# CURRICULUM VITAE FOR PROMOTION AND TENURE

## ERIN E. BALDINGER

# **IDENTIFYING INFORMATION**

Department of Curriculum and Instruction

Associate Professor

Academic Rank

	uate Faculty in Curriculum and Instruction	
Educatio	on	
Degree	Institution	Date
Ph.D.	Stanford University, Stanford, CA Mathematics Education, individually designed minor in mathematics Advisors: Jo Boaler & Pam Grossman	2014
B.A.	Tufts University, Medford, MA Mathematics, s <i>umma cum laude</i>	2005
License	5	
Massach	ary teaching certification in mathematics (grades 5-12), <i>Commonwealth</i> nusetts, 2007 ary teaching credential, Secondary mathematics, <i>State of California</i> , 20	
Employ	nent	
University of Minnesota, Twin Cities (2015-Present) Associate Professor of Mathematics Education Assistant Professor of Mathematics Education		2021-Present 2015-2021
	State University stant Professor of Mathematics and Teacher Preparation	2014-2015
	y of San Francisco nct Instructor, Mathematics Education	2011-2014
Unive Rese	University ersity Student Teaching Supervisor earch Assistant ching Assistant	2010-2014 2008-2012 2009-2013
	Middle School le School Mathematics Teacher	Summer 2009
	Jewish Community Day School le School Mathematics Teacher	2005-2008

## **Professional Memberships**

American Educational Research Association (AERA) Association of Mathematics Teacher Educators (AMTE) National Council of Teachers of Mathematics (NCTM) Psychology of Mathematics Education, North America Chapter (PME-NA)

### HONORS AND AWARDS

SIGMAA-on-RUME Meritorious Citation Award (one of the top three papers reviewed in the Best Paper Award competition), 2018 AMTE Service, Teaching, and Research (STaR) Fellow, 2016-2017 AERA Division K New Faculty Pre-Conference Seminar Participant, 2016 Stanford Graduate School of Education Dissertation Support Grant (\$6000), 2013-2014 Stanford Graduate School of Education Teaching Award Nominee, 2013 Dixon Fellowship Fund for Graduate Students in Education, Stanford University, 2008-2009

### **RESEARCH AND SCHOLARSHIP**

### **Grants and Contracts**

### External sources Received at the University of Minnesota

Investigator status: Co-investigator Name of PI: Stacy Ernst External agency: Network for Excellence in Teaching (NExT) Teacher Effectiveness Initiative Pilot Sub-Award from Bush Foundation Project title and dates: *Piloting Focus Groups and Student Work Sample Interviews as Measures of Teaching Effectiveness*, \$20,000, May 2019 – May 2020

Investigator status: PI

Name of PI: Erin Baldinger, with Eileen Murray, Josh Hertel, Diana White External agency: NSF Improving Undergraduate STEM Education Conference Grant Project title and dates: *Connections between Advanced and Secondary Mathematics: Exploring the Impact of Abstract Algebra on the Teaching and Learning of Secondary Mathematics*, \$94,952, January 2019 – December 2019

Investigator status: co-PI Name of PI: Kathleen Cramer External agencies: Generation Next; Foundation grant from the Campbell Family; Office of the President, University of Minnesota Project title and dates: GopherMath, \$110,000, August 2016 – August 2017

### Grants submitted but not funded

2022 National Science Foundation DRK-12 Research Grant: Collaborative research: Learning to respond to errors in whole-class mathematics discussions through pedagogies of practice centered in discretionary spaces 2018 National Science Foundation DRK-12 Research Grant: *Collaborative research: Learning to respond to errors in whole-class mathematics discussions* 

2017 James S. McDonnell Foundation: Teachers as Learners program: *Researching teachers learning to use core practices for ambitious mathematics instruction: Case-studies of embedded professional learning cycles* (<10% proposals accepted)

2016 Spencer Foundation Small Grant: *Learning to respond to student errors: Investigating pedagogies of practice that support novice mathematics teachers' facilitation of classroom discussion* (<10% proposals accepted)

### **Publications**

- <sup>G</sup> Graduate student author
- <sup>U</sup> Undergraduate student author

## **Refereed Journal Articles**

- Munson, J., & **Baldinger, E. E.** (in press, August 2023). What pedagogy feels like: Teachers' development of pedagogical empathy in rehearsal debriefs. *Journal of the Learning Sciences*.
- Campbell, M. P., & **Baldinger, E. E.** (2022). Using scripting tasks to reveal mathematics teacher candidates' resources for responding to student errors. *Journal of Mathematics Teacher Education*, 25, 507–531. <u>https://doi.org/10.1007/s10857-021-09505-4</u>
- **Baldinger, E. E.**, & Campbell, M. P. (2021). Making learning visible: Cases of teacher candidates learning to respond to errors through multiple approximations of practice. *Mathematics Teacher Education and Development*, 23(4), 119–142.
- Lai, Y., & **Baldinger, E. E.** (2021). Authority relations and the tertiary-to-secondary (dis)continuity. *For the Learning of Mathematics*, *41*(2), 26–31.
- Graif, F.<sup>G</sup>, Baldinger, E. E., & Campbell, M. P. (2021). Teacher candidates' reflections on responding to errors: Exploring their vision and goals. *The Mathematics Educator*, 30(1), 3– 24. <u>https://openjournals.libs.uga.edu/tme/article/view/2092</u>
- **Baldinger, E. E.**, Campbell, M. P., & Graif, F. <sup>G</sup> (2021). Learning to respond to students in discussions: Examining the use of planted errors in an approximation of practice. *Journal of Teacher Education*, 72(5), 523–537. <u>https://doi.org/10.1177/0022487120977148</u>
- Munson, J., **Baldinger, E. E.**, & Larison, S.<sup>G</sup> (2021). What if ... ? Exploring thought experiments and non-rehearsing teachers' development of adaptive expertise in rehearsal debriefs. *Teaching and Teacher Education*, 97, 103222. <u>https://doi.org/10.1016/j.tate.2020.103222</u>
- Campbell, M. P., **Baldinger, E. E.**, & Graif, F.<sup>G</sup> (2020). Representing student voice in an approximation of practice: Using planted errors in coached rehearsals to support teacher candidate learning. *Mathematics Teacher Educator, 9*(1), 23–49. https://doi.org/https://doi.org/10.5951/MTE.2020.0005

