louis, MO.

Marrero, M. & Riccio, J. (2008). Live Online Professional Development: Creating Teacher Communities Across Contexts. Paper presented at the International Meeting of the Association for Science Teacher Education (ASTE). January 2008: St. Louis, MO.

Perin, D., Rivet A., Marri, A. **Riccio. J.** (2007). Preparing Preservice Science and Social Studies Teachers for Adolescent Literacy Challenges: Reports from Student-Teaching Classrooms. Paper presented at the annual meeting of the American Educational Research Association (AERA). April 2007: Chicago, IL.

Rivet, A., Petzoldt, M, Ingber, J., & Riccio, J. (2007). Characterizations of inquiry: Science teachers' descriptions of curriculum reform. Paper presented at the Knowledge Sharing Institute for the Center for Curriculum Materials in Science. July 2007: Washington, D.C.

Brotman, J., Riccio, J. (2007). Transformative Action Research in Urban Science Education Paper presented at the Annual Meeting of National Association for Research in Science Teaching (NARST). April 2007: New Orleans, LA

Rivet, A., Lafferty, B., Petzolt, M. & **Riccio, J**. (2006). The 6th grade pilot of the PBIS program in New York City public schools: Feedback from the teacher's perspective. Report submitted to the New York City Department of Education, September 15, 2006.

Riccio, J. and Calabrese Barton, A. (2006). A Review of: This Teaching Life: How I Taught Myself to Teach. *Teachers College Record* Volume 108 Number 1, p. 174-179.

Riccio, J. (2005). How Can Humans Change the Environment? In Science Professional Development Handbook: Grade 5. pp. 14-18. Houghton Mifflin. Boston, MA.

Riccio, J. (2005). The Changing Environment. In Science Professional Development Handbook: Grade 6. pp. 12-16. Houghton Mifflin. Boston, MA.

SERVICE

Lisa Beck EdD Final Oral Defense Fourth Examiner, April 2010

Dissertation Title:

More Than "Just" Changing Diapers: The Experiences of Preservice Early Childhood Teachers in Infant Field Placements.

Department of Mathematics, Science and Technology, Teachers College

Graduate Student Representative

3 Faculty Searches

PROFESSIONAL MEMBERSHIPS

- National Science Teachers Association
- NY Biology Teachers Association
- NY State Marine Educators Association Past Vice President
- Science Teachers Association of NY State
- Association for Science Teacher Education
- AERA
- NARST