CURRICULUM VITAE Melissa M. Soto

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EDUCATION	
2014	University of California, Davis
Ph.D.	Education, Mathematics Education
2009	University of Central Florida
M.Ed.	Education, Mathematics Education
2006	University of North Florida
B.A.	Elementary Education
2003	University of Florida
	General Education
TEACHING POSITIONS	
2024-Present	Clinical Associate Professor
University of Florida	Mathematics Education
2023-2024	Visiting Clinical Associate Professor
University of Florida	Mathematics Education
2019 – Dec. 2022	Associate Professor
San Diego State University	Mathematics Education
2014 – 2019	Assistant Professor
San Diego State University	Mathematics Education
Fall 2009	Graduate Teaching Assistant
University of California, Davis	Education
2006 – 2008	Elementary School Teacher, Orange Park, FL
Argyle Elementary School	Elementary Mathematics & Science

Research

Refereed Journal Articles (*Denotes graduate student/in-service teacher co-author)

- 1. Dick, L. K., Appelgate, M. H., Gupta, D., & **Soto, M. M.** (2022). Continuous improvement lesson study: A model of MTE professional development. *Mathematics Teacher Educator, 10*(2), 111-128.
 - Acceptance rate: 14% (For the three-year period between 1/2018-10/2020)
- 2. Appelgate, M. H., Dick, L., Soto, M., & Gupta, D. (2020). Growing a greater understanding of multiplication through lesson study: Mathematics teacher educators' professional development.

The Mathematics Enthusiast, *17*(2), 583-613. Retrieve (open access) from: https://scholarworks.umt.edu/tme/vol17/iss2/9/

- Acceptance rate: 17%
- 3. **Soto, M.**, Gupta, D., Dick, L., & Appelgate, M. (2019). Bridging distances: Professional development for higher education faculty through technology-facilitated lesson study. *Journal of University Teaching & Learning Practice*, *16*(3). Retrieved (open access) from https://ro.uow.edu.au/jutlp/vol16/iss3/7/
 - Acceptance rate: 33%
- 4. **Soto, M.**, Broderick, S., Dick, L., Appelgate, M., & Gupta, D. (2018). Fitting it all in: Time challenges in lesson pacing. *Curriculum and Teaching Dialogue*, *20*(1 & 2), 149-151.
- 5. Sternal, A.*, Milligan, L.*, & **Soto, M. M.** (2018). Comparison tasks: Making 'more' sense. *Teaching Children Mathematics*, *24*(6), 400.
 - Acceptance rate: 25%
- 6. Gupta, D., Appelgate, M., Dick, L., **Soto, M**., & Broderick, S. (2018). Reaching new possibilities on lesson study collaboration. *Curriculum and Teaching Dialogue*, *20*(1 & 2), 129-131.
- 7. **Soto, M.** (2017). Beyond drill & practice: Using technology to assess and promote reflection in elementary students' mathematical explanations. *Journal of the California Mathematics Project, 8,* 7-13. Retrieved from https://sites.google.com/site/californiamathprojectjournal/home/volume-8-fall-2017.
- 8. **Soto, M. M.**, & Hargis, J. (2017). What a "Tweet" idea! *Teaching Children Mathematics*, 24(3), 200-202.
 - Acceptance rate: 25%
- 9. Minnes, M., Mayberry, J., **Soto, M.**, & Hargis, J. (2017). Practice makes deeper? Regular reflective writing during engineering internships. *Journal of Transformative Learning*, *4*(2), 7-20. Retrieved from https://jotl.uco.edu/index.php/jotl/article/view/195/129.
- 10. **Soto, M.**, & Ambrose, R. (2016). Screencasts: Formatively assessing mathematical thinking. *Technology, Knowledge and Learning*, *21*(2), 277-283.
- 11. **Soto, M.**, & Schwappach, B.* (2016). Screencasting in the math classroom. *Teaching Children Mathematics*, *23*(4), 264.
 - Acceptance rate: 25%
- 12. **Soto, M. M.**, & Ambrose, R. (2016). Making students' mathematical explanations accessible to teachers through the use of digital recorders and iPads. *Learning, Media and Technology, 41*(2), 213-232.
 - Acceptance rate: 35%, Impact factor: 2.035
- 13. **Soto, M.** (2016). Students' use of screencasting technology to explain their mathematical thinking. *GLOKALde*, *2*(2), 83-104.
- 14. **Soto, M.** (2015). Elementary students' mathematical explanations and attention to audience with screencasts. *Journal of Research on Technology in Education*, 47(4), 242-258.
 - Acceptance rate: 17%
- 15. Hargis, J., & **Soto, M.** (2015). Embracing the critical issues in higher education. *Journal of Science Education*, *16*(2), 44-48.