- **Baldinger, E. E.**, & Munson, J. (2020). Developing adaptive expertise in the wake of rehearsals: An emergent model of the debrief discussions of non-rehearsing teachers. *Teaching and Teacher Education*, 95, 103125. <u>https://doi.org/10.1016/j.tate.2020.103125</u>
- Baldinger, E. E., Campbell, M. P., & Graif, F.<sup>G</sup> (2020). Sorting out definitions. *Mathematics Teacher: Learning and Teaching Pre-K-12, 113*(3), 209-215. https://doi.org/10.5951/MTLT.2019.0121
- Baldinger, E. E. (2020). Reasoning about student written work through self-comparison: How pre-service secondary teachers use their own solutions to analyze student work. *Mathematical Thinking and Learning, 22*(1), 56-78. <u>https://doi.org/10.1080/10986065.2019.1624930</u>
- Baldinger, E. E., & Lai, Y. (2019). Pedagogical context and proof validation: The role of positioning as a teacher or student. *Journal of Mathematical Behavior*, 55(April), 100698. <u>https://doi.org/10.1016/j.jmathb.2019.03</u>.
- Sun, K. L., Baldinger, E. E., & Humphreys, C. (2018). Number Talks: Gateway to sense making. *Mathematics Teacher*, 112(1), 48–54. <u>https://doi.org/10.5951/mathteacher.112.1.0048</u>
- Murray, E., **Baldinger, E. E.**, Wasserman, N. H., Broderick, S., & White, D. (2017). Connecting advanced and secondary mathematics. *Issues in the Undergraduate Mathematics Preparation of School Teachers*, *1*(August), 1–10. <u>http://www.k-12prep.math.ttu.edu/journal/1.contentknowledge/volume.shtml</u>
- **Baldinger, E. E.,** Selling, S. K., & Virmani, R. (2016). Supporting novice teachers to lead discussions that reach a mathematical point: Defining and clarifying mathematical ideas. *Mathematics Teacher Educator*, *5*(1), 8–28. <u>http://doi.org/10.5951/mathteaceduc.5.1.0008</u>

# **Refereed Book Chapters**

- Baldinger, E. E., Staats, S., Covington Clarkson, L. M., Gullickson, E.<sup>G</sup>, Norman, F.<sup>G</sup>, & Akoto, B.<sup>G</sup> (2020). Returning voice to the silent M: A review of conceptions of mathematics in integrated STEM education. In J. Anderson & Y. Li (Eds.), *Integrated Approaches to STEM Education* (pp. 67–90). Springer. <u>https://doi.org/10.1007/978-3-030-52229-2\_5</u>
- Baldinger, E. E. (2018). Learning mathematical practices to connect abstract algebra to high school algebra. In N. H. Wasserman (Ed.), *Connecting Abstract Algebra to Secondary Mathematics, for Secondary Mathematics Teachers* (pp. 211–239). New York: Springer International Publishing. <u>http://doi.org/10.1007/978-3-319-99214-3\_11</u>
- Murray, E., & Baldinger, E. E. (2018). Impact of abstract algebra on teachers' understanding of and approaches to instruction in solving equations. In N. H. Wasserman (Ed.), *Connecting Abstract Algebra to Secondary Mathematics, for Secondary Mathematics Teachers* (pp. 403–429). New York: Springer International Publishing. <u>http://doi.org/10.1007/978-3-319-99214-3\_19</u>

# Manuscripts Under Review

- Sun, K. L., Waller, P., Id-Deen, L., & **Baldinger, E. E.** (accepted with revisions, October 2023). Does discussing controversial issues support student learning? Secondary preservice mathematics teachers' perspectives. Submitted to *Mathematics Teacher Educator*.
- Munson, J., **Baldinger, E. E.**, Altshuler, M. <sup>G</sup>, & Lee, H. S. <sup>U</sup> (under review, revision submitted August 2023). Side-by-side Coaching: Decomposing a Practice-Embedded Teacher Learning Opportunity. Submitted to *Learning, Culture and Social Interaction*.

## **Refereed Conference Proceedings**

- Stack, K. K. <sup>G</sup>, & Baldinger, E. E. (2022). Influence of context on teachers' assessment practices. In A. E. Lischka, E. B. Dyer, R. S. Jones, J. N. Lovett, J. F. Strayer, & S. Drown (Eds.), Proceedings of the forty-fourth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 201–209). Middle Tennessee State University.
- Munson, J., Altshuler, M. <sup>G</sup>, **Baldinger, E. E.**, Lee, H. S. <sup>U</sup>, & Kadiyali, V. <sup>U</sup> (2021). Integrating three planes of teacher learning: The case of side-by-side coaching. In D. E. Olanoff, K. Johnson, & S. M. Spitzer (Eds.), *Proceedings of the forty-third annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1849–1853).
- Campbell, M. P., **Baldinger, E. E.**, Karr, J. H. <sup>G</sup>, & Freeland, S. P. <sup>G</sup> (2021). Teacher candidates' construction of characters in scripts. In D. E. Olanoff, K. Johnson, & S. M. Spitzer (Eds.), *Proceedings of the forty-third annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1066–1071).
- Munson, J., Baldinger, E. E., & Larison, S.<sup>G</sup> (2020). Position and sensemaking in rehearsal debrief discussions. In A. I. Sacristán, J. C. Cortés-Zavala, & P. M. Ruiz-Arias (Eds.), *Mathematics Education Across Cultures: Proceedings of the 42nd Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1902–1906). Cinvestav/AMIUTEM/PME-NA. https://doi.org/10.51272/pmena.42.2020
- Karr, J. H. <sup>G</sup>, Campbell, M. P., Baldinger, E. E., & Freeland, S. P. <sup>G</sup> (2020). Documenting adaptive expertise through the evolving use of an enactment tool. In A. I. Sacristán, J. C. Cortés-Zavala, & P. M. Ruiz-Arias (Eds.), *Mathematics Education Across Cultures: Proceedings of the 42nd Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1726–1727). Cinvestav/AMIUTEM/PME-NA. <u>https://doi.org/10.51272/pmena.42.2020</u>
- **Baldinger, E. E.,** & Campbell, M. P. (2019). Cases of learning to respond to errors through approximations of leading whole-class discussions. In S. Otten, A. G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.), *Proceedings of the 41<sup>st</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1066–1075).
- Munson, J., & Baldinger, E. E. (2019). Public sensemaking of non-rehearsing teachers during debriefs of rehearsals. In S. Otten, A. G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.), Proceedings of the 41<sup>st</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 520–524).

