

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, Regression Analysis, 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

**Assistant Professor, Mathematics Education**

August 2013 – present

**Graduate Courses Taught:**

MSTM 4038: Finite Mathematics

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

MSTM 6500/6501: Research Seminar

MSTM 4025: Teaching Mathematics with Technology

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

MSTM 4005: Teaching Mathematics in Diverse Cultures

MSTM 5034/6034: Topics/Advanced Topics in Analysis

Southern Methodist University, Dallas, TX

**Assistant Professor, Mathematics Education**

August 2011 – May 2013

**Undergraduate Courses Taught:**

MATH 1337: Calculus I

MATH 3308: Discrete Mathematics

**Graduate Courses Taught:**

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

### Refereed Research Journal Articles

**Wasserman, N.**, and Weber, K. (in press). Pedagogical applications from real analysis for secondary mathematics teachers. *For the Learning of Mathematics*, X(XX), pp. XXX.

**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), pp. 181-201.

**Wasserman, N.**, Casey, S., Champion, J., & Huey, M. (in press). Statistics as unbiased estimators: Exploring the teaching of standard deviation. *Research in Mathematics Education*, X(XX), pp. XXX.

**Wasserman, N.** (in press). Exploring how understandings from abstract algebra can influence the teaching of structure in early algebra. *Mathematics Teacher Education and Development*, X(XX), pp. XXX.

**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), pp. 559-578.

Stockton, J., & **Wasserman, N.** (2017). Forms of knowledge of advanced mathematics for teaching. *The Mathematics Enthusiast*, 14(1), pp. 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), pp. 545-568.

**Wasserman, N.** (2016). Abstract algebra for algebra teaching: Influencing school mathematics instruction. *Canadian Journal of Science Mathematics and Technology Education*, 16(1), pp. 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), pp. 75-93.

Casey, S., & **Wasserman, N.** (2015). Teachers' knowledge about informal line of best fit. *Statistics Education Research Journal*, 14(1), pp. 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), pp. 22-34.

**Wasserman, N.**, & Walkington, C. (2014). Exploring links between beginning UTeachers' beliefs and observed classroom practices. *Teacher Education and Practice*, 27(2/3), pp. 376-401.

**Wasserman, N.** (2014). Introducing algebraic structures through solving equations: Vertical content knowledge for K-12 mathematics teachers. *PRIMUS*, 24(3), pp. 191-214. DOI: 10.1080/10511970.2013.857374.

**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), pp. 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), pp. 20-22.

#### **Refereed NCTM Professional Journal Articles**

**Wasserman, N.** (2017). Math madness: Coloring, reasoning, and celebrating. *Teaching Children Mathematics*, 23(8), pp. 468-475.

**Wasserman, N.** (2015). A random walk: Stumbling across connections. *Mathematics Teacher*, 108(9), pp. 686-695.

**Wasserman, N.** (2014). A rationale for irrationals: An unintended exploration of  $e$ . *Mathematics Teacher*, 107(7), pp. 500-507.

**Wasserman, N., & Arkan, I.** (2011). Technology tips: An Archimedean walk. *Mathematics Teacher*, 104(9), May 2011, pp. 710-714.

#### **Refereed Other Professional Journal Articles**

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), pp. 1-10.

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), pp. 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), pp. 9-14.

**Wasserman, N.** (2011). The Common Core State Standards: Comparisons of access and quality. *Journal of Mathematics Education at Teachers College*, 2(1), pp. 18-27.

**Wasserman, N.** (2011). Partition and iteration in Algebra: Intuition with linearity. *Association of Mathematics Teachers of New York State Journal*, 61(1), pp. 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), pp. 12-16.

#### **Books and Book Chapters**

**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).

Karp, A., & **Wasserman, N.** (2015). *Mathematics in middle and secondary schools: A problem solving approach*. Charlotte, NC: Information Age Publishing Inc.

**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 Conference Papers and Proceedings**

**Wasserman, N., Weber, K., & McGuffey, W.\*** (in press). Leveraging real analysis to foster pedagogical practices [2017 RUME Best Paper Award]. In XX, XX (Eds.), *Proceedings of the 20<sup>th</sup> Annual Conference on Research in Undergraduate Mathematics Education (RUME)* (pp. XXX). San Diego, CA: RUME.

