

Current Position:

Professor, University of Luxembourg

Contact Information:E-mail: christina.siry@uni.lu**EDUCATION**

Ph.D. in Urban Education

The Graduate Center: City University of New York, 2009

M.S. in Elementary Education

Hunter College: City University of New York, 1994

B.S. in Elementary Education

St. John's University, 1991

ACADEMIC APPOINTMENTS

9/2014 – present **Professor in learning and instruction***University of Luxembourg, Luxembourg*

Faculty of Language and Literature, Humanities, Arts and Education

Education, Culture, Cognition, and Society (ECCS) research unit

9/2011 - 2014 **Associate Professor in primary science education***University of Luxembourg, Luxembourg*

Faculty of Language and Literature, Humanities, Arts and Education

Educational Measurement and Applied Cognitive Sciences (EMACS) research unit

2009 – 2011 **Collaborateur Scientifique***University of Luxembourg, Luxembourg*

Language, Culture, Media and Identities (LCMI) and Educational Measurement and

Applied Cognitive Sciences (EMACS) research units

2009 – 2011 **Instructor, Drexel University, Philadelphia, PA**

Goodwin School of Education

2007 - 2009 **Lecturer, University of Pennsylvania, Philadelphia, PA**

Penn Science Teachers Institute, Masters of Integrated Science Education

2004 - 2008 **Instructor, Manhattanville College, Purchase, NY**

Tenure-track, Curriculum and Instruction Department, Childhood Program

1998 - 2002 **Science Specialist (grades K-5) Conte Community School, Pittsfield, MA****TEACHING CERTIFICATIONS**

New York State Teaching Certificate (nursery-6)

Massachusetts Teaching Certificate (1-6)

RESEARCH INTERESTS AND CURRENT PROJECTS

My research focuses on teaching and learning at the primary school level, and I am interested in the interrelated areas of the learning of science by young children as well as the education of teachers for science teaching in the primary years. A foundation of my work in general is the importance and complexity of working towards incorporating multiple voices and perspectives in my teaching and my research. Situated in the multilingual context of Luxembourg, much of my work and the work of my research team seeks to highlight the diverse ways in which children interact in science lessons, both nonverbally as well as across and among languages. In addition to actively collaborating on the three projects below, I am involved in collaborations involving critical perspectives on the construction of childhood.

Science Teacher Training and Resource Center (SciTeach Center)

This project seeks to develop a collaborative teacher education for science network that is simultaneously rooted in the specific needs and strengths of the Luxembourgish primary education system, and based on a global body of research in science education on how to support teachers and quality science education. Through sustained professional development, teachers are offered pedagogical and content offerings that support engaging students in the practices of science, in order to support the promotion of science to stakeholders including teachers and children. The research conducted in this study examines the ways in which teachers engage in professional development workshops and make meanings around the teaching of science. A further strand of study in this project is the ways in which the roles and identities of the facilitators of professional development workshops evolve over time.

Science Education, Innovation, and Policy in Modern Luxembourg (SciPol: Lux)

This study seeks to gain insights into policy and curricular reform of science education in Luxembourg's primary schools through an approach that integrates research in educational sciences with research in the history of education. Beginning with the premise that "science education" as a school discipline is the product of culturally shaped expectations, SciPol examines the interface of international and national educational policy with local educational practice through the lens of primary school science education in Luxembourg (from 1920 through the present). Using Luxembourg as the context from which to examine global and local curriculum policies and reforms from a historical perspective, the study combines a historical analysis with an ethnographic approach to examine the lived practices in a local context.

Science teaching and learning in a field-based teacher education setting

This study focuses on pre-service teacher education in field-based contexts. In particular, I am examining longitudinal data from my own methods courses in which participants learned to teach by coteaching in a second grade classroom. In these field-based courses, pre-service teachers worked collaboratively in elementary schools to teach science to young children. Through this research, I explore the evolving possibilities for identity transformation as teachers begin to enact new roles in classrooms as well as the emergence of group solidarity among the participants. A central focus of my research is examining the role of collaboration through coteaching and cogenerative dialogue in teacher preparation.

Journal articles

- Siry, C. & Gorges, A.** (in press). Drawing on diverse resources for meaning making in science: Learning from multilingual contexts. Accepted for publication in the *International Journal of Science Education*.
- Gómez Fernández, R., & **Siry, C.** (2018). O projeto Scipol: Lux e o ensino / aprendizagem da ciência nas escolas pré-escolares e primárias no Luxemburgo: o caso dos estudantes cultural e linguisticamente diversos (The SciPol:Lux project and the teaching / learning of science in primary schools in Luxembourg: The case of the culturally and linguistically diverse students). *International Journal Education and Teaching*, 1(1), 70-90.
- Wilmes, S. & **Siry, C.** (2018). Interaction rituals and inquiry-based science instruction: Analysis of student participation in small-group investigations in a multilingual classroom. Advanced online publication in *Science Education*, doi 10.1002/sce.21462
- Wilmes, S., te Heesen, K., **Siry, C.**, Kneip, N., Heinericy, S., (2018). The role of critical reflexivity in the professional development of professional developers: a co-autoethnographic exploration. *Interfaces Científicas; Educação*, 7(1), 13-24.
- Villányi, D., Martin, R., Sonnleitner, P., **Siry, C.**, Fischbach, F. (2018). A tablet-computer-based tool to facilitate accurate self-assessments in third- and fourth-grader. *International Journal of Emerging Technologies in Learning*, 13 (10), 225-251.
- Gomez Fernandez, R. & **Siry, C.** (2018). “Opening up” a science task: An exploration of shifting embodied participation of a multilingual primary student. *International Journal of Science Education*, 40 (7), 771-795.
- Wilmes, S. E. D., **Siry, C.**, Gomez Fernández, R., & Gorges, A. (2018). Underscoring the value of video analysis in multilingual and multicultural classroom contexts. *The Video Journal of Education & Pedagogy* (3), 4.
- Brendel, M., **Siry C.**, Haus, J., & Breedijk-Goedert, F. (2017). Transforming praxis in science through dialogue towards inclusive approaches. *Research in Science Education*. Advance online publication: 10.1007/s11165-017-9642-2
- Siry, C.**, Brendel, M. Frisch, R. (2016). Radical listening and dialogue in educational research. *International Journal of Critical Pedagogy*, 7 (3), 120-136.
- Siry, C.** & Brendel, M. (2016) The inseparable role of emotions in the teaching and learning of primary school science. *Cultural Studies of Science Education*, 11 (3), 803-815.
- Siry, C.**, Wilmes, S., & Haus, J. (2016). Examining children’s agency within participatory structures in primary science investigations. *Learning, Culture and Social Interaction*, 10, 4-16.
- Milne, C., **Siry, C.**, Mueller, M. (2015). Reflections on the challenges and possibilities of journal publication in science education. *Cultural Studies of Science Education*, 10 (4), 1063-1069.

- Siry, C., & Martin, S.** (2014). Facilitating reflexivity in preservice science teacher education using video analysis and cogenerative dialogue in field-based methods courses. *Eurasia Journal of Mathematics, Science, and Technology Education* 10 (5), 481-508.
- Ali-Khan, C. and **Siry, C.** (2014). Sharing seeing: Exploring photo-elicitation with children in two different cultural contexts. *Teaching and Teacher Education*, 37, 194-207.
- Siry, C.** (2014). Towards multidimensional approaches to early childhood science education. *Cultural Studies of Science Education*, 9 (2) 297-304.
- Siry, C.** and Max, C. (2013). The collective construction of a science unit: Framing curricula as emergent from Kindergarteners' wonderings. *Science Education*, 97 (6), 878-902.
DOI: 10.1002/sce.21076
- Siry, C.** (2013). Exploring the complexities of children's inquiries in science: Knowledge production through participatory practices. *Research in Science Education*, 43, 2407-2430.
DOI: 10.1007/s11165-013-9364-z
- Bencze, J., Carter, L., Chiu, M., Duit, R., Krajcik, J., Martin, S., **Siry, C.**, Choi, K., Lee, H., Shin, N., & Kim S. (2013). Globalization and science education. *Cosmos* 8 (2), 139-152. DOI: 10.1142/S021960771250005X.
- Siry, C.**, Ziegler, G., & Max, C. (2012). "Doing science" through discourse-in-interaction: Young children's science investigations at the early childhood level. *Science Education*, 96, 311-326. DOI: 10.1002/sce.20481
- Siry, C. & Lara, J.** (2012). "I didn't know water could be so messy": Coteaching in elementary teacher education and the production of identity for a new teacher of science. *Cultural Studies of Science Education*, 7, 1-30.
- Kirch, S. & **Siry, C.** (2012). "Maybe the algae was from the filter": „Maybe“ and similar modifiers as mediational tools and indicators of uncertainty and possibility in children's science talk. *Research in Science Education*. DOI 10.1007/s11165-010-9197-y.
- Siry, C. & Kremer, I.** (2011). Children explain the rainbow: Using young children's ideas to guide science curricula. Invited contribution to special issue of *The Journal of Science Education and Technology*, 20, 643-655.
- Martin, S. & **Siry, C.** (2011). The role of social networks in science education research: A global context. *The Journal of Research in Science Teaching*, 48 (6), 592-623.
- Siry, C.** (2011). Exploring the significance of resource-rich views in science education. *Cultural Studies of Science Education*, 6 (4), 1019-1029. DOI 10.1007/s11422-011-9353-3
- Siry, C. & Zawatski, E.** (2011). "Working with" as a methodological stance: Collaborating with students in teaching, writing, and research. Invited contribution to special issue of *The International Journal of Qualitative Studies in Education*, 24 (3), 343-361.
- Siry, C.**, Ali-Khan, C., & Zuss, M. (2011). Cultures in the making: An examination of the ethical and methodological implications of collaborative research [26 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 12(2), Art. 24, <http://nbn-resolving.de/urn:nbn:de:0114-fqs1102245>.
- Siry, C.** (2011). Emphasizing collaborative practices in learning to teach: Coteaching and cogenerative dialogue in a field-based methods course. *Teaching Education*, 22, (1), 91-101.

