

CURRICULUM VITA



Catherine E. Milne

Associate Professor
New York University
The Steinhardt School of Culture, Education and
Human Development; Department of Teaching and
Learning
239 Greene Street, Rm 637D
New York, NY 10003

Phone: (212) 998-5132
Fax: (212) 995-4198
E-mail: cem4@nyu.edu

EDUCATION

Post-Doctoral Researcher	University of Pennsylvania	2000-2002	Chemistry Education
Doctor of Philosophy	Curtin University of Technology	1994-1998	Science Education
Master of Science	Curtin University of Technology	1990-1993	Science Education
Bachelor of Science	James Cook University	1974, 1977-1978	Chemistry/Botany
Bachelor of Education	James Cook University	1974-1977	Education

Masters Thesis Title: "The pedagogical implications of teacher personal philosophies of science in the school science classroom: an interpretive study."

Ph.D. Thesis Title: "Science cultural myths and school science: a critical analysis of historical and contemporary discourses."

Honors/Awards

Outstanding Science Teacher Educator of the Year Level 1: 10 or fewer years in science education. Association for Science Teacher Education, 2009.

Goddard Award Awarded by the Steinhardt School of Culture, Education, and Human Development, 2006.

Zirin Research Award, Recognition of research potential within the Department of Teaching and Learning, 2003.

Australian Postgraduate Award Competitive award from the Federal Department of Education to support full-time Doctoral study, 1994-1997.

Northern Territory Study Award Awarded by the Northern Territory Department of Education to provide fulltime substantive position salary to complete Masters Thesis, 1992 (only full year recipient).

Finalist National Association for Research in Science Teaching (NARST) Outstanding Masters Thesis Award, 1994.

One of 4 finalists NARST Doctoral Dissertation Award, 1998/1999.

Nominated for *Distinguished Teaching Award*. New York University, 2004.

Nominated for *Distinguished Teaching Award*. New York University, 2006.

PROFESSIONAL EXPERIENCE

New York University

Associate Professor, Science Education, New York University, May 2008 –

Develop and teach courses in science content such as *Science in a Historical Perspective*, *Recent Advances in Chemistry*, *Recent Advances in Physics*, *Science and Human Values*. Develop and teach courses in education content including *Science Curriculum: Middle and High School*, and science methods courses for middle and high school contexts with focus on classroom interactions and curriculum development. Supervise pre-service teachers in practicum. Conduct research in the nature of knowing in science disciplines, microanalysis of teaching and teaching and learning science in urban schools, explore the design of multimedia for education using descriptive and statistical methods. Develop new online courses for professional degree program. Develop and teach pedagogy course for GK-12 Fellows at NYU-Polytechnic. Mentor doctoral candidates.

Assistant Professor, Science Education, New York University, September 2002 to May 2008.

Develop and teach courses in science content such as *Science in a Historical Perspective*, *Recent Advances in Chemistry*, *Recent Advances in Physics*, *Science and Human Values*. Develop and teach courses in

education content including *Science Curriculum: Middle and High School*, and science methods courses for middle and high school contexts with focus on classroom interactions and curriculum development. Supervise pre-service teachers. Conduct research in the nature of knowing in science disciplines, microanalysis of teaching and teaching and learning science in urban schools. Write new course proposals for courses, *Teaching Science in Middle and High Schools II: Methods and Curriculum* and *Breakthroughs in Science*.

University of Pennsylvania

Post-doctoral Researcher, *Graduate School of Education & Department of Chemistry*, Developed two courses in chemistry education for the Masters of Chemistry Education program, Philadelphia, PA, September 2000-2002. Taught the initial course 2000-2002. Internal evaluator, 2000-2002. Responsibility for ensuring that teaching faculty use pedagogies such as the PENN Inquiry Model in their teaching and for monitoring of student participation in program. Consultant, taught advanced chemistry education course in MCE program, 2003-2006. Member of the Penn Science Education Teacher Institute Advisory Board 2003 to present. Also co-taught *Teaching Science in the Middle and High School*, *Special Topics in Secondary Education: Science* and supervised new teachers of science in the co-teaching program in the Graduate School of Education, 2000-2002.

University of Wollongong, New South Wales, Australia

Tertiary Literacies Co-ordinator, co-ordinate the articulation between the University's Graduate Attributes and course development within academic. Provided professional development to academic staff in areas such as integration of generic skills, collaborative learning strategies, evaluation, curriculum and assessment and for developing introductory programs for students in the areas of information, computer and statistical literacy. Developed interactive computer, information, and statistical literacy programs to be completed online by all University of Wollongong undergraduates, 1997-2000.

Curtin University of Technology, Perth, Western Australia, Australia

Project Officer, Devolved Staff Development Project and Dissemination of Good Teaching and Learning Practices at Curtin University, 1997.

Professional Development Facilitator, Teacher-Leader Program in science education. This involved developing and implementing seven days of workshops over 6 months, 1997.

Project Assistant, Development and implementation of the Commonwealth Scientific and Industrial Research Organization (CSIRO) Junior Scientist program, 1997.

Lecturer, Centre for Aboriginal Studies, Environmental Chemistry – developed and implemented the course, which formed part of an Associate Degree in Science and Technology, 1996-1997.

Writing Team, Curriculum Council of Western Australia, As a member of a consortium successfully tendered to be the writing team for the Science Area Learning Statement, 1996-1997.

Tutor, Science and Mathematics Education Center, Gender Studies, Learning in Science and Mathematics, and Special Topics in Science Education, 1994-1997.

Sanderson High School, Northern Territory, Australia

Founding Head of Department – Science, Responsibility for oversight of all science course development at the school. Wrote many of the science units. Other high schools across Australia that adopted a vertical timetable (across-age grouping) adopted our science program. Responsible for budget, administration of science department and professional development of science staff. Assistant Principal Staffing and Student Welfare. Assistant Principal-Staffing. Taught evening classes at Casuarina Secondary College, 1993, 1985-1991.

Curtin University of Technology, Perth, Western Australia, Australia

Research Assistant, 1992.

Nightcliff High School, Northern Territory, Australia

Head of Department - Science, 1984.

Darwin High School, Northern Territory, Australia

Science Teacher, 1979-1983.

RELATED EXPERIENCE

Consultancies

Universities

Educational consultant, *NYU-Poly* GK-12 Fellows program (2009- present)

Visiting Professor, *Department of Chemistry*, University of Pennsylvania, 2003- 2006.

