

Curriculum Vitae

NICK WASSERMAN, Ph.D.

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EDUCATION

Ph.D., Mathematics Education

Teachers College, Columbia University, New York, NY

May 2011

*Dissertation Title: When beginning mathematics teachers report learning successful attributes:
Reflections on teacher education*

*Mathematics Coursework: Topology, Abstract Algebra, Foundations of Number Systems,
Analysis, Combinatorics, Graph Theory, Advanced Modeling and Information Theory,
Foundations of Statistics, Problem Solving, Finite Mathematics, Geometry*

Master of Science, Mathematics Education

Teachers College, Columbia University, New York, NY

October 2010

Master of Arts, Mathematics Education

Teachers College, Columbia University, New York, NY

October 2008

Bachelor of Science, Mathematics – UTeach Program

The University of Texas at Austin, Austin, TX

December 2003

La Universidad de Granada, Granada, Spain (Semester Abroad), February 2002 – May 2002

TEACHING EXPERIENCE

Teachers College, Columbia University, New York, NY

Associate Professor, Mathematics Education

September 2019-present

Assistant Professor, Mathematics Education, September 2013-August 2019

Graduate Courses Taught:

Mathematics

MSTM 4038. Finite Mathematics

MSTM 5030/6030. Topics/Advanced Topics in Probability Theory

MSTM 5036/6036. Topics/Advanced Topics in Discrete Mathematics

MSTM 5034/6034. Topics/Advanced Topics in Analysis

Mathematics Education

MSTM 6500. Mathematics Education Research Seminar

MSTM 4025. Teaching Mathematics with Technology

MSTM 4005. Teaching Mathematics in Diverse Cultures

MSTM 5011. Mathematics in the Secondary School

MSTM 4020. Mathematics Teaching and Learning II

MSTM 5022. Mathematics Curriculum Development

Southern Methodist University, Dallas, TX

Assistant Professor, Mathematics Education

August 2011-May 2013

Undergraduate Courses Taught:

Mathematics

MATH 1337. Calculus I
MATH 3308. Discrete Mathematics

Graduate Courses Taught:

Mathematics/Mathematics Education
EDU 6379. Numerical Reasoning: Numbers and Operations
EDU 6380. Algebraic Reasoning and Patterns
EDU 6381. Geometry and Measurement
EDU 6382. Everyday Mathematics: Probability and Statistics

Marymount School of New York, New York, NY

Mathematics Teacher

August 2008-May 2011

Upper School Courses Taught:

Calculus BC, Finite Mathematics, Pre-Calculus, Geometry, Algebra

James Bowie High School, Austin, TX

Mathematics Teacher, Algebra Team Leader (2006-2007)

August 2004-May 2007

High School Courses Taught:

Geometry, Algebra

PUBLICATIONS**Books**

- Wasserman, N.**, Fukawa-Connelly, T., Weber, K., Mejia-Ramos, J. P., & Abbott, S. (under contract). *Understanding analysis: A companion text for secondary mathematics teachers*. In, Texts in Education Series. Cham, Switzerland: Springer.
- Wasserman, N.** (Ed.) (2018). *Connecting abstract algebra to secondary mathematics, for secondary mathematics teachers*. In J. Cai and J. A. Middleton (Eds.), Research in Mathematics Education Series. Cham, Switzerland: Springer.
- Karp, A., & **Wasserman, N.** (2015). *Mathematics in middle and secondary schools: A problem solving approach*. Charlotte, NC: Information Age Publishing Inc.

Book Chapters

- Wasserman, N.** (invited). Mathematical challenge in connecting advanced and secondary mathematics: Recognizing binary operations as functions. In R. Leikin, C. Christou, A. Karp, D. Pitta-Pantazi, & R. Zazkis (Eds.), *Mathematical challenge for all*, Research in Mathematics Education (pp. XXX). Cham, Switzerland: Springer.
- Wasserman, N.** (2018). Exploring advanced mathematics courses and content for secondary mathematics teachers. In N. Wasserman (Ed.), *Connecting abstract algebra to secondary mathematics, for secondary mathematics teachers*, Research in Mathematics Education (pp. 1-15). Cham, Switzerland: Springer.
- Wasserman, N.**, & Galarza, P.* (2018). Exploring an instructional model for designing modules for secondary mathematics teachers in an abstract algebra course. In N. Wasserman (Ed.), *Connecting abstract algebra to secondary mathematics, for secondary mathematics teachers*, Research in Mathematics Education (pp. 335-361). Cham, Switzerland: Springer.
- Wasserman, N.** (2017). The dilemma of advanced mathematics: Instructional approaches for secondary mathematics teacher education. In A. Karp (Ed.), *Current issues in mathematics education: Materials of the American-Russian workshop* (pp. 107-123). Bedford, MA: The Consortium for Mathematics and Its Applications (COMAP).

* Indicates work done with a current or former graduate student.

Wasserman, N. (2015). Bringing dynamic geometry to three dimensions: The use of SketchUp in mathematics education. In D. Polly (Ed.), *Cases on technology integration in mathematics education* (pp. 68-99). Hershey, PA: IGI-Global.

Refereed Research Journal Articles

Mirin, A., Milner, F., **Wasserman, N.**, & Weber, K. (accepted). On two definitions of 'function'. *For the Learning of Mathematics*, XX(X), XXX.

Wasserman, N., & McGuffey, W.* (2021). Opportunities to learn from (advanced) mathematical coursework: A teacher perspective on observed classroom practice. *Journal for Research in Mathematics Education*, 52(4), 370-406.

Lockwood, E., **Wasserman, N.**, & Tillema, E. (2020). A case for combinatorics: A research commentary. *Journal of Mathematical Behavior*, 59(1), 100783.

Weber, K., Mejia-Ramos, J. P., Fukawa-Connelly, T., & **Wasserman, N.** (2020). Connecting the learning of advanced mathematics with the teaching of secondary mathematics: Inverse functions, domain restrictions, and the arcsine function. *Journal of Mathematical Behavior*, 57(1), 100752.

Fukawa-Connelly, T., Mejia-Ramos, J. P., **Wasserman, N.**, & Weber, K. (2020). An evaluation of ULTRA: An experimental real analysis course built on a transformative theoretical model. *International Journal of Research in Undergraduate Mathematics Education*, 6(2), 159-185.

Wasserman, N. (2019). Duality in combinatorial notation. *For the Learning of Mathematics*, 39(3), 16-21.

Wasserman, N., Weber, K., Fukawa-Connelly, T., & McGuffey, W.* (2019). Designing advanced mathematics courses to influence secondary teaching: Fostering mathematics teachers' 'attention to scope'. *Journal of Mathematics Teacher Education*, 22(4), 379-406.

McGuffey, W.*, Quea, R., Weber, K., **Wasserman, N.**, Fukawa-Connelly, T., & Mejia-Ramos, J. P. (2019). Pre- and in-service teachers' perceived value of an experimental real analysis course for teachers. *International Journal of Mathematical Education in Science and Technology*, 50(8), 1166-1190.

Dawkins, P., Inglis, M., & **Wasserman, N.** (2019). The use(s) of 'is' in mathematics. *Educational Studies in Mathematics*, 100(2), 117-137.

Wasserman, N., & Galarza, P.* (2019). Conceptualizing and justifying sets of outcomes with combination problems. *Investigations in Mathematics Learning*, 11(2), 83-102.

Wasserman, N., Weber, K., Villanueva, M., & Mejia-Ramos, J. P. (2018). Mathematics teachers' views about the limited utility of real analysis: A transport model hypothesis. *Journal of Mathematical Behavior*, 50(1), 74-89.

Lockwood, E., **Wasserman, N.**, & McGuffey, W.* (2018). Classifying combinations: Investigating undergraduate students' responses to different categories of combination problems. *International Journal of Research in Undergraduate Mathematics Education*, 4(2), 305-322.

Huey, M. E., Champion, J., Casey, S., & **Wasserman, N.** (2018). Secondary mathematics teachers' planned approaches for teaching standard deviation. *Statistics Education Research Journal*, 17(1), 61-84.