- Fellner, G. & Siry, C. (2010). Reconceptualizing the relationship between universities and schools: a dialectic and polysemic approach. *Cultural Studies of Science Education*, 5, (3), 775-785.
- Siry, C. & Lang, D. (2010). Creating participatory discourse for teaching and research in early childhood science. *Journal of Science Teacher Education*, 21, (2), 149-160.
- Martin, S. & Siry, C. (2009). Raising critical issues in the analysis of gender and science in children's literature. *Cultural Studies of Science Education*, 4, (4), 951-960.
- Rubenstein, A., Cleary, S., and Siry, C. (2009). The Science of pumpkins: Gourd-ous decomposition in the elementary classroom. *Science and Children*, 47, (1), 60-62.
- Siry, C. (2009). Expanding the field of science education: A conversation with Ken Tobin. *Eurasia Journal of Mathematics, Science & Technology Education*, 5, (3), 197-208.
- Siry, C., Horowitz, G., Otulaja, F.S., Gillespie, N., Shady, A., Augustin, L.A. (2008). Conceptual change research and science education practice: A response from educators. *Cultural Studies of Science Education*, 3, (2), 451-470.
- Siry, C. & Famiglietti, J. (2007). A nutritious field trip. *Journal of Nutrition Education and Behavior* 39, (3), 175-177.
- Ferrara, J. & Siry, C. (2007) Pre-service teachers and classroom teachers learning together: A collaborative teacher education program. *Excelsior: Leadership in Teaching and Learning*, 1, (2), 39-48.
- Siry, C. (2006). Teaching with trade books: Wonderful, wiggly worms. *Science and Children*, 43, (7), 14-16.
- Siry, C. & Buchinski, L. (2005). A field guide of their own. *Science and Children*, 43,(1), 36-39.

Books

- Bazzul, J., & Siry, C. [Eds]. (2019). *Critical voices in science education research: Narratives of hope and struggle*. Switzerland: Springer Nature.
- Siry, C., Schreiber, C., Gomez Fernandez, R., & Reuter, R. (edited book in progress). *Critical methodologies for researching teaching and learning*. The Netherlands: Sense Publishing.
- Siry, C. (authored book in progress). *Teacher education as participatory practice: Learning to teach through collaboration and shared responsibility*. Rotterdam: Springer.

Book chapters

- Siry, C. (accepted). "Situating difference as a valuable resource in education research". In K. Scantlebury [Ed.] *Moving science education into the 21st century: A festschrift in honor of Kenneth Tobin*. Dordrecht: Springer Publishing.
- Haus, J.M. & Siry, C. (2019). "Agency, materiality, and relations in intra-action in a kindergarten science investigation." In C. Milne & K. Scantlebury [Eds]. *Material practice and materiality in science education*. (pp. 131-150). Dordrecht: Springer Publishing.
- Bazzul, J. & Siry, C. (2019). "Critical voices in science education." In J. Bazzul & C. Siry [Eds]. *Critical voices in science education research: narratives of hope and struggle*. (pp. 3-7). Switzerland: Springer Nature.

- Siry, C., Andersen, K., Wilmes, S.** (2018). „Doing Science“: Erwerb von Kompetenzen im naturwissenschaftlichen Unterricht der École fondamentale. *Bildungsbericht Luxemburg 2018*, pp. 140-141.
- Siry, C.** (2018). “Troubling science education and imagining possibilities for transformation: An afterword.” In A. Orlander, M. Sillasen, K. Otrell-Cass [Eds]. *Troubling science education through cultural, political, and social perspectives*. (pp. 197-206). Dordrecht: Springer Publishing
- Siry, C.** (2017). “The science curriculum at the elementary level: What are the basics, and are we teaching them?” In L. Bryan & K. Tobin [Eds.] *Thirteen questions for science education*. Peter Lang Publishing.
- Wilmes, S., **Siry, C.**, Gómez Fernández, R., & Gorges, A. (2017). “Reconstructing science education within the language / science relationship: reflections from multilingual contexts”. In L. Bryan & K. Tobin [Eds.] *Thirteen questions for science education*. Peter Lang Publishing.
- Siry, C.** (2015). Researching with children: Dialogic approaches to participatory research. In K. Tobin, & S. Steinberg [Eds]. *Doing educational research: A handbook (Second edition)* (pp. 151-165). Rotterdam, NL: Sense Publishing.
- Andersen, K., **Siry, C.**, Henges, G. (2015) Naturwissenschaftlicher Unterricht an der Luxemburger École fondamentale. *Bildungsbericht Luxemburg 2015, Analysen und Befunde* (Band 2), p. 28-33.
- Max, C., **Siry, C.** & Kracheel, M. (2015). “And? Did we do nice things?”: Children documenting their emerging inquiries in early science learning. In C. Milne, K. Tobin & D. DeGennaro [Eds]. *Sociocultural studies and implications for science education: the experiential and the virtual*. (pp. 135-153). Rotterdam: Springer.
- Siry, C.** & Lowell, N. (2014). Exploring the complexities of learning to teach: Collaborative methods and participatory structures in teacher education. In K. Tobin and A. Shady [Eds.] *Transforming Urban Education*. (pp.283-302). The Netherlands: Sense Publishers.
- Siry, C.**, Ferrara, J. & Lang, D. (2014). Preparing preservice teachers in a PDS Context: Insights into field-based methods courses. In J. Ferrara, J. Nath & I. Guadarrama [Eds.] *Research in Professional Development Schools: Creating visions for university-school partnerships*.
- Siry, C.**, Ali-Khan, C. & Siry, D. (2014). Political engagement as a child: Rethinking, reseeing and reinvesting youth in political participation. In K. Tobin and A. Shady [Eds.] *Transforming Urban Education*. (pp. 377-387). The Netherlands: Sense Publishers.
- Siry, C.** & Mick, C. (2013). Multivoiced research with children: Exploring methodological issues in children's documentation of school projects. In T. Kress, C. Malott and B. Porfilio [Eds.] *Challenging Status Quo Retrenchment: New Directions in Critical Research* (pp. 129-145). IAP Press.
- Siry, C.** (2013). Imagining educational spaces of possibility, hope, and joy. In R. Lake and T. Kress [Eds.]. *We Saved the Best for You: Letters of Hope, Imagination and Wisdom* (pp. 47-50). IAP Press.
- Martin, S. & **Siry, C.** (2012). An analysis of the utilization of video-based media in science teacher education. In B. Fraser, K. Tobin, & C. Campbell [Eds.] *International handbook of science teaching and learning*. (pp. 417-433). Rotterdam: Springer.

- Siry, C. & Ali-Khan, C** (2011). Writing we: Collaborative text in educational research. In C. Malott & B. Portfilio [Eds.] *Critical pedagogy in the 21st century* (pp. 233-249). Connecticut: Information Age Publishing.
- Siry, C. & Martin, S.** with Baker, S., Lowell, N., Marvin, J. & Wilson, Y. (2010). Coteaching in science education courses: Transforming teacher education through shared responsibility. In C. Murphy & K. Scantlebury [Eds.] *Coteaching in international contexts: Research and practice* (pp. 57-78). Rotterdam: Springer.
- Adams, J., **Siry, C.**, Dhingra, K., & Bayne, G. (2010). Forum: Science agency and structure across a lifespan. A dialogic response. In W-M. Roth & K. Tobin [Eds.] *ReUniting Psychological and Sociological Perspectives* (pp. 341-353). Rotterdam: Springer.
- Siry, C.** (2010). Envisioning polysemicity: Generating insights into the complexity of place-based research within contested spaces. In D.J. Tippins, M.P. Mueller, M. van Eijck, and J.D. Adams [Eds.], *Cultural studies and environmentalism: The confluence of EcoJustice, place-based (science) education, and indigenous knowledge systems* (pp. 315-321). Rotterdam: Springer.
- Ferrara, J., Santiago, E., & **Siry, C.** (2008). Preparing teachers to serve diverse learners: A PDS / full-service community school model. In I. Guadarrama, J. Ramsey, & J. Nath [Eds.], *University and School Connections: Research Studies in Professional Development Schools* (pp.151-164). Connecticut: Information Age Publishing.

