
Kathleen Pitvorec

1119 W. North Shore Ave., Chicago, IL 60626

Phone: +1 (773) 972-9785

E-mail: kapitvor@uic.edu

LinkedIn: <https://www.linkedin.com/in/kathleen-pitvorec/>

Orcid #0000-0001-7073-7487

Education

University of Illinois at Chicago	Learning Sciences—Mathematics Education Focus Dissertation: <i>Mathematics as Meaning-Making Activity: Describing Preservice Teachers' Discourse during Meaning Making</i>	Ph.D., 2016
University of Chicago	Elementary Education	M.S.T., 2001
University of Chicago	Anthropology	B.A., 1987

Employment History/Appointments

Research Assistant Professor	University of Illinois at Chicago (UIC)	2016–present
Adjunct Faculty; Visiting Lecturer: designed & taught mathematics content and methods courses	Northwestern University UIC	2016–2020 2010–2021
Senior Curriculum Developer K-6 Math & Team Lead; special projects consultant	University of Chicago Center for Elementary Mathematics and Science Education	2007–2021
Researcher: Bilingual students and curriculum (K-8)	Center for the Mathematics Education of Latinos/as Assessment Project at UIC	2008–2011 2008
Curriculum developer (K-2); researcher	Teaching Integrated Mathematics and Science Project at UIC	2005–2007
Associate Director: Designed & Coordinated PD for teachers and administrators	<i>Everyday Mathematics</i> Implementation Center at the University of Chicago	2000–2004
2 nd and 3 rd Edition author (K-6 math curriculum)	<i>Everyday Mathematics</i> at the University of Chicago School Mathematics Project	1995–2006
Mathematics education consultant	National and international consultant supporting leadership development, and mathematics teaching	1996–present
Teacher	University of Chicago Laboratory Schools Lincolnshire, Illinois	1989–1995 1988–1989

Research Foci

Study the collaborative design process and instructional strategies for the implementation of mathematics tasks that maximize opportunities for student agency with an emphasis on promoting student-to-student discourse

Study the contexts and task features that support student-to-student discourse during collective reflection on student thinking and ideas

Study teacher learning with relation to how teachers revise their practices related to promoting student agency and distributing mathematical authority in the classroom

Study researcher-practitioner partnership engagement with districts to develop district capacities for designing and implementing data-driven improvement cycles in mathematics teaching and learning with particular emphasis on developing a distributed teacher-leadership model for sustaining improvement

Journal Publications (Refereed)

Superfine, A. C., & Pitvorec, K. (2021). Using community artifacts to support novice math teacher educators in teaching prospective teachers. *International Journal of Science and Mathematics Education*, 19, 59-75.

Brown, S. A., Pitvorec, K., Ditto, C., & Kelso, C. R. (2009). Reconceiving the intended curriculum: An investigation of elementary whole number lessons. *Journal for Research in Mathematics Education*, 40(4), 363–395.

Book Chapters (Refereed)

DeVoto, C., Pitvorec, K., & Superfine, A.C. (2024). Building a Scalable Model for Networked Improvement across Schools: The Case of District Leadership Teams. *Catalytic Improvement Communities*. 73.

Pitvorec, K., Superfine, A. C., Goldman, S., & Fry, C. (2022). Teacher-researcher collaborative inquiry in mathematics teaching practices: Learning to promote student discourse. In A. C. Superfine, S. Goldman, and M.L. Ko (Eds.), *Teacher Learning in Changing Contexts: Perspectives from the Learning Sciences* (pp. 136-157). Routledge.

Pitvorec, K., & Tavormina, M. J. (2020). Hybrid courses for preparing Elementary Mathematics Specialists: Challenges, successes, and lessons learned. In *Handbook of Research on Online Pedagogical Models for Mathematics Teacher Education* (pp. 79-98). IGI Global.

Superfine, A. C., Pitvorec, K., & Stoelinga, T. (2020). Developing student agency to support learning-trajectory-based formative assessment. In *Handbook of Research on Formative Assessment in Pre-K Through Elementary Classrooms* (pp. 151-164). IGI Global.

Pitvorec, K., Willey, C., & Khisty, L. L. (2010). Toward a framework of principles for ensuring effective mathematics instruction for bilingual learners through curricula. In W. Secada, M. Graven, P. Valero, & B. Atweh (Eds.), *Mapping Equity and Quality in Mathematics Education*. (pp. 407–422). Springer: Netherlands.

Conference Proceedings and Papers (Refereed)

Hall, A., Pitvorec, K., Goldman, S. (2024). Teachers Learning to Make Space for Student Agency and Authority in Literature and Math Classroom Discourse. In Lindgren, R., Asino, T. I., Kyza, E. A., Looi, C. K., Keifert, D. T., & Suárez, E. (Eds.) Proceedings of the 18th International Conference of the Learning Sciences. Buffalo, NY, June 10-14, 2024.

Pitvorec, K. (2022). Coding System for Identifying Agency and Authority Relationships between Teachers and Students in Classroom Discussions. Paper presented at the American Educational Research Association Annual Meeting, San Diego, CA, April 21-26, 2022.