Consultant, Penn Science Teacher Institute, *Department of Chemistry*, University of Pennsylvania, 2008-

International

Invited Institute Presenter *Science and Mathematics Education Centre (SMEC) Curtin University of Technology* Perth, Australia. July 4-8, 2011.

Consultant, Food Educator Network International, Chicago, 2004.

Invited Presentations

Presenter, Representation and Interaction Design for Effective High School Chemistry Simulations: Suggestions from the Field, as part of the Symposium *Seeing Concepts: Rethinking Math and Science Instruction* at the 2010 Institute for Education Sciences (IES) Research Conference, National Harbor, MD, 28-30 June, 2010.

Presenter, *Exploring the design of effective Chemistry simulations*. Saturday Seminar Series, New York University, NY, September 9, 2009.

Presenter, *Why argument needs narrative in science education*. Urban Science Education Research – Network (USER-N), Graduate Center, City University of New York, December 5, 2008.

Presenter, *What's in a question? Strategies for a question-focused classroom*, National Science Teachers' Association (NSTA) New Teacher Mentoring Program, 2008.

Presenter, *Action research in science education*, Queen's College, NY, 2004.

Presenter, *Critical literacy and the teaching of science*, Queen's College, NY, 2003.

Invited Participant

Participant, Strand 1 Invited Session: Enhancing student learning in chemistry at the Annual Meeting of the National Association for Research in Science Teaching, New Orleans LA., April 15-17, 2007.

Reviewer

Co-editor-in-Chief, *Cultural Studies of Science Education*, 2010-

Editorial Board Member, *Journal of Research in Science Teaching*, 2006- 2010.

Editorial Board Member, *Research in Science Education*, 2006-present.

Board Member, *Teaching and learning science: A handbook*. Praeger Publishing. (Editor Kenneth Tobin), 2005-2006.

Proposal Reviewer National Science Foundation (NSF) Office of Cyberinfrastructure Cyberinfrastructure Team (October, 2007).

Proposal Reviewer National Science Foundation (NSF) REESE Panel (February, 2008; January, 2010).

Journal Reviewer

Cultural Studies of Science Education, 2010-

Editor for Special Issue *Digital Games and Learning in Science: A Sociocultural Perspective*

Public Understanding of Science, 2007.

Mind, Culture & Activity, 2006, 2007, 2008.

International Journal of Science Education, 1998.

Journal of Research in Science Teaching, 2004-2010.

Learning Environments Research, 2000.

School Science and Mathematics special issue on urban education, 2005.

Research in Science Education, 2006-2010.

Science Education, 2007-2009.

Book Reviewer

Co-editor book series, *Research Dialogues*, Sense Publishers, 2010-

Co-editor book series, *Cultural Studies of Science Education*, Springer, 2010-

Review book and book pre-proposals for publishers Kluwer and Laurence Erlbaum, 2000-2005.

Reviewed chapter for D. Bunce & R. Cole. (Eds.) *Nuts and bolts of chemical education research*. ACS Publishers, 2006.

Reviewed chapter for M. Weinburg & K. Wiesman (Eds.) *Women's experiences in leadership in K-12 science education communities: becoming and being*, March 2008.

Strand Co-ordinator

Strand Co-ordinator for Strand 1 – Understanding and Conceptual Change, *National Association for Research in Science Teaching*. Oversee calls for proposals for annual meeting. Oversee reviewing of proposals and co-ordinate grouping of proposal into sessions for the international annual conference, 2007-2009.

Reviewer

Program proposals in Strands 1(Understanding and Conceptual Change), Strand 4 (Teaching) and Strand 13 (History, Philosophy, and Sociology of Science) for *National Association for Research in Science Teaching* annual conference, 2000-present.

Program proposals for Divisions B Curriculum Studies, 2005; C Learning and Instruction, 2002-2004, 2007; K Teaching and Teacher Education, 2001-2004, 2006-2007 for the annual meeting of *American Educational Research Association*.

Symposium/Forum Co-ordinator

2011 Springer Forum *Making the Most of Difference: Place, Positionality, and Power in Science Education* to be held at Orlando, Florida, April 6-7, 2011.

For symposium, *Integrating simulations and animations into the teaching and learning of chemistry*, t 20th Biennial Conference on Chemical Education, Indiana University, Bloomington, IN, July 27-31, 2008. Chemistry educators across the United States submit proposals for inclusion in the symposium.

GRANTS

Principal Investigator, US Dept. of Education. Institute of Education Sciences: *Molecules & Minds: Developing Bridging Scaffolds to Improve Chemistry Learning*. Funded Amount: \$1,456,706.00 Duration: August 1, 2009 – July 31, 2012. Grant Number: R305A090203.

- Co-Principal Investigator**, US Dept. of Education. Institute of Education Sciences: *Mind and Molecules: Optimizing Simulations for Science Education* Funding amount: \$1,112,774.00 Duration: August 1, 2005-July 31, 2008 Grant Number: R305K05014.
- Co-Principal Investigator**, National Science Foundation. *The Scientific Thinker Project: A study of teaching and learning concepts of evidence and nature of scientific evidence in elementary school*. Funded Amount: \$268,096. Duration: August 1, 2009 - July 31, 2010.
- Principal Investigator**, Steinhardt School of Culture, Education and Human Development, *IDEA Award: Using Eye-tracking to Assess High School Students' Visual Attention When Using Chemistry Simulations: A Pilot Study*. Requested amount, \$5000. Awarded May 2007.
- Principal Researcher**, Games for Learning Institute. The Institute is funded by grants from organizations such as Microsoft. Started 2007. Collaborations involve New York University, NYU-Polytechnic, Columbia, Teachers College, The New School, Rhode Island School of Design, Dartmouth College.
- Co-Principal Investigator**, National Science Foundation: *Teaching and learning of science in urban high schools*. Requested amount, \$1,114,523. Duration 36 months. Start date 06/01/01. REC-0107022.
- Principal Investigator**, Steinhardt School of Education, Research Challenge Grant *Qualitative evaluation of culminating papers submitted by graduating Master of Arts students*, 2003.