Book reviews

- Haus, J. M. & **Siry, C.** (2017). Anne Gadow: Bildungssprache im wissenschaftlichen Sachunterricht: Beschreiben und Erklären von Kindern mit deutscher und anderer Familiensprache. *Zeitung für Grundschulforschung*, 10, H. 2
- Ali-Khan, C. & **Siry, C.** (2012). Genies and wishes: A review of *Key Works in Critical Pedagogy*. [(2011). The Netherlands: Sense Publishers.]. *Cultural Studies of Science Education*, doi 10.1007/s11422-012-9404-4.
- Gupta, P. & **Siry, C.** (2009). [Review of the book Roth, W-M. *In search of meaning and coherence: A life in research*. (2007). The Netherlands: Sense Publishers.] *Cultural Studies of Science Education*, 4, p. 487-493.
- Siry, C. & Ali-Khan, C.** (2008) [Review of the book Doyle, C. & Singh, C. (2006). *Reading and teaching Henry Giroux*. London: Continuum Publishing.] *Education Review*.
- Siry, C.** (2005). [Review of the book Garrick, R. (2004). *Playing outdoors in the early years*. London: Continuum Publishing.] *Education Review*.
- Siry, C.** (2005). [Review of the book Columba, L, Kim, C, & Moe, A. (2005). *The power of picture books in teaching math and science*. AZ: Holcomb Hathaway.] *Education Review*.

Conference proceedings

- Blanquet, E., **Siry, C.**, Picholle, É. (2018). Identification de compétences (pré-)scientifiques chez des élèves d'école maternelle: de l'utilité de croiser les cadres théoriques pour l'analyse émergente d'une vidéo. In I. Verscheure, M. Ducrey-Monnier, L. Pelissier [Eds.]. *Contributions du comparatisme en didactique à l'intelligibilité des pratiques d'enseignement et de formation*.

Lang, D. E. & Siry, C. (2008). Diversity as a context for inquiry-based pre-service teacher learning and teaching in elementary school settings: A self-study in teacher education practices. In M. L. Heston, D. L. Tidwell, K. East, L. M. Fitzgerald [Eds.] *The Proceedings of the Seventh International Conference on Self-study of Teacher Education Practices*. University of Northern Iowa: Cedar Falls, IA.

Encyclopedia entries

Siry, C. & Siry, L. (2010). Brothers. In S. R. Steinberg, M. Kehler, & L. Cornish [Eds.] *Boy culture: An encyclopedia*. Greenwood Press: Westwood, CT, 178-181.

Siry, C. (2010). PCBs. In D.R. Mulvaney [Ed.] *Green Politics: An A-to-Z Guide*. SAGE Publications. http://www.sage-ereference.com/greenpolitics/Article_n95.html

PROFESSIONAL DISTINCTIONS

American Educational Research Association (AERA) Division K

Outstanding Dissertation Award, 2010

This award recognizes a dissertation of exemplary conceptual, methodological, and literary quality on an important topic in teaching and teacher education.

Association for Science Teacher Education

Manuscript Award IV – Innovations in Teaching Science Teachers, 2010

This award recognizes excellence in manuscripts presented at previous ASTE Annual Meetings. Awarded for: Siry, C., Lowell, N. & Zawatski, B. “Learning to teach science through collaboration: Coteaching and cogenerative dialogue in elementary methods courses”.

City University of New York

Writing Fellowship, 2008-2009

Awarded a year-long fellowship to assist with the writing across the curriculum / writing in the disciplines initiative at the CUNY on-line baccalaureate program. This fellowship is awarded to doctoral candidates to support the completion of their dissertations.

Critical Perspectives in Early Childhood SIG of AERA

Travel Scholarship, 2008

Awarded to attend AERA 2009 in recognition of my presentation as a graduate student at AERA 2008. Awarded for: Siry, C. & Lang, D. “Creating participatory discourse for teaching and research in early childhood science”.

Massachusetts Executive Office of Environmental Affairs

Massachusetts Secretary’s Award for Excellence in Environmental Education

Three programs that I developed at Conte Community School received this award:

Storm Drain Awareness Program, 2003

The Fern Project, 2002

Watershed Program, 2001

Massachusetts Partnership for Advancing the Learning of Math and Science (PALMS)

Teacher Leader, 1999

The PALMS initiative was a NSF-funded State Systemic Initiative to improve mathematics, science and technology education in Massachusetts. The Teacher Leader component focused on implementing education reform for math, science and technology by certifying classroom

teachers as leaders to provide professional development, mentoring and peer coaching. Teacher Leaders met standards in content, pedagogy, leadership, systemic change.

YouthALIVE! Wallace Foundation

Fellowship Recipient, 1995

Awarded a fellowship through the YouthALIVE! Program to conduct research regarding the development of after-school teen programs at the Junior Museum. The fellowship provided for travel to science museums with established programs funded through the foundation for low-income adolescents.

PROFESSIONAL EXPERIENCE

University of Luxembourg, Luxembourg

Faculty of Language and Literature, Humanities, Arts and Education

Professor, 2014-present

Appointed to the *Education, Culture, Cognition and Society (ECCS)* research unit as a Professor in Learning and Instruction. This position includes teaching in Bachelors of Educational Sciences program, teaching in the Masters in Learning and Communication in Multilingual and Multilingual Contexts, supervision of doctoral students, and administration including heading the Institute of Applied Educational Sciences (AES) and as head of the ECCS research unit. In this position, I have created and facilitate the work of a team of researchers focusing on science education in multilingual school contexts, the Science Education Research Team (SERT), consisting of doctoral students, classroom teachers, postdoctoral researchers, and university faculty. This team collaborates on a number of projects, all with a central focus on science education at the primary levels, as well as teacher education for science in primary school.

University of Luxembourg, Luxembourg

Faculty of Language and Literature, Humanities, Arts and Education

Associate Professor, 2011-2014

Appointed to the *Educational Measurement and Cognitive Sciences (EMACS)* research unit as an Associate Professor in primary school science education. This position includes teaching in the Bachelors of Educational Sciences program, advising pre-service teachers' bachelor's theses, supervising school practica, and co-coordinating the primary science education modules within that program. I have initiated and facilitate a science education research team that conducts a variety of research projects grounded in sociocultural theoretical frameworks around the teaching and learning of science in primary schools.

University of Luxembourg, Luxembourg

Faculty of Language and Literature, Humanities, Arts and Education

Collaborateur Scientifique, Research Associate on two projects 2009 - 2011

In Language, Culture, Media and Identities (LCMI) research unit:

Collaborated on CODI-SCILE-A project (Competences for Organizing Discourse in Interaction and Science Learning - Analyzing knowledge building as activity of collaborative inquiring). Position included collecting and analyzing data from K-2 classrooms at multiple sites. Responsible for maintaining Transana database and writing publications from the collaborative analysis of project data.

In Educational Measurement and Applied Cognitive Sciences (EMACS) research unit:

Collaborated on European-wide Fibonacci project that focuses on disseminating inquiry-based math and science education throughout Europe. Position included conducting teacher education

workshops on the implementation of inquiry-based science education for primary teachers and providing support to their science instruction. Also collaborated on the project evaluation.

Drexel University, Philadelphia, PA

Goodwin School of Education

Instructor, 2009 - 2011

Taught graduate and undergraduate online courses to pre-service teachers enrolled in Drexel University's education programs. Courses included early childhood child development, elementary and secondary science methods, and evaluation of instruction.

University of Pennsylvania, Philadelphia, PA

Penn Science Teachers Institute, Masters of Integrated Science Education Program (MISEP)

Lecturer, 2007 - 2009

Taught graduate science pedagogy course to in-service middle school teachers. Evaluated e-portfolios and capstone projects as graduation requirements.

Seminars on Science, American Museum of Natural History, NY

Teaching Assistant, Water: Environmental Science, 2009, 2011

Assisted with teaching of an on-line intensive graduate level science course for in-service teachers. This course focuses on water as a critical resource and the social, economic, and environmental implications of water management.

The Graduate Center, City University of New York, NY

CUNY Writing Across the Curriculum initiative

Writing Fellow, 2008 - 2009

Designed specific writing-focused assignments for faculty teaching in the CUNY on-line baccalaureate program to facilitate student learning in an online environment. Developed professional development materials including on-line faculty newsletter.

Manhattanville College, Purchase, NY

Curriculum and Instruction Department, Childhood Program

Instructor, 2004 - 2008

Tenure-track faculty position. Responsibilities included teaching pre-service graduate and undergraduate curriculum methods course to early childhood and elementary education majors, including field-based science methods courses at a PDS. Co-coordinated the Day Start masters program, advised graduate students, and served on various School of Education committees.

Manhattanville College, Purchase, NY

Curriculum and Instruction Department, Childhood Program

Adjunct Faculty, 2002 - 2004

Taught graduate and undergraduate science methods courses as an adjunct, prior to joining the faculty in Fall 2004, and developed and piloted the field-based science methods courses.

St. Rose College, Albany, NY

Adjunct Faculty, Fall 2002

Taught pre-service graduate education courses in the Childhood Education Program.