- Campbell, M. P., Baldinger, E. E., Freeland, S.<sup>G</sup>, Graif, F.<sup>G</sup>, & Karr, J.<sup>G</sup> (2019). Learning to respond to errors: Evidence from scripting tasks. In S. Otten, A. G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.), *Proceedings of the 41st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1197–1202).
- Baldinger, E. E., & Munson, J. (2019). Sensemaking of non-rehearsing teachers in rehearsal debriefs. In M. Graven, H. Venkat, A. A. Essien, & P. Vale (Eds.), *Proceedings of the 43rd Conference of the International Group for the Psychology of Mathematics Education* (Vol. 4, p. 8). Pretoria, South Africa: PME.
- Munson, J., & Baldinger, E. E. (2019). Using rehearsal debriefs to develop emotional understanding of pedagogy. In M. Graven, H. Venkat, A. A. Essien, & P. Vale (Eds.), Proceedings of the 43rd Conference of the International Group for the Psychology of Mathematics Education (Vol. 4, p. 76). Pretoria, South Africa: PME.
- Wasserman, N. H., Zazkis, R., Baldinger, E. 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* (pp. 819–826). Oklahoma City, OK: Special Interest Group of the Mathematical Association of America for Research in Undergraduate Mathematics Education.
- Baldinger, E. E., Campbell, M. P., & Graif, F.<sup>G</sup> (2018). Examining teacher candidates' responses to errors during whole-class discussions through written performance tasks. In T. E. Hodges, G. J. Roy, & A. M. Tyminski (Eds.), *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Greenville, SC: University of South Carolina & Clemson University.
- Baldinger, E. E., & Lai, Y. (2018). How positioning as teacher or student may change validation of the same proofs. In A. Weinberg, C. L. Rasmussen, J. M. Rabin, M. Wawro, & S. Brown (Eds.), *Proceedings of the 21st Annual Conference on Research in Undergraduate Mathematics Education* (pp. 31–45). San Diego, CA: Special Interest Group of the Mathematical Association of America for Research in Undergraduate Mathematics Education. [This paper received the SIGMAA-on-RUME Meritorious Citation Award for being one of the top three papers in the 2018 Best Paper Award competition. It is an extended version of the paper listed below.]
- Baldinger, E. E., & Lai, Y. (2018). Validating proofs in parallel mathematical and pedagogical tasks. In A. Weinberg, C. L. Rasmussen, J. M. Rabin, M. Wawro, & S. Brown (Eds.), *Proceedings of the 21st Annual Conference on Research in Undergraduate Mathematics Education* (pp. 1331–1337). San Diego, CA: Special Interest Group of the Mathematical Association of America for Research in Undergraduate Mathematics Education. [This paper is an initial version of the longer paper listed above.]
- Baldinger, E. E., Campbell, M. P., Selling, S. K., & Graif, F.<sup>G</sup> (October 2017). Investigating practice through rehearsals: How teacher candidates respond to student contributions in whole-class discussions. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 925-928). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators.

- Campbell, M. P., Baldinger, E. E., Selling, S. K., & Graif, F.<sup>G</sup> (October 2017). Responding to students during whole-class discussions: Using written performance tasks to assess teacher candidate practice. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 977-980). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators.
- Campbell, M. P., Elliott, R., Baldinger, E. E., Selling, S. K., Webb, J.<sup>G</sup>, & Wieman, R. (October 2017). Advancing pedagogies of enactment in mathematics professional education: Implications for research and practice. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1454-1463). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators.
- Selling, S. K., & Baldinger, E. E. (November 2016). Reasoning about telling in rehearsals of discussions: Considering what, when, and how to "tell". In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli (Eds.), Proceedings of the 38<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 905-908). Tucson, AZ: The University of Arizona.
- Baldinger, E. E., Murray, E., White, D., Broderick, S., & Wasserman, N. (November 2016). Exploring connections between advanced and secondary mathematics. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli (Eds.), *Proceedings of the 38<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1633-1640). Tucson, AZ: The University of Arizona.
- Campbell, M., Selling, S. K., Aaron, W. R., Van Zoest, L., Ghousseini, H., Elliott, R., Freeburn, B., Baldinger, E. E., Wieman, R., Lesseig, K., Knapp, M., Virmani, R., & Garcia, N. (November 2016). Designing and researching pedagogies of rehearsal and enactment for secondary mathematics teacher development. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli (Eds.), *Proceedings of the 38<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1664-1672). Tucson, AZ: The University of Arizona.
- **Baldinger, E. E.** (November 2015). Pre-service secondary teachers learning to engage in mathematical practices. In T. G. Bartell, 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*. East Lansing, MI: Michigan State University.
- Murray, E., Baldinger, E. E., Wasserman, N., Broderick, S., White, D., Cofer, T., Stanish, K. (November 2015). Exploring connections between advanced and secondary mathematics. In T. G. Bartell, 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*. East Lansing, MI: Michigan State University.
- Hallinen, N., Baldinger, E. E., & Selling, S. K. (July 2014). The role of examples and nonexamples in defining. In P. Liljedahl, Nicol, C., Oesterle, S., Allan, D. (Eds.), Proceedings of the 38<sup>th</sup> Conference of the International Group for the Psychology of Mathematics

Education and the 36<sup>th</sup> Conference of the North American Chapter of the Psychology of Mathematics Education. Vancouver, BC.

- **Baldinger, E. E.** (November 2013). Connecting abstract algebra to high school algebra. In M. Martinez & Castro Superfine, A. (Eds.), *Proceedings of the 35<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Chicago, IL: University of Illinois, Chicago.
- **Baldinger, E. E.** (November 2012). Studying abstract algebra to teach high school algebra. In L. Van Zoest, J. Lo, & J. Kratky (Eds.), *Proceedings of the 34<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education.* Kalamazoo, MI: Western Michigan University.

# **Other Publications**

NExT Teacher Effectiveness Work Group. (2018). *Preparing effective teachers: Multiple approaches to ensuring teaching quality and impact.* M. Sato & R. M. Lloyd (Eds.). Minneapolis, MN: Network for Excellence in Teaching. <u>nextdigitalhandbook.org</u>.

I was one of about 30 authors for this work. I served as the lead author for one of the eight chapters, and coordinated a group of 3-4 people to write our chapter.

- Waller, P. P., Id-Deen, L., Sun, K. L., & Baldinger, E. E. (2017, December 15). AMTE STaR: Supporting young scholars in forging connections and collaborations around equitable practices, AMTE Connections! Newsletter (<u>https://amte.net/connections/2017/11/amte-star-supporting-young-scholars-forging-connections-and-collaborations</u>).
- Baldinger, E. E. (2017, April 21). How to better prepare math teachers for success, *Improving Lives CEHD Vision 2020 Blog* (<u>https://cehdvision2020.umn.edu/blog/better-prepare-math-teachers-success/</u>).</u>
- Baldinger, E. E., Broderick, S., Murray, E., Wasserman, N., & White, D. (2015, December 10). Exploring connections between abstract algebra and high school algebra: A few connections worth exploring, AMS Blog, On Teaching and Learning Mathematics (http://blogs.ams.org/matheducation/2015/12/10/connections-between-abstract-algebraand-high-school-algebra-a-few-connections-worth-exploring/#sthash.13SyS1Ah.dpbs).