Wasserman, N. (2018). Knowledge of nonlocal mathematics for teaching. *Journal of Mathematical Behavior*, 49(1), 116-128.

Wasserman, N., & Weber, K. (2017). Pedagogical applications from real analysis for secondary mathematics teachers. *For the Learning of Mathematics*, 37(3), 14-18.

Wasserman, N. (2017). Making sense of abstract algebra: Exploring secondary teachers' understanding of inverse functions in relation to its group structure. *Mathematical Thinking and Learning*, 19(3), 181-201.

Wasserman, N., Casey, S., Champion, J., & Huey, M. (2017). Statistics as unbiased estimators: Exploring the teaching of standard deviation. *Research in Mathematics Education*, 19(3), 236-256.

- Wasserman, N.** (2017). Exploring how understandings from abstract algebra can influence the teaching of structure in early algebra. *Mathematics Teacher Education and Development*, 19(2), 81-103.
- Wasserman, N.,** Fukawa-Connelly, T., Villanueva, M., Mejia-Ramos, J. P., & Weber, K. (2017). Making real analysis relevant to secondary teachers: Building up from and stepping down to practice. *PRIMUS*, 27(6), 559-578.
- Stockton, J., & **Wasserman, N.** (2017). Forms of knowledge of advanced mathematics for teaching. *The Mathematics Enthusiast*, 14(1), 575-606.
- Wasserman, N.,** Quint, C.*, Norris, S. A., & Carr, T. (2017). Exploring flipped classroom instruction in Calculus III. *International Journal of Science and Mathematics Education*, 15(3), 545-568.
- Wasserman, N.** (2016). Abstract algebra for algebra teaching: Influencing school mathematics instruction. *Canadian Journal of Science, Mathematics and Technology Education*, 16(1), 28-47.
- Wasserman, N.** (2015). Unpacking teachers' moves in the classroom: Navigating micro- and macro-levels of mathematical complexity. *Educational Studies in Mathematics*, 90(1), 75-93.
- Casey, S., & **Wasserman, N.** (2015). Teachers' knowledge about informal line of best fit. *Statistics Education Research Journal*, 14(1), 8-35.
- Wasserman, N.,** & Rossi, D. (2015). Mathematics and science teachers' use of and confidence in empirical reasoning: Implications for STEM teacher preparation. *School Science and Mathematics*, 115(1), 22-34.
- Wasserman, N.,** & Walkington, C. (2014). Exploring links between beginning UTeachers' beliefs and observed classroom practices. *Teacher Education and Practice*, 27(2/3), 376-401.
- Wasserman, N.** (2014). Introducing algebraic structures through solving equations: Vertical content knowledge for K-12 mathematics teachers. *PRIMUS*, 24(3), 191-214.
- Wasserman, N.,** & Ham, E. (2013). Beginning teachers' perspectives on attributes for teaching secondary mathematics: Reflections on teacher education. *Mathematics Teacher Education and Development*, 15(2), 70-96.
- Wasserman, N.,** & Stockton, J. (2013). Horizon content knowledge in the work of teaching: A focus on planning. *For the Learning of Mathematics*, 33(3), 20-22.

Refereed Professional Journal Articles

- Wasserman, N.** (2020). Dynamically reconstructed proof visualizations in real analysis. *Electronic Journal of Mathematics and Technology*, 14(1), 38-49.
- Wasserman, N.,** Weber, K., Fukawa-Connelly, T., & Mejia-Ramos, J. P. (2020). Area-preserving transformations: Cavalieri in 2D. *Mathematics Teacher: Learning and Teaching PK-12*, 113(1), 53-60.
- Murray, E., Baldinger, E., **Wasserman, N.,** Broderick, S., & White, D. (2017). Connecting advanced and secondary mathematics. *Issues in the Undergraduate Mathematics Preparation of School Teachers* (Vol. 1, August 2017), 1-10.
- Wasserman, N.** (2017). Math madness: Coloring, reasoning, and celebrating. *Teaching Children Mathematics*, 23(8), 468-475.
- Wasserman, N.** (2015). A random walk: Stumbling across connections. *Mathematics Teacher*, 108(9), 686-695.
- Wasserman, N.** (2014). A rationale for irrationals: An unintended exploration of e . *Mathematics Teacher*, 107(7), 500-507.
- Gould, H., & **Wasserman, N.** (2014). Striking a balance: Students' tendencies to oversimplify or overcomplicate in mathematical modeling. *Journal of Mathematics Education at Teachers College*, 5(1), 27-34.
- Wasserman, N.,** & Ham, E. (2012). Gaining perspective on success, support, retention, and student test scores: Listening to beginning teachers. *Leaders of Learners*, 5(3), 9-14.
- Wasserman, N.,** & Arkan, I. (2011). Technology tips: An Archimedean walk. *Mathematics Teacher*, 104(9), May 2011, 710-714.

- Wasserman, N.** (2011). The Common Core State Standards: Comparisons of access and quality. *Journal of Mathematics Education at Teachers College*, 2(1), 18-27.
- Wasserman, N.** (2011). Partition and iteration in Algebra: Intuition with linearity. *Association of Mathematics Teachers of New York State Journal*, 61(1), 10-14.
- Wasserman, N.** (2010). Inside the UTeach program: Implications for research in mathematics teacher education. *Journal of Mathematics Education at Teachers College*, 1(1), 12-16.

Refereed Conference Papers and Proceedings

- Mirin, A., Weber, K., & **Wasserman, N.** (2020). What is a function? In A. I. Sacristán, J. C. Cortés-Zavala, & P. M. Ruiz-Arias (Eds.), *Proceedings of the 42nd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)* (pp. 1156-1164). Mazatlán, Mexico: PME-NA.
- Wasserman, N.**, Zazkis, R., Baldinger, E., Marmur, O., & Murray, E. (2019). Points of connection to secondary teaching in undergraduate mathematics courses. In A. Weinberg, D. Moore-Russo, H. Soto, & M. Wawro (Eds.), *Proceedings of the 22nd Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. 819-826). Oklahoma City, OK: RUME.
- Wasserman, N.** (2018). Exploring the secondary teaching of functions in relation to the learning of abstract algebra. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, and S. Brown (Eds.), *Proceedings of the 21st Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. 687-694). San Diego, CA: RUME.
- Weber, K., **Wasserman, N.**, Mejia-Ramos, J. P., & Fukawa-Connelly, T. (2018). Connecting the study of advanced mathematics to the teaching of secondary mathematics: Implications for teaching inverse trigonometric functions. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, and S. Brown (Eds.), *Proceedings of the 21st Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. 643-651). San Diego, CA: RUME.
- Dawkins, P., Inglis, M., & **Wasserman, N.** (2018). The use(s) of 'is' in mathematics. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, and S. Brown (Eds.), *Proceedings of the 21st Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. 500-507). San Diego, CA: RUME.
- Wasserman, N.**, Weber, K., & McGuffey, W.* (2017). Leveraging real analysis to foster pedagogical practices [2017 RUME Best Paper Award]. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, and S. Brown (Eds.), *Proceedings of the 20th Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. 1-15). San Diego, CA: RUME.
- Baldinger, E., Murray, E., White, D., Broderick, S., & **Wasserman, N.** (2016). Exploring connections between advanced and secondary mathematics. In M. B. Wood, E. E. Turner, M. Civil, and J. A. Eli (Eds.), *Proceedings of the 38th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)* (pp. 1633-1640). Tucson, AZ: The University of Arizona.
- Wasserman, N.** (2016). Nonlocal mathematical knowledge for teaching. In C. Csikos, A. Rausch, and J. Sztányi (Eds.), *Proceedings of the 40th Conference of the International Group for the Psychology of Mathematics Education (PME)* (Vol. 4, pp. 379-386). Szeged, Hungary: PME.
- Lockwood, E., **Wasserman, N.**, & McGuffey, W.* (2016). Classifying combinations: Do students distinguish between different categories of combination problems? In T. Fukawa-Connelly, N. E. Infante, M. Wawro, and S. Brown (Eds.), *Proceedings of the 19th Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. 296-309). Pittsburgh, PA: RUME.
- Murray, E., Baldinger, E., **Wasserman, N.**, Broderick, S., Cofer, T., White, D., & Stanish, K. (2015). Exploring connections between advanced and secondary mathematics. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, and H. Dominguez (Eds.), *Proceedings of the 37th Annual Meeting of the North American Chapter of the International Group for the*

Psychology of Mathematics Education (PME-NA) (pp. 1368-1376). East Lansing, MI: Michigan State University.