Conte Community School, Pittsfield, MA

Science Specialist (K-5), 1998 - 2002

Developed and taught inquiry-based science curricula to grades K-5. Created after-school and family science-based programs, including the Conte Stream Team, which conducted on-going water quality monitoring. Served as a resource to teachers for the inclusion of science into their curriculum, and facilitated teacher workshops connecting curricula and local environment.

The Berkshire Museum, Pittsfield, MA

Senior Educator, 1995 - 1998

Created and implemented activities for teachers and students to explore science collections at a natural history museum. Coordinated after-school and weekend programs for children and families.

Museum Institute for Teaching Science (MITS), Boston, MA

Consultant, 2003 - 2005

Coordinator, Instructor, 1996 - 1999, 2002

Facilitated a regional component of a statewide program to develop collaborations between cultural organizations. This 3-credit in-service summer course for K-8 teachers utilized the local environment and organizations to connect science with resources available to teachers. Position included course coordination and developing and teaching sessions at the Berkshire Museum.

The Junior Museum (renamed Children's Museum of Science and Technology) Troy, NY

Youth Services Coordinator, 1994 - 1995

Developed after-school programming for middle and high school students. Coordinated programs for adolescents in collaboration with the Troy Housing Authority and provided opportunities for children to participate in science programs and to become museum interns.

International Wildlife Park / The Bronx Zoo, Bronx, NY

Teaching Intern, 1993 - 1994

Taught habitat ecology to children in grades pre-K through 6 and their teachers, and facilitated activities for students in after-school and summer science programs. Conducted research for staff members to develop teacher resource materials.

St. Francis Xavier School, Brooklyn, NY

Teacher, 1991 - 1992

Taught grades 5 / 6. Developed activities to combine language arts lessons with science units.

St. Patrick's School, Long Island City, NY

Science Teacher, 1991

Taught physical and life science to grades 5-8. Created a math Regents preparation after-school course and organized a school-wide science fair.

GRANTS

Fonds National de la Recherche Luxembourg (FNR) grants:

Promoting Science to the Public (PSP) Flagship grant

Received funding for the Sci2Schools project, focused on developing and facilitating school-based science education professional development with primary school teachers.
Awarded: 298,000 €, grant years 2019-2021.

Promoting Science to the Public (PSP) Flagship grant

Received funding for the SciTeach Center project – “Science Teacher Training and Resource Center”, to establish and empirically support a collaborative teacher education for science network based in Luxembourg and grounded on ongoing inservice professional development.
Awarded: 370,125 €, grant years 2016-2018.

INTER / Mobility grant (incoming)

Granted funds for a 6-week researcher exchange for Dr. Jrene Rahm, University of Montreal, to

conduct collaborative research in Luxembourg “A comparative study of meaning-making in science that matters in a global world: Creative interthinking, multilingualism, and multimodality tied to expansive learning in science education” (GlobalSci).
Awarded: 12,000 €, grant year 2016.

RESCOM Exploratory Workshops in Luxembourg grant scheme

Received funding for a three day international workshop, titled “Innovation and collaboration in cultural studies of science education: towards an international research agenda”
Awarded: 15,000 €, grant year 2014.

INTER / Mobility grant (outgoing)

Awarded funding for a 6 week visiting researcher exchange, to CUNY, NYC, USA to pursue the E-M-OTION Project: Examining mindfulness of emotions in science teacher education.
Awarded: 28,000 €, grant year: 2013

Active Participation in Scientific Conferences Abroad grant

Awarded funding to participate in, the 2012 American Educational Research Association Annual Meeting, Vancouver, Canada.
Awarded: 2,000 €, grant year: 2012

Promotion of Scientific Culture grant

Awarded funding to support a lecture series for educators and researchers, titled: “Kanner fuerschen: Naturwëssenschaften an technik an der Grondschoul a maison relais”.
Awarded: 3,000 €, grant year: 2012

Active Participation in Scientific Conferences Abroad grant

Awarded funding to participate in, the 2011 American Educational Research Association Annual Meeting, New Orleans, Louisiana.
Awarded: 2,000 €, grant year: 2011

Training for Researchers grant

Awarded funding to participate in summer training on multi-level analysis techniques in science educational research at the Graduate Center, City University of New York.
Awarded: 2,000 €, grant year: 2010

The University of Luxembourg

Internal Research Grants for Faculty

“Science Education, Innovation, and Policy in Modern Luxembourg” (SciPol: Lux).
Awarded: 350,000 € for grant years 2014-2017 (funding extended to 2018)

Singapore Incentive Scheme

Received funding for an academic exchange between the science education research team at the University of Luxembourg and a research team at the National Institute of Education in Singapore. Titled “Diversities in science learning” (DiverSci), the purpose of the project is to conduct collaborative data analysis.
Awarded: 13,333 € for grant year 2016

Internal Research Grants for Faculty

“Assessing Science Processes In Narratives: Building knowledge through collaborative assessment” (ASPIN Project). Co-PI with Michelle Brendel of the University of Luxembourg.
Awarded: 205,000 €, grant years 2013-2016 (funding extended to 2017)

European Science Education Association (ESERA):

Travel Award for New Researchers

One of three people chosen to receive this award, designed to enable junior scholars to visit science education researchers in other European countries.

Awarded: 350 €, grant year: 2010

The Graduate Center, CUNY grants:

Student Travel and Research Fund

Awarded a grant to disseminate research findings at the University of Pennsylvania's Ethnography Forum. Awarded: \$ 300, grant year: 2008-2009

Research Grant for Doctoral Students

Awarded funding for "Becoming a teacher: Identity development and group membership in collaborative field-based methods courses". Grant provided stipends for student researchers and funding to disseminate findings at the Urban Ethnography in Educational Research Forum

Awarded: \$ 900, grant year: 2008-2009

Manhattanville College Faculty Research Grants:

Summer Research grant

Awarded grant to research a daytime masters program and explore the ways in which individual notions of self impact a person's changing identity as they become a teacher.

Awarded: \$ 2,500, grant year: 2007

Course release grant

Awarded course release grant to research field-based elementary science methods courses and explore impacts on pre-service teachers' understandings of science teaching and learning.

Awarded grant years: 2007 and 2006

Berkshire Environmental Fund

Nature's Classroom funding

Received funding to establish a "Nature's Classroom" to provide resources for students and staff, and professional development opportunities for county educators. Proposals included developing a comprehensive river curriculum. Coauthored with Dr. Neale, Conte principal.

Awarded: \$ 7,500, grant year: 2002 Awarded \$ 10,000, grant year: 2001

Housatonic River Restoration, Inc.

Housatonic River Restoration Environmental Education Network Grants

Granted funding for a project to provide students with experience in outdoor exploration and key factors in plant identification with the purpose of creating a guide to the ferns at the school.

This project was awarded a state award for environmental excellence.

Awarded \$ 700, grant year: 2002

Orion Society

Stories in the Land fellowship program

Awarded funding for a place-based project in which students traced the origins of Conte school's property from its original owners to its present use. This project integrated research of local history and environmental research and resulted in reports and art projects authored by students.

Awarded: \$1,000, grant year: 1999 (Coauthor: Lisa Buchinski, Art teacher Conte School)

Massachusetts Cultural Council

Science in the Community Program

Received funding for a collaborative project coordinated through the Berkshire Museum and designed to strengthen science skills and content knowledge of underserved youth and families. Awarded: \$ 35,000, grant year: 1997 (Coauthor: Marion Grant, Education Director)

COMPLETED RESEARCH PROJECTS

Assessing Science Processes in Narratives: Building knowledge through collaborative assessment (ASPIN)

This study focused on teachers' and students' use of narrative assessment strategies in primary science investigations. This was a tandem research project together with Michelle Brendel of the University of Luxembourg. With a main focus on the processes of narrative assessment as a learning tool for teachers and students, the overall intention of this study was to gain a multifaceted picture of the experiences and learning of children and their teachers as they interacted around the assessment of science. Study completed 2017.

Examining mindfulness of emotions in science teacher education (E-M-OTION)

Principal Investigator: Christina Siry

This study was based upon a research stay in the United States in 2013 with Kenneth Tobin at the CUNY Graduate Center. The research exchange served as the central focus of the project's purpose of 'operationalizing' dialogic research on the role of emotions in learning to teach science. This study focused on collaborative analyses and interpretation of a dataset, in order to emerge with an analytical framework for use in Luxembourg. Objectives included examination and interpretation of teachers' emotions and identifying practices that connect with science teaching achievement. Study completed 2013.

Competences for organizing discourse-in-interaction & science learning: analyzing knowledge building as activity of collaborative inquiring (CODISCILE-A)

Principal Investigator: Charles Max, University of Luxembourg

This project focused on the scientific knowledge construction by children ages 4 – 8 and examined the ways children interact while learning about science in public schools in Luxembourg. The main focus was on multimodal discourse as children learned science, and we considered the ways in which children interact using gestures, tools and representations. My role was as post-doctoral researcher, and the project structure of collaboration with children as they learned science and as they document their discoveries provided insights into their scientific reasoning within discourse-in-interaction. Study completed 2011.