## Presentations

<sup>G</sup> Graduate student

<sup>U</sup> Undergraduate student

## International Conferences, Peer-Reviewed

- Munson, J., **Baldinger, E. E.**, & Armstrong, A. <sup>G</sup> (2023, June 10-15). The relationship between appropriation and guided participation during teacher professional learning [Conference presentation]. Annual meeting of the International Society of the Learning Sciences, Montreal, Canada.
- Munson, J., & **Baldinger, E. E.** (2021, June 7-11). What pedagogy feels like: Using rehearsal debriefs to develop pedagogical empathy [Conference presentation]. Annual meeting of the International Society of the Learning Sciences, Bochum, Germany.

- **Baldinger, E. E.** & Munson, J. (2019, July 7-12). Sensemaking of non-rehearsing teachers in rehearsal debriefs [Conference presentation]. 43<sup>rd</sup> annual meeting of the International Group for the Psychology of Mathematics Education, Praetoria, South Africa.
- Munson, J. & **Baldinger, E. E.** (2019, July 7-12). Using rehearsal debriefs to develop emotional understanding of pedagogy [Conference presentation]. 43<sup>rd</sup> annual meeting of the International Group for the Psychology of Mathematics Education, Praetoria, South Africa.
- Hallinen, N., **Baldinger, E. E.,** & Selling, S. K. (2014, July). The role of examples and nonexamples in defining [Conference presentation]. 38<sup>th</sup> annual meeting of the International Group for the Psychology of Mathematics Education and the 36<sup>th</sup> annual meeting of the North American Chapter of the Psychology of Mathematics Education, Vancouver, BC.
- Hedrick, B. & **Baldinger, E. E.** (2012, July). Beliefs about tracking: Comparing American and Finnish prospective teachers [Conference presentation]. 12<sup>th</sup> International Congress on Mathematics Education, Seoul, South Korea.

## National Conferences, Peer-Reviewed

- Munson, J., **Baldinger, E. E.,** Armstrong, A. <sup>G</sup>, & Kasahara, A <sup>G</sup>. (2023, April 13-16). The relationship between appropriation and guided participation in side-by-side coaching [Symposium presentation]. Understanding the Complexities of Mathematics Coaching: What Multiple Theoretical and Analytical Frameworks Reveal symposium at the annual meeting of the American Educational Research Association, Chicago, IL.
- Ellis, R., Parrish, C., Bolyard, J., Gibbons, L., **Baldinger, E. E.**, & Ivy, J. (2023, February 2-4). I am new to mathematics teacher education: Supports around teaching, scholarship, and service [Conference session]. Annual meeting of the Association of Mathematics Teacher Educators, New Orleans, LA.
- **Baldinger, E. E.** & Munson, J. (2023, February 2-4). Developing pedagogical empathy in rehearsal debriefs [Conference session]. Annual meeting of the Association of Mathematics Teacher Educators, New Orleans, LA.
- Stack, K. K. <sup>G</sup>, & **Baldinger, E. E.** (2022, November 17-20). Influence of context on teachers' assessment practices [Conference presentation]. 44<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Nashville, TN.
- **Baldinger, E. E.**, Munson, J., & Altshuler, M. <sup>G</sup> (2022, February 10-12). Side by side coaching: Embedding teacher learning in practice [Conference session]. Annual meeting of the Association of Mathematics Teacher Educators, Henderson, NV.
- Freeburn, B., Graysay, D., Konuk, N., Van Zoest, L., Stockero, S., Baldinger, E. E., & Campbell, M. P. (2022, February 10-12). Designing and implementing rehearsals in mathematics teacher education [Conference symposium]. Annual meeting of the Association of Mathematics Teacher Educators, Henderson, NV.
- Polojac-Chenoweth, D., Gibbons, L., Bieda, K., **Baldinger, E. E.,** Ellis, R., & Bolyard, J. (2022, February 10-12). I am new to mathematics teacher education: Supports around teaching,

scholarship, and service [Conference session]. Annual meeting of the Association of Mathematics Teacher Educators, Henderson, NV.

- Campbell, M. P., **Baldinger, E. E.**, Karr, J. <sup>G</sup>, & Freeland, S. <sup>G</sup>, (2021, October 14-17). Teacher candidates' construction of characters in scripts [Conference presentation]. 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Philadelphia, PA.
- Munson, J., Altshuler, M.<sup>G</sup>, **Baldinger, E. E.**, Lee, H.<sup>U</sup>, & Kadiyali, V.<sup>U</sup> (2021, October 14-17). Integrating three planes of teacher learning: The case of side-by-side coaching [Conference presentation]. 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Philadelphia, PA.
- Karr, J.<sup>G</sup>, Freeland, S.<sup>G</sup>, Campbell, M. P., & **Baldinger, E. E.** (2021, February 11-13, 18-20). Experiences with and considerations for coached rehearsals in secondary mathematics methods courses [Conference session]. Annual meeting of the Association of Mathematics Teacher Educators, virtual synchronous conference.
- **Baldinger, E. E.,** Campbell, M. P., Freeland, S.<sup>G</sup>, & Karr, J. <sup>G</sup> (2021, February 11-13, 18-20). Scripting tasks as approximations of practice in secondary mathematics methods courses [Conference session]. Annual meeting of the Association of Mathematics Teacher Educators, virtual synchronous conference.
- Munson, J., Baldinger, E. E., & Larison, S.<sup>G</sup> (2020, October 14-18; postponed to 2021, June 2-6). Position and sensemaking in rehearsal debrief discussions [Conference presentation]. 42<sup>nd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Mazatlán, Sinaloa, Mexico.
- Campbell, M. P. & Baldinger, E. E. (2020, April 16-21). Teacher candidates' representation of student voice in scripts of whole-class mathematics discussions [Symposium presentation]. Approaches to Learning about Student Thinking in Practice-based Teacher Education symposium at the annual meeting of the American Educational Research Association, San Francisco, CA. (Conference canceled)
- Munson, J. & **Baldinger, E. E.** (2020, February 6-8). What if...?: Exploring thought experiments and the development of adaptive expertise in rehearsal debriefs [Conference session]. Annual meeting of the Association of Mathematics Teacher Educators, Phoenix, AZ.
- Id-Deen, L., Baldinger, E. E., Sun, K. L., & Waller, P. (2020, February 6-8). Middle and secondary prospective teachers' motivations to implement social justice mathematics lessons [Discussion session]. Annual meeting of the Association of Mathematics Teacher Educators, Phoenix, AZ.
- **Baldinger, E. E.** & Campbell, M. P. (2019, November 14-17). Cases of learning to respond to errors through approximations of leading whole-class discussions [Conference presentation]. 41<sup>st</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, St. Louis, MO.
- Campbell, M. P., **Baldinger, E. E.**, Freeland, S.<sup>G</sup>, Graif, F.<sup>G</sup>, & Karr, J.<sup>G</sup> (2019, November 14-17). Learning to respond to errors: Evidence from scripting tasks [Conference

presentation]. 41<sup>st</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, St. Louis, MO.

