

# JULIE CONTINO

American Museum of Natural History  
Central Park West At 79<sup>th</sup> Street • New York, NY 10024  
212-496-3623 • jcontino@amnh.org

## Education:

---

*Doctor of Education in Science Education*

**Teachers College, Columbia University**, New York, NY

Dissertation Title: An Analysis of the New York State Earth Science Curriculum with Respect to Standards, Classroom Practices, and the Regents Examination

Advisor: Dr. O. Roger Anderson

May 2011

*Master of Arts in Teaching Science*

**Cornell University**, Ithaca, NY

Advisor: Don Duggan-Haas

May 2002

*Bachelor of Science in Natural Resources*

**Cornell University**, Ithaca, NY

May 2001

## Professional Certifications:

---

- New York State Earth Science 7-12 Permanent Certificate 2007
- New York State General Science 7-12 Extension Permanent Extension 2007

## Awards and Recognition:

---

- ASTE/NSTA recognition for publication of one of ten most worthy published science education articles in 2010: A study of teacher-mediated enhancement of students' organization of earth science knowledge using web diagrams as a teaching device. By O. Roger Anderson and Julie Contino, *Journal of Science Teacher Education*, 21, 683 – 701. (Current research: 2011 summer reading suggestions. (2011, Summer). *Science Scope* 34(9), 62-4.)
- E. Laurence Palmer Award for Excellence in Environmental Science Education – 2001
- Sparberg Braun Alexiou Scholarship – 2008

## Teaching Experience:

---

*Senior Specialist in Science and Teacher Preparation*

**American Museum of Natural History**

New York, NY

August 2011 – present

- Collaborated with a team of educators and scientists to create an innovative teacher preparation program. Constructed a comprehensive curriculum; developed core science and pedagogy courses; designed museum, science practicum, and school-based residencies for teacher candidates.
- Developed mentoring program that includes mentoring at the schools, museum, and online and supports all professional and academic dimensions of the teaching profession including teacher assessments, licensing, portfolio development, and certification.
- Supervised Teacher Candidates in Residency schools.
- Taught two graduate level courses, EDU 620 Curriculum and Instruction for Teaching Earth Science in Secondary Schools and EDU/SCI 660 Earth Science Literacy Journal Seminar.
- Served on the Technology Team for the AMNH MAT Program.

*Program Coordinator/Professional Development Specialist, Seminars on Science*

**American Museum of Natural History**

New York, NY

October 2008 – August 2011

- Created professional development activities in science, project-based learning, and technology for middle and high school teachers in low achieving, New York City schools.
- Contributed to alignment analysis of Museum's halls with city, state, and national science education standards.
- Collaborated with a team of scientists and museum educators to create a new online course, Climate Change. Developed assignments and discussion questions; edited course essays; and identified useful websites for teachers.
- Provided operational support including administrative support, course operations, program inquiries, learner registration and support, event coordination, university partnership support and dissemination.
- Managed database of over 4000 science teachers.
- Served as registrar and bursar for graduate-level, online, science teacher education courses.
- Contributed to new programs in education for students and teachers at the museum and online.

*Instructor, Seminars on Science*

**American Museum of Natural History**

New York, NY

May 2011 – June 2011

- Taught Earth: Inside and Out, an online teacher professional development course that served approximately 20 learners.
- Participated in weekly discussions.
- Evaluated learners' weekly participation, assignments, and final projects.

*Teaching Assistant, Seminars on Science*

**American Museum of Natural History**

New York, NY

July 2009 – October 2009

- Assisted in teaching online teacher professional development courses including The Solar System and Water: Environmental Science that served approximately 25 learners per course.
- Participated in weekly discussions.
- Evaluated learners' weekly participation, assignments, and final projects.

*Upper School Teacher/Lower School Science Coach*

**New Explorations into Science, Technology, and Math, New York City Department of Education**

New York, NY

September 2007 – August 2008

- Created, developed, and implemented lesson plans for Regents Earth Science, Regents Earth Science Lab, Regents Living Environment, and Regents Living Environment Lab.
- Assisted lower school teachers with classroom science curricula.
- Integrated technology into curriculum using Schoolrack.com to post grades, announcements, notes, and assignments.

*Science Teacher*

**Broadalbin-Perth Central School District**

Broadalbin, NY

September 2003 – August 2007

- Created, developed, and implemented lesson plans for Regents Earth Science, Earth One, Regents Earth Science Lab, Regents Living Environment, Regents Living Environment Lab, and Academic Intervention Services.
- Integrated technology into curriculum using Blackboard.com to post grades, announcements, notes, assignments, and discussions.
- Established and maintained positive relationships with students, parents, and colleagues.