- 16. Hargis, J., Cavanaugh, C., Kamali, T., & **Soto, M.** (2014). A federal higher education iPad mobile learning initiative: Triangulation of data to determine early effectiveness. *Innovative Higher Education*, *39*(1), 45-57.
 - Acceptance rate: 18%
- 17. Cavanaugh, C., Hargis, J., Kamali, T., & **Soto, M.** (2013). Substitution to augmentation: Faculty adoption of iPad mobile learning in higher education. *Interactive Technology and Smart Education*, 10(4), 270-284.
 - Acceptance rate: 20%
- 18. Hargis, J., Cavanaugh, C., Kamali, T., & **Soto, M.** (2013). Measuring the difficult to measure: iPad mobile learning. *International Journal of Mobile and Blended Learning*, *5*(2), 60-77.
 - Acceptance rate: 40%
- 19. Hargis, J., & **Soto, M.** (2013). Effective large-scale integration of the iPad mobile learning device into first year programs. *Journal of Science Education*, *14*(1), 45-49.

Refereed Book Chapters

1. Gupta, D., **Soto, M.**, Dick, L., Broderick, S., & Appelgate, M. (2018). Noticing and deciding the next steps for teaching: A cross-university study with elementary pre-service teachers. In G. J. Stylianides & K. Hino (Eds.), *Research advances in the mathematical education of pre-service elementary teachers – An international perspective* (pp. 261-275). Springer, Cham.

Refereed Proceedings

- 1. **Soto, M. M.**, Appelgate, M. H., Dick, L. K., & Gupta, D. (2024). Improving the integration of mathematics, social justice, and pedagogy. *Proceedings of the 15th International Congress on Mathematics Education* (ICME). Sydney, Australia
- 2. **Soto, M. M.**, Gupta, D., Lewis, C. C., Hakansson, S. W., Appelgate, M. H., & Dick, L. K. (2022). Adaptations to Lesson Study to support equitable teaching practices working group. In A. E. Lischka, E. B. Dyer, R. S. Jones, J. Lovett, J. 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. 2184-2186). Nashville, TN: Middle Tennessee State University.
- 3. Gupta, D., Dick, L. K., **Soto, M. M.**, & Appelgate, M. H. (2021). Continuous Improvement Lesson Study working group. In D. 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. 1944-1946). Philadelphia, PA. *Virtual conference due to Covid-19*.
- 4. Dick, L., **Soto, M.**, Appelgate, M., & Gupta, D. (2021). Continuous improvement lesson study with mathematics teacher educators. *Proceedings of the 42nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 761). Mazatlán, Mexico. *Virtual conference, postponed due to Covid-19, originally scheduled to be held in 2020*.
- 5. Dick, L. K., **Soto, M. M.**, Appelgate, M. H., Gupta, D. (2018). Elementary preservice teachers' whole-class instructional decision making. 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.

- 6. Appelgate, M., Gupta, D., **Soto, M.**, Dick, L., & Broderick, S. (2016). Elementary mathematics teacher educator's learning through lesson study: A cross-institutional study. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli. (Eds.). *Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 845-848). Tucson, AZ: The University of Arizona.
- 7. Broderick, S., Dick, L., Gupta, D., Appelgate, M., & **Soto, M.** (2016). A cross- institutional study on pre-service teachers deciding "next steps" through noticing children's mathematical thinking. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli. (Eds.). *Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 928). Tucson, AZ: The University of Arizona.
- 8. **Soto, M. M.**, & Ambrose, R. C. (2011). A perspective of change: A teacher's evolution through professional development. In L. R. Wiest & T. Lamberg. (Eds.). *Proceedings of the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1603-1611). Reno, NV: University of Nevada, Reno.
- 9. Ambrose, R., **Soto, M.**, & Alexander, C. (2011). Does it still "work": CGI in a contemporary CA high-poverty district. In L. R. Wiest & T. Lamberg. (Eds.). *Proceedings of the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 862-869). Reno, NV: University of Nevada, Reno.