- Munson, J. & **Baldinger, E. E.** (2019, November 14-17). Public sensemaking of non-rehearsing teachers during debriefs of rehearsals [Conference presentation]. 41<sup>st</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, St. Louis, MO.
- Wasserman, N. H., Zazkis, R., Baldinger, E. E., Marmur, O., & Murray, E. (2019, March). Points of connection to secondary teaching in undergraduate mathematics courses [Conference presentation]. 22<sup>nd</sup> annual conference on Research on Undergraduate Mathematics Education, Oklahoma City, OK.
- Id-Deen, L., Baldinger, E. E., Sun, K. L., & Waller, P. (2019, February). Advancing middle and secondary prospective mathematics teachers' understanding of teaching mathematics for social justice [Discussion session]. Annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Campbell, M. P., & **Baldinger, E. E.** (2019, February). Planted errors in coached rehearsals: Attending to the authenticity of an approximation of practice [Conference session]. Annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- **Baldinger, E. E.,** Campbell, M. P., & Graif, F.<sup>G</sup> (2018, November). Examining teacher candidates' responses to errors during whole-class discussions through written performance tasks [Conference presentation]. 40<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Greenville, SC.
- **Baldinger, E. E.**, Campbell, M. P., & Graif, F.<sup>G</sup> (2018, April). Responding to student errors during classroom discussion: Deliberate opportunities to support teacher candidate development [Symposium presentation]. Responding to Student Thinking symposium at the annual meeting of the American Educational Research Association, New York, NY.
- **Baldinger, E. E.**, Campbell, M. P., Dyer, E., Freeburn, B., Graif, F.<sup>G</sup>, Rougée, A., Van Zoest, L. (discussant), & Boaler, J. (chair) (April 2018). Responding to student thinking in secondary mathematics classrooms: Studying and supporting teaching practice [Symposium]. Annual meeting of the American Educational Research Association, New York, NY.
- **Baldinger, E. E.** & Lai, Y. (2018, February). Validating proofs in parallel mathematical and pedagogical tasks [Conference presentation]. 21<sup>st</sup> annual conference on Research on Undergraduate Mathematics Education, San Diego, CA.
- Waller, P., Sun, K. L., **Baldinger, E. E.**, & Id-Deen, L. (2018, February). Addressing access and equity in secondary methods courses [Discussion session]. Annual meeting of the Association of Mathematics Teacher Educators, Houston, TX.
- **Baldinger, E. E.,** Campbell, M. P., Selling, S. K., & Graif, F.<sup>G</sup> (2017, October). Investigating practice through rehearsals: How teacher candidates respond to student contributions in whole-class discussions [Conference presentation]. 39<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Indianapolis, IN.

- Campbell, M. P., **Baldinger, E. E.,** Selling, S. K., & Graif, F.<sup>G</sup> (2017, October). Responding to students during whole-class discussions: Using written performance tasks to assess teacher candidate practice [Conference presentation]. 39<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Indianapolis, IN.
- Campbell, M. P., Elliott, R., Baldinger, E. E., Selling, S. K., Webb, J.<sup>G</sup>, & Wieman, R. (2017, October). Advancing pedagogies of enactment in mathematics professional education: Implications for research and practice [Working group]. 39<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Indianapolis, IN.
- Selling, S. K., & **Baldinger, E. E.** (2017, April). Supporting novice teachers to reason about telling: Leveraging problems of practice in rehearsals of discussions [Conference presentation]. Annual meeting of the American Educational Research Association, San Antonio, TX.
- Sun, K. L., Baldinger, E. E., Id-Deen, L., & Waller, P. (2017, April). Beyond "Mickey Mouse math": Access and equity in secondary methods courses [Conference presentation]. National Council of Teachers of Mathematics Research Conference, San Antonio, TX.
- **Baldinger, E. E.,** & Wyberg, T. (2017, February). Number talk professional learning communities: Scaling up through online professional development facilitation [Conference presentation]. Annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Campbell, M., **Baldinger, E. E.,** & Selling, S. K. (2017, February). Investigating pedagogies of practice that support novices' responding to student errors during classroom discussion [Conference presentation]. Annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Selling, S. K., & Baldinger, E. E. (2016, November). Reasoning about telling in rehearsals of discussions: Considering what, when, and how to "tell" [Conference presentation]. 38<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tucson, AZ.
- Baldinger, E. E., Murray, E., White, D., Broderick, S., & Wasserman, N. (2016, November). Exploring connections between advanced and secondary mathematics [Working group]. 38<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tucson, AZ.
- Campbell, M., Selling, S. K., Aaron, W. R., Van Zoest, L., Ghousseini, H., Elliott, R., Freeburn, B., Baldinger, E. E., Wieman, R., Lesseig, K., Knapp, M., Virmani, R., & Garcia, N. (2016, November). Designing and researching pedagogies of rehearsal and enactment for secondary mathematics teacher development [Working group]. 38<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tucson, AZ.

- **Baldinger, E. E.** (2016, April). Assessment and evaluation: Pre-service secondary mathematics teacher evaluation of student written work [Conference presentation]. Annual meeting of the American Educational Research Association, Washington, DC.
- Selling, S. K., & Baldinger, E. E. (2016, January). Planning for and facilitating coached rehearsals of secondary novice mathematics teachers leading class discussions [Conference presentation]. Annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- **Baldinger, E. E.** (2015, November). Pre-service secondary teachers learning to engage in mathematical practices [Conference presentation]. 37<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, East Lansing, MI.
- Murray, E., **Baldinger, E. E.**, Wasserman, N., Broderick, S., Cofer, T., White, D., & Stanish, K. (2015, November). Exploring connections between advanced and secondary mathematics [Working group]. 37<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, East Lansing, MI.
- **Baldinger, E. E.** (2015, April). Interpreting student work: What secondary teacher candidates bring to preparation [Conference presentation]. National Council of Teachers of Mathematics Research Conference, Boston, MA.
- **Baldinger, E. E.,** Selling, S. K., & Virmani, R. (2015, February). Supporting novice teachers to lead discussions that reach a mathematical point [Conference presentation]. Association of Mathematics Teacher Educators Annual Conference, Orlando, FL.
- Selling, S. K., & **Baldinger, E. E.** (2015, February). The (potential) role of non-examples in supporting novice teacher learning of core instructional practices [Conference presentation]. Association of Mathematics Teacher Educators Annual Conference, Orlando, FL.
- **Baldinger, E. E.** (2014, April). Secondary mathematical knowledge for teaching: Challenges in measurement [Conference presentation]. National Council of Teachers of Mathematics Research Conference, New Orleans, LA.
- **Baldinger, E. E.** & Selling, S. K. (2014, February). Reasoning with and about definitions: Learning opportunities afforded by rehearsal in a secondary methods course [Conference presentation]. Annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- **Baldinger, E. E.** (2013, November). Connecting abstract algebra to high school algebra [Conference presentation]. 35<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL.
- **Baldinger, E. E.** (2013, April). Mathematical practices and mathematical knowledge for teaching: Unpacking the mathematical thinking of future secondary teachers [Conference presentation]. Annual meeting of the American Educational Research Association, San Francisco, CA.

