

Curriculum Vitae
JEFFREY J. ROZELLE
Knowles Science Teaching Foundation
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EDUCATION

- 2010 **Ph.D., Michigan State University, East Lansing, MI**
Curriculum, Teaching, and Educational Policy
Concentration: Science Education
Department of Teacher Education
- Dissertation Title: *Becoming a Science Teacher: The Competing Pedagogies of Schools and Teacher Education*
- NARST Outstanding Doctoral Research Award, 2011** – Dissertation was judged “by colleagues to have the greatest significance in the field of Science Education from among all dissertations nominated for the award.”
- Doctoral Committee: Suzanne M. Wilson (Chair), Charles W. Anderson, Gail Richmond, and Gary Sykes
- 2003 **M.Ed., Miami University, Oxford, OH**
Secondary Education; School of Education and Allied Professions
- 1997 **B.S., University of Cincinnati, Cincinnati, OH**
Secondary Education; College of Education
Ohio Teaching Certificate: High School (7-12), Chemistry
- 1996 **B.S., University of Cincinnati, Cincinnati, OH**
Chemistry; McMicken College of Arts and Sciences

PROFESSIONAL EXPERIENCE

- 2013-present **Senior Program Officer, Knowles Science Teaching Foundation.**
Led a team of teacher developers to conceptualize, plan, and provide intensive in-person and online professional development for Knowles Teaching Fellows during their third and fourth years of the fellowship. Managed team budget to allocate resources for staff, consultant support, meetings, and professional development. Contributed to fellowship-wide strategic planning.
- 2009-2013 **Assistant Professor of Science Education, Syracuse University**
Department of Science Teaching, College of Arts and Sciences
Department of Teaching & Leadership, School of Education
Curriculum Problems in Science Education (SCE 718),
Seminar in Science Education Research (SCE 789),
Quests and Questions in Physical Phenomena (SCI 105),
Elementary Science Methods and Curriculum (EED 627),
Elementary Science Methods and Curriculum (EED 337),
Teacher Development in Science (SED 415/615)

First Year Forum, College of Arts & Sciences (CAS 101),

- 2006-2009 **Research Assistant, Entering the Guild: The Effects of Teacher Professional Community and Professional Development on New Teachers and their Students.** Project funded by National Science Foundation (Suzanne M. Wilson and Linda Shore (PIs), Jodie Galosy, Project Director). Project explores the relationship between new science teacher induction and teacher and student learning. My work included designing and revising instruments to assess teacher and student learning, developing and implementing data collection procedures for classroom and PD observations, designing and executing data analysis, and preparing presentations and papers for conferences and journals.
- 2006-2008 **Teaching Assistant, Michigan State University.** Courses Taught: Crafting Teaching Practices, Secondary Science; Reflection and Inquiry in Teaching Practice I & II, Secondary Science.
- 2005-2006 **Research Assistant, Investigating and Questioning Our World through Science and Technology (IQWST).** Project funded by National Science Foundation (David Fortus, Co-PI). Project involves designing a middle-school science curriculum that includes physics, chemistry, life science, and earth science units. I designed and wrote portions of the 6th grade physics light curriculum unit, assisted in data collection at two pilot sites, and co-developed and implemented a week-long professional development for teachers who used the IQWST units in their classrooms.
- 2005-2006 **Research Assistant, Developing Leadership and Support for Professional Learning Communities for Urban Science Teaching (PICRUST).** Project funded by National Science Foundation (Gail Richmond, PI). Project develops professional learning communities among Lansing elementary and middle-school teachers to improve their teaching of science. I attended and documented bi-weekly meetings for the 6th and 8th grade communities and assisted the MSU faculty leaders as needed.
- 1996-2005 **High School Science Teacher, Cincinnati Public Schools.** Taught a science courses including chemistry, advanced chemistry, biology, and physical science at Hughes Center and Western Hills High School (both urban public schools). As an interdisciplinary team leader, guided a team of four teachers in taking full responsibility for 90 students. Coordinated student block scheduling to enhance student achievement, handled team disciplinary action, led team conferences with parents, planned team events, and oversaw interdisciplinary projects.
- 1999-2002 **Faculty Mentor, Miami University.** Coordinated a summer residential science research program for high school students. Facilitated communication between students and mentoring Miami professors through involvement with students' research.