CURRENT MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Association for the Advancement of Science (AAAS)	National Science Teachers' Association (NSTA)
American Chemical Society (ACS)	National Association of Biology Teachers (NABT)
American Educational Research Association (AERA)	National Association for Research in Science Teaching (NARST)
Association of Science Teacher Educators (ASTE)	New York & North Jersey Sections of the American Chemical Society
Australasian Science Education Research Association (ASERA)	

COMMITTEES

University

National Advisory Board for Penn MCE and SETI	2003-present
Centre for Education Development and Interactive Resources (CEDIR) Representative, Faculty of Informatics Education Committee	1999-2000

School

Search Committee Administration Leadership and Technology	2004-2005 and 2007-2008
Search Committee Mathematics Education	2004-2005
Search Committee Science Education	2005-2006
Steinhardt Technology Committee	2007-
Steinhardt Curriculum and Course Development Committee	2010-
Mitchell Leaska Award Review Committee	2008
IDEA Award Panel	2008
Steinhardt Technology Challenge Panel	2009
Technology Challenge Grants	2010

Department

Curriculum Committee	2002-2007, 2010-
Faculty Development Committee	2005-2007

National and International

Co-Editor in Chief <i>Cultural Studies of Science Education</i>	2010-
Editorial Board <i>Journal of Research in Science Teaching</i>	2006-2010

Editorial Board <i>Research in Science Education</i>	2006-present
Strand 1 Co-ordinator National Association for Research in Science Teaching	2007-2009
Member NARST	
Program Committee	2007-2009
Outstanding Paper Awards Committee	2001-2002

Interdepartmental

Member Educational Outreach Group MECO Project involving NYU Physics Department, Brookhaven National Laboratories, University of Houston	2004-
Member Writing Team from NYU Department of Chemistry and Steinhardt School of Culture, Education, and Human Development Proposed Master of Chemistry for Educators submitted to New York State	2003-2009

Intercollegiate

Member Research Group Professor Tobin's NSF Distinguished Teacher Scholar Award	2005-present
---	--------------

PUBLICATIONS

Books

- Milne, C. (in press). *The invention of science: a role for history of science in the science classroom*. Dordrecht, The Netherlands: Sense Publishers.
- McVarish, J., & Milne, C. (Eds.) (under contract) *Self-assessment and self-evaluation in teacher education: A guide for the perplexed*. Peter Lang.
- Milne, C., Tobin, K., & DeGennero, D. (Eds.) (under contract) *Sociocultural studies and implications for science education: The experiential and the virtual*. Springer.

Gilmer, and David Treagust (Eds.), *Celebrating the 100th Anniversary of Madam Maria Sklodowska Curie's Nobel Prize in Chemistry*. Sense Publishers.

- Milne, C. (in press). Beyond argument: Science education as separate and connected knowing. *Second international handbook of science education*. Dordrecht, The Netherlands: Springer.
- Olitsky, S., & Milne, C. (in press). Understanding engagement in science education: The psychological and the social. *Second international handbook of science education*. Dordrecht, The Netherlands: Springer.

Book and Monograph Chapters – Peer Reviewed

- Milne, C. (under contract). What is science? In Vaill Dawson & Grady Venville (Eds.), *The art of teaching science*. Allen and Unwin.
- Milne, C. & Martin, S. (under contract). What internal evaluation brings to professional education programs in Science: The case of the PennSTI. In S. Martin (Ed.), *Improving science teachers' content knowledge and inquiry practice through professional development programs*. The Netherlands: Springer.
- Milne, C. & Teitelbaum, A. (under contract). The Penn Instructional Model (PIM): An underappreciated tool for guided-inquiry in science. In S. Martin (Ed.), *Improving science teachers' content knowledge and inquiry practice through professional development programs*. The Netherlands: Springer.
- Milne, C. (under development). Marie Curie and ethics in research. In Mei-Hung Chiu, Penny

- Milne, C. (2010). Captives of the text? How analyzing discovery science stories set me free. In K. Scantlebury, J. B. Kahle, and S. Martin (Eds.), *Re-visioning science education from feminist perspectives: Challenges, choices and careers*. The Netherlands: Sense Publishers.
- Milne, C., & Ma, J. (2008). Making sense of the Regents Chemistry exam. In P. Fraser-Abder (Ed.), *Pedagogical issues in science, mathematics and technology education*. Volume 3. Schenectady, NY: New York Consortium for Professional Development.
- Milne, C. (2008). In praise of questions: Elevating the role of questions for inquiry in secondary school science. In J. Luft, R. L. Bell, & J. Guess-Newsome (Eds.), *Science as inquiry in the secondary setting* (pp. 99-106). Washington, DC: National Science Teachers' Association.

- Milne, C. (2007). School science stories and a strategy of action for cultural transformation. In P. C. Taylor and J. Wallace (Eds.), *Contemporary qualitative research: Exemplars for science and mathematics educators* (pp. 69-79). Springer.
- Milne, C. (2007). Power, status and the whole shebang: A personal perspective of collaborative research. In S. Ritchie (Ed.), *Research collaboration: Relations and praxis* (pp. 107-122). The Netherlands: Sense Publishers.
- Milne, C. (2006). Pitfalls in the teaching of evolution: Darwin, finches, history. In K. Tobin (Ed.), *Teaching and learning science: A Handbook* (pp. 401-409). Westport, CT: Praeger.
- Milne, C., & Tobin, B. (2006). Some issues for using comics in the science classroom: A conversation. In K. Tobin (Ed.), *Teaching and learning science: A Handbook* (pp. 313-316). Westport, CT: Praeger.
- Homan, S., & Milne, C. (2006). Hydrogen Fuel Cells: The Alternative Energy Source of the Future? In K. Tobin (Ed.), *Teaching and learning science: A Handbook* (pp. 541-546). Westport, CT: Praeger.
- Nam, J-M., & Milne, C. (2006). The Truth About Sunscreens and Sunblocks: Using Sunprint Paper to Investigate SPF. In K. Tobin (Ed.), *Teaching and learning science: A Handbook* (pp. 537-540). Westport, CT: Praeger.
- Milne, C., McVarish, J. & Blonstein, J. (2006). Self-evaluation: Themes and tensions. In P. Fraser-Abder (Ed.), *Pedagogical issues in science, mathematics and technology education*. Volume 2. Schenectady, NY: New York Consortium for Professional Development.
- Blonstein, J., & Milne, C. (2006). "They're not doing anything." Coteaching prospective and in-service teachers: Modeling professional collaboration. In P. Fraser-Abder (Ed.), *Pedagogical issues in science, mathematics and technology education*. Volume 2. Schenectady, NY: New York Consortium for Professional Development.
- Otieno, T., & Milne, C. (2005). Paperclips + Polymers → Problems: Learning to use Levels of Representation in a High School Chemistry Classroom. In R. Elmesky, G. Seiler and K. Tobin (Eds.), *Improving urban science education: New roles for teachers, students, and researchers*. Boulder, CO: Rowan & Littlefield (Choice Book Award for Outstanding Academic Titles, 2006).
- Milne, C., & Blonstein, J. (2004). Beyond "Right On!" and "Awesome!" Examining the tensions between pedagogy and subject matter knowledge in a science methods course. In P. Fraser-Abder (Ed.), *Pedagogical issues in science, mathematics and technology education* (pp. 71-96). Schenectady, NY: New York Consortium for Professional Development.
- Beck, S. W. and Milne, C. (2004). The use of text for thinking and learning in science. In P. Fraser-Abder (Ed.), *Pedagogical issues in science, mathematics and technology education* (pp. 42-70). Schenectady, NY: New York Consortium for Professional Development.
- Milne, C. (2002). Dilemmas about representation: Textbooks and student reports. In J. Wallace and W. Louden (Eds.) *Dilemmas of science teaching: Perspectives on problems of practice* (pp. 116-118 and pp. 129-131). London: Routledge Falmer.
- Milne, C. (2000). Tertiary literacies: Integrating generic skills into the curriculum. In S. J. Fellows & C. Stevens (Eds.), *Integrating key skills in higher Education: Employability, transferable skills and learning for life* (pp. 87-97). London: Kogan Page.
- Carter, H., & Milne, C. (2000). Moving online: Developing a compulsory university-wide statistical literacy program. In M. Wallace, A. Ellis & D. Newton (Eds.) *Proceedings of Moving Online, A conference to explore the challenges for workplaces, colleges and universities* (pp.155-162), Gold Coast, Australia.
- Milne, C., & Taylor, P. C. (1998). Between a myth and a hard place: Situating school science in a climate of critical cultural reform. In W. Cobern (Ed.) *Culture, science and science education*. Dordrecht, The Netherlands: Kluwer Academic Press.