- Pitvorec, K. (2022). Teacher Learning Through Reflective Inquiry: Increasing Productive Disciplinary Discourse in Mathematics Classrooms. Paper presented at the American Educational Research Association Annual Meeting, San Diego, CA, April 21-26, 2022.
- Pitvorec, K. & Fry, C. (2019). Fostering student agency and distributed mathematical authority: Surfacing teacher learning and teacher change. Proceedings of 41st Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education. St Louis, MO, November 14–17, 2019.
- Popp, J.S. & Pitvorec, K. (2019). Teacher reflection on problems of practice guiding inquiry into teacher learning. Paper presented at the American Educational Research Association Annual Meeting, Toronto, Canada, April 5–9, 2019.
- Brown, S., Pitvorec, K., & Ditto, C. (2008). Exploring the need for a professional vision towards curricula. Proceedings of 32nd Annual Conference of the International Group for the Psychology of Mathematics Education, Morelia, Mexico, Jul 17–21, 2008.
- Brown, S., Castro, A., Pitvorec, K., & Ditto, C. (2007). Fidelity of implementation: Teachers' instructional moves in the context of a standards-based curriculum. Proceedings of 29th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education, Lake Tahoe, NV, Oct 25–18, 2007.
- Brown, S., Ditto, C., Kelso, C., & Pitvorec, K. (2006). Teachers' implementation of standards-based elementary whole number lessons. Proceedings of 28th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education, Merida, Yucatan, Nov 9–12.

Conference Presentations (Refereed)

- Pitvorec, K., Regan, K., Knor, E., Egan, P. (2024). Leveraging a district leadership team structure to activate to activate teacher leaders as co-pilots driving improvement. Presentation given at National Council of Supervisors of Mathematics, Sep 23-25, Chicago, IL.
- Pitvorec, K., Regan, K., Gaona, C. (2024). Stepping out so students can step up: Increasing opportunities for student agency. Presentation given at National Council for Teachers of Mathematics, Sep 25-28, Chicago, IL.
- Pitvorec, K., & Superfine, A. (2020). A collaborative inquiry model for teacher professional development: A focus on formative assessment and student agency. Presentation given at Association of Mathematics Teacher Educators, Feb 6-8, Phoenix, AZ.
- Pitvorec, K., & Tavormina, M. (2020). Hybrid courses for preparing elementary mathematics specialists: Challenges, successes, and lessons learned. Presentation given at Association of Mathematics Teacher Educators, Feb 6-8, Phoenix, AZ.
- Superfine, A. & Pitvorec, K. (2020) A collaborative inquiry model for teacher professional learning: working with teachers rather than on.” ICMI Study 25, Teachers of Mathematics Working and Learning in Collaborative Groups. Lisbon, Portugal, February 3–7, 2020.
- Wiley, C., Pitvorec, K. Khisty, L. (2012) Examining curricula as a means to improve access for Latina/o mathematics learners. Presentation given at National Council of Teachers of Mathematics Conference, Apr 25–28, Philadelphia, PA.
- Wiley, C., Pitvorec, K. Khisty, L. (2012) Redesigning a written curriculum to maximize bilingual students' mathematics learning. Paper presented at American Educational Research Association Conference, Apr 13–17, Vancouver, BC, Canada.
- Pitvorec, K., & Khisty, L. (2012) An exploration of ideological becoming in the redesign of a university course in mathematics teacher education. Presentation given at Mini-Bakhtinian Conference on Dialogic Pedagogy, Mar 29–Apr 1, Wilmington, DE.

- Pitvorec, K. & Haake, J. (2011). Assessment of and FOR Learning: How to Use Summative Assessments to Inform Instruction. Presentation given at National Council of Supervisors of Mathematics Conference, Apr 10–13, Indianapolis, IN.
- Pitvorec, K., & Haake, J. (2010). Every student, every day: Developing the knowledge and skills to ensure high quality core instruction. Presentation given at National Council of Supervisors of Mathematics Conference, Apr 18–21, San Diego, CA.
- Willey, C., & Pitvorec, K. (2009). How do you know if what you're doing is good for ELLs? Presentation given at Chicago Mathematics Science Initiative Conference, May 2 Chicago, IL.
- Brown, S., & Pitvorec, K. (2009). Characterizing “Character of Use”: An examination of elementary whole number lesson enactments. Paper presented at American Educational Research Association Conference, Apr 13–17, San Diego, CA.
- Willey, C., & Pitvorec, K. (2009). Developing a framework for considering how mathematics curricula support bilingual students. Paper presented at Center for the Mathematics Education of Latinos/ as Conference Jan 16–18. Albuquerque, NM.
- Pitvorec, K. (2001). “Teaching Everyday Mathematics.” Interactive presentation at National Council of Teachers of Mathematics Regional Conference, Oct 11, Madison, WI.
- Pitvorec, K. (2000). “Fun & Frolic with Data Discoveries.” Interactive presentation at National Council of Teachers of Mathematics, Apr 12–15, Chicago, IL.
- Palopoli, M., Matsikas, P., & Pitvorec, K. (1994). “An interdisciplinary insect investigation.” Interactive presentation at National Science Teachers Association, Oct 15, Portland.