- Hedrick, B. & **Baldinger, E. E.** (2013, April). Beliefs about tracking: Comparing American and Finnish prospective teachers [Conference roundtable]. Annual meeting of the American Educational Research Association, San Francisco, CA.
- **Baldinger, E. E.** (2012, November). Studying abstract algebra to teach high school algebra [Conference presentation]. 34<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Kalamazoo, MI.
- **Baldinger, E. E.** (2011, April). Modifying rich mathematical tasks in the problem-solving cycle: Teachers' specialized knowledge [Conference presentation]. Research pre-session of the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
- **Baldinger, E. E.** (2011, April). Modifying rich mathematical tasks in the problem-solving cycle: Helping teachers adapt instruction to promote mathematical thinking [Conference presentation]. Research pre-session of the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
- **Baldinger, E. E.,** Borko, H., Jacobs, J., Koellner, K., & Selling, S. K. (2011, April). Modifications to mathematical tasks in the problem-solving cycle [Conference presentation]. Annual meeting of the American Educational Research Association, New Orleans, LA.
- Borko, H., O'Hara, S., Selling, S. K., & **Baldinger, E. E.** (2011, April). Designing an instructional leadership model of mathematics professional development in local contexts: A study of mutual adaptation [Conference presentation]. Annual meeting of the American Educational Research Association, New Orleans, LA.
- Borko, H., Koellner, K., Jacobs, J., Roberts, S., **Baldinger, E. E.,** & Risley, R. (2010, April). Preparing instructional leaders to facilitate mathematics professional development [Conference presentation]. Annual meeting of the American Educational Research Association, Denver, CO.

# National Conferences, Invited

Bieda, K., Baldinger, E. E., & Selling, S. K. (2017, April). Contributing to the knowledge base of mathematics teacher educators: How successful MTE authors address reviewers' feedback and the revise and resubmit process [Conference presentation]. National Council of Teachers of Mathematics Research Conference, San Antonio, TX.

# Local and Regional Conferences, Peer-Reviewed

- **Baldinger, E. E.** (2016, April). Leading discussions that reach a mathematical point [Conference session]. Minnesota Council of Teachers of Mathematics Spring Mathematics Conference, Duluth, MN.
- **Baldinger, E. E.** (2015, November). Mathematical practices: Connecting abstract algebra to high school algebra [Conference presentation]. National Council of Teachers of Mathematics Regional Conference & Exposition, Minneapolis, MN.

## **Other Presentations**

- Ernst, S., **Baldinger, E. E.,** Stack, K.<sup>G</sup>, Maguire, C., Stemper, K.<sup>G</sup>, & Matson, J. (2020, November). Tales of two protocols for teacher effectiveness: Getting ready for student work group sampling and focus groups [Invited roundtable]. NExT: Network for Excellence in Teaching 2020 Virtual Summit.
- **Baldinger, E. E.** & Wyberg, T. (2020, October). Using Google Jamboard to engage students and teachers [Invited presentation]. College in the Schools Algebra by Inquiry professional development session, University of Minnesota, Minneapolis, MN.
- Ernst, S. & **Baldinger, E. E.** (2019, June). Tales of two protocols for teacher effectiveness: getting ready for student work group sampling and focus groups in 2019-2020 [Invited roundtable]. NExT: Network for Excellence in Teaching 2019 Summit, Plymouth, MN.
- **Baldinger, E. E.** (2019, April). Responding to Errors [Invited presentation]. College in the Schools Algebra by Inquiry professional development session, University of Minnesota, Minneapolis, MN.
- NExT Digital Handbook Writing Team Leads. (2017, October). Vanguard endeavors Creating a digital handbook [Invited presentation]. NExT: Network for Excellence in Teaching 2017 Summit, Plymouth, MN.
- **Baldinger, E. E.** (2016, October). Leading mathematical discussions [Invited presentation]. College in the Schools Algebra by Inquiry professional development session, University of Minnesota, Minneapolis, MN.
- Brown, J. C., Chen, B., & **Baldinger, E. E**. (2015, November). New directions in STEM and LT faculty research [Invited panel]. Curriculum and Instruction faculty and graduate students, University of Minnesota, St. Paul, MN.
- **Baldinger, E. E.**, & Selling, S. K. (2015, March). Beginning careers as math education researchers [Invited presentation]. Math education graduate students, Purdue University, West Lafayette, IN.

## Posters

## International and National Conferences, Peer-Reviewed

- **Baldinger, E. E.** & Munson, J. (2022, November 17-20). Bridging professional development and math teachers' contexts [Poster]. 44<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Nashville, TN.
- Karr, J.<sup>G</sup>, Freeland, S.<sup>G</sup>, Campbell, M. P., & Baldinger, E. E. (2020, October 14-18; postponed to 2021, June 2-6). Documenting adaptive expertise through the evolving use of an enactment tool [Poster]. 42<sup>nd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Mazatlán, Sinaloa, Mexico.
- **Baldinger, E. E.** & Campbell, M. P. (2019, July). Learning to respond to errors in approximations of practice [Poster]. Annual meeting of the International Group of the Psychology of Mathematics Education, Praetoria, South Africa.

Lai, Y. & **Baldinger, E. E.** (2019, March). Writing explanations: Provoking different knowledge bases by context [Poster]. 22<sup>nd</sup> annual conference on Research on Undergraduate Mathematics Education, Oklahoma City, OK.