- Wasserman, N., & Mamolo, A.** (2015). Knowledge for teaching: Horizons and mathematical structure. In T. Fukawa-Connelly, N. Infante, K. Keene, and M. Zandieh (Eds.), *Proceedings of the 18th Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. 1032-1036). Pittsburgh, PA: RUME.
- Wasserman, N., Villanueva, M., Mejia-Ramos, J.P., & Weber, K.** (2015). Secondary mathematics teachers' perceptions of real analysis in relation to their teaching practices. In T. Fukawa-Connelly, N. Infante, K. Keene, and M. Zandieh (Eds.), *Proceedings of the 18th Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. 1037-1040). Pittsburgh, PA: RUME.
- Wasserman, N., Mamolo, A., Ribeiro, C. M., & Jakobsen, A.** (2014). Exploring horizons of knowledge for teaching. In P. Liljedahl, C. Nicol, S. Oesterle, and D. Allan (Eds.), *Proceedings of the Joint Meeting of PME 38 and PME-NA 36* (Vol. 1, p. 247). Vancouver, Canada: PME.
- Wasserman, N.** (2013). Exploring teachers' categorizations for and conceptions of combinatorial problems. In S. Reeder and G. Matney (Eds.), *Proceedings of the 40th Annual Meeting of the Research Council on Mathematics Learning (RCML)* (pp. 145-154). Tulsa, OK: RCML.
- Wasserman, N., Norris, S., & Carr, T.** (2013). Comparing a "flipped" instructional model in an undergraduate Calculus III course. In S. Brown, G. Karakok, K. H. Roh, and M. Oehrtman (Eds.), *Proceedings of the 16th Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (Vol. 2, pp. 652-655). Denver, CO: RUME.
- Wasserman, N., & Ham, E.** (2012). Attributes of good mathematics teaching: When are they learned? *Conference Proceedings for the 12th International Congress on Mathematics Education (ICME-12)* (p. 7843). Seoul, Korea: ICME-12.

Professional Resources, Reviews, and Other Scholarship

- Wasserman, N., Holbert, N., & Blikstein, P.** (2020). Will the coronavirus infect education, too? *New York Daily News*, 8 April 2020. Op ed. Available at: <http://www.nydailynews.com/opinion/ny-oped-coronavirus-infect-education-20200408-tasi4zfbozcxlgq34f22rk4zwm-story.html>
- Baldinger, E., Broderick, S., Murray, E., **Wasserman, N.**, & White, D. (2015). Connections between abstract algebra and high school algebra: A few connections worth exploring. *American Mathematical Society (AMS) Blogs: On Teaching and Learning Mathematics* (December 10, 2015). Available at: <http://blogs.ams.org/matheducation/2015/12/10/connections-between-abstract-algebra-and-high-school-algebra-a-few-connections-worth-exploring/>
- Wasserman, N.** (2015). Review of the book *Getting to the common core: Using research-based strategies that empower students to own their own achievement*, by S. L. Spencer & S. Vavra. *Teachers College Record*. Available at: <http://www.tcrecord.org/Content.asp?ContentID=18176>
- Wasserman, N., Mamolo, A., Ribeiro, C. M., & Jakobsen, A.** (2015). Discussion Group 2: Exploring horizons of knowledge for teaching. *International Group for the Psychology of Mathematics Education (PME) Newsletter*, December 2014/January 2015, 7-10.
- Zachary, S. C., Zannou, Y., Basaraba, D., **Wasserman, N.**, Hill, S., & Ketterlin-Geller, L. (2013). Middle School Students in Texas: Algebra Ready (MSTAR): Learning Progressions Development (Tech. Rep. No. 13-03). Dallas, TX: Southern Methodist University, Research in Mathematics Education.
- Wasserman, N.** (2011). Bending steel. In H. Gould, D. Murray, and A. Sanfratello (Eds.), *Teachers College Mathematical Modeling Handbook* (pp. 75-82). Bedford, MA: The Consortium for Mathematics and Its Applications (COMAP).

Wasserman, N. (2011). A bit of information. In H. Gould, D. Murray, and A. Sanfratello (Eds.), *Teachers College Mathematical Modeling Handbook* (pp. 83-91). Bedford, MA: The Consortium for Mathematics and Its Applications (COMAP).

Wasserman, N. (2010). Reader reflections: A fourth way to break a stick: Conditional probability. *Mathematics Teacher*, 104(1), 9-10.

Manuscripts Under Review and in Preparation

Wasserman, N. (under review, *For the Learning of Mathematics*). Re-exploring the intersection of mathematics and pedagogy.

Lai, Y., Wasserman, N., Casey, S., Strayer, J. F., Fukawa-Connelly, T., & Weber, K. (under review). Making advanced mathematics work in secondary teacher education.

Nelson, S.*, & Wasserman, N. (under revisions, *International Journal of Science and Mathematics Education*). Exploring affordances of a three-part instructional model for teaching advanced mathematics for secondary teachers.

Wasserman, N. (in preparation, *Journal of Mathematical Behavior*). Distinguishing natural and formal sets of outcomes: The use of formulas/expressions to generate set-theoretic encoded outcomes.

Wasserman, N., & Wentworth, E.* (in preparation, *Mathematical Thinking and Learning*). Mathematical teaching practices.

Wasserman, N. (in preparation, *Journal of Mathematical Behavior*). Foreshadowing: Valuing knowledge of mathematics outside the scope of what is being taught.

PRESENTATIONS

Invited Presentations

Wasserman, N. (2021). *Pedagogical Mathematical Practices as a way to develop pedagogy from mathematics coursework. Mathematics Courses Designed to Develop Mathematical Knowledge for Teaching* (AMS Special Session), Joint Mathematics Meetings of the MAA and AMS, Washington D.C. 6 January 2021.

Wasserman, N. (2020). Secondary mathematics teachers' *pedagogical* learning: Pedagogical mathematical practices in university mathematics courses. **Seminar on Mathematics Education**, Department of Science Teaching, Weizmann Institute of Science, Rehovot, Israel. 22 November 2020.

Wasserman, N. (2020). Secondary mathematics teachers' *mathematical* learning: Expanding mathematical connections in university mathematics courses. **Seminar on Mathematics Education**, Department of Science Teaching, Weizmann Institute of Science, Rehovot, Israel. 8 November 2020.

Wasserman, N. (2020). Secondary mathematics teachers' *pedagogical* learning: Pedagogical mathematical practices as a way to develop pedagogy from university mathematics courses. **Center for Research in Mathematics Education Seminar Series**, Seoul National University, Seoul, South Korea. 31 October 2020.

Wasserman, N. (2020). Secondary mathematics teachers' *mathematical* learning: Connecting to classroom teaching as a way to develop mathematics from university mathematics courses. **Center for Research in Mathematics Education Seminar Series**, Seoul National University, Seoul, South Korea. 17 October 2020.

Wasserman, N. (upcoming). *Pedagogical mathematical practices in advanced mathematics courses for secondary teachers. Third International Seminar of Conhecimento Interpretative e Especializado do Professor que Ensina Matemática (CIEspMat)*, UNICAMP, São Paulo, Brazil. 20 November 2020.