**Wasserman, N.** (2016). Nonlocal mathematical knowledge for teaching. In Csíkos, C., Rausch, A., & Sztányi, J. (Eds.), *Proceedings of the 40<sup>th</sup> 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 19<sup>th</sup> 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 Bartell, T.G., Bieda, K.N., Putnam, R.T., Bradfield, K., & Dominguez, H. (Eds.), *Proceedings of the 37<sup>th</sup> 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 18<sup>th</sup> 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 18<sup>th</sup> 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 Liljedahl, P., Nicol, C., Oesterle, S., & Allan, D. (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 & G. Matney (Eds.), *Proceedings of the 40<sup>th</sup> 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 16<sup>th</sup> 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 12<sup>th</sup> International Congress on Mathematics Education (ICME-12)* (p. 7843). Seoul, Korea: ICME-12.

### Other Publications

- 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*, <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, pp. 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 & 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 & 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), pp. 9-10.

### Manuscripts Under Review and in Preparation

- Huey, M., Champion, J., Casey, S., & Wasserman, N. (under review, *Journal of Statistics Education*). Secondary mathematics teachers' planned approaches for teaching standard deviation.
- Lockwood, E., Wasserman, N., & McGuffey, W. (under review, *International Journal of Research in Undergraduate Mathematics Education*). Classifying combinations: Do students distinguish between different categories of combination problems?
- Wasserman, N., Weber, K., Villanueva, M., & Mejia-Ramos, J. P. (under review, *Journal of Mathematics Teacher Education*). Mathematics teachers' views about the limited utility of real analysis: A transport model hypothesis.
- Wasserman, N. (under review, *Journal of Mathematical Behavior*). Nonlocal mathematical knowledge for teaching.
- Wasserman, N. (in preparation, (*PRIMUS* or *EJMT*)). Dynamically reconstructed proof visualizations in real analysis.
- Wasserman, N., Weber, K., Fukawa-Connelly, T., McGuffey, W. (in preparation, *Journal of the Learning Sciences*). Building up and stepping down.
- Wasserman, N. (under review, *Mathematical Thinking and Learning*). Distinguishing natural and formal sets of outcomes: The use of formulas/expressions to generate set-theoretic encoded outcomes.
- Wasserman, N., & Galarza, P. (under review, *Investigations in Mathematics Learning*). Conceptualizing and justifying sets of outcomes with combination problems.
- Wasserman, N., & Wentworth, E. (in preparation). Mathematical teaching practices.
- Wasserman, N. (in preparation, *XXX*). Foreshadowing: Valuing knowledge of mathematics outside the scope of what is being taught.

### PRESENTATIONS

#### Invited Presentations

- Wasserman, N. (upcoming). Don't forget discrete mathematics! **National Council for Teachers of Mathematics (NCTM) Annual Meeting**, Washington D.C. 25 April 2018.
- Wasserman, N., Weber, K., & McGuffey, W. (upcoming). Leveraging real analysis to foster pedagogical practices. **Joint Mathematics Meetings of the MAA and AMS**, San Diego, CA. January 2018.
- 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 13<sup>th</sup> **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](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.

### International & National Conferences

- Wasserman, N., Fukawa-Connelly, T., & Weber, K. (2017). Leveraging real analysis to foster pedagogical practices. National Council for 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 13<sup>th</sup> 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 13<sup>th</sup> 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 for 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 for 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 Research Pre-Session, National Council for Teachers of Mathematics (NCTM), Denver, CO. 15 April 2013.
- Wasserman, N. (2013). *A rationale for irrationals: Convincing students they exist*. National Council for 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 MathFest. Madison, Wisconsin. 4 August 2012.
- Wasserman, N., & Walkington, C. (2012). *Exploring links between beginning UTeacher's 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.

### Regional Conferences

- Basaraba, D., Wasserman, N., Ketterlin-Geller, 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*. NCTM Regional Conference, Albuquerque, NM. 3 November 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*. 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*. AMTNYS Annual Conference, Saratoga Springs, NY. 13 November 2010.
- Wasserman, N. (2010). *Partition and iteration in Algebraic thinking: Intuition with linearity*. 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 or Submitted



- 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)

### Other Contributions

- Wasserman, N. **(Consultant – mathematics context expert)**. *North Texas Collaborative for Science, Math, and Writing and Ft. Wort/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, SCHOLARSHIPS, AWARDS, AND HONORS