DayStart: An ethnography

Principal Investigators: Christina Siry and Diane Lang

This study examined the experiences of participants engaged in an Education Masters program that was structured to be taught in the day. The primary focus was on the pre-service teachers' perspectives of themselves as teachers, and the ways in which the curriculum of the teacher education program (which employed field-based methods courses as a central point) mediated the participants' developing sense of themselves as teachers. Study completed 2008.

DOCTORAL SUPERVISION AND ADVISEMENT

Dissertation supervisor (successful completion):

Sara Wilmes, University of Luxembourg, AFR funded candidate, 2013-2017

Student-driven inquiry-based science education in Luxembourg primary school contexts.

Grade: Excellent

Jana Maria Haus, University of Luxembourg, PUL funded candidate, 2013-2018

Tracing the development of children's science processes.

Grade: Good

Shaghayegh Nadimi, University of Luxembourg, faculty-funded candidate, 2016-2017

Historicizing the journey of the New Math reform from the United States to Luxembourg in the 1960s and 1970s.

Grade: Very good

Dissertation supervisor (in process):

Anna Gorges, University of Luxembourg, faculty-funded candidate.

Analysis of interactions in multilingual primary school classrooms in Luxembourg.

March, 2015-

Dissertation committee member:

Mohamed Faizal Bin Badron, National Institute of Education, Singapore

“Using cogenerative dialogue to mediate conceptual change in science: A case study of four primary schools in Singapore”, 2015-present

Melissa Winchell, University of Massachusetts, Boston.

“Cultural Competence as Co-construction in Teacher Training Programs”, 2011-2013

Member of Comite d'Encadrement de These:

Denise Villanyi, University of Luxembourg, 2014-2018

Melanie Noesen, University of Luxembourg, 2016-present

Katarina Krkovic, University of Luxembourg, 2013-2015

Viktoria Boretska, University of Luxembourg, 2015-2016

Shaghayegh Nadimi, University of Luxembourg, 2015-201

External Examiner: Aalborg University, Denmark, 2013, 2018, 2019

Monash University, Australia, 2012, 2015, 2018

National Institute of Education, Singapore, 2018

Queensland University of Technology, Australia, 2016

University of Waikito, 2016

COURSES TAUGHT

Undergraduate Education

The University of Luxembourg

Kinder auf dem Weg zum Naturwissenschaftlichen Bildung

Kinder, Natur, und Technik

Naturwissenschaftliche Bildung im Fröhalter

Manhattanville College:

Elementary Science Methods (EDU 3108); field- and campus-based sections

Curriculum, Management, Assessment (EDU 3380); field- and campus-based sections

Drexel University:

Science Teaching Methods (EDU 114 online)

Child Development I: Typical development, early childhood (EDU120 online)

Evaluation of Instruction (EDU 522 online)

Graduate Education

The University of Luxembourg

Collaborative Research Approaches in Multilingual (school) contexts

The Emergence of School Subjects in the Course of History

Manhattanville College

Elementary Science Methods (EDU 5108)

Curriculum, Management, and Assessment (EDU 5380)

University of Pennsylvania

Teaching and Learning Middle School Science (EDUC 545-631)

Drexel University

Child Development I: Typical development, early childhood (EDU520 online)

Science Teaching Methods, elementary (EDU 514 online) and secondary (EDU 901 online)

The College of St. Rose

Informal Student-based Assessment (EDU 540-01)

Curriculum and Instruction (ELE 580)

COURSE DEVELOPMENT

Sample course descriptions from syllabi of select courses I have developed:

Manhattanville College

Childhood Science Methods (field-based)

This course focuses on teaching elementary school science. Emphasis is placed on the nature of science and teaching processes of inquiry, through class discussions, assignments, group activities and presentations. This course consists of direct interaction with second grade students and follow-up discussions and reflections. Science activities will be developed and cotaught to the children, and this will allow for an exploration of a variety of teaching approaches. In addition to teaching children, we will create individual units that serve as the basis for demonstrating your growth and understanding. Discussions will focus on science instruction, issues of education reform, and content inquiry. The NYS Standards for Teaching Science and the National Science Education Standards are the basis for the course content. The course culminates in the development and presentation of a field experience project.

Manhattanville College

Curriculum, Management, and Assessment

This course examines ways for childhood educators to develop curricula and implement instruction within a within range of student abilities. Curricula will be examined and analyzed, including the state standards, local curriculum documents, and published curricula. This course focuses on developing methods for assessing student learning and assessment tools and techniques. An additional focus is on examining methods for gathering data, improving instructional planning, and acquiring classroom management strategies. This course emphasizes

the importance of developing methods for assessing student learning and using this information to focus on improvement of instruction and student performance. The course includes group trips to visit schools and cultural institutions to examine components of effective teaching.

University of Pennsylvania

Teaching and Learning Middle School Science

This course provides a foundation in theory and research significant to teaching and learning science in middle school. There are three areas of focus: Personal inquiry into professional practice, scholarly research, and exploration of pedagogy for science. Assignments will incorporate each of these strands, and objectives will be met through discussions (in person and on-line), classroom inquiry, reflection upon practice, and scholarly research. The course utilizes a variety of teaching models including coteaching, and we will work together to develop sessions that further our understandings of the main topics. Professional literature will provide a basis for connecting our experiences with pertinent research in the field, and articles will be researched by participants and posted on-line. Collaboration and co-responsibility are a key foundation to development of the course and furthering our learning community.

PROJECT COORDINATION

Project coordinator, Fibonacci project, completed February 2013.

Coordinated and managed the Luxembourg component of the European-wide Fibonacci Project, which supported the continued professional development of primary school teachers in science education (funded under the FP-7 scheme of the EU). Coordinator position included all administration for the Luxembourg initiative, including: data collection, interim and final reporting, budgeting, and supervising team of 5. Additionally, position included organizing and facilitating workshops for over 75 primary teachers.

SCIENCE RESOURCE DEVELOPMENT

Waterkeeper kids, *Waterkeeper magazine*

Created a series of three children's pages for the publication of the Waterkeeper Alliance to engage children in exploring the topics presented in each of the issues.

Pages included:

Siry, C. & Siry, L. (2006). Waterkeeper kids: What's sewage? *Waterkeeper*, Summer.

Siry, C. & Siry, L. (2006). Waterkeeper kids: Good food. *Waterkeeper*, Spring, 77.

Siry, C. & Siry, L. (2005). Waterkeeper kids: What is coal? *Waterkeeper*, Winter, 66.

Young Women in Science project, *Flying Cloud Institute, Massachusetts*

Served as a consultant to develop curriculum for an enrichment program for middle school-aged girls. In this program, high-school girls are educated by college science faculty members to facilitate science activities with the younger girls. Curriculum topics focused on inertia and structural engineering activities. Spring 2006.

Discovering the Housatonic Watershed; a guide for teachers, *Housatonic River Restoration*

Developed a guide for teachers in Berkshire county focusing on interdisciplinary activities to teach about watershed education. Supported by grant funds provided to the Housatonic River Restoration organization by the Environmental Protection Agency. Printed 2003.

Living Landscapes, *The Berkshire Museum*

Served as a member of a curriculum writing team to develop a curriculum guide for teachers in grades K-8. The purpose of the guide is to connect the science exhibits at this natural history museum to the local environment of Berkshire County. Printed 2003.

From Farm to Table, *The New England Heritage Breed Society*

Participated in developing lessons for a curriculum guide for integrating agricultural education into the elementary classroom. Printed 2002.

PRESENTATIONS

Invited

Siry, C. “Equity and diversity in science education”. Keynote lecture at the workshop The Role of Science in a Changing World, the Lorenz Institute, Leiden University, the Netherlands, January 11, 2018.

Siry, C. “Framing science as a sociocultural enactment: resource-rich approaches to exploring children's meaning making.” Keynote lecture at the conference Naturvetenskap I förskolan (science in preschool), Lund University, National Resource Center for Physics, Sweden. October 13, 2016.

Siry, C. “The inseparable role of emotions in the teaching and learning of primary school science.”. Lecture at the colloquium, Mindfulness, Emotions, and Educational Research, The University of Sao Paulo, Brazil. Sept. 29. 2015.

Siry, C. “Examining emotions in video-based research”. Workshop at the colloquium, Mindfulness, Emotions, and Educational Research, The University of Sao Paulo, Brazil. Sept. 29. 2015.

Siry, C. “Dialogical approaches to ethical research practices”. Lecture at the National Institute of Education, Singapore. July 23, 2015.

Siry, C. “Thematic trends of research in Science Education”. Keynote lecture at the IV Graduate Journey doctoral seminar, Federal University of Rio de Janeiro, Brazil, Nov. 10, 2014.

Siry, C. “Sociocultural perspectives of context in science education research and practice”. Presentation at doctoral seminar, Perspectives sobre el context en educació científica: Aproximacions teòriques i implicacions per la practica educativa, Universitat Autònoma de Barcelona, Dec. 13, 2013.

Siry, C. and Wilmes, S. “Designing Science Professional Development WITH Teachers: An emergent, responsive approach in a time of inquiry-based science dissemination”. University of Stockholm, Nov. 21, 2013.

Siry, C. “Researching *with* teachers and students: dialogic approaches to ethical research practices”. Uppsala University, Sweden, June 11, 2013.