Papers in Preparation

Milne, C. et al. (under development) *Exploration of using narrative to scaffold 'levels of representation' in a multimedia simulation for introductory high school Chemistry.*

Papers

In Press

Milne, C., Scantlebury, K., Blonstein, J., & Gleason, S. (online). Coteaching and disturbances: Building a better system for learning to teach science. *Research in Science Education.*

Published

Milne, C. (2009). Interpretive repertoires as mirrors on society and as tools for action: reflections on Zeyer and Roth's *A mirror of society*, *Cultural Studies of Science Education*, 4, 1013-1022.

Milne, C. (2009). Assessing self-evaluation in a science methods course: Power, agency, authority and learning. *Teaching and Teacher Education*, 25, 758-766.

Milne, C., Rubel, L., Rodriguez, A. J., Emdin, C., Rivera Maulucci, M., Locke, D., Tan, E., Clairmont, N. & Upadhyay, B. (2009). Celebrating Jhumki Basu's contributions to science education as a scholar and an activist: voices from the field, *Cultural Studies of Science Education*, 4, 417-434.

Plass, J. L., Homer, B. D., **Milne, C.**, Jordan, T., Kalyuga, S., Kim, M., & Lee, H. (2009). Design factors for effective science simulations. *International Journal of Gaming and Computer-Mediated Simulations*, 1(1), .

Milne, C., Kirch, S., Basu, S. J., Leou, M., Fraser-Abder, P. (2008). Understanding conceptual change: Connecting and questioning. *Cultural Studies of Science Education*, 4, 417-434.

Milne, C. (2008). The beaks of finches and the tool analogy: Use with care. *American Biology Teacher*, 70, 153-157.

Milne, C. (2007). On being a science teacher: Identities, emotions, morals, and the dialectics of organic link. *Cultural Studies of Science Education*, 2, 906-912.

Milne, C. & Otieno, T. (2007). Understanding engagement: Science demonstrations and

emotional energy. *Science Education*, 91, 523-553.

Martin, S., **Milne, C.**, & Scantlebury, K. (2006). Eye rollers, risk-takers, and turn sharks: Target students in a professional science education program, *Journal of Research in Science Teaching*, 43, 819-851.

Milne, C., Scantlebury, K. & Otieno, T. (2006). Using socio-cultural theory to understand the relationship between teacher change and a science-based professional education program, *Cultural Studies of Science Education*, 1, 325-352.

Zembylas, M., Espinet, M., **Milne, C.**, & Scantlebury, K. (2006) Teacher agency, social structures and professional education in science education: Understanding teacher change in terms of agency/structure. *Cultural Studies of Science Education*, 1, 353-366.

Milne, Catherine (2005, August). On Being Authentic: A Response to "No thank you, not today": Supporting ethical and professional relationships in large qualitative studies [8 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* [On-line Journal], 6(3), Art 38. Available at <http://www.qualitative-research.net/fqs-texte/3-05/05-3-38-e.htm> [Date of Access: Month Day, Year]

Milne, Catherine (2005, January). Overseeing research: Ethics and the Institutional Review Board [33 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* [On-line Journal], 6(1), Art. 41. Available at: <http://www.qualitative-research.net/fqs-texte/1-05/05-1-41-e.htm>

Gribble, S. J., Rennie, L. J., Tyson, L., **Milne, C.** & Speering, W. (2000). Negotiating values for the science curriculum: The need for dialogue and compromise. *Research in Science Education*, 30, 199-211.

Milne, C. (1999). "Only some facts matter for my given pattern": The fact of stories in school science. A response to Whitaker. *Journal of Research in Science Teaching*, 36, 1155-1157.

Milne, C. (1999). Stories and primary science: The tentativeness of scientific understanding. *Investigating*, 15(3), 14-17.

Milne, C., Wallace, M., & Porter, A. (1999). Coming to terms with statistical literacy: Developing a university-wide introductory program. *Of Significance, 1*, 35-41.

Venville, G. & Milne, C. (1999). Three women scientists and their role in the history of genetics. *Australian Science Teachers Journal, 45*(3), 9-15.

Milne, C. (1998). Philosophically correct science stories? Examining the implications of heroic science stories for school science. *Journal of Research in Science Teaching, 35*, 175-187.

Milne, C. (1996). The representation of "acid" in school chemistry: From concept to fact. *Chemeda: The Australian Journal of Chemical Education, 46*, 8-18.

Milne, C. & Taylor, P. C. (1995). Metaphors as global markers for teachers' beliefs about the nature of science. *Research in Science Education, 25*, 39-49.

Other Journals

Blasie, C., Milne, C. & Dai, H-L. (2001). Inquiring into the teaching and learning of science: An initiative from a research university. *University of Pennsylvania Almanac, 47*(1), 8.