Wasserman, N. (2020). *Episode 17: Connecting secondary teaching to advanced mathematics. Teaching Math Teaching podcast* (sponsored by the Association of Mathematics Teacher Educators (AMTE)). 8 July 2020. Available at: <https://www.teachingmathteachingpodcast.com/17>

- Wasserman, N. (2020). Connecting advanced to secondary mathematics, for secondary mathematics teachers. **Seminario de Didáctica de la Matemática**, Instituto de Matemáticas, Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile. 11 May 2020.
- Wasserman, N., Holbert, N., & Blikstein, P. (2020). Classes in Corona [Audio podcast]. **The Blue Jay, The Blue and White, The Undergraduate Magazine of Columbia University**. May 2020 (Vol. XXVI No. II). Available at: <https://open.spotify.com/episode/5g8CINZTbELSkL7foQiKVP>
- Cook, J. P., Heid, M. K., Smith, J. P., Zazkis, R., & Wasserman, N. (2019). *Connecting abstract algebra to secondary mathematics, for secondary mathematics teachers*. **Program in Mathematics Colloquium Series**, Teachers College, Columbia University. 7 October 2019.
- Heid, M. K., Lai, Y., Wasserman, N., & Zazkis, R. (2019). *Panel: Connecting advanced and secondary mathematics*. **Connecting Advanced and Secondary Mathematics (CASM) Conference**, Minneapolis, Minnesota. 20 May 2019.
- Dawkins, P., Inglis, M., & Wasserman, N. (2019). *The use(s) of 'is' in mathematics*. **Joint Mathematics Meetings of the MAA and AMS**, Baltimore, MA. 19 January 2019.
- Wasserman, N. (2018). *Using discrete mathematics problems in secondary teaching*. **Math for America (MfA) Mini-Course** (3 sessions), New York, NY. Fall 2018.
- Wasserman, N. (2018). *Don't forget discrete mathematics!* **National Council of Teachers of Mathematics (NCTM) Annual Meeting**, Washington D.C. 26 April 2018.
- Wasserman, N., Weber, K., & McGuffey, W. (2018). *Leveraging real analysis to foster pedagogical practices*. **Joint Mathematics Meetings of the MAA and AMS**, San Diego, CA. 13 January 2018.
- Wasserman, N. (2017). *Applying ideas from real analysis to secondary teaching*. **Math for America (MfA) Mini-Course** (3 sessions), New York, NY. Fall 2017.
- Wasserman, N. (2017). *Designing advanced mathematics courses for secondary teachers: Connecting to their future professional work in the classroom*. **Mathematics for Future Teachers: A one-day conference on designing and teaching mathematics courses for pre-service teachers**, Rutgers University, New Brunswick, NJ. 11 May 2017.
- Wasserman, N. (2017). *What can we learn for teaching from studying advanced mathematics?* **Special Seminar**, Simon Fraser University, Vancouver, British Columbia. 24 January 2017.
- Wasserman, N. (2016). *Making advanced content courses relevant to secondary teachers: Investigating an instructional model from a real analysis course*. **Brown Bag Lunch Speaker Series**, Graduate School of Education, Rutgers University, New Brunswick, NJ. 7 December 2016.
- Wasserman, N. (2016). *Addressing the dilemma of advanced mathematics in secondary teacher preparation: The case of a real analysis course*. **Montclair State University Colloquium Series**, Department of Mathematical Sciences, Montclair State University, Montclair, NJ. 5 December 2016.
- Wasserman, N. (2016). *The dilemma of advanced mathematics: Instructional approaches for secondary mathematics teacher education*. **Current Issues in Mathematics Education Workshop**, Teachers College, Columbia University, New York, NY. 20 November 2016.
- Wasserman, N. (2016). *Accommodation of teachers' knowledge of inverse functions with the group of invertible functions*. Paper invited to be presented at the 13th **International Congress on Mathematical Education (ICME-13), Topic Study Group 46** (Knowledge in/for teaching mathematics at secondary level), Hamburg, Germany. 29 July 2016.
- Wasserman, N. (2015). *Episode 1503: Nick Wasserman*. **MathEd Podcast: Conversations with math ed researchers**. 23 February 2015. Available at: http://mathed.podomatic.com/entry/2015-02-18T07_12_33-08_00
- Wasserman, N. (2014). *Using pedagogical contexts to foster teachers' mathematical development and practices*. **Joint Seminar in Mathematics Education of Stony Brook**

- University and Teachers College**, Teachers College, Columbia University, New York, NY. 5 December 2014.
- Wasserman, N. (2014). *Using pedagogical contexts to explore mathematics: A parallelogram task in teacher education*. **Proof Comprehension Research Group (PCRG) Seminar**, Rutgers University, New Brunswick, NJ. 14 November 2014.
- Wasserman, N. (2014). *Using cognitive conflict in mathematics education*. Opening keynote address. **World Mathematical Olympiad Competition**, hosted by the China National Committee for the Wellbeing of the Youth (NCWY), Columbia University, New York, NY. 20 August 2014.
- Wasserman, N., & Walkington, C. (2013). *Exploring research in Algebra: Tackling algebra in middle school and high school*. **Research in Mathematics Education (RME) Annual Research to Practice Conference**, Dallas, TX. 15 February 2013.
- Wasserman, N. (2012). *Mathematics and teaching: Teachers' knowledge of tasks and proof*. **Department of Mathematics Colloquium Series**, Southern Methodist University, Dallas, TX. 1 February 2012.
- Wasserman, N., & Schielack, J. (2012). *Systems level content development: Establishing learning progressions*. **Research in Mathematics Education (RME) Annual Research to Practice Conference**, Dallas, TX. 24 February 2012.

Refereed Presentations: International and National Conferences

- Wasserman, N., Weber, K., Mejia-Ramos, J. P., & Fukawa-Connelly, T. (2021). *Upgrading learning for teachers in real analysis (ULTRA): An instructional model for secondary teacher education*. Long oral presentation at the 14th International Congress on Mathematical Education (ICME-14), Topic Study Group 33 (Knowledge in/for teaching mathematics at secondary level), Shanghai, China. July 2021.
- Mirin, A., Weber, K., & Wasserman, N. (2021). *What is a function?* Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA 42), Mazatlán, Mexico. 29 May 2021.
- Fukawa-Connelly, T., Wasserman, N., Weber, K., & Mejia-Ramos, J. P. (2019). *Upgrading Learning for Teachers in Real Analysis (ULTRA): A curriculum project*. Poster presented at the Annual Conference on Research in Undergraduate Mathematics Education (RUME), Oklahoma City, OK. 2 March 2019.
- Wasserman, N., Zazkis, R., Baldinger, E., Marmur, O., & Murray, E. (2019). *Points of connection to secondary teaching in undergraduate mathematics courses*. Annual Conference on Research in Undergraduate Mathematics Education (RUME), Oklahoma City, OK. 2 March 2019.
- Wasserman, N. (2019). *Content courses for secondary teachers: Teachers' attributions for influencing teaching practice*. Association of Mathematics Teacher Educators (AMTE) Annual Conference, Orlando, FL. 7 February 2019.
- Wasserman, N. (2018). *Exploring the secondary teaching of functions in relation to the learning of abstract algebra*. Annual Conference on Research in Undergraduate Mathematics Education (RUME), San Diego, CA. 24 February 2018.
- Weber, K., Wasserman, N., Mejia-Ramos, J. P., & Fukawa-Connelly, T. (2018). *Connecting the study of advanced mathematics to the teaching of secondary mathematics: Implications for teaching inverse trigonometric functions*. Annual Conference on Research in Undergraduate Mathematics Education (RUME), San Diego, CA. 22 February 2018.
- Dawkins, P., Inglis, M., & Wasserman, N. (2018). *The use(s) of 'is' in mathematics*. Annual Conference on Research in Undergraduate Mathematics Education (RUME), San Diego, CA. 22 February 2018.
- Wasserman, N., & McGuffey, W.* (2018). *Advanced mathematics courses for secondary teachers: An instructional model for connecting to secondary teaching practice*. Association of Mathematics Teacher Educators (AMTE) Annual Conference, Houston, TX. 8 February 2018.