Siry, C. “Dialogic approaches to research with teachers and children in multilingual settings”. Presentation at Urban Science Education Research Seminar (USER-S), NY, US Feb. 16, 2013.

Siry, C. & Martin, S. “Video analysis workshop: Using video annotation tools to analyze interactions in the science education classroom.” Presented at Seoul National University, on July 19, 2012 and Ewha Women’s University, Seoul, South Korea, July 20, 2012.

- Siry, C.** “Participatory science with young children”. Invited keynote address at the conference *Critical Ecological Pedagogy and Philosophy: What does Levinas Have to Do With It?* Hogeschool, Utrecht, the Netherlands, Oct. 12, 2011.
- Vlassis, J. & **Siry, C.** “Science and language in multilingual contexts”. Invited workshop for the “Integrating Inquiry Across Curricula Seminar” as part of the EU Fibonacci project. University of Leicester, UK, September 13, 2011.
- Siry, C.** “Collaborative inquiry: Analyzing young children’s explorations into science”. Invited presentation for the LCMI research seminar series, University of Luxembourg, Luxembourg. February 8, 2011.
- Siry, C.** “Researching together: Exploring children’s insights as they learn science”. Invited symposium presentation at the Centre for Gender Research, Uppsala University, Sweden, January 27, 2011.
- Vlassis, J. & **Siry, C.** “Use of science in supporting language development”. Invited presentation at the Fibonacci Cross-Disciplinary workshop, University of Leicester, UK, December 8, 2010.
- Siry, C.** Invited plenary speaker at the Spain Congress, co-hosted by the Paolo and Nita Freire Center at McGill University and the Universities of Granada and Barcelona. Granada, Spain, November 10-14, 2010.
- Siry, C. & Max, C.** “‘Doing’ science in Kindergarten: Young children's explorations and explanations of water”. Invited colloquium presentation at the Eindhoven Institute of Technology School of Education, Netherlands, October 25, 2010.
- Siry, C.** “Examining children’s interactions as they collaboratively investigate water”. Invited presentation for Dr. Diane Lang’s early childhood curriculum course at Manhattanville College, NY, January 11, 2010.
- Max, C., & **Siry, C.** “Naturwissenschaftliches lernen und kompetenzmodelle: Transatlantische einblicke”. Invited lecture at Ministry of Education, Luxembourg, November 18, 2009.
- Siry, C., Lowell, N. & Bedard, D.** “Developing identity and community through an authentic approach to teacher education”. Presentation given for the Manhattanville College Faculty Lecture Series, NY, January 30, 2008.
- Siry, C.** “A collaborative, field-based framework for teacher education”. Presentation given at Brooklyn College, NY for Dr. Jennifer Adams’ Teacher Researcher class, October 29, 2007.

Presented

- Siry, C.** “Re-imagining primary school science: Resource-rich approaches to highlight multilingual children’s interactions. Symposium contribution at the NARST conference, Baltimore, MD, US, April 3, 2019.
- Siry, C.** “Explorations in teaching science to multilingual learners”. Presentation at the NARST conference, Baltimore, MD, US, April 1, 2019.
- te Heesen, K., **Siry, C.**, Schreiber, C. “Conceptualizing science education curricula and practices through a historical lens.” Paper presentation at the ISCHE conference, Berlin, Sept.1, 2018.
- Wilmes, S. & **Siry, C.** “A dialectic view of student notebook use: the dance of the individual / collective.” Paper presentation at EARLI SIG meeting, Luxembourg, August, 2018.

- Wilmes, S. & **Siry, C.** “Interaction rituals in multilingual student-centered science instruction” Symposium contribution at the ESERA conference, Dublin, Ireland, August 25, 2017.
- te Heesen, K., Kneip, N., Heinericy, S., **Siry, C.**, Wilmes, S. “The role of critical reflexivity in the professional development of professional developers. Roundtable presentation at the AERA conference, New York, April 16, 2018.
- Milne, C. & **Siry, C.** “What does it mean to support socio-cultural research in Science education: The experience of Cultural Studies of Science Education.” Symposium contribution at the ESERA conference, Dublin, Ireland, August 25, 2017.
- Siry, C.** & Wilmes, S. “Multilingual, multimodal interactions in primary school and the role of wonderings” Symposium contribution at the ESERA conference, Dublin, Ireland, August 24, 2017.
- Siry C.** Invited participant at the sponsored symposium “13 questions: Reframing education’s conversation: Science” at the NARST conference, San Antonio, April 23, 2017.
- Siry, C.** Invited participant in the sponsored session “How to get your research published in science education journals” at the NARST conference, San Antonio, April 22, 2017.
- Martin, S. & **Siry, C.** “Globalization and science education”. Symposium contribution at the NARST conference, San Antonio, April 23, 2017.
- Siry, C.** “Imagining the possibilities: seeking approaches to highlight multilingual interactions in school science” Invited contribution in the sponsored session Diversity and Equity in Science Education at the NARST conference, Baltimore Maryland, April 15, 2016.
- Martin, S., **Siry, C.**, Dixon, M. “Critical perspectives on cogenerative dialogue and video analysis on science teaching and learning in the elementary classroom”. Paper presentation contribution at the NARST conference, Baltimore Maryland, April 16, 2016.
- Rahm, J. & **Siry, C.** “Creative interthinking, multilingualism, and multimodality tied to expansive learning in science education”. Paper presentation at the ESERA conference in Helsinki, Sept. 5, 2015.
- Siry, C.** & Brendel, M. “Narrative assessment as an inclusive approach to primary science education”. Paper presentation at the ESERA conference in Helsinki, Sept. 5, 2015.
- Schreiber, C., **Siry, C.**, Reuter, R. “Problematizing science as a primary school discipline: Learning from contingencies and diversities. Paper presentation at the ESERA conference in Helsinki, Sept. 5, 2015.
- Milne, C. & **Siry, C.** “Toward a meaningful science education: Cultural Studies of Science Education. Invited symposia at the ESERA conference in Helsinki, Sept. 3, 2015.
- Wilmes, S. & **Siry, C.** “The role of wonderings in inquiry-based science education: Expanding the notion of questions.” Paper presentation at the ESERA conference in Helsinki, Sept. 3, 2015.
- Siry, C.** “Imagining the possibilities: Seeking approaches to highlight multilingual interactions in school science” Presented at the annual NARST conference in Chicago, April 11, 2015.
- Siry, C.** “An international perspective on decolonizing research methodologies in science education” Symposium discussant at the annual NARST conference in Chicago, April 14, 2015.

- Brendel, M., **Siry, C.**, Hilgers, J. “Transforming praxis in science through dialogue towards inclusive approaches”. Presented at the annual AERA conference in Philadelphia, PA, April, 2014.
- Siry, C.** “Knowledge production through participatory research structures with children”. Symposium contribution at the annual NARST conference, Puerto Rico, April 9, 2013.
- Siry, C.**, & Wilmes, S. “Working with inservice science teachers to design professional development; An emergent, responsive approach”. Paper presentation at the annual NARST conference, Puerto Rico, April 7, 2013.
- Siry, C.** “The collective construction of science curricula in a Kindergarten class”. Paper presentation at the Australasian Science Education Research Association (ASERA), Sippy Downs, Queensland, June 29, 2012.
- Siry, C.** & Martin, S. “Participatory approaches to science teacher education courses: Fostering professionalism through sharing responsibility.” Paper presentation at the meeting of the American Education Research Association (AERA), Vancouver, BC, April 16, 2012.
- Martin, S. & **Siry, C.** “Engaging teachers and students in participatory dialogues to cogenerate positive learning environments in elementary school.” Paper presentation at the annual meeting of the American Education Research Association (AERA), Vancouver, BC, April 15, 2012.
- Ali-Khan, C. & **Siry, C.** “Exploring new languages and finding new voices: Critical perspectives of international image based projects with children.” Paper presentation at the annual meeting of the American Education Research Association (AERA), Vancouver, BC, April 14, 2012.
- Siry, C.** “The Collective Construction of a Science Unit: Framing Curriculum as Emergent from Kindergarteners’ Wonderings.” Paper presentation in the symposium: Learning from Children: A Conversation about Science Education in the Early Years at the annual international conference of the National Association for Research in Science Teaching (NARST), Indianapolis, Indiana, US, March 28, 2012.
- Siry, C.** “Teachers' Integration of Science and Language Instruction in Multilingual Classrooms: Implications for In- service Education”. Paper presentation at the annual international conference of the National Association for Research in Science Teaching (NARST), Indianapolis, Indiana, US, March 25, 2012.
- Martin, S. & **Siry, C.** “The role of social networks in science education research: A global context.” Paper presentation in the symposium: Globalization and Science Instruction at the annual international conference of the National Association for Research in Science Teaching (NARST), Indianapolis, Indiana, US, March 25, 2012.
- Siry, C.** Children’s wonderings and insights in science: Possibilities for co-constructing science curricula. Presentation at Urban Science Education Research Seminar (USER-S), NY, November 19, 2011.
- Ali-Khan, C. & **Siry, C.** Children's images and expanding worlds: Critical possibilities in international contexts. Presentation at Urban Science Education Research Seminar (USER-S), NY, November 19, 2011.
- Mick, C & **Siry, C.** “Multivoiced ethnography: Exploring methodological issues in children's documentation of school projects”. Presented at the Oxford Ethnography and Education