Submitted Manuscripts

Milne, C., & Ma, J. Can we use classroom observation and Rasch analysis to make sense of students' responses to items on the chemistry Regents' exam? Submitted for review to *Pedagogical issues in science, mathematics and technology education*. Volume 4. Schenectady, NY: New York Consortium for Professional Development (October, 2007).

Manuscripts in Progress

Milne, C. What makes a good simulation? In preparation to *The Science Teacher*.

Milne, C. & Ma, J. Using Rasch analysis and classroom observations to make sense of students' responses on a State-wide Chemistry exam. In preparation to *Journal of Research in Science Teaching*.

PRESENTATIONS

INVITED PRESENTATIONS

Milne, C., Plass, J., Homer, B., Jordan, T., Wang, Y., Schwartz, R., Hayward, E., & Ng, F. (2009). *Exploring the design of effective Chemistry simulations*. Saturday Seminar Series, New York University, NY, September 9, 2009.

Milne, C. (2008). *Why argument needs narrative in science education*. Urban Science Education Research – Network (USER-N), Graduate Center, City University of New York, 5th December, 2008.

Presenter, *What's in a question? Strategies for a question-focused classroom*, NSTA New Teacher Mentoring Program, 2008.

Milne, C., Plass, J., Homer, B. Jordan, T., & Kim, M. (April, 2007). *Of molecules and minds: Developing cognitively appropriate simulations for high school chemistry*. Strand 1 Invited Session: Enhancing student learning in chemistry at the Annual Meeting of the National Association for Research in Science Teaching, New Orleans LA., April 15-17, 2007.

Milne, C. (1997). *Conducting science education research as a bower bird*. Western Australian Institute of Educational Research, Perth, Australia.

Milne, C. (1997). *What is fair science? Women in science through time*. Women's studies. Edith Cowan, Perth, Australia

PRESENTATIONS Selected past 10 years

Published Conference Proceedings

Milne C. (2000). Developing an instructional description of generic skills. In *Proceedings of the lifelong learning conference*. Yeppoon, Australia: Central Queensland University.

Milne, C., & Peisley, E. (2000). Coming to terms with information literacies: Developing a university-wide introductory program. In *Proceedings of the lifelong learning conference*. Yeppoon, Australia: Central Queensland University.

Milne, C., Gluck, R., Peisley, E., Peel, T., & Myers, W. (1998). Information literacies on-line: Unanticipated benefits of assisting higher education students to meet basic information literacies skills. In R. M. Corderoy (Ed.), *Flexibility: The next wave?* Proceedings of the 15th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (pp. 507-516). Wollongong, NSW: University of Wollongong.

Milne, C. (1997). Politically correct science stories. Looking for social justice in school science. In M. W. Hackling (Ed.), *Proceedings of the 21st annual conference of the Western Australian Science Education Association* (pp. 53-63). Perth, Australia.

Milne, C. (1996a). Is it fair science? School science stories of discovery. In E. Godfrey (Ed.), *Proceedings of the Second Australasia and South Pacific Region GASAT Conference*. (pp. 86-95). Auckland, New Zealand: University of Auckland.

Milne, C. E. (1996b). *Looking for social justice in school science: Reconstructing school science stories*. Paper presented at the 21st Annual Conference of Western Australian Science Educators Association, Perth, Western Australia.

Milne, C., & Taylor, P. C. (1995). Practical activities don't talk to students: Decostructing a mythology of school science. In F. Finley, D. Allchin, D. Rhees & S. Fifield (Eds.), *Proceedings of the third international history, philosophy and science teaching conference* (pp. 788-801). Minneapolis, MN: University of Minnesota, October.

International

Milne, C., Plass, J. Homer, B., Jordan, T., Schwartz, R., Chang, Y. K., Khan M., Ching, D. (2011). *Developing narrative scaffolds for use within multimedia chemistry simulations: Challenges and possibilities*. AERA Annual Meeting, New Orleans, LA, 8 -12 April, 2011.

- Chang, Y. K., Milne, C., Plass, J., Homer, B., Jordan, T., Schwartz, R., O'Keefe, P. (2011). *Exploratory analysis of multiple data sources using data visualization*. AERA Annual Meeting, New Orleans, LA, 8 -12 April, 2011.
- Milne, C., Plass, J., Homer, B., Jordan, T., O'Keefe, P., Schwartz, R., Ching, D., Khan, M. (2011). *Using eye-tracking to examine learning in a multimedia simulation: The importance of visual transitions*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Orlando, FL, April 3-6, 2011.
- Milne, C., Plass, J., Homer, B., Jordan, T., Schwartz, R., Khan, M., & Ching, D. (2011). *Exploration of using narrative to scaffold levels of representation in a multimedia simulation for introductory high school chemistry*. Interactive poster presented at the annual meeting of the National Association for Research in Science Teaching, Orlando, FL, April 3-6, 2011.
- Martin, S., **Milne, C.**, Siry, C., Ruggirello, R., Butler-Kahle, J., Scantlebury, K., & Li, Y. (2011). *Employing sociocultural frameworks in program evaluation design: exploring the challenges and benefits for internal and external evaluation*. Paper set annual meeting of the National Association for Research in Science Teaching, Orlando, FL, April 3-6, 2011
- Milne, C., Scantlebury, K., Blonstein, J., & Gleason, S. (2010). *Valuing the disturbances of learning to teach Science: How coteaching helps*. American Educational Research Association Annual Meeting, Denver, CO, 30 April – May 4, 2010.
- Milne, C., Plass, J., Homer, B., Wang, Y., Jordan, T., Schwartz, R., Chang, Y-K., Ng, F., & Hayward, E. (2010). *Exploring the possibilities for narrative in the use of multimedia simulations for the teaching and learning of Chemistry*. American Educational Research Association Annual Meeting, Denver, CO, 30 April – May 4, 2010.
- Milne, C., Scantlebury, K., Blonstein, J., & Gleason, S. (2010). *The role of coteaching in valuing and using the disturbances of learning to teach science*. Poster presented at Annual Meeting of the National Association for Research in Science Teaching, 21-24 March, 2010.
- Milne, C., Plass, J., Homer, B., Wang, Y., Jordan, T., Schwartz, R., Chang, Y-K., Ng, F., & Hayward, E. (March 2010). *Exploring narrative scaffolding in the use of multimedia simulations for the teaching and learning of Chemistry*. Paper presented at Annual Meeting of the National Association for Research in Science Teaching, 21-24 March, 2010.
- Milne, C., Plass, J., Homer, B., Jordan, T., Wang, Y., Schwartz, R., & Chang, Y-K. (August 2009). *A role for narrative in chemistry education: Why argument (might) need it*. Presentation at the Fall Meeting of the American Chemical Society, Washington, DC.
- Milne, C. (April 2008). *Strand 1 Invited Symposium: Finding connections between psychological and sociological perspectives in conceptual change*. National Association for Research in Science Teaching (NARST) Annual International Conference, Anaheim, CA, 17-20 April, 2009.
- Milne, C., Jordan, T., Plass, J., Homer, B., Wang, Y., Schwartz, R., & Chang, Y. K. (July, 2008). *Analysis of curriculum integration of simulations high school chemistry classes: emergent questions and lessons learned* 20th meeting of the Biennial Conference of Chemical Education, Indiana University, Bloomington, IN, 27-31 July, 2008.
- Milne, C., Plass, J.L., Homer, B. D., & Jordan, T. (July, 2008). *Beyond argument: Science education as connected and separate knowing*. Paper presented at the annual meeting of the Australian Science Education Research Association, Brisbane, Australia, July 2-5, 2008.
- Plass, J.L., Homer, Bruce D., Wang, Y., Kim, M., **Milne, C.**, & Jordan, T. (2008). *Using narratives as contextual scaffolds for science simulations*. Paper accepted for presentation at the 2008 Conference of the International Society of the Learning Sciences (ICLS 2008), July 2008, Utrecht, The Netherlands.
- Milne, C. & Ma, J. (April, 2008). *Using Rasch analysis and classroom observations to examine high stakes testing*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching (NARST), Baltimore, MD., March 30- April 2, 2008.