- Wasserman, N., Weber, K., Mejia-Ramos, J. P., & Fukawa-Connelly, T. (2018). *Designing real analysis courses for secondary mathematics teachers*. Joint Mathematics Meetings of the MAA and AMS, San Diego, CA. 11 January 2018.
- Wasserman, N., Fukawa-Connelly, T., & Weber, K. (2017). *Leveraging real analysis to foster pedagogical practices*. National Council of Teachers of Mathematics (NCTM) Research Conference, San Antonio, TX. 5 April 2017.
- Wasserman, N., Weber, K., & McGuffey, W.* (2017). *Leveraging real analysis to foster pedagogical practices*. Annual Conference on Research in Undergraduate Mathematics Education (RUME), San Diego, CA. 23 February 2017.
- Baldinger, E., Murray, E., White, D., Broderick, S., & Wasserman, N. (2016). *Exploring connections between advanced and secondary mathematics* (Working Group). Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA 38), Tucson, AZ. 4 November 2016.
- Wasserman, N. (2016). *Nonlocal mathematical knowledge for teaching*. Paper presented at the Annual Conference of International Group for the Psychology of Mathematics Education (PME 40), Szeged, Hungary. 5 August 2016.
- Murray, E., & Wasserman, N. (2016). *Connecting solving equations in an advanced context to secondary mathematics instruction*. Paper presented at the 13th International Congress on Mathematical Education (ICME-13), Topic Study Group 46 (Knowledge in/for teaching mathematics at secondary level), Hamburg, Germany. 29 July 2016.
- Ribeiro, M., Jakobsen, A., Ribeiro, A., Wasserman, N., Carrillo, J., Montes, M., & Mamolo, A. (2016). *Reflecting upon different perspectives on specialized advanced mathematical knowledge for teaching*. Working group at the 13th International Congress on Mathematical Education (ICME-13), Hamburg, Germany. 29 July 2016.
- Lockwood, E., Wasserman, N., & McGuffey, W.* (2016). *Classifying combinations: Do students distinguish between different types of combination problems?* Annual Conference on Research in Undergraduate Mathematics Education (RUME), Pittsburgh, PA. 26 February 2016.
- Wasserman, N. (2016). *Unpacking teachers' moves for navigating mathematical complexities in teacher education*. Association of Mathematics Teacher Educators (AMTE) Annual Conference, Irvine, CA. 29 January 2016.
- Murray, E., Baldinger, E., Wasserman, N., Broderick, S., Cofer, T., White, D., & Stanish, K. (2015). *Exploring connections between advanced and secondary mathematics* (Working Group). Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA 37), East Lansing, MI. 6 November 2015.
- Casey, S., Zejnullahi, R., Wasserman, N., & Champion, J. (2015). *Preparing to teach statistics: Connecting subject matter and pedagogical content knowledge*. United States Conferences on Teaching Statistics (USCOTS), State College, PA. 29 May 2015.
- Wasserman, N., Stockton, J., Weber, K., Champion, J., Waid, B.*, Sanfratello, A.*, & McCallum, W. (2015). *Exploring the role of the mathematical horizon for secondary teachers*. National Council of Teachers of Mathematics (NCTM) Research Conference, Boston, MA. 14 April 2015.
- Wasserman, N., Villanueva, M., Mejia-Ramos, J. P., & Weber, K. (2015). *Secondary mathematics teachers' perceptions of real analysis in relation to their teaching practice*. Annual Conference on Research in Undergraduate Mathematics Education (RUME), Pittsburgh, PA. 21 February 2015.
- Wasserman, N., & Mamolo, A. (2015). *Knowledge for teaching: Horizons and mathematical structures*. Annual Conference on Research in Undergraduate Mathematics Education (RUME), Pittsburgh, PA. 19 February 2015.
- Wasserman, N., Casey, S., Champion, J., Huey, M., Sanfratello, A.*, & Waid, B.* (2015). *Exploring the impact of advanced mathematics on secondary teaching practices*. Association of Mathematics Teacher Educators (AMTE) Annual Conference, Orlando, FL. 13 February 2015.

- Wasserman, N., Mamolo, A., Ribeiro, C. M., & Jakobsen, A. (2014). *Exploring horizons of knowledge for teaching*. Joint meeting of International Group for the Psychology of Mathematics Education (PME 38) and North American Chapter of the Psychology of Mathematics Education (PME-NA 36), Vancouver, Canada. 16 July 2014.
- Casey, S., Wasserman, N. H., Wilson, D. C., Molnar, A., & Shaughnessy, J. M. (2014). *Knowledge for teaching informal line of best fit*. National Council of Teachers of Mathematics (NCTM) Research Pre-session, New Orleans, LA. 8 April 2014.
- Wasserman, N., & Stockton, J. (2014). *The impact of teachers' knowledge of group theory on early algebra teaching practices*. Association of Mathematics Teacher Educators (AMTE) Annual Conference, Irvine, CA. 6 February 2014.
- Wasserman, N., & Stockton, J. (2013). *Group theory's effect on mathematical knowledge for teaching*. Poster presented at National Council for Teachers of Mathematics (NCTM) Research Pre-session, Denver, CO. 15 April 2013.
- Wasserman, N. (2013). *A rationale for irrationals: Convincing students they exist*. National Council of Teachers of Mathematics (NCTM) Annual Conference, Denver, CO. 18 April 2013.
- Wasserman, N., & Williams-Rossi, D. (2013). *Discussing proof in STEM fields: Mathematics and science teachers' use of inductive evidence*. International Consortium for Research in Science and Mathematics Education (ICRSME) Conference, Granada, Nicaragua. 13 March 2013.
- Wasserman, N. (2013). *Exploring teachers' categorizations and conceptions of combinatorial problems*. Research Council on Mathematics Learning (RCML) Annual Conference, Tulsa, OK. 28 February 2013.
- Wasserman, N., Norris, S., & Carr, T. (2013). *Comparing a 'flipped' instructional model in an undergraduate Calculus III course*. Annual Conference on Research in Undergraduate Mathematics Education (RUME), Denver, CO. 22 February 2013.
- Quebec-Fuentes, S., Wasserman, N., & Switzer, J. (2013). *Advanced mathematics content: A comparative analysis of CCSSM and mathematics textbooks for teachers*. Association of Mathematics Teacher Educators (AMTE) Annual Conference, Orlando, FL. 24 January 2013.
- Wasserman, N., & Stockton, J. (2013). *Researching the mathematical horizon: Two complementary perspectives*. Poster presented at Association of Mathematics Teacher Educators (AMTE) Annual Conference, Orlando, FL. 24 January 2013.
- Ketterlin-Gellar, L., Wasserman, N., Chard, D., Fontenot, S., & Zachary, S. (2012). *Progress with fractions: Using learning progressions to guide instruction*. Council for Learning Disabilities (CLD) International Conference. Austin, TX. 11 October 2012.
- Stockton, J., & Wasserman, N. (2012). *Mapping the Common Core State Standards to advanced mathematical knowledge for teaching*. Mathematical Association of America (MAA) MathFest. Madison, Wisconsin. 4 August 2012.
- Wasserman, N., & Walkington, C. (2012). *Exploring links between beginning UTeachers' beliefs and observed classroom practices*. UTeach Institute Annual Conference, University of Texas at Austin, Austin, TX. 1 June 2012.
- Wasserman, N., & Ham, E. (2012). *Attributes of good mathematics teaching: When are they learned?* Poster presented at International Congress on Mathematics Education (ICME-12), Seoul, Korea. 11 July 2012.
- Wasserman, N., & Ham, E. (2011). *Learning to be a successful mathematics teacher: Reflections on two teacher education models*. UTeach Institute Annual Conference, University of Texas at Austin, Austin, TX. 24 May 2011.