- Conference, Oxford, UK, Sept. 20, 2011.
- Siry, C.** “Exploring the centrality of emotions in science teacher education”. European Science Education Research Association conference, Lyon, France, Sept. 6, 2011.
- Siry, C.** “Sociocultural approaches for the analysis of interaction in science education and environmental education”, symposium discussant, European Science Education Research Association conference, Lyon, France, Sept. 9, 2011.
- Siry, C. & Max, C.** “There fits more in than there”: “Doing science” through interaction in the early childhood classroom. ISCAR meeting, Rome, Italy, September 4-6, 2011.
- Martin, S. & Siry, C.** “The role of social networks in science education research: A global context”. European Science Education Research Association conference, Lyon, France, Sept. 9, 2011
- Max, C. & Siry, C.** “The emergence of science in early childhood classroom interactions”. European Science Education Research Association conference, Lyon, France, Sept. 7, 2011.
- Siry, C., Fellner, G., & Tobin, K.** “Who’s to say what’s essential?”: Co-constructing logics of inquiry with participants. American Educational Research Association Annual Meeting, New Orleans, LA, April 11, 2011.
- Max, C., & Siry, C.** “Analyzing the “doing” of science within collaborative activities at the early childhood level”. American Educational Research Association Annual Meeting, New Orleans, LA, April 10, 2011.
- Ali-Khan, C., Siry, C., & Zuss, M.** “Cultures in the making: An examination of the ethical and methodological implications of collaborative research”. American Educational Research Association Annual Meeting, New Orleans, LA, April 9, 2011.
- Martin, S. & Siry, C.** Applying theory to practice: Video analysis and cogenerative dialogues as reflexive tools for pre-service teachers. American Educational Research Association Annual Meeting, New Orleans, LA, April 8, 2011.
- Siry, C.** “Facilitating responsive science teacher education: Professional development as embedded in teachers’ everyday practices and concerns.” National Association for Research in Science Teaching International Conference, Orlando, LA, April 6, 2011.
- Siry, C.** Participant in symposium “Theoretical and empirical analyses of social capital and networking in science education: From global to local.” National Association for Research in Science Teaching International Conference, Orlando, LA, April 6, 2011.
- Ali-Khan, C., & Siry, C.** “Pakistan and Luxembourg: An ethnographic image-based exploration of schoolchildren’s insights in two international contexts”. Urban Ethnography in Educational Research Forum, Philadelphia, PA, February 25-26, 2011.
- Lang, D., & Siry, C.** “Children’s play as cultural and intellectual location for exploration of scientific principals: Motion and matter”. Urban Ethnography in Educational Research Forum, Philadelphia, PA, February 25-26, 2011.
- Siry, C.** “The role of laughter in science teacher education courses”. Presentation at the National Association for Research in Science Teaching International Conference, Philadelphia, PA, March 24, 2010.

- Max, C. & **Siry, C.** “Learning about water through discourse-in-interaction”. Presentation at the National Association for Research in Science Teaching International Conference, Philadelphia, PA, March 23, 2010.
- Martin, S., **Siry, C.**, Ruggirello, R., Blasié, C., Horowitz, J., & Wilson, Y. “It’s electric!” E-portfolios as evidence of teacher growth: Examining a growing trend in both research and practice in science teacher education. Pre-conference workshop at the National Association for Research in Science Teaching International Conference, Philadelphia, PA, March 21, 2010.
- Siry, C.** “Exploring young children’s interactions as they engage in science investigations”. Presentation at the Urban Science Education Research Seminar (USER-S), NY, January 9, 2010.
- Siry, C.**, Lowell, N. & Zawatski, B. “Learning to teach science through collaboration: Coteaching and cogenerative dialogue in elementary methods courses”. Presentation at Association for Science Teacher Education International Conference, Hartford, CT, January 8, 2009.
- Tobin, K., & **Siry, C.** “Using StudioCode and other research tools”. Presentation at the Urban Science Education Research Seminar (USER-S), NY, October 10, 2009.
- Martin, S. & **Siry, C.** “Cogenerative dialogues and video analysis: Transforming science teaching and learning in the elementary classroom”. Paper presentation at the European Science Education Research Association Annual Conference, Istanbul, Turkey. September 4, 2009.
- Siry, C.** & Martin, S. “Coteaching in science teacher education: Facilitating collective responsibility for teaching and learning” Paper presentation at the European Science Education Research Association Annual Conference, Istanbul, Turkey. September 4, 2009.
- Tobin, K., **Siry, C.**, Fellner, G., Williams, M., Amoako, B. & Lin, N. “Insider perspectives of a melee: Surviving the turmoil and reaping the fruits of participant research”. Presentation at the Urban Science Education Research Seminar (USER-S), NY, June 13, 2009.
- Siry, C.** “Exploring the role of emotions in science teacher preparation”. Presentation at a symposium What About Love? The Role of Emotions in Urban Science Education
- National Association for Research in Science Teaching International Conference, Garden Grove, CA, April 20, 2009, and
 - Urban Science Education Research Seminar (USER-S), NY, June 13, 2009.
- Siry, C.** & Martin, S. “Coteaching as engaged pedagogy: Transforming science teacher education through shared responsibility”. Paper presentation at the National Association for Research in Science Teaching International Conference, Garden Grove, CA, April 20, 2009.
- Martin, S. & **Siry, C.** “More table, less carpet: The transformative role of cogenerative dialogue and video analysis on science teaching and learning in the elementary classroom”. Paper presentation at the National Association for Research in Science Teaching International Conference, Garden Grove, CA April 20, 2009.
- Martin, S. & **Siry, C.** “Windows and mirrors: Using video analysis to build community and support pre-service teacher autonomy and reflexivity”. Symposium paper at the American Educational Research Association Annual Meeting, San Diego, CA, April 17, 2009.
- Siry, C.** & Terracciano, B. “A partnership for learning about elementary science teaching.” Presentation at the National Science Teacher’s Association, New Orleans, LA, March 20, 2009.

- Scantlebury, K. & **Siry, C.** “Inspiring inservice teachers and mentoring beginning teachers through coteaching.” Presentation at the National Science Teacher’s Association, New Orleans, LA, March 19, 2009.
- Siry, C.** “Facilitating new teacher identity trans/formations through coteaching and cogenerative dialogue”. Paper presentation at the Urban Ethnography in Educational Research Forum, Philadelphia, PA, February 27, 2009.
- Siry, C.** and Griffin, A. “Sharing responsibility for teaching and learning science pedagogy through coteaching”. Paper presentation at the Urban Ethnography in Educational Research Forum, Philadelphia, PA, February 28, 2009.
- Ali-Khan, C. & **Siry, C.** “Holding hands: An examination of collaboration in research”. Paper presentation at the Urban Ethnography in Educational Research Forum, Philadelphia, PA, February 28, 2009.
- Siry, C.** “Supporting teacher inquiry through coteaching and practitioner research.” Interactive paper presentation at the Association for Science Teacher Education International Conference, Hartford, CT, January 10, 2009.
- Martin, S., & **Siry, C.** “An analysis of the utilization of video-based media in science teacher education”. Paper presentation at the Association for Science Teacher Education International Conference, Hartford, CT, January 9, 2009.
- Lang, D. & **Siry, C.** “Diversity as a context for inquiry-based pre-service teacher education”. Paper presentation at the Seventh International Conference on Self-Study of Teacher Education Practices, East Sussex, UK, August 6, 2008.
- Siry, C.**, Bedard, D., Lowell, N. & Zawatski, E. “Becoming a teacher: Identity development and group membership in field-based science methods courses”. Paper at Sharing our Success in Urban Math and Science Education Conference, New York University, NY, May 3, 2008.
- Kirch, S. & **Siry, C.** “Maybe the algae was from the filter: Theorizing ‘maybe’ and its use by young children in conversation”.
 - Poster presented at the National Association for Research in Science Teaching International Conference, Baltimore, MD, March 31, 2008, and
 - Paper presented at the Association for Science Teacher Education International Conference, St. Louis, MO, January 11, 2008.
- Siry, C.** & Martin, S. “Reconceptualizing teacher education through the use of coteaching and cogenerative dialogues”. Symposium discussion at the National Association for Research in Science Teaching Conference, Baltimore, MD, March 31, 2008.
- Siry, C.** & Lang, D. “Creating participatory discourse for teaching and research in early childhood science”. Paper presentation at the American Educational Research Association Annual Meeting, NY, March 24-28, 2008.
- Lang, D. & **Siry, C.** “Teaching teachers to use inquiry in diverse settings: A self-study in teacher education practices”. Paper presentation at the American Educational Research Association Annual Meeting, NY, March 24-28, 2008.
- Martin, S. & **Siry, C.** “Choosing the right tool for the job: An analysis of the utilization of video and multi-media resources in teacher education”. Paper presentation at the American Educational Research Association Annual Meeting, NY, March 24-28, 2008.