Selected Invited Talks

- Pitvorec, K., & Tavormina, M. (2020, March 17). Engaging students online with Zoom. Association of Mathematics Teacher Educators.
<https://www.amte.net/content/synchronous-online-instruction%E2%80%94special-two-part-webinar>
- Pitvorec, K., Khisty, L. L., Willey, C., & Guzowski, M. (2011). Curriculum Design that Supports Math & Language Development for ELLs. Interactive presentation at *Center for Elementary Mathematics and Science Education* at the University of Chicago. Chicago IL, Jan 25.
- Pitvorec, K., Willey, C., & Khisty, L. L. (2010). Curriculum and Latinas/os: Toward guiding principles for equity and quality in mathematics instruction. Paper presented at CEMELA-CPTM-TODOS Conference, Tucson, AZ, March 4–7.
- Pitvorec, K. (2009). “Implementing EM with attention to meeting the needs of a diverse student group.” Interactive presentation at the International School of Jakarta. Jakarta, Indonesia, Feb 23–Mar 6.
- Pitvorec, K. (2008). “Algebra in elementary school.” Presentation for L.A. School District, Los Angeles, CA, Jan 15.
- Pitvorec, K. (2007). “Strategies for meeting students’ needs.” Interactive presentation at International School of Beijing. Beijing, China, Sep 10–14, 2007.
- Pitvorec, K. (2006). “Differentiation in the *Everyday Mathematics* program.” Presentation at Elementary School Heads Association annual meeting, Chicago, IL, Oct 22–24, 2006.
- Pitvorec, K. (2003). “Implementing *Everyday Mathematics*.” Interactive presentation at the Newark Annual Principals Meeting, Newark, NJ, May 14, 2003.

Synergistic Activities

UIC. Supported by a local foundation grant, Pitvorec worked with a team (including team members from UChicago Stem and DePaul University's Stem Center) to develop and pilot courses for elementary mathematics specialists (EMS). In addition, the development team worked with the Illinois State Board of Education to promote the development of credentials for EMS. As a result of this work Illinois added an EMS endorsement in September of 2023. Pitvorec is currently the program coordinator for the EMS program at UIC.

Chicago Hopes for Kids. From August 2023, Pitvorec ran workshops for middle school math tutors who work in the community centers and homeless shelters in underserved communities. The mission of this organization is to provide "comprehensive support to Chicago students and families experiencing homelessness" and in particular "are committed to...children's educational development and long-term empowerment through academic support..."

America Needs You. From August 2019 to August 2021, Pitvorec participated in American Needs You (ANY) Chicago chapter as a mentor coach providing support for a high-potential, first generation University of Illinois undergraduate students. The mission of the organization is to "fight for the economic mobility for ambitious, first-generation college students."

CEMELA. At the Center for the Mathematics Education of Latinos/as (CEMELA) at UIC, Pitvorec worked closely with Dr. Lena Licón Khisty and Dr. Craig Willey with the goal of synthesizing a set of recommendations for increasing bilingual learners' access to mathematics content through improved curricular design. This work culminated in several presentations to the authors of the *Everyday Mathematics* curriculum aimed at informing their design of the fourth edition materials.

CEMSE. At the Center for Elementary Mathematics and Science Education (CEMSE) at the University of Chicago, Pitvorec had the role of senior curriculum developer and team leader for the Grade 6 writing team of *Everyday Mathematics*. In this role, she served as the architect for the fourth edition of the sixth grade materials. She also served as a mentor to team members, overseeing their work lesson writing and designing and providing professional development for field test teachers.

UCSMP. In 2000, Pitvorec was appointed the associate director of the University of Chicago School Mathematics Project's (UCSMP) *Everyday Mathematics* Implementation Center. As part of her work there, she designed and provided professional development for teachers implementing the *Everyday Mathematics* curriculum. In addition, she planned, organized, and coordinated national leadership conferences to support administrators and teacher leaders using the curriculum.

Other Professional Activities

Reviewer for Journal of Mathematics Teacher Education (2019–present)

Reviewer for School Science and Mathematics (2017–present)

Reviewer for PME-NA conference proposals (2013–2014, 2019–present)

Reviewer for AMTE conference proposals (2010–present)

Reviewer for AERA Division K conference proposals (2008–2014, 2020–present)

Reviewer for the *NCSM Journal* (2008–2011)

Reviewer for the *Mathematics Teacher* (1993–2000)

University of Chicago Laboratory Schools Curriculum Committee member (1995–96)

University of Chicago Laboratory Schools liaison to globally oriented L.I.F.E. school in Guatemala establishing relationships for curriculum development and student exchange (1993–95)

Vice President of the Faculty Association (1994–95); Member-at Large on the Executive Board of the Faculty Association (1992–94)

Awards & Grants

2022 Phillip Wagreich STEM Education Award

2010 Nominated for Dean's Scholarship Award

1994 Golden Apple Award Finalist

1994 Heinemann Family Grant to support classroom Lego-Logo project

1992 Heinemann Family Grant for cross-curricular project comparing the economic systems of socialism and capitalism