Refereed Presentations: Regional Conferences

- Basaraba, D., Wasserman, N., Ketterlin-Gellar, L., & Hill, S. (2012). *Learning progressions for algebra readiness: A roadmap for instructional planning*. Poster presented at Center on

- Teaching and Learning (CTL) Research to Practice Conference, Portland, OR. 28 October 2012.
- Wasserman, N., & Ham, E. (2011). *A question of when, for beginning mathematics teachers*. National Council of Teachers of Mathematics (NCTM) Regional Conference, Albuquerque, NM. 3 November 2011.
- Wasserman, N., & Ham, E. (2011). *A question of when, for beginning mathematics teachers*. National Council of Teachers of Mathematics (NCTM) Regional Conference, Atlantic City, NJ. 21 October 2011.
- Welch, A., Wright, R., Wasserman, N., & Garcia, K. (2011). *UTeach Graduates Roundtable*. UTeach Institute Annual Conference, University of Texas at Austin, Austin, TX. 24 May 2011.
- Wasserman, N., & Arkan, I. (2011). *Archimedes rediscovered through technology*. New York State Association of Independent Schools (NYSAIS) Teaching with Technology Conference, Abraham Joshua Heschel School, New York, NY. 27 April 2011.
- Wasserman, N., & Ham, E. (2010). *A question of "When?" for beginning mathematics teachers*. Association of Mathematics Teachers of New York State (AMTNYS) Annual Conference, Saratoga Springs, NY. 13 November 2010.
- Wasserman, N. (2010). *Partition and iteration in Algebraic thinking: Intuition with linearity*. Association of Mathematics Teachers of New York State (AMTNYS) Annual Conference, Saratoga Springs, NY. 12 November 2010.
- Wasserman, N. (2006). *Stacking paper cups*. UTeach professional development, University of Texas at Austin, Austin, TX. November 2006.

GRANTS

Awarded

- Wasserman, N. (PI). *Teaching mathematics with technology*. Teachers College, Columbia University, Rapid Prototyping Grant, Office of the Provost. 2018. (Award: \$6,000)
- Wasserman, N. (PI). *Designing abstract algebra tasks for secondary mathematics teacher education*. Teachers College, Columbia University, Dean's Grant for Pre-Tenured and Non-Tenure Track Faculty. 2017. (Award: \$9,500)
- Weber, K., Wasserman, N., Mejia-Ramos, J. P., Fukawa-Connelly, T., & Cohen-Corwin, A. (Co-PI). *Collaborative research: ULTRA: Upgrading learning for teachers in real analysis*. National Science Foundation, Improving Undergraduate STEM Education (IUSE). 2015-2018. (Award: \$519,650)
- Wasserman, N. (PI). *Teachers' advanced mathematics knowledge: Understanding what transforms the elementary, middle, and secondary teaching of mathematics*. Southern Methodist University, University Research Council. 2012-2013. (Award: \$2,600)

Submitted

- Wasserman, N. (PI). *Changing what is, and who can do, mathematics: A case for studying discrete mathematics*. Small Research Grants. Spencer Foundation. 2019. (Not awarded)
- Wasserman, N. (PI). *Investigating how secondary teachers' knowledge of abstract algebra impacts algebra teaching*. Spencer Postdoctoral Fellowship. National Academy of Education and the Spencer Foundation. 2013. (Not awarded)

Fulbright Specialist

- Wasserman, N. (Fulbright Specialist). *Connecting advanced mathematics to secondary mathematics*. Joint project proposal by Pontificia Universidad Católica de Chile, Santiago, Chile, and Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile. Fulbright Chile. U. S. Department of State. 2020.

Other Contributions

- Wasserman, N. (Advisory Board Member – mathematics education doctoral educator). *Third national conference on doctoral programs in mathematics education* (PIs: Shih & Reys). National Science Foundation. 2019-2020.
- Wasserman, N. (Advisory Board Member – task design expert). *Developing and validating proof comprehension tests in real analysis* (PIs: Mejia-Ramos, Weber, Gitomer, Lew & Melhuish). National Science Foundation, Improving Undergraduate STEM Education (IUSE). 2018-2021.
- Wasserman, N. (STEM Course Development – mathematics content expert). *A series of STE(A)M initiatives*. Teachers College, Columbia University, Provost's Investment Fund. 2017-2018.
- Wasserman, N. (Consultant – mathematics content expert). *North Texas collaborative for science, math, and writing and Ft. Worth/Dallas Xtream science and math institute* (University of North Texas). Teacher Quality Grants, under 2002 NCLB: Public Law 107-110. 2012-2014; 2014-2015.
- Wasserman, N. (Consultant – mathematics content expert). *Elementary school students in Texas algebra readiness (ESTAR) and Middle school students in Texas algebra readiness (MSTAR) diagnostic assessments* (Southern Methodist University, Research in Mathematics Education). Texas Education Agency. 2013-2014.

FELLOWSHIPS, AWARDS, AND HONORS

- 2021 Faculty Teaching Award, Honorable Mention · Teachers College, Columbia University, 2021
- Fulbright Specialist Roster Candidate · U.S. Department of State, Bureau of Educational and Cultural Affairs (ECA), 2019-2022
- Outstanding Reviewer · *Journal for Research in Mathematics Education* (JRME), 2018
- Best Paper Award (“Leveraging real analysis to foster pedagogical practices”) · Annual Conference on Research in Undergraduate Mathematics Education (RUME), San Diego, CA, 2017
- STaR Fellow · Service, Teaching, and Research (STaR) Program for Early Career Mathematics Educators, 2012-2013
- MST Doctoral Writing Scholarship Award · Department of Mathematics, Science and Technology (MST), Teachers College, Columbia University, New York, NY, October 2010
- R. L. Moore Award for Best Inquiry Lesson · University of Texas at Austin, Austin, TX, April 2008

OTHER PROFESSIONAL ACTIVITIES

- Center for the Professional Education of Teachers (CPET), Mathematics instructional coach, Westchester Square Academy, Bronx, NY, 2018-2019
- Amplify., Curriculum development, Measurement in the Middle Grades, New York, NY, 2013-2014
- InchUp, LLC (founding partner), Dynamic software development, New York, NY, 2014-present

SERVICE ACTIVITIES

Service to the Profession and Community

- Research in Undergraduate Mathematics Education (RUME), Special Interest Group of the Mathematical Association of America (MAA), Treasurer · RUME, 2020-present
- National Fund for Scientific and Technological Research (FONDECYT-CHILE), Education Evaluation Group Reviewer · Agencia Nacional de Investigación y Desarrollo (ANID), Gobierno de Chile, 2020
- Journal of Mathematical Behavior*, Editorial Board Member · JMB, 2020-present
- International Seminar of Conhecimento Interpretative e Especializado do Professor que Ensina Matemática (CIEspMat), International Committee Member · UNICAMP, 2019

Association of Mathematics Teacher Educators (AMTE), (STaR) AMTE Manuscript Mentor · AMTE, 2019-present

Research in Undergraduate Mathematics Education (RUME) Annual Conference, Program Committee Member · RUME, 2017-present

Journal of Mathematics Education at Teachers College, Chair of Editorial Board · Program in Mathematics Education, Teachers College, Columbia University, New York, NY, Spring 2014-present

Mathematics Teacher, Delving Deeper, Department Editor · National Council of Teachers of Mathematics (NCTM), Reston, VA, 2015-2019

Nominations and Elections Committee, Committee Member · Association of Mathematics Teacher Educators in Texas (AMTE-TX), 2012-2015

UTeach Alumni Conference, Program Committee Member · UTeach Institute, University of Texas at Austin, 2013-2014

Journal of Mathematics Education at Teachers College, Guest Editor · Teachers College, Columbia University, New York, NY, Spring 2011

High School Redesign, Steering Committee Member · James Bowie High School, Austin, TX, 2005-2006

External Tenure Letters

Eileen Murray · Montclair State University, 2019

Peer Referee (ongoing)

Journal for Research in Mathematics Education

Educational Studies in Mathematics

Journal of Mathematical Behavior

Journal of Mathematics Teacher Education

For the Learning of Mathematics

Journal of Teacher Education

Zentralblatt für Didaktik der Mathematik (ZDM)

International Journal of Research in Undergraduate Mathematics Education

Canadian Journal of Science, Mathematics and Technology Education

International Journal of Science and Mathematics Education

Peer Referee (previous)

Mathematics Teacher

Mathematics Teaching in the Middle School

School, Science and Mathematics

Nordic Studies in Mathematics Education (NOMAD)

Problems, Resources, and Issues in Mathematics Undergraduate Studies

Journal of Mathematics Education at Teachers College

Service to the College and University

Teachers College, Columbia University

Faculty Executive Committee, MST Department Elected Representative · Teachers College, Columbia University, New York, NY, 2020-2022