## **Other Posters**

- **Baldinger, E. E.**, Staats, S., Covington Clarkson, L. M., Gullickson, E. C. <sup>G</sup>, Norman, F. <sup>G</sup>, & Akoto, B <sup>G</sup>. (2019, March). Returning voice to the 'silent M:' A review of conceptions of mathematics in integrated STEM education [Poster]. College of Education and Human Development Research Day, Minneapolis, MN.
- Cramer, K., **Baldinger, E. E.**, Varma, K., Codding, R., Mazzocco, M., Fagerlund, C. <sup>G</sup>, & Brandjord, S. <sup>G</sup> (2017, March). Gopher math [Poster]. College of Education and Human Development Research Day, Minneapolis, MN.
- **Baldinger, E. E.**, Campbell, M. P., Selling, S. K., & Graif, F. <sup>G</sup> (2016, November). Learning to respond to student contributions during whole class discussions: Using written performance assessments to assess teacher candidate practice [Poster]. Designing and Researching Pedagogies of Rehearsal and Enactment for Secondary Mathematics Teacher Development working group at the annual meeting of the Psychology of Mathematics Education, North America Chapter, Tucson, AZ

## Other Research Dissemination

Thanheiser, E. (Host). (2021, January 4). Representing student voice in an approximation of practice: Using planted errors in coached rehearsals to support teacher candidate learning (No. 24) [Audio podcast episode]. In *Mathematics Teacher Educator Podcast*. AMTE and NCTM. <u>https://mtepodcast.amte.net/24</u>

I appear as a guest in this podcast, along with my coauthors, discussing our recently published MTE article of the same name.

- Sun, K. L., **Baldinger, E. E.**, & Humphreys, C. (2018, December 5). Twitter Chat for the article Number talks: Gateway to sense making. *Mathematics Teacher*, *112*(1), 48–54. #MTChat
- Baldinger, E. E., Id-Deen, L., Waller, P., & Sun, K. L. (2018, October 28). What about the controversy? Addressing social justice issues in secondary mathematics methods. AMTE Webinar. <u>https://amte.net/webinar/what-about-controversy</u>

## Faculty Development Activities Regarding Research

Association of Mathematics Teacher Educators, STaR Fellowship, June 11-16, 2016.

University of Michigan, Specialized Content Knowledge Institute, June 2-4, 2016.

## TEACHING AND CURRICULUM DEVELOPMENT

## University of Minnesota

Courses, seminars, and instructional units taught

CI 5186: Practicum

CI 8132: Curriculum and Instruction Core: Teaching Theory and Research CI 8572: Learning Theory and Classical Research in STEM Education MTHE 3102: Mathematics and Pedagogy for Elementary Teachers II MTHE 5021: Algebraic Structures in School Mathematics MTHE 5031: Geometric Structures in School Mathematics MTHE 5172: Teaching and Learning Statistics and Probability MTHE 5314: Teaching and Learning Mathematics MTHE 8571: Current Research in Mathematics Education MTHE 8591: Seminar in Mathematics Education – Mathematics Teacher Preparation

## Curriculum development

MTHE 5115: Applications of Teaching Mathematics, Co-developed new teaching practicum course for secondary mathematics ILP students with Terry Wyberg, for Fall 2018, 3 credits.

Mathematics Program Change, ME.D./Initial Licensure Program in Mathematics Education: Revised program with Terry Wyberg, for Fall 2018.

MTHE 8591: Seminar in Mathematics Education – Mathematics Teacher Preparation, Special topics course for Spring 2016, 3 credits.

## Collaborative efforts and activities

MTHE 5696: Student Teaching Practicum, Provide course oversite, help organize the syllabus, and support the graduate student instructors, 2019-Present.

MATH 8001: Preparation for College Teaching, Guest instructor about leading mathematical discussions, November 2019, 2020, 2021. Course instructors: Jonathan Rogness and Bryan Mosher.

CI 8134: Foundations of Research, Guest lead instructor focused on design-based research, October 2019, November 2020. Course instructors: Blanca Caldas (2019, 2020) and David O'Brien (2019).

CI 8151: Paradigms and Practices in Teacher Preparation, Guest speaker about high-leverage instructional practices and teacher preparation, 2015, 2017. Course instructor: Misty Sato.

MTHE 5011: Number and operations in school mathematics, Led class on problem solving with ratio and proportion problems, 2017, Led portions of class focused on lesson planning and leading discussions using number talks, 2016. Course instructor: Terry Wyberg.

MTHE 8571: Current Research in Mathematics Education, Led class on mathematical knowledge for teaching and core instructional practices, 2017. Course instructor: Lesa Clarkson.

STEM Teaching Methods, University of Wisconsin, River Falls, Guest speaker about edTPA focused on unpacking the rubrics, 2018, 2019. Course instructor: Kyle Whipple (2018), Rachelle Haroldson (2019).

### Independent/Directed Studies

MTHE 8995: Critical mathematics education, sustainable mathematics education, and mathematical modeling. Fall 2023. (Amber Armstrong)

MTHE 8995: Geometry in elementary settings. Fall 2023. (Alyssa Kasahara)

### Faculty development activities regarding teaching

College of Education and Human Development, Treks Summer Professional Development, August 2-12, 2021.

College of Education and Human Development, Teacher Education Technology Initiative, May 2018 – Present.

College of Education and Human Development, Dispositions Knowledge Community, 2016-2018.

College of Education and Human Development, Treks Mix: Mobile Learning, August 11-16, 2016.

Association of Mathematics Teacher Educators, STaR Fellowship, June 11-16, 2016.

### Arizona State University

### Courses, seminars, and instructional units taught

MTE 280: Investigating Quantity: Number, Operations, and Numerical Systems (2015) MTE 482: Methods of Teaching Mathematics in the Secondary School (2015) SED 512: Methods of Teaching Mathematics in the Secondary School, Hybrid (face-to-face & online) format primarily serving Teach for America candidates (2016)

### Collaborative efforts and activities

COE 503: Introduction to Qualitative Research, Guest panel member for issues with data collection in qualitative research, 2015. Course instructor: Kate T. Anderson.

### University of San Francisco

### Courses, seminars, and instructional units taught

TEC 615: Single Subject Curriculum and Instruction in Mathematics I (2011, 2012, 2013) TEC 632: Single Subject Curriculum and Instruction in Mathematics II (2014)

### Curriculum development

TEC 615, TEC 632: Single Subject Curriculum and Instruction in Mathematics I and II, Codeveloped expansion of required secondary mathematics methods course from one semester to two semesters with Sarah Kate Selling, 2013-2014.