SCHOLARLY PUBLICATIONS AND ACTIVITIES

Peer-Reviewed Journal Articles

Holmstrup, M. E., Stearns-Bruening, K., & **Rozelle, J.** (2013). Quantifying accurate calorie estimation using the "Think Aloud" method. *Journal of Nutrition Education and Behavior*, 45, 77-81.

Rozelle, J. J., & Wilson, S. M. (2012). Opening the black box of field experiences: How cooperating teachers' beliefs and practices shape student teachers' beliefs and practices. *Teaching and Teacher Education*, 28, 1196-1205.

Rozelle, J. J., & MacKenzie, A. H. (2011). Biology experiences in the summer: Keeping the faucet flowing for all students. *The American Biology Teacher*, 73(8), 450-453.

Wilson, S. M., **Rozelle, J. J.**, & Mikeska, J. N. (2011). Cacophony or embarrassment of riches: Building a system of support for quality teaching. *Journal of Teacher Education*, 62(4), 383-394.

Book Reviews

Rozelle, J. J., & Bearkland, M. (2012). [Review of *The Really Useful Elementary Science Book*.] *Teachers College Record*, Date Published: April 6, 2012 at www.tcrecord.org.

Rozelle, J. J. (2007). [Review of *Teacher Man: A Memoir*.] *Education Review*, Date Published: July 24, 2007 at <http://edrev.asu.edu/reviews/rev572.htm>.

Rozelle, J. J. (2007). [Review of *Understanding Teacher Expertise in Primary Science: A Sociocultural Approach*.] *Teachers College Record*, Date Published: May 21, 2007 at <http://www.tcrecord.org>.

Grant Applications

Funded

Dotger, B. (PI), Dotger, S., Masingila, J, & **Rozelle, J.** (Co-PIs) (August 2011 – July 2014). *The Science and Mathematics Simulated Interaction Model*. The National Science Foundation, Discovery Research K12 Program (DR-K12), (\$449,563).

Smith, C. (PI), Ashby, C. & **Rozelle, J. J. (Co-PIs)**. (September 2011 – August 2014). *Syracuse Urban Inclusive Teacher Residency Students with Disabilities Generalist 7-12 Master's Program* (SUITR). Graduate Level Clinically Rich Teacher Preparation Pilot Program from the New York State Department of Education Race to the Top. (\$1,638,011).

Declined

Tillotson, J. W. (PI) & **Rozelle, J. J.** (Co-PI). *Investigating the Meaningfulness of Pre-Service Programs Across the Continuum of Teaching in New York State*. The National Science Foundation, Research and Evaluation on Education in Science and Engineering (REESE), \$2,499,855.

Tillotson, J. W. (PI) & **Rozelle, J. J.** (Co-PI). *Investigating the Meaningfulness of Pre-Service Programs Across the Continuum of Teaching in New York State*. The National Science Foundation, Discovery Research K12 Program (DR-K12), \$3,997,039.

Shore, L. (PI) & **Rozelle, J. J.** (Co-PI). *The Exploratorium Post-Induction Program: A Proof of Concept Project*. The National Science Foundation, Discovery Research K12 Program (DR-K12), \$450,000 (total), \$147,404 (subcontracted to Syracuse University).

Wilson, S. M. (PI), **Rozelle, J. J. (Co-PI)** & Shore, L. (Co-PI). *Science Teacher Learning Progressions: Using high-quality, stable, and career-long professional development in understanding teachers' knowledge, learning, and practice*. Grant proposal submitted to the REESE program, National Science Foundation, \$2,499,388 (total), \$301,706 (subcontracted amount to Syracuse University). November 15, 2010.

Shore, L. (PI), Wilson, S. M. (Co-PI), **Rozelle, J.** (subcontract), Lamberston, L., & Tamez, M (senior personnel). (2010). *Mapping the Learning Progressions of Science Teachers: Developing and Researching an Innovative Early-Career Teacher Professional Development Program at the Exploratorium*. Grant proposal submitted to the Discovery Research K-12 program (DR-K12), National Science Foundation, \$3,257,083 (total), \$276,255 (subcontracted amount to Syracuse University), January 6, 2010.

Curricula

Fortus, D., Grueber, D., Nordine, J., **Rozelle, J.**, Schwarz, C., & Weizman, A. (2012). Seeing the Light: Can I Believe My Eyes? In J. Krajcik, B. Reiser, D. Fortus, & L. Sutherland (Eds.), *Investigating and Questioning Our World through Science and Technology (IQWST)*.