Academic Program Subcommittee of the Faculty Executive Committee, MST Department Elected Representative · Teachers College, Columbia University, New York, NY, 2020-2022

Fulbright Student Program, Faculty Review Committee (FRC) · Teachers College, Columbia University, New York, NY, 2020

STEAMnasium, Presenter (with MSTM 4025 students) · Department of Mathematics, Science, and Technology, Teachers College, Columbia, New York, NY, 2018-2020

Abby M. O'Neill Fellowship Committee, Committee Member (Department of Mathematics, Science, and Technology Representative) · Teachers College, Columbia University, New York, NY, 2018-2019, 2020-2021

Departmental STEM Course Development Committee, Committee Member (Program in Mathematics Education Representative) · Department of Mathematics, Science, and Technology, Teachers College, Columbia University, New York, NY, 2018-2019

Program in Mathematics Education Faculty Search Committee, Committee Member · Teachers College, Columbia University, New York, NY, 2017-2018

Teacher Education and Policy Committee (TEPC), Committee Member · Teachers College, Columbia University, New York, NY, 2017-present

FFSS Financial Plan Design Event, Volunteer Faculty Member · Teachers College, Columbia University, New York, NY, 2017

Program in Mathematics Education, 2020 CAEP Accreditation Coordinator · Teachers College, Columbia University, New York, NY, 2016-present

Faculty Salary Committee, Elected Committee Member (Assistant Professor Representative) · Teachers College, Columbia University, New York, NY, 2014-2017

Journal of Mathematics Education at Teachers College, Chair of Editorial Board · Program in Mathematics Education, Teachers College, Columbia University, New York, NY, Spring 2014-present

Director of Academic Administration Search Committee, Committee Member (Program in Mathematics Education Representative) · Department of Mathematics, Science, and Technology, Teachers College, Columbia University, New York, NY, Spring 2014

Dean's Grant for Student Research, Committee Member · Teachers College, Columbia University, New York, NY, 2013-2014

Southern Methodist University

Scholarship, Admissions, and Recruitment Committee, Committee Member · Southern Methodist University, Dallas, TX, 2012-2013

Math, Science, Technology Graduate Curriculum Committee, Chair of Committee · Southern Methodist University, Dallas, TX, 2011-2013

Math, Science, Technology Faculty Search Committee, Committee Member · Southern Methodist University, Dallas, TX, 2012-2013

GRADUATE ADVISING

Doctoral Sponsor (Current)

Brandon Milonovich, Program in Mathematics Education (Ed.D.)

Larry Kwon, Program in Mathematics Education (Ed.D.)

Paul Gray, Program in Mathematics Education (Ph.D.)

Sarah Nelson, Program in Mathematics Education (Ph.D.)

Rachael Simon, Program in Mathematics Education (Ed.D.)

Benjamin Bailey, Program in Mathematics Education (Ph.D.)

Fernando Carnauba, Program in Mathematics Education (Ph.D.)

Sekou Cox, Program in Mathematics Education (Ed.D.)

Davidson Barr, Program in Mathematics Education (Ed.D.)

Yuxi Chen, Program in Mathematics Education (Ed.D.)

Graduate Research Assistants

Nathan Dilworth, Program in Mathematics Education (Ph.D.), 2019

Sarah Nelson, Program in Mathematics Education (Ed.D.), 2018-2019

William McGuffey, Program in Mathematics Education (Ph.D.), 2015-2018

Patrick Galarza, Program in Mathematics Education (Ph.D.), 2017

Cris Wellington, Program in Mathematics Education (Ed.D.), 2017

Elizabeth Wentworth, Program in Mathematics Education (Ed.D.), 2016-2017

Andrew Sanfratello, Program in Mathematics Education (Ph.D.), 2014-2015

Christa Quint, Program in Mathematics Education (Ed.D.), 2014-2015

Brandie Waid, Program in Mathematics Education (Ph.D.), 2014

Arundhati Velamur, Program in Mathematics Education (M.A.), 2013-2014

Graduate Student Guest Editors (*Journal of Mathematics Education at Teachers College*)

Alyssa MacMahon, Program in Mathematics Education (Ph.D.), 2021-2022

Nasriah Morrison, Program in Mathematics Education (Ed.D.), 2021

Anisha Clarke, Program in Mathematics Education (Ed.D.), 2020-2021

Brian Darrow, Jr., Program in Mathematics Education (Ed.D.), 2020

Dyanne Baptiste, Program in Mathematics Education (Ed.D.), 2019-2020

Sarah Nelson, Program in Mathematics Education (Ed.D.), 2019

Paul Gray, Program in Mathematics Education (Ph.D.), 2018-2019

Patrick Galarza, Program in Mathematics Education (Ph.D.), 2018

Mara Markinson, Program in Mathematics Education (Ph.D.), 2017-2018

Elizabeth Wentworth, Program in Mathematics Education (Ed.D.), 2017

Brandon Milonovich, Program in Mathematics Education (Ph.D.), 2016-2017

Kimberly Barba, Program in Mathematics Education (Ph.D.), 2016

William McGuffey, Program in Mathematics Education (Ph.D.), 2015-2016

Beatriz Levin, Program in Mathematics Education (Ph.D.), 2015

Matthew DeGraaf, Program in Mathematics Education (Ed.D.), 2014-2015

Simone Salmon-Nembhard, Program in Mathematics Education (Ed.D.), 2014

Dissertation Committee, Sponsor

Ed.D., Sponsor · Elizabeth Wentworth, Mathematics Education, “Mathematics and music: The effects of an integrated approach on student achievement and affect” · Teachers College, Columbia University, New York, NY, Spring 2019

Ph.D., Sponsor · Sunyoung Ban, Mathematics Education, “The influence of teaching instruction and learning styles on mathematics anxiety in the developmental mathematics classroom” · Columbia University, New York, NY, Spring 2019

Ph.D., Sponsor · Patrick Galarza, Mathematics Education, “The effects of mathematical game play on the cognitive and affective development of pre-secondary students” · Columbia University, New York, NY, Fall 2018

Ph.D., Sponsor · Beatriz Levin, Mathematics Education, “Gender gap in mathematics achievement in Brazil: Teachers’ implicit gender bias” · Columbia University, New York, NY, Fall 2018

Ph.D., Sponsor · Kimberly Barba, Mathematics Education, “Mindset over matter: How does parent mathematical mindset relate to student mathematical experience?” · Columbia University, New York, NY, Fall 2018

Ph.D., Sponsor · Brandie Waid, Mathematics Education, “Pre-service mathematics teacher beliefs and growth mindset assessment practices” · Columbia University, New York, NY, Spring 2018

Ph.D., Sponsor · William McGuffey, Mathematics Education, “Insights from college algebra students’ reinvention of limit at infinity” · Columbia University, New York, NY, Spring 2018

Ph.D., Sponsor · Mengmeng Cao, Mathematics Education, “An examination of three-dimensional geometry in high school curricula in the U.S. and China” · Columbia University, New York, NY, Fall 2017

Ed.D., Sponsor · Vincent Bulone, Mathematics Education, “An investigation into post-secondary students’ understanding of combinatorial questions” · Teachers College, Columbia University, New York, NY, Spring 2017

Dissertation Committee, Second Reader

Ed.D. Committee Member, Second reader · Salvatore Maimone, Mathematics Education, “Eliminating remedial mathematics: A case study of the design and implementation of a module mathematics curriculum” · Teachers College, Columbia University, New York, NY, Spring 2021