*Long-term Substitute Teacher*

**Hamilton Elementary School, Boston Public Schools**

Brighton, MA

October 2002 – June 2003

- Supervised and taught a variety of courses to elementary students in regular education and special education programs for one hundred and thirty days during the school year.
- Elementary Science Specialist for forty days during the school year.

*Naturalist/Lead Instructor*

**Massachusetts Audubon Society**

Milton, MA

June 2002 – September 2003

- Developed curricula for 5-8 –year-olds with a focus on natural history and ecology.
- Taught environmental science to groups of 5-10 students, ages 4-14-year-olds.
- Assisted with overnight sessions.

*Student Teacher*

**Boynton Middle School, Ithaca City School District**

Ithaca, NY

September 2001 – December 2001

- Created, developed, and implemented lesson plans for Eighth Grade Physical Science.
- Supervised 12-30 students during lessons and labs for 5 periods a day.
- Assisted with special needs class of 8 Eighth Grade students one period a day.
- Created a student teacher portfolio with written analysis of school and community and examples of lessons.

*Teaching Assistant*

**Cornell University, Natural Resources Department**

Ithaca, NY

August 2000 – May 2001

- Assisted professor with a Field Biology class of 35 college students, six hours a week, focusing on methods of inventorying, identifying, and studying plants and animals.
- Developed and taught environmental issues section to 18 college students, two hours a week, that complimented the Environmental Conservation course.

## Research Experience:

---

### *Researcher*

#### **Teachers College, Columbia University**

New York, NY

January 2008 – August 2010

Supervisor: O. Roger Anderson

- Used web diagrams to enhance students' organization of science knowledge and flow map analyses for students' recall narrative.
- Examined returned Peace Corps volunteer educators' opinions on transitions into Teachers College Peace Corps Training Programs.

### *Student Researcher/Laboratory Assistant*

#### **Cornell University, Natural Resources Department**

Ithaca, NY

July 2001 – May 2002

- Created a database of over 300 lesson plans for the Environmental Conservation course.
- Developed lesson plans for college-aged student discussion groups.

## Publications:

---

- Contino, J. & Anderson, O.R. (in press, 2013). From prescribed curriculum to classroom practice: An examination of the implementation of the New York State Earth Science standards.
- Anderson, O. R. & Contino, J. (in press, 2013). The role of visualization in conceptual learning and conceptual change. In K. D. Finson and J. E. Pederson (Eds.), *Visual data and their use in science education*. Charlotte, NC: Information Age Publishing.
- Contino, J. (2012). A case study of the alignment between curriculum and assessment in the New York State Earth Science standards-based system. *Journal of Science Education and Technology*, DOI 10.1007/s10956-012-9376-x
- Contino, J. (2011). An analysis of the New York State Earth Science curriculum with respect to standards, classroom practices, and the Regents examination. *Dissertation Abstracts International*.
- Anderson, O.R. & Contino, J. (2010). A study of teacher-mediated enhancement of students' organization of Earth science knowledge using web diagrams as a teaching device. *Journal of Science Teacher Education*, 21(6), 683 – 701.

## Presentations:

---

- Contino, J. & Cooke-Nieves, N. (January 2013). The missing ingredient in science teacher preparation: The role of the senior specialist presented at 2013 The Association for Science Teacher Education (ASTE) International Conference, Charleston, SC.
- Steiner, R., Kinzler, R., Contino, J., Mathez, E., Randle, D., Schmidt, G., and Shindell, D. (November 2012). Online and blended climate change courses for secondary school educators from the American Museum of Natural History presented at 2012 The Geological Society of America (GSA) Annual Meeting, Charlotte, NC.
- Macdonald, M., Kinzler, R., Contino, J., Abder, P., Hogan, T., & Schwinge, D. (October 2011). Is there anything new in science teacher preparation in NY State? presented at 2011 Northeast Association for Science Teacher Education (NE-ASTE) Regional Conference, Cornwall, NY.
- Randle, D., Kinzler, R. & Contino, J. (March 2010). As the world turns: Revolutions in Earth science presented at 2010 National Teachers Association (NSTA) National Conference, Philadelphia, PA.
- Anderson, O.R. & Contino, J. (January 2009). A study of teacher-mediated enhancement of students' organization of science knowledge using web diagrams as a teaching device and flow map analyses of students' recall narrative presented at 2009 Association for Science Teacher Education (ASTE) International Conference, Hartford, CT.

**Professional Organizations:**

---

- American Educational Research Association (AERA) Member (2011 – present)
- AMNH Association for Women in Science (AWIS) Member (2010 – present)
- Association for Science Teacher Education (ASTE) Member (2008 – present)
- National Association for Research in Science Teaching (NARST) Member (2010 – present)
- National Earth Science Teachers Association (NESTA) Member (2009 – present)
- New York State Association of Agricultural Education (NYSAAE) Member (2001)
- Science Teachers Association of New York State (STANYS) Member (2001 – 2007)