Research Conference Papers and Presentations

Rozelle, J. J., Dotger, S., Dotger, B., Masingila, J., & Bearkland, M. (April 2013). Simulated interactions as a pedagogy for preservice science teachers. Paper presented at the annual conference of the National Association of Research in Science Teaching, Rio Grande, Puerto Rico.

Orado, G. N. & **Rozelle, J. J.** (April 2013). Pre-service teachers' views about teaching and learning of science by ELLs: A case study. Paper presented at the annual conference of the National Association of Research in Science Teaching, Rio Grande, Puerto Rico.

Dotger, B. H., Dotger, S., **Rozelle, J. J.**, & Masingila, J. O. (April 2012). From knowing to doing: Simulated interactions for mathematics and science teacher development. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.

Rozelle, J. J., Dotger, B. H., Dotger, S., Masingila, J. O. (March 2012). Simulated Interaction Model (SIM): An innovative approach for preparing and researching preservice science teachers. Poster presented at the annual conference of the National Association of Research in Science Teaching, Indianapolis, IN.

Rozelle, J. J., & Richmond, G. (March 2012). Persistence of a culture of inquiry: Professional development schools and preparation of reform-based science teachers. Paper presented at the annual conference of the National Association of Research in Science Teaching, Indianapolis, IN.

Orado, G. N., LaTray, C., & **Rozelle, J.** (July 2011). Considering students' conceptions of scientific phenomena: Adapting constructivist teaching strategies in teacher education for a developing country. Paper presented at the International Conference on Education, Nairobi, Kenya.

Mikeska, J. N., **Rozelle, J. J.**, Green, K. R., Galosy, J. A., & Wilson, S. M. with McDonald, M. (discussant) (April 2011). The effects of teacher professional development on new science teachers and their students. A symposium presented at the annual conference of the American Educational Research Association, New Orleans, LA.

Rozelle, J. J., Galosy, J. A., Mikeska, J. N., Green, K. R., & Wilson, S. M. (April 2011). Using science teacher knowledge to predict teaching practices and student achievement. Symposium paper presented at the annual conference of the American Educational Research Association, New Orleans, LA.

Mikeska, J. N., Green, K. R., **Rozelle, J. J.**, Galosy, J. A. & Wilson, S. M. (April 2011). Examining links with teachers' learning opportunities in a science-specific induction program. Symposium paper presented at the annual conference of the American Educational Research Association, New Orleans, LA,

Rozelle, J. J. (January 2011). "It's based on a true story, I guess": A case of playing the game of teacher education. Paper presented at the annual meeting of the Association of Science Teacher Education, Minneapolis, MN.

Mikeska, J. N., Galosy, J. A., **Rozelle, J. J.**, Green, K. R., & Wilson, S. M. (May 2010). *Measuring teaching: A mixed methods approach to building a composite portrait of practice*. Poster presented at the annual meeting of the American Educational Research Association, Denver, CO.

Rozelle, J. J., Galosy, J. A., Mikeska, J. N., Green, K. R., & Wilson, S. M. (March 2010). *Examining topic-specific professional development in a science teacher induction program*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA.

Rozelle, J. J., Mikeska, J. N., Galosy, J. A., Green, K. R., & Wilson, S. M. (April 2009). *Linking teacher outcomes to learning opportunities within a science teacher induction program*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Garden Grove, CA.

Mikeska, J. A., **Rozelle, J. J.**, Galosy, J. A., Green, K. R., & Wilson, S. M. (April 2009). *Linking teacher outcomes to learning opportunities within a science teacher induction program*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Mikeska, J. N., **Rozelle, J. J.**, Galosy, J. A., & Wilson, S. M. (January 2009). *Using contour maps to characterize varied learning opportunities within a science teacher induction program*. Paper presented at the annual meeting of the Association for Science Teacher Education, Hartford, CT.

Galosy, J. A., Mikeska, J. N., **Rozelle, J. J.**, & Wilson, S. M. (November 2008). *Mapping teachers' pathways in a science-specific induction program*. Poster presented at 2008 DRK-12 Principal Investigator's meeting, Washington DC.

Galosy, J. A., Mikeska, J. N., **Rozelle, J. J.**, & Wilson, S. M. (March 2008). *Characterizing new science teacher support: A prerequisite for linking professional development to teacher knowledge and practice*. Poster presented at the annual meeting of the American Educational Research Association, New York, NY.