- Plass, J., Homer, B., **Milne, C.** (Presenter) Jordan, T., Chang, Y. K., Kalyuga, S., Kim, M., & Barrientos, J. (March, 2008). *The effectiveness of direct instruction vs. exploration, in learning from chemistry simulations*. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), New York, March 24-28, 2008.
- Plass, J.L., Homer, B.D., **Milne, C.**, Jordan, T., Kim, M., & Barrientos, J. (October 2007). *Representational mode and cognitive load: Optimizing the instructional design of science simulations*. Featured Research paper accepted for presentation at the annual convention of the Association for Educational Communication and Technology (AECT) in October, 2007 in Anaheim, CA.
- Milne, C., Plass, J., Homer, B. Jordan, T., & Kim, M. (July 2007). *Molecules, minds, and learning chemistry: Developing cognitively appropriate simulations*. The Annual Meeting of the Australasian Science Education Research Association, Fremantle Western Australia, July 11-14, 2007.
- Plass, J.L., Homer, B.D., **Milne, C.**, Jordan, T., & Kim, M. (2007, June). *Optimizing cognitive load in simulations for science education*. Poster accepted for presentation at the 2007 IES Research Conference, June 7-8 in Washington, D.C.
- Milne, C., Plass, J. L., Homer, B., Jordan, T., Kalyuga, S., & Kim, M. (April, 2007). *Of molecules and minds: Developing cognitively appropriate simulations for high school chemistry*. Paper presentation for Strand 1 Invited Session: Enhancing student learning in chemistry at the Annual Meeting of the National Association for Research in Science Teaching, New Orleans LA., April 15-17, 2007.
- Milne, C., & Blonstein, J. (April, 2007). *Confidence in questions: Making pedagogical tensions explicit through professional education in science courses*. Paper presentation at the Annual Meeting of the National Association for Research in Science Teaching, New Orleans LA., April 15-17, 2007.
- Milne, C., & Blonstein, J. (April, 2007). *Self-Evaluation as scientific argument*. Paper presented as part of the symposium, *Self-actualizing Learning: Multidisciplinary Approaches to Using Self-assessment* at the Annual American Educational Research Association Meeting, Chicago IL, April 9-13, 2007.
- Plass, J. L., Homer, B., **Milne, C.** Jordan, T., Kalyuga, S., & Kim, M. (April, 2007). *Optimizing cognitive load in simulations for science education*. Paper presented at the Annual American Educational Research Association Meeting, Chicago IL, April 9-13, 2007.
- Milne, C., Jordan, T., Plass, J., Homer, B., Kalyuga, S., Barrientos, J. M., & Lansiquot, R. (July, 2006). *Using cognitive load theory to develop animations and simulations: The road partly traveled*. Paper presented in the Symposium: Designing effective molecular animations at the 19th Biennial Conference in Chemical Education, Purdue University, West Lafayette, IN., July 30 – August 3, 2006.
- Milne, C., & Blonstein, J. (April, 2006). *A socio-cultural analysis of coteaching at the college level*. Paper presented in Paper Set *Using coteaching and cogenerative dialogues to improve science teaching and enhance student learning through a sociocultural lens*. Presented at the NARST Annual Conference, San Francisco, CA, April 3-6, 2006.
- Milne, C., & Scantlebury, K., & Otieno, T. (April, 2006). *Teacher change and science based professional education: A socio-cultural perspective*. Paper presented at the NARST Annual Conference, San Francisco, CA, April 3-6, 2006.
- Milne, C., McVarish, J., & Blonstein, J. (February, 2006). *Using ethnographic methods to evaluate the implementation of self-evaluation model in a science methods course*. Paper presented at the 27th Annual Ethnography in Education Research Forum, University of Pennsylvania, 24-25 February 2006.
- Milne. C., & Ma, J. (February, 2006). *Using ethnography and quantitative measures to make sense of high-stakes testing*. Paper presented at the 27th Annual Ethnography in Education Research Forum, University of Pennsylvania, 24-25 February 2006.