Submitted/Under Review (*Denotes graduate student/in-service teacher co-author)

- 1. Appelgate, M. H., Dick, L. K., Gupta, D., & **Soto, M. M.**, Broderick, S. (under review). Using a community of practice perspective to analyze MTE learning during lesson study. *International Journal of Lesson and Learning Studies*.
- 2. Dick, L. K., **Soto, M. M.**, Appelgate, M. H., Gupta, D. (under review). Decomposing the complex practice of whole class instructional decision making. *Journal of Educational Research in Mathematics*.
- 3. Apraiz, K., Moghtader Eslami, S.*, Bashirah, R. A. A.*, & **Soto, M.** (under review). Places and spaces: Utilizing informal learning spaces to support preservice teachers in designing mathematical tasks. The 29th Annual Association of Mathematics Teacher Educator Conference, Reno, NV.

Conferences Presentations (*Denotes graduate student/in-service teacher co-author) *International*

- 1. **Soto, M. M.**, Appelgate, M. H., Dick, L. K., & Gupta, D. (July 2024). Improving the integration of mathematics, social justice, and pedagogy. Presented at the 15th International Congress on Mathematics Education (ICME), Sydney, Australia.
- 2. **Soto, M. M.**, Gupta, D., Lewis, C. C., Hakansson, S. W., Appelgate, M. H., & Dick, L. K. (November 2022). Adaptations to Lesson Study to support equitable teaching practices working group. Presented at the 44th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Nashville, TN.
- 3. **Soto, M.** (December 2021). Documenting students' thinking in virtual Lesson Study to support teachers' professional noticing of children's mathematical thinking. Presented at the 2021 World Association of Lesson Study (WALS) Annual International Conference, Macau & Hong Kong. *Virtual conference due to Covid-19.*

- 4. Gupta, D., Dick, L. K., **Soto, M. M.**, & Appelgate, M. H. (October 2021). Continuous Improvement Lesson Study working group. Presented at the 43rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Philadelphia, PA. *Virtual conference due to Covid-19*.
- 5. **Soto, M. M.**, Appelgate, M. H., Dick, L. K., Gupta, D. (July 2021). Using a community of practice perspective to analyze mathematics teacher educator learning during lesson study. Presented at the 14th International Congress on Mathematical Education (ICME), Shanghai, China. *Virtual conference, postponed due to Covid-19, originally scheduled to be held in 2020.*
- 6. Dick, L., **Soto, M.**, Appelgate, M., & Gupta, D. (May 2021). Continuous improvement lesson study with mathematics teacher educators. Presented at the 42nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Mazatlán, Mexico. *Virtual conference, postponed due to Covid-19, originally scheduled to be held in 2020.*
- 7. Appelgate, M., Dick, L., Gupta, D., & **Soto, M.** (November 2018). Investigating mathematics teacher educators' learning through the phases of lesson study. Presented at the World Association of Lesson Studies (WALS) Annual International Conference 2018, Beijing, China.
- 8. Dick, L. K., **Soto, M. M.**, Appelgate, M. H., Gupta, D. (November 2018). Elementary preservice teachers' whole-class instructional decision making. Presented at the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Greenville, SC.
- 9. **Soto, M. M.**, Dick, L. K., Gupta, D., Appelgate, M. H., & Broderick, S. (November 2017). Improving our own teaching practice: Mathematics teacher educators' participation in a cross institutional Lesson Study. Presented at the World Association of Lesson Studies (WALS) International Conference 2017, Nagoya University, Japan.
- 10. Appelgate, M., Gupta, D., **Soto, M.**, Dick, L., & Broderick, S. (November 2016). Elementary mathematics teacher educator's learning through lesson study: A cross-institutional study. Presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tucson, AZ.
- 11. Broderick, S., Dick, L., Gupta, D., Appelgate, M., & **Soto, M.** (November 2016). A cross-institutional study on pre-service teachers deciding "next steps" through noticing children's mathematical thinking. Presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tucson, AZ.
- 12. Gupta, D., **Soto, M.**, Dick, L., Broderick, S., & Appelgate, M. (July 2016). Noticing and deciding the "next steps" for teaching: A cross-university study with elementary pre-service teachers. Presented at the 13th International Congress on Mathematical Education (ICME), Hamburg, Germany.
- 13. Hargis, J., Suh, J. Carlson, B., Kido, R., Kaui, T. M., Lockard, E., Allen, J., Peterson, J., Chun, H., & Soto, M. (January 2016). Backward design course redesign. Presented at the 14th Annual Hawaii International Conference on Education, Honolulu, HI.
- 14. Ambrose, R., **Soto, M.**, & Alexander, C. (November 2011). Does it still "work": CGI in a contemporary CA high-poverty district. Presented at the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Reno, NV.