- Ed.D. Committee Member, Second reader · Lucretia Glover, Mathematics Education, “Teaching mathematics for social justice: How students in an all-girls independent school setting use mathematics to read and write the world” · Teachers College, Columbia University, New York, NY, Spring 2019
- Ed.D. Committee Member, Second reader · Bakary Sagna, Mathematics Education, “Effectiveness of remedial mathematics supplemental instruction: An urban community college study” · Teachers College, Columbia University, New York, NY, Spring 2019
- Ed.D. Committee Member, Second reader · Xingchi Lu, Mathematics Education, “A comparative study of the introduction of advanced placement and international baccalaureate courses in Chinese mathematics education” · Teachers College, Columbia University, New York, NY, Spring 2019
- Ed.D. Committee Member, Second reader · Bibi Khan, Mathematics Education, “The effectiveness of supplemental instruction and online homework in first semester calculus” · Teachers College, Columbia University, New York, NY, Spring 2018
- Ed.D.C.T. Committee Member, Second reader · Edward DePeau, Mathematics Education, “Mathematics A Regents examination: Performance differences between Russian federation students and United States students” · Teachers College, Columbia University, New York, NY, Fall 2016
- Ed.D. Committee Member, Second reader · Shereen Khan, Mathematics Education, “Mathematics proficiency of primary school students in Trinidad and Tobago” · Teachers College, Columbia University, New York, NY, Fall 2016
- Ed.D. Committee Member, Second reader · Kena Gibson, Mathematics Education, “Mathematics education in one special high school for mathematically talented students” · Teachers College, Columbia University, New York, NY, Fall 2016
- Ed.D. Committee Member, Second reader · Jessica Vialva, Mathematics Education, “Mathematics anxiety within an inquiry-based, developmental mathematics classroom” · Teachers College, Columbia University, New York, NY, Spring 2016
- Ph.D. Committee Member, Second reader · Elizabeth Brennan DeGraaf, Mathematics Education, “What makes a good problem? Perspectives of students, teachers, and mathematicians” · Columbia University, New York, NY, Spring 2015
- Ed.D. Committee Member, Second reader · Christa Quint, Mathematics Education, “A study of the efficacy of the flipped classroom model in a university mathematics classroom” · Teachers College, Columbia University, New York, NY, Spring 2015
- Ph.D. Committee Member, Second reader · Shalini Sudarsanan, Mathematics Education, “Keeping up with the times: How are teacher preparation programs preparing aspiring elementary teachers to teach mathematics under the new standards of today” · Columbia University, New York, NY, Fall 2014

Dissertation Committee, Other Member

- Ph.D. Committee Member, External Examiner · Kaitlyn Serbin, XXX · Mathematics Department, Virginia Tech University, Blacksburg, VA, YYY
- Ph.D. Committee Member, Outside reader · Yue Ma, Measurement and Evaluation, “Assessing student achievement in probability problem solving using collaboration process data: Development and use of a scoring rubric” · Columbia University, New York, NY, Spring 2021
- Ed.D. Committee Member, Chairperson · Margaret Chen, Mathematics Education, “An analysis of the redesigned SAT I-Mathematics: Perceptions of teachers, English proficient students, and English language learners” · Teachers College, Columbia University, New York, NY, Spring 2021
- Ph.D. Committee Member, Outside reader · Musa Elbulok, Measurement and Evaluation, “A cognitively diagnostic modeling approach to diagnosing misconceptions and subskills” · Columbia University, New York, NY, Fall 2020

- Ph.D. Committee Member, Chairperson · Mustapha Nadmi, Mathematics Education, “A significant step toward the development of modern algebra: Al-Samaw’al Ibn Yahya Al-Maghribi, a twelfth century mathematician” · Columbia University, New York, NY, Spring 2019
- Ph.D. Committee Member, Third reader · Moulay Aqil, Mathematics Education, “Morocco, multilingualism, cultural identity, and mathematics education post-French protectorate: A historical perspective” · Columbia University, New York, NY, Spring 2019
- Ph.D. Committee Member, Chairperson · O’Rita Johnson, Mathematics Education, “The impact of parent involvement on high-achieving females’ mathematics performance and decision to major in science, technology, engineering and mathematics” · Columbia University, New York, NY, Spring 2019
- Ed.D. Committee Member, Chairperson · Birgitta Corneille, Mathematics Education, “The Common Core State Standards in Mathematics and K-3 word problems in textbooks” · Teachers College, Columbia University, New York, NY, Spring 2019
- Ph.D. Committee Member, Third reader · Hong Yuan, Mathematics Education, “Modes of acquisition of Shanghai mathematics teachers’ pedagogical content knowledge within communities of practice” · Columbia University, New York, NY, Spring 2018
- Ed.D. Committee Member, Chairperson · Kanchan Sharma, Mathematics Education, “Effects of instructional videos and real-life mathematics activity on student achievement and attitude in a community college transitional mathematics course” · Teachers College, Columbia University, New York, NY, Spring 2018
- Ph.D. Committee Member, Chairperson · Laura Golnabi, Mathematics Education, “Mathematics self-efficacy and flow in developmental mathematics students” · Columbia University, New York, NY, Spring 2017
- Ed.D. Committee Member, Outside reader · Myra Luna-Lucero, Human Development · “Mistake detection videos: Integrating perspectives from motivation to enhance high school students’ math learning” · Teachers College, Columbia University, New York, NY, Spring 2017
- Ph.D. Committee Member, External examiner · Masomeh Jamshid Nejad, Mathematics Education, “Students’ understanding of transformations of sinusoidal functions” · Simon Fraser University, Vancouver, British Columbia, Spring 2017
- Ed.D. Committee Member, Chairperson · Nathaniel Stahl, Mathematics Education, “Winning ways for your educational plays: An analysis of students’ understanding of the concept of a winning strategy” · Teachers College, Columbia University, New York, NY, Fall 2016
- Ed.D. Committee Member, Outside reader · Grant Tedaldi, Art Education, “Harmonizing digital drawing practice within studio art pedagogy” · Teachers College, Columbia University, New York, NY, Spring 2016
- Ph.D. Committee Member, Chairperson · Yevgeniy Milman, Mathematics Education, “Effect of the curriculum on the instructional practice of the community college faculty in the developmental mathematics courses” · Columbia University, New York, NY, Spring 2016
- Ph.D. Committee Member, Outside reader · Spyridon Varthis, Science Education, “Students’ perceptions of blended learning and its effectiveness as a part of second year dental curriculum” · Columbia University, New York, NY, Spring 2016
- Ph.D. Committee Member, Outside reader · Patrick Ashby, Science Education, “Critical science education in a suburban high school chemistry class” · Columbia University, New York, NY, Fall 2015
- Ed.D. Committee Member, Chairperson · Elana Hagler Sichel, Mathematics, Education, “Concepts of continuity in calculus: A look at how Algebra 1 and Algebra 2 shape students’ understanding of continuity” · Teachers College, Columbia University, New York, NY, Spring 2015
- Ed.D. Committee Member, Chairperson · Stephanie Quan, Mathematics Education, “The impact of stressful situations on mathematics anxiety and mathematics performance” · Teachers College, Columbia University, New York, NY, Spring 2015

Ph.D. Committee Member, Outside reader · Alison Miller, Science Education, “Examining the relationship between physical models and students’ science practices” · Columbia University, New York, NY, Spring 2015

Ed.D. Committee Member, Outside reader · Suzanne Zak, Music Education, “Examining the effect of asynchronous video on student learning and engagement in music e-learning” · Teachers College, Columbia University, New York, NY, Spring 2015

Ed.D. Committee Member, Chairperson · Nazar Rabadi, Mathematics Education, “Overcoming difficulties and misconceptions in calculus” · Teachers College, Columbia University, New York, NY, Fall 2014

Ph.D. Committee Member, Third reader · Nathan Alexander, Mathematics Education, “Structuring student beliefs in context: Identity, self-efficacy, and black student success in mathematics” · Columbia University, New York, NY, Fall 2014

Ed.D. Committee Member, Outside reader · Carla Marie Becker, Urban and Minority Education, “African American high school students in a space of creative engagement: From can’t to can” · Teachers College, Columbia University, New York, NY, Spring 2014

PROFESSIONAL AFFILIATIONS

Mathematical Association of America

National Council of Teachers of Mathematics

Association of Mathematics Teacher Educators

American Educational Research Association

Association of Mathematics Teachers of New York State

CERTIFICATIONS

State of Texas Master Mathematics Teacher Certificate (8-12), valid for life

State of Texas Educator Certificate, Secondary Mathematics (8-12), expired April 2016