- Siry, C. & Lang, D.** “Becoming a teacher: Identity development in the context of field-based curriculum methods courses”. Paper presentation at the Urban Ethnography in Educational Research Forum, Philadelphia, PA, March 1, 2008.
- Martin, S., **Siry, C.**, & Baker, S. “Coteaching as praxis: A method for improving science teacher education courses”. Workshop presented at the Association for Science Teacher Education International Conference, St. Louis, MO, January 11, 2008.
- Siry, C. & Lara, J.** “Fostering community through coteaching in a science methods course”. Paper presented at Sharing our Success Conference, New York University, NY, May 19, 2007.
- Siry, C. & Lang, D.** “Inquiry-based social studies and science with young children”. Workshop facilitated at the New York State Association for the Education of Young Children Annual Conference, Rye, NY, May 5, 2007.
- Siry, C., Lang, D. & Ferrara, J.** “Two schools, three models: The development and evolution of a field-based teacher preparation program”. Paper presented at the New Educator Conference, New York, NY, October 23, 2006.
- Ferrara J. & **Siry, C.** “The power of college / community school partnerships to promote reciprocal learning opportunities”. Paper presented at the Association of Teacher Educators Annual Meeting, Atlanta, GA, February 20, 2006.
- Siry, C. & Childs, N.** “Discovering your local watershed”. Workshop presented at the National Science Teachers Association eastern regional convention, Hartford, CT, October 22, 2005.

TEACHER WORKSHOPS

The University of Luxembourg, Luxembourg

- 4 Elemente im Unterricht, 2017,2018
- Forschend-entdeckendes Unterricht, 2017, 2018
- Bewegung und Konstruktion, 2016
- Lehren mit Würmer und Schnecken, 2015
- Forschendes Lernen mit Wasser, 2011, 2013
- Untersuchendes Lernen mit dem Fibonacci Projekt, 2011, 2012
- Sprachförderung und forschendes Lernen, 2011, 2012

The European School, Luxembourg

- Teaching inquiry based science: water, 2013
- Learning to teach about sustainability, 2012
- Teaching about motion and design at the primary level, 2011
- Assessing and evaluating inquiry-based science, 2011
- Teaching chemical tests: Investigating the properties of common household chemicals, 2010
- Incorporating student-centered inquiry investigations into the curriculum, 2010

Lavelle School for the Blind, Bronx, NY

- Social skills: What, when, how (co-presented with D. Lang), 2009

Pittsfield School Department, In-service education, Pittsfield, MA

- Using the environment as a context for learning, 2005
- Water, water everywhere; teaching about watersheds (co-presented with N. Childs), 2003
- Schoolyard science, 2002
- From farm to table, 2001

Sacred Heart School, Pittsfield, MA
Teaching science using the outdoors, 2002

Housatonic River Restoration, Great Barrington, MA
Shaping our river's future: a student teach-in for the Housatonic River. Facilitated student presentations entitled "Conte's nature trails and sense of place", 1999

Museum Institute for Teaching Science at The Berkshire Museum, Pittsfield, MA
Stream ecology, 2002
Performance assessment techniques, 1999
The technology of paper, 1999

The Berkshire Museum, Pittsfield, MA
Teaching animal adaptations, 1998
Teaching and evaluating inquiry-based science, 1997
Using animals in the classroom, 1996
Designing kits, 1996

ADMINISTRATIVE EXPERIENCE

Head of Applied Educational Science (AES) institute, *University of Luxembourg, 2014-present*
Administrative head of the AES institute, which brings together a diverse group of researchers focused on the description, documentation, analysis, explanation, understanding, and development of structures and of teaching and learning processes. As a group, we study learning and teaching in a range of contexts with the aim of developing, understanding and improving the quality of education. This role includes administration as well as coordination of academic events and structures, including internal as well as external events, colloquia, lectures, and other scholarly exchanges and collaborations.

Head of Education, Culture, Cognition, and Society (ECCS) research unit, *University of Luxembourg, 2017-present (deputy head from 2014-2017)*
Head (and former deputy head) of a research unit that consists of over 100 researchers; including educationalists, neuro-scientists, anthropologists, linguists, psychologists, historians, sociologists and IT experts. Members of this group are working on different research topics such as curriculum and policy studies, teacher education, cognitive development and learning processes, migration and multilingualism in school and Higher Education as well as learning processes across the life span. A particular emphasis of our research unit lies on education in socially, linguistically and culturally diverse societies.

Program co-coordinator, *Day Start Masters program, Manhattanville College, 2005-2008*
Initiated, developed, and coordinated a Masters program collaboratively with Dr. Diane Lang. Coordination involved planning the structure of an innovative Masters degree for teacher certification (Childhood program) with courses held during the school day. The Day Start program consists of 12 courses and student teaching, and position included advising students, planning courses, and organizing field-based experiences at partner elementary schools.

PROFESSIONAL DEVELOPMENT

Professional workshops

Formation d'excellence en leadership

University of Luxembourg leadership training through Plateforme, 2012-2013

FINESSE: Faculty Institutes for NASA Earth and Space Science Education

Association of Science Teacher Educators, 2009

Technology in Teacher Education, Faculty Resource Network

New York University, 2005

Elementary Science and Technology for Children

Pittsfield School District curriculum development, 2000

Completed courses beyond degree requirements

Chemistry for Elementary Teachers, EDUC 690

Massachusetts College of Liberal Arts, Spring 2001, 3 credits

Advanced Journeys: Teaching Sense of Place, EDUC 5560

Teton Science School residential course

Utah State University, Summer 2000, 3 credits

Museum Bird Study, BIO 128

Hudson Valley Community College, Spring 1998, 3 credits

PROFESSIONAL AFFILIATIONS

Member, American Educational Research Association

Member, European Association for Research on Learning and Instruction

Member, European Science Education Research Association

Member, National Association for Research in Science Teaching

EDITORIAL ROLES

Co-editor

Cultural Studies of Science Education journal, 2012-present

Special issue guest editor

Co-editing special issue on Science in Multilingual Contexts (together with Mariona Espinet and Sara Salloum) International Journal of Science Education, 2017- present

Book series editor

Cultural Studies of Science Education book series, 2012-present

Editorial board member

Asia Pacific Science Education, 2015-present

Cultural Studies of Science Education, 2009-2012

Journal of Science Teacher Education, 2012-2016

Research in Science Education, 2011-present

SERVICE ACTIVITIES

Service to professional organizations

Board service:

Board member, NARST, Publications Advisory Committee liaison 2017-2020

Committee service:

International committee member, NARST, 2011-2014

Proposal reviewing:

American Association for Colleges of Teacher Education (AACTE), 2006

American Educational Research Association (AERA), 2007 – 2011

2009 - Division K Teaching and teacher education

2010 - 2011- Critical perspectives in early childhood SIG; Science teaching-learning SIG

Association of Science Teacher Educators (ASTE), 2008 - 2009

European Science Education Research Association (ESERA), 2008

National Association for Research in Science Teaching (NARST), 2008- present

North American Association for Environmental Education (NAAEE), 2005

University service

The University of Luxembourg Committees:

Member of Faculty Council, 2017-present

Bachelor in Educational Sciences “think tank” 2015-2016

Bachelor in Educational Sciences Quality Assurance Group 2017-present

The University of Luxembourg student supervisory panels:

Student teaching supervisor, 2012-2016

Masters in Learning and Communication in Multilingual and Multicultural Contexts thesis jury member, 2018

Manhattanville College Committees:

Professional Development School Steering Committee, 2007-2008

School of Education Awards Committee, 2005-2008

School of Education Curriculum Committee, 2005-2008

School of Education Childhood Search Committee, 2005, 2006

Service to community organizations

Children’s Help Net Foundation

Advisory Board Member, 2005-present

Pittsfield School Department Committees:

District Curriculum Renewal Committee, 2001-2002

Conte Community School Science Committee, 1999-2002

Co-chair of Conte School Science Committee, 2000

United Educators of Pittsfield

Membership Chair, 2001-2002

Rennselaer County Youth Advisory Board

Member, 1995

Shared Decision Making Team, New Lebanon School district

Community Representative, 1994-1995

PEER REVIEW ACTIVITIES

Grant reviewing

Office of Educational Research, National Institute of Education, Singapore, 2011-present
Conseil de recherches en sciences humaines de Canada (CRSH), 2016

Manuscript reviewing

Contemporary Issues in Early Childhood, 2011-present
Eurasia Journal of Mathematics, Science and Technology Education, 2016
International Journal of Qualitative Studies in Education, 2010
International Journal of Science Education, 2015-present
Journal of Science Teacher Education, 2010-2012
Journal of Teacher Education, 2011
Pedagogies, 2011, 2017
Research in Science Education, 2009-2011
Science and Children, 2002-2016
Science Education, 2011-present
Teaching Education, 2007
Teaching and Teacher Education, 2016

Book reviews

Springer Press, 2010, 2011, 2014
Allyn & Bacon Publishers, 2008
Sense Publishers, 2007, 2009
Green Teacher, 2004

LANGUAGE COMPETENCIES

English (native speaker)
German (fluent)
Luxembourgish B2
French A2