- Milne, C., Scantlebury, K., Blonstein, J., & Gleason, S. (January, 2006) *Yours, mine and ours: Modeling professional collaboration by coteaching in teacher education*. Paper presented at the Association for Science Teacher Education International Conference 2006, Portland, Oregon, January 12-14, 2006.
- Milne, C., LaVan, S-K., Elmesky, R., Martin, S., Scantlebury, K., Gilmer, P., and Tobin, K. (January, 2006). *Coteaching and cogenerative dialogues: Dynamic pathways for innovative research and teaching strategies in science teacher education*. Symposium presented at the Association for Science Teacher Education International Conference 2006, Portland, Oregon, January 12-14, 2006.
- Milne, C., & Blonstein, J. (April, 2005). *Accountability in curriculum: The tension between pedagogy and science knowledge in a science methods course*. Paper presented at the Annual Meeting of the American Educational Research Association, April 11-15, 2005, Montréal, Canada.
- Milne, C., & Otieno, T. (April, 2005). *Integrating phenomena, explanations, and symbolism using science demonstrations: A model for change*. Paper presented at the National Association for Research in Science Teaching Annual International Conference, April 4-7, 2005, Dallas, TX.
- Milne, C., & Blonstein, J. (January, 2005). *Confidence in questions: Examining the tensions between pedagogy and subject matter knowledge in a science methods course*. Paper presented at the AETS 2005 International Conference, January 19-23, 2005, Colorado Springs.
- Milne, C., Scantlebury, K., & Otieno, T. (April, 2004). *Framing urban high school teachers' dispositions to inquiry: A cautionary tale*. Paper presented at the 2004 Annual Meeting of the American Educational Research Association, April 12-16, San Diego, CA.
- Martin, S., **Milne, C.**, Scantlebury, K. (April, 2004). *Eyerollers, risk-takers and turn sharks: The emergence of target students and the formation of cliques in graduate chemistry courses for teachers*. Paper presented at the 2004 Annual Meeting of the American Educational Research Association, April 12-16, San Diego, CA.
- Milne, C., Abder, P., Adler, A., & Halpin, J. (January, 2004) *What is the nature of science teacher education and science education? Learning from each other*. Paper presented at the 2004 AETS International Conference, Nashville, TN, January 8-11.
- Milne, C., Scantlebury, K., & Otieno, T. (January, 2004) *Framing Urban High School Teachers' Professional Development: A Disposition to Inquiry?* Paper presented at the 2004 AETS International Conference, Nashville, TN, January 8-11.
- Milne, C. (2003, September). *The role of representations in learning chemistry: A socio-cultural perspective*. Paper presented at the 226th American Chemical Society National Meeting, New York, NY, September 7-11.
- Scantlebury, K. & **Milne, C.** (2003, September). *Target students: Catalysts or inhibitors to the learning of chemistry in a Masters of chemistry education program*. Paper presented at the 226th American Chemical Society National Meeting, New York, NY, September 7-11.
- Milne, C. (2003, April). *Looking at learning environments from a socio-cultural perspective: Examining demonstrations as sites of concentrated practice in the chemistry classroom*. Paper presented at the American Educational Research Association Meeting, Chicago, IL, April 21-25.
- Milne, C. (2003, March). *Making a silk purse from a sow's ear? Teaching science in an urban high school without a science department*. Paper presented at the National Association for Research in Science Teaching (NARST) Conference, Philadelphia, PA, March 23-26.
- Milne, C. (2003, January). *Learning more about representations: Retooling chemistry instruction*. Paper presented at the Association for the Education of Teachers of Science (AETS) 2003 Annual Conference, St. Louis, MO, January 2003.
- Milne, C. (2003 January). *Developing and implementing chemistry education courses for practicing teachers*. Interactive syllabi symposium presented at the AETS 2003 Annual Conference, St. Louis, MO, January 2003.

- Milne, C. (2002, July). *Rules and tools for learning chemistry: Implications for high school chemistry*. Paper presented at the 17th Biennial Conference on Chemical Education, Western Washington University, Bellingham, WA, July 28-August 1, 2002.
- Milne, C. (2002, July). *Using collaboration to identify pedagogical content knowledge for a chemistry education course*. Paper presented at the 17th Biennial Conference on Chemical Education, Western Washington University, Bellingham, WA, July 28-August 1, 2002.
- Milne, C. (2002, July). *Modeling scientific inquiry in the classroom: Applying an inquiry-based model of instruction*. Paper presented at the 17th Biennial Conference on Chemical Education, Western Washington University, Bellingham, WA, July 28-August 1, 2002.
- Milne, C., & Otieno, T. (2002, April). *The influence of cognitive and socio-cultural factors on enacted and learned curriculum in a professional education program for practicing science teachers*. Paper presented at AERA, New Orleans, April 1-5, 2002.
- Milne, C., Scantlebury, K., & Otieno, T. (April, 2002). *Students', teachers, and researchers' cultural transformations and professional education programs for teachers: coherence and contradictions*. A Calabrese-Barton (Symposium organizer) *Crafting socially just and empowering science education in urban settings*. Paper presented for presentation at the American Educational Research Association Annual Meeting, New Orleans, LA.
- Lavan, S-K., Koo, E. **Milne, C.** (2002, April) *A non-linear yellow brick road: Learning about chemistry through inquiry in a university setting*. Paper presented at NARST Annual Meeting, New Orleans, April 7-10, 2002.
- Milne, C. (2002, January). *Using internal evaluation in curriculum development*. Paper presented at the Association for the Education of Teachers of Science (AETS) 2002 Conference, Charlotte, NC, January 10-13, 2002.
- Milne, C., & Otieno, T. (2002, January). *Teachers inquire: Learning about chemistry education in a Master of Chemistry Education program*. Paper presented at the Association for the Education of Teachers of Science (AETS) 2002 Conference, Charlotte, NC, January 10-13, 2002.
- Milne, C. (2001). *Examining the intended, enacted and learned curriculum: Voices from a Master of Chemistry Education program*. Paper presented at American Chemical Society Meeting, August 26-31, Chicago.
- Milne, C. (2001, April). *The discourse of chemistry in different contexts*. Paper presented at the 74th NARST Annual Meeting, St Louis, March 24 – 28, 2001 (Nominated for the 2001 NARST Outstanding Paper Award).
- Milne, C., & Corcoran, M. (2001, April). "We're all learners here." *Integrating curriculum design and research in the development of a Master of Chemistry Education program*. Paper presented at the 74th NARST Annual Meeting, St Louis, March 24 – 28, 2001.
- Milne, C., & Taylor, P. C. (2000, April/May). "Facts are what you teach in science!" *Teacher beliefs and the culture of school science*. Paper presented at the 73rd NARST Annual Meeting, New Orleans, April 28 - May 1, 2000.
- Milne, C., & Gluck, R. (1999, October) *Evaluation: The grim reaper and safety*. Paper presented at the annual conference of the Australasian Evaluation Society, Perth, Western Australia.
- Milne, C. (1998, April). *A personal perspective on the role of history and philosophy of science for school science*. Paper presented at the annual conference of the National Association for Research in Science Teaching, San Diego, CA.

National

- Milne, C. (May, 2007). *Of Minds and Molecules: What makes a good simulation?* Paper presented at the 8th Sharing Our Success Conference, New York University, NY, 17-19 May, 2007.
- Milne, C. (May, 2007). *Can we use classroom observation and Rasch analysis to make sense of students' responses to items on the Chemistry Regents' exam?* Paper presented at the 8th Sharing Our Success Conference, New York University, NY, 17-19 May, 2007.
- Ma, J. & **Milne, C.** (2006). *Making sense of high stakes testing*. Paper presented at the 7th Sharing Our Success Conference, New York, NY, 18-20 May, 2006.