## **Stanford University**

### Courses, seminars, and instructional units taught

*Directed Reading in High School Mathematics from an Advanced Perspective.* (2013, 2014) EDUC 263C. *Curriculum and Instruction in Mathematics* (2013)

### Teaching assistant

CTL 297X. Teaching and Learning in Higher Education (2012) EDUC 246D. Secondary Teaching Seminar (Practicum) (2010, 2012, 2013) EDUC 325B. Professional Seminar on Learning and Teaching in the School Setting (2010) EDUC 424. Introduction to Research in Curriculum and Teacher Education (2010)

## Tutoring

Stanford University Athletic Academic Resource Center (2011)

### **ADVISING AND MENTORING**

### University of Minnesota

### Graduate student activities

Master's Theses Directed (completed)

Foster Graif	A case study exploring beliefs and practice in the	October 2017
(Mathematics	area of geometric proof	
Education)		

Doctoral Students Advised (completed)

Megan Parise (STEM Education)	Gender, sex, and sexuality in secondary statistics	May 2022
Aran Glancy (STEM Education)	Student experiences navigating data analysis tasks in fifth grade science and engineering settings	August 2020
Foster Graif (STEM Education)	Mathematical knowledge for teaching proof in secondary mathematics teacher preparation	June 2020
James Carlovsky (STEM Education)	Recognizing mathematical opportunities in student thinking by preservice teachers	August 2019
Timothy Morrison (STEM Education)	A lesson plan intervention for preservice elementary teachers: Bridging mathematical content from a methods course to student teaching	June 2019
Nathan Earley (STEM Education)	An ethic of critical care in the midst of paradoxes of praxis	February 2019

Doctoral Students Advised (current) Kamie Stack (STEM Education) Amber Armstrong (STEM Education) Sophie Kasahara (STEM Education) Alyssa Kasahara (STEM Education) Jenny Tilsen (STEM Education) Paul Anderson (STEM Education)

Doctoral Committees (completed)

Ahmed Alghamdi (Special Education)	Word problem solving tasks in third-grade mathematics textbooks: How well do they align with effective teaching practices?	May 2023
Vimal Rao (Statistics Education)	A multi-modal multiple descriptive case study of graduate students' statistical thinking in statistical tests seven months after completing an introductory level simulation-based course	May 2023
Chelsey Fagerlund (Elementary Education)	Feedback dialogues in elementary mathematics: An exploratory study	December 2022
Josh Karr (Mathematics Education, West Virginia University)	Possible paths forward for a practice-based teacher education centered on justice	November 2022
Jessica Forrester (STEM Education)	Equity, joy, and genius: Creating community- inspired mathematics activities for an after-school tutoring program	August 2022
Chelsey Legacy (Statistics Education)	Understanding the development of students' multivariate statistical thinking in a data visualization course	July 2022
Fawnda Norman (STEM Education)	Mathematics experiences of preservice elementary teachers and the impact on mathematics identity and mathematics teacher identity	December 2021
Rebecca Edmunds (School Psychology)	The differential effects of elaborated task and process feedback on multi-digit multiplication	April 2020
Kyle Whipple (STEM Education)	LGBTQ secondary mathematics educators: Their identities and their classrooms	May 2018
Laura Le (Statistics Education)	Assessing the development of students' statistical thinking: An exploratory study	January 2017
Nii Tackie (STEM Education)	An investigation into three core practices in a standards-based elementary mathematics	May 2016

methods class: The case of six pre-service teachers

Doctoral Committees (current) Bismark Akoto (STEM Education) Dexter Lim (STEM Education) Jimin Park (Psychological Foundations of Education) Marta Stoeckel (STEM Education)

## SERVICE AND PUBLIC OUTREACH

### **Professional service**

AMTE Professional Development Committee member, 2021-2024

Consultant to Mathematical Association of America's Committee on the Undergraduate Program in Mathematics' Curriculum Guide's Treatment of Teacher Education Guiding Principles Task Force, 2022

AMTE Manuscript Review Group Mentor, 2022 annual conference

NSF DRK-12 Grant Panel Reviewer, 2020

Panel member, STaR 2020 Session

Team Leader, NExT Consortium Teacher Effectiveness Writing Group, *Digital Handbook of Measures of Teaching Effectiveness for Teacher Preparation Program Improvement*, Mechanisms for measuring teaching quality, 2017-2018

Manuscript reviewer

Journal for Research in Mathematics Education Journal of Mathematical Behavior Journal of Mathematics Teacher Education Mathematics Teacher Educator Mathematics Teacher: Learning and Teaching PreK-12 NCSM Journal of Mathematics Education Leadership Teaching Children Mathematics

Conference reviewer

Association of Mathematics Teacher Educators annual meeting Psychology of Mathematics Education – North America Chapter AERA, Research in Mathematics Education SIG, 2015, 2017 AERA, Division K, Section 5, 2017 National Council of Teachers of Mathematics Research Conference, 2013, 2014, 2016

Presider

Psychology of Mathematics Education – North America Chapter, 2012, 2021 National Council of Teachers of Mathematics Research Conference, 2017

### **University service**

University of Minnesota

Co-Licensure Program Lead, Secondary Mathematics Education, Curriculum & Instruction, 2016-present

Member, Personnel Committee, 2021-2023

Co-chair, Elementary Mathematics Education Search Committee, 2022-2023 Member, Elementary Mathematics Education Search Committee, 2021-2022

Member, Race, Equity, and Justice Departmental Culture Work Group, 2021-2022 Race, Equity, and Justice Departmental Policies Work Group, 2019-2021

Presenter, CI Graduate Student Writing Day, March 2022, December 2022, February 2024

Presenter, CI Graduate Student Proseminar, First Steps Toward a Journal Article, November 2022 Member, C&I Budget Task Force, 2021

Member, Graduate Studies Committee, Curriculum & Instruction, 2017-2020; 2023-Present

Member, Network Advisory Panel, Office of Teacher Education, 2017-2018

Member, Research Committee, Curriculum & Instruction, 2016-2018

Presenter, TERC Research Group, Curriculum & Instruction, 2017, 2018

Discussant, C&I Graduate Student Research Day, Curriculum & Instruction, 2016-present

Member, Network for Excellence in Teaching Teacher Effectiveness Workgroup, 2015-2020

## Arizona State University

Undergraduate thesis committee member, Barrett Honors College, 2014-2015

### Stanford University

Organizer, Mathematics Education Research Group, 2011-2014 Discussant, Curriculum & Teacher Education Symposium, 2012 Organizer, Teacher Education and Math Education Speaker Series, 2011 Member, Education and Jewish Studies Search Committee, 2010-2011

### Public service

Presented about GopherMath, Generation Next Stakeholder Meeting, 2016 Math-on-a-stick volunteer, MN State Fair, 2015

### Consulting

Member of Math Content Team, Math Science Partnership Grant with Independent School District 287 and other Region 11 partners, Number Sense professional development for K-12 teachers, 2015-2016