Rozelle, J. J. & MacKenzie, A. H. (April 2007). *Keeping the faucet on: Summer science experiences and summer learning loss*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.

Rozelle, J. J., Galosy, J. A., Mikeska, J. N., & Wilson, S. M. (April 2007). *Developing teacher assessments of science content and pedagogical content knowledge*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Mikeska, J. N., **Rozelle J. J.**, Galosy, J. N., & Wilson, S. M. (April 2007). *Anticipatory dread: Teachers, professional development, assessments, and the challenges of research-practice collaborations*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Invited Presentations and Workshops

Rozelle, J. (2012). Science labs: Small changes that can make school science more like science and less like school. Workshop for Syracuse City School District high school science teachers, Syracuse, NY, March 10, 2012.

Rozelle, J. (2011). Motivating Students. Workshop for the Syracuse University TA Orientation, Syracuse, NY, August 19, 2011.

Rozelle, J. (2011). Science labs: Small changes that can make school science more like science and less like school. Workshop for Syracuse City School District, Syracuse, NY, August 3-4, 2011.

Dotger, S. & **Rozelle, J.** (2011). Early College High School Summer Science Institute. Workshop for students and teachers of Nottingham High School, Syracuse, NY, July 18-22.

Rozelle, J. (2011). Teaching science in authentic ways. Workshop for the Say Yes to Education Summer Institute, Syracuse, NY, June 15-16, 2011.

Rozelle, J. (2010). The competing pedagogies of schools and teacher education. Presentation for the Syracuse University School of Education Research Luncheon, Syracuse, NY, November 16, 2010.

Rozelle, J. (2010). Open inquiry in an hour: Or using the Suchman Inquiry instructional model to help students *do* science without chaos, cost, and compromising the curriculum. Presentation for Syracuse City School District Fall Superintendant Day, the Museum of Science and Technology, Syracuse, NY, October 20, 2010.

Dotger, S. & **Rozelle, J.** (2009). Defining inquiry science for K-12 classrooms: What do we know and how do we use it? Presentation for the National Say Yes to Education Fall Institute, Syracuse University, Syracuse, NY, September 25 – 27, 2009.

Rozelle, J. (2009). Reform-based science curricula: What are they, what's out there, do they work, and how do we know one when we see it? Presentation to Syracuse University Educational Administration class, EDA 722, November 16, 2009.

PROFESSIONAL SERVICE

National and State

Manuscript Reviewer

- *Teaching and Teacher Education*, 2012, 2103
- *Journal of Research in Science Teaching*, 2011
- *Urban Education*, 2011, 2012
- *CBE: Life Science Education*, 2010, 2011
- *Science Education*, 2009

Conference Proposal Reviewer

- National Association for Research in Science Teaching (2008-2012)
- Association for Science Teacher Education (2009, 2011-2012)
- American Educational Research Association (2007-2008, 2011)

Advisory Board and External Evaluation

- External Evaluator, EPA Environmental Education Program proposal entitled "Energy Impact." Project PI: Nancy Volk, Museum of Science and Technology (2011, Declined)
- External Evaluator, NSF DRK-12 proposal entitled "Technology-Enhanced Supports for Teaching (TEST): Using video analysis and annotation tools to develop high-leverage science and mathematics teaching practice." Project PI: Dr. Gail Richmond, Michigan State University (2011, Declined).
- Advisory Board, NSF REECE proposal entitled "Learning from students as a foundation for beginning teachers: A learning progression for teaching science for all." Project PI: Gail Richmond, Michigan State University (2009, Declined).

NYSTEM Network

- Professional Development Portfolio Design Team, coordinating professional development efforts with stakeholders across New York State in STEM (2010-current)
- Small Group Facilitator for Central New York STEM Education Regional Dialogue, 11/02/2009.

New York State Department of Education

- Committee Member, Development of new Middle Childhood (5-9) Multi-Subject Content Specialty Test, May 18-19, 2011, April 20, 2012.
- Piloted the new New York State Teacher Performance Assessment for Initial Certification, November 1-30, 2011.

University

Doctoral Students

Doctoral Advising

- Grace Orado (Science Education, 2014); Describing students' talk about physical science phenomena outside and inside the classroom: A case of secondary school students from Maragoli, Western region of Kenya.