- Blonstein, J., & **Milne, C.** (May, 2005). "They're not doing anything." *Coteaching prospective and in-service teachers: Modeling professional collaboration*. Paper presented at the 6th Annual Sharing Our Success in Urban Science and Mathematics Teaching: Inspiring Outstanding Performance, May 19 – 21, 2005, New York University.
- Milne, C., McVarish, J., & Blonstein, J. (May, 2005). *Self-evaluation: Tensions and themes*. Paper presented at the 6th Annual Sharing Our Success in Urban Science and Mathematics Teaching: Inspiring Outstanding Performance, May 19 – 21, 2005, New York University.
- Milne, C., & Blonstein, J. (May, 2004). *Beyond "Right On!" and "Awesome!": Critical Conversations in a science methods course*. Paper presented at the 5th Annual Sharing Our Success in Urban Science and Mathematics Teaching: The Power of Excellent Teaching, May 19 – 21, 2004, New York University.
- Beck, S., & **Milne, C.** (May, 2004). *The use of texts for thinking and learning in science*. Paper presented at the 5th Annual Sharing Our Success in Urban Science and Mathematics Teaching: The Power of Excellent Teaching, May 19 – 21, 2004, New York University.
- Milne, C., Otieno, T., Koo, E., & Hatchett, J. (2002). *Examining sites of concentrated practice in a high school chemistry classroom: The can crushing demonstration*. Paper presented at the Symposium: Social and cultural perspectives on the teaching and learning of science at the 23rd Annual Ethnography in Education Research Forum *Dialogue across time, space and perspective*, Graduate School of Education, University of Pennsylvania, March 1-2, 2002.
- Milne, C. & Otieno, T. (2002). *The learned curriculum in a professional education program for practicing science teachers: The importance of agency and context*. Paper presented at the 23rd Annual Ethnography in Education Research Forum: Dialogue across time, space, and perspective, Graduate School of Education, University of Pennsylvania, March 1-2, 2002.
- Milne, C. & Corcoran, M. (2001). *Activation energy, learning and curriculum design in the development of a Master of Chemistry Education program*. Paper presented at the 2001 Ethnography Forum, University of Pennsylvania, March 2 – 3, 2001.
- Milne, C., Campbell, K. & Hong, L. (2001). *Teaching and learning science in urban high schools: First impressions*. Paper presented at the 2001 Ethnography Forum, University of Pennsylvania, March 2 – 3, 2001.
- Milne, C., Corcoran, M., Roberts, B., & Blasie, C. (2001). "We're all learners here." *Integrating curriculum design and research in the development of a Master of Chemistry Education Program*. Paper presented at American Chemical Society Meeting, August 26-31, Chicago.
- Corcoran, M. & **Milne, C.** (2001). *An innovative method of inquiry: The Penn instructional model*. Poster presented at the National Science Teachers' Association annual conference, St Louis, March 17 – 23, 2001.
- Albury, R., Curtis, S., Lefoe, G., Merten, M., & **Milne, C.** (1999, July). Passing through the pain barrier: Making a flexibly delivered degree. In *Cornerstones, Proceedings of HERDSA conference*, Melbourne, Australia. URL: <http://herdsa.org.au/vic/cornerstone/>
- Milne, C. (1999, January). *The role of stories in primary science: How scientific is your language?* Paper presented as part of a workshop for the Literacy in Science Conference, Canberra, ACT.
- Venville, G. & Milne, C. (1998, July). *Stevens, Franklin and McClintock: The Role of Three Women in Theory Change in Genetics*. Paper presented at CONASTA 47, the annual Conference of the Australian Science Teachers Association, Darwin, Northern Territory.

State and Regional

- Milne, C. Blasie, C. W. Corcoran, M. T., & Roberts, B. W. (2001). *Preparing teachers for the 21st Century: An initiative at the University of Pennsylvania – A view from the Graduate School of Education*. Paper presented at the Mid-Atlantic Regional Meeting of the American Chemical Society, May 28-31, Towson University, Towson.
- Milne, C., & Venville, G. (1999, October). *Discovery doesn't count for much if you're a woman: Examples from the history of genetics*. Paper presented at the second annual History,

Philosophy and New South Wales Science Teaching conference, University of New South Wales, Sydney.

Milne, C. (1998, October). *Captives of the text? Examining the power of school science stories*. Paper presented as part of a workshop for the mini-conference Teaching History in New

South Wales Years 7-10 Science, Oatley Campus, UNSW

Milne, C. (1997). *Narrative and research: A personal perspective*. Paper presented as part of a symposium on research and narrative for the Western Australian Institute for Educational Research, Perth, WA.

SERVICE PRESENTATIONS AND ACTIVITIES

Invited Presenter

Milne, C. (2010). *Developing ideas for creating a virtual Molecules and Minds level*. New York Hall of Science.

Milne, C. (September, 2005). *Action research in science education*, Queen's College, NY.

Milne, C. (September, 2004). *Critical literacy and the teaching of science*, Queen's College, NY.

OTHER PROFESSIONAL RESPONSIBILITIES

Doctoral Committee

Maaïke Bouwmeester (2009-

Yoo-Kyung Chang (2009-2010)

Kara Naidoo (2009-

Co-supervisor

Doctoral student at Curtin University of Technology, Perth, 2002-2004.

Reader

NYU Steinhardt School of Culture, Education and Human Development, Read Doctoral thesis and participate in final examination, 2002, 2003.

Outside Reader for Doctoral Proposals, NYU Steinhardt School of Culture, Education and Human Development, 2007, 2008.

External Examiner

Doctoral and Master of Science Thesis, Curtin University of Technology, Perth, (2000-2001, 2004) and Queensland University of Technology (2009).

Symposium Organizer

For the 2002 Biennial Conference on Chemistry Education (BCCE) held at Western Washington University. Submitted a proposal for a symposium on inquiry in chemistry education to the conference organizers. With its acceptance, the symposium was listed on the conference call for proposals. Reviewed proposals for acceptance and organized symposium schedule, which because of its popularity was held over 2 days.

For symposium, *Integrating simulations and animations into the teaching and learning of chemistry*, the 20th Biennial Conference on Chemical Education, Indiana University, Bloomington, IN, July 27-31, 2008.