- Best Paper Award (Leveraging real analysis to foster pedagogical practices) · Annual Conference on Research in Undergraduate Mathematics Education (RUME), San Diego, CA, 2017
- Service, Teaching, and Research (STaR) for Early Career Mathematics Educators Fellow · 2012 – 2013
- Eugene Hellmich, Helen Heid Stack, Ruth McCullough Walzer Mathematics Scholarships · Teachers College, Columbia University, New York, NY, 2008 – 2011
- MST Doctoral Writing Scholarship · Department of Mathematics, Science and Technology, Teachers College, Columbia University, New York, NY, October 2010
- Featured Student Spotlight, MST Times Newsletter · Department of Mathematics, Science and Technology, Teachers College, Columbia University, New York, NY, April 2010
- R.L. Moore Award for Best Inquiry Lesson · University of Texas at Austin, Austin, TX, April 2008
- Salutatorian · Jenks High School, Jenks, OK, May 1999

### OTHER PROFESSIONAL ACTIVITIES

- 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

#### Elected and Appointed Positions

- Conference Program Committee, Appointed Member · Research in Undergraduate Mathematics Education (RUME) Annual Conference, 2017-present
- Mathematics Teacher*, Delving Deeper, Department Editor, Appointed Position · National Council of Teachers of Mathematics (NCTM), Reston, VA, 2015-present
- Faculty Salary Committee, Assistant Professor Elected Member · Teachers College, Columbia University, New York, NY, 2014-2017
- Nominations and Elections Committee, Appointed Member · Association of Mathematics Teacher Educators in Texas (AMTE-TX), 2012-2015
- Journal of Mathematics Education at Teachers College*, Guest Editor, Appointed Position · Teachers College, Columbia University, New York, NY, Spring 2011

HS Redesign, Steering Committee, Appointed Position · James Bowie High School, Austin, TX, 2005-2006

### **Volunteer Activities to the Field**

*Mathematics Teacher*, Delving Deeper, Department Editor, Appointed Position · National Council of Teachers of Mathematics (NCTM), Reston, VA, 2015-present

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

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

### **Peer Referee**

*Educational Studies in Mathematics*, Springer

*Canadian Journal of Science Mathematics and Technology Education*, Taylor & Francis

*Nordic Studies in Mathematics Education (NOMAD)*, NCM

*School, Science and Mathematics*, School Science and Mathematics Associations

*CRUME Conference*, Research in Undergraduate Mathematics Education (RUME), a special interest group of the Mathematical Association of America

*Mathematics Teaching in the Middle School*, National Council for Teachers of Mathematics

*Journal for Research in Mathematics Education*, National Council for Teachers of Mathematics

*Mathematics Teacher*, National Council of Teachers of Mathematics

*Journal of Mathematics Education at Teachers College*, New York, NY

### **Volunteer Activities to the College**

*Teachers College, Columbia University*

Director of Academic Administration Search Committee, 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 Member · Southern Methodist University, 2012-2013

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

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

## **GRADUATE ADVISING**

### **Doctoral Sponsor (Current)**

Ph.D., William McGuffey, Mathematics Education

Ph.D., Beatriz Levin, Mathematics Education

Ed.D., Elizabeth Wentworth, Mathematics Education

Ph.D., Kimberly Barba, Mathematics Education

Ph.D., Patrick Galarza, Mathematics Education

Ph.D., Brandon Milonovich, Mathematics Education

Ed.D., Steven Cheng, Mathematics Education

### **Graduate Research Assistants**

Ph.D., William McGuffey, Mathematics Education, 2015-2018

Ed.D., Elizabeth Wentworth, Mathematics Education, 2016-2017

Ph.D., Patrick Galarza, Mathematics Education, 2017

Ed.D., Cris Wellington, Mathematics Education, 2017  
Ph.D., Andrew Sanfratello, Mathematics Education, 2014-2015  
Ph.D., Brandie Waid, Mathematics Education, 2014  
M.A., Arundhati Velamur, Mathematics Education, 2013-2014

**Dissertation Committee, Sponsor**

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 · 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  
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, 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
- Ph.D., Committee Member, Third 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, 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  
Association of Mathematics Teacher Educators in Texas  
American Educational Research Association  
Association of Mathematics Teachers of New York State  
Phi Beta Kappa (University of Texas at Austin Chapter)

### CERTIFICATIONS

State of Texas Master Mathematics Teacher Certificate (8–12), valid until April 2016  
State of Texas Educator Certificate, Secondary Mathematics (8–12), valid until April 2016