15. **Soto, M. M.**, & Ambrose, R. C. (November 2011). A perspective of change: A teacher's evolution through professional development. Presented at the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Reno, NV.

National

- 1. Gupta, D., Dick, L., **Soto, M. M.**, & Appelgate, M. (2024). Lesson Study to analyze the integration of social justice, mathematics, and pedagogy. Presented at the 2024 American Educational Research Association (AERA) Annual Meeting, Philadelphia, PA.
- 2. **Soto, M. M.**, Dick, L. K., Gupta, D., & Appelgate, M. (February 2021). Continuous Improvement Lesson Study to develop an educative lesson. Presented at the 2021 Association of Mathematics Teacher Educators (AMTE) Virtual Annual Conference.
- 3. **Soto, M.** (November 2020). "How'd you solve that? Supporting children's mathematical thinking through questioning. Presented at the National Council of Teachers of Mathematics (NCTM) 2020 Virtual Conference.
- 4. Shih, J., Appelgate, M. H., & **Soto, M. M.** (June 2019). Using screencasts in CGI classrooms. Presented at the 2019 Cognitively Guided Instruction (CGI) Biennial Conference, Minneapolis, MN.
- 5. Milligan, L.*, Sternal, A.*, & **Soto, M. M.** (April 2019). Making "more" sense of comparison story problems. Presented at the 2019 National Council of Teachers of Mathematics (NCTM) Annual Meeting & Exposition, San Diego, CA.
- 6. Appelgate, M., Dick, L., **Soto, M.**, & Gupta, D. (April 2019). MTEs' learning through lesson study: A community of practice perspective. Presented at the 2019 National Council of Teachers of Mathematics (NCTM) Research Conference, San Diego, CA.
- 7. Appelgate, M., Dick, L., Gupta, D., & **Soto, M.** (February 2019). Lesson study as a vehicle for establishing early career MTE learning from practice. Presented at the 23rd Annual Association of Mathematics Teacher Educators (AMTE) Conference, Orlando, FL.
- 8. Dick, L. K., Gupta, D., Appelgate, M. H., Broderick, S., & **Soto, M. M.** (April 2018). Lesson study with mathematics teacher educators across five universities: Implementation and learning. Presented at the 2018 American Educational Research Association (AERA) Annual Meeting, New York, NY.
- 9. Dick, L., Broderick, S., Gupta, D., Appelgate, M., & **Soto, M.** (April 2017). MTEs learning through cross-institutional Lesson Study. Presented at the National Council of Teachers of Mathematics (NCTM) 2017 Research Conference, San Antonio, TX.
- 10. Broderick, S., Gupta, D., Appelgate, M., Dick, L., & Soto, M. (February 2017). Development of a rubric to assess PST's noticing of children's mathematical thinking: A cross-institutional study. Presented at the 21st Annual Association of Mathematics Teacher Educators (AMTE) Conference, Orlando, FL.
- 11. Yeh, C., **Soto, M. M.**, Chao, T., Henry, V., & Guarino, J. L. (January 2016). Technology-based ways to develop preservice teacher noticing in three elementary methods' courses. Presented at the 20th Annual Association of Mathematics Teacher Educators (AMTE) Conference, Irvine, CA.
- 12. **Soto, M. M.**, & Ambrose, R. (April 2015). Screencasts as a formative assessment tool for mathematical explanations. Presented at the 2015 American Educational Research Association (AERA) Annual Meeting, Chicago, IL.