Doctoral Dissertation Committees

- Lauren Jetty (Science Education, 2014)
- Lynn Infanti (College Science Teaching, 2012)
- Michael Holmstrup (Exercise Science, 2011)
- John Taylor (College Science Teaching, 2010)
- Paul Maza (College Science Teaching, 2010)

Research Apprenticeship Supervision

- Patrick Dawes (Science Education)
- Grace Orado (Science Education)
- Jonathan Damiani (Teaching and Curriculum)

Other Advising

Masters Advising, M.S. in Science Education, 15 students (2010-2013)

Lower Division Advising, College of Arts & Sciences, 28 students (2010-2013)

Coordinator, Secondary Science Certification Program, School of Education (2012-2013)

Syracuse University-Kenyatta University Teacher Education Collaborative (2009-2012)

Steering Team, Building Capacity through Quality Teacher Preparation. HED-grant funded project (PI: Joanna Masingila, Syracuse University) seeks to build capacity of KU teacher educators and in doing so, impact Kenyan teachers and students. Assisted with grant writing. As steering committee member, provide guidance for direction of project.

Partner Faculty Member, Using Technology to Support Teacher and Student Conceptual Learning in Mathematics and Science. 2010 HP Catalyst Initiative grant (PI: Dr. Marguerite K. Miheso-O'Connor, Kenyatta University). Work with Kenyatta University colleagues to plan workshops for mathematics and science preservice and inservice teachers.

Robert Noyce Scholars Program for Science and Mathematics, (2010-2013).

Senior Personnel on NSF-funded grant (PI: John Tillotson, Syracuse University) that seeks to attract talented students to math and science teaching in high-needs urban and rural schools. Role includes planning and executing recruiting of students and planning for Noyce professional development.

Secondary Education Program Group, School of Education, (2009-2013)

Curriculum Committee, School of Education, (2010-2013)

Curriculum Committee, College of Arts and Sciences, (2011-2013)

K-12 School Service

Directing Council, West Genesee Teacher Center (2010-present)

CORE Team, STEM Hub Planning, East Syracuse-Minoa School District. (2010-present)

Working with ES-M administrators and teachers on the planning of a STEM-oriented focus at their middle and high school.

Professional Developer, Nottingham High School, Early College High School, (2010-2011)

Co-lead (with Sharon Dotger) a bi-monthly professional development meeting for the science department.

Consultant, Cincinnati Public Schools, Science PD Framework, (2007)

Mentoring Teacher, Cincinnati Public Schools. (1999-2005).

Led a professional practice school team that mentored student interns from University of Cincinnati. Mentored numerous student observers, teaching associates, and student teachers from University of Cincinnati, Xavier University, and Antioch University.

Curriculum Development and Implementation, Cincinnati Public Schools. (2002-2005)

Co-developed a ninth-grade physical science curriculum to align with the new Ohio Science Standards. Designed and implemented professional development for all ninth

grade science teachers in district including one-week summer training and monthly follow-ups.

Member, Hughes Center Instructional Leadership Team. (2001-2004)

Teacher Member, Hughes Center Local School Decision Making Committee. (2002-2004)

Served with principal, parents, staff, students, and local community members to make policy decisions for school.

AWARDS & RECOGNITION

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| 2011 | NARST Outstanding Doctoral Research Award , National Association for Research in Science Teaching. Dissertation judged to have “the greatest significance in the field of science education” for 2011. |
| 2009 | Finalist, Spencer Dissertation Fellowship for Research Related to Education , The Spencer Foundation. |
| 2005-2009 | University Distinguished Fellowship , Michigan State University. Five-year full-support award from the Graduate School and the College of Education. |
| 2008 | Beginning Researcher/Developer , Education Development Center. One of 10 emerging scholars selected to attend 2008 DR-K12 Annual PI meeting. |
| 2002-2005 | Credentialed Lead Teacher , Cincinnati Public Schools. |
| 2002 | Accomplished Rating (highest of five categories), Cincinnati Public Schools' Comprehensive Teacher Evaluation System. |
| 1992-1996 | Voorheis Honor Scholarship , University of Cincinnati. Full tuition scholarship for undergraduate education. |
| 1993 | Freshman of the Year , Department of Chemistry, University of Cincinnati. |

PROFESSIONAL MEMBERSHIPS

- American Educational Research Association
- National Association for Research in Science Teaching
- Association for Science Teacher Education