13. **Soto, M. M.**, & Ambrose, R. (April 2015). Screencasts as proxy audiences for students' and their mathematical explanations. Presented at the National Council of Teachers of Mathematics (NCTM) 2015 Research Conference, Boston, MA.

Regional

- Soto, M. (June 2024). Leveraging counting collections to engage children in problem solving.
 Presented at the 2024 Florida Council of Teachers of Mathematics (FCTM) Conference, Orlando,
 FL.
- Soto, M. (June 2024). Scaffolding young children's mathematical thinking as they solve compare problems. Presented at the 2024 Florida Council of Teachers of Mathematics (FCTM) Conference, Orlando, FL.
- 3. **Soto, M.** (October 2023). Engaging in Lesson Study to support young children solving compare story problems. Presented at the P.K. Yonge 2023 Inquiries and Investigations Symposium, Gainesville, FL.
- 4. **Soto, M.** (March 2022). Scaffolding young children's mathematical thinking and problem solving through story problems. Presented at the San Diego County Office of Education's 19th Annual Virtual Early Years Conference.
- 5. **Soto, M. M.** (February 2018). What "counts" in early childhood mathematics. Presented at the 36th Annual Greater San Diego Math Council (GSDMC) Conference, San Diego, CA.
- 6. **Soto, M.**, & Schwappach, B.* (January 2017). Screencasting in the math classroom: Capturing student thinking. Presented at the 35th Annual Greater San Diego Math Council (GSDMC) Conference, San Diego, CA.
- 7. Sternal, A.*, Milligan, L.*, & **Soto, M.** (January 2017). Making "more" sense of comparison story problems. Presented at the 35th Annual Greater San Diego Math Council (GSDMC) Conference, San Diego, CA.

Book Review (*Denotes graduate student/in-service teacher co-author)

1. White, I.*, & **Soto, M. M.** (April 2022). "*Teaching Mathematics Creatively*" book review. Teachers College Record. https://www.tcrecord.org/Content.asp?ContentID=24030

Non-refereed Journal Articles

- 1. Hargis, J., & **Soto, M.** (2017). A proposal to use classroom observations as assessment data to measure and evaluate effective teaching. *The Online Journal of New Horizons in Education, 7*(2), 6-17.
- 2. **Soto, M.**, & Hargis, J. (2014). Students ExplainEverything using iPads. *Learning & Leading with Technology*, *41*(7), 32-33.

Invited Presentations

National

- 1. **Soto, M. M.,** & Appelgate, M. H. (June 2018). Positioning students as mathematical thinkers using screencasts. Impact Session speaker at the TODOS: Mathematics for ALL 2018 Conference, Scottsdale, AZ.
- 2. **Soto, M.** (June 2015). Integrating technology and CGI: Using screencasts to capture students' mathematical thinking. Presented at the 2015 CGI Biennial Conference, Lawndale, CA.

- 3. **Soto, M. M.**, & Fennell, F. (April 2015). Moving principles into actions: Leading change in mathematics programs (elementary). Presented at the National Council of Teachers of Mathematics (NCTM) 2015 Annual Meeting & Exposition, Boston, MA.
- 4. **Soto, M.**, & Ambrose, R. (June 2011). Bringing teachers' classrooms into professional development. Presented at the 2011 CGI Biennial Conference, Little Rock, AK.

Regional

- 1. Gupta, D., **Soto, M. M.**, Appelgate, M. H., & Dick, L. K. (April 2024). Collaborating to design and refine an integrated mathematics & social justice lesson. Presented at Bucknell University.
- 2. **Soto, M. M.** (January 2020). Saying no to key words to truly make "more" meaningful sense of compare problems. Presented at the UCLA Math Project-LAUSD CGI Celebration, Los Angeles, CA.
- 3. **Soto, M. M.** (February 2019). "How'd you solve that?" Supporting children's mathematical thinking through questioning. Presented at the San Diego County Office of Education's Math Leader Summit, San Diego, CA.
- 4. Appelgate, M. H., Dick, L. K., Gupta, D., & **Soto, M. M.** (April 2018). Using lesson study to develop preservice teachers' noticing of children's mathematical thinking. Presented at Bucknell University.
- 5. **Soto, M.** (November 2015). Visualizing students' mathematical thinking with screencasts. Presented at the 2015 National Science Foundation's Western Regional Noyce Conference, San Diego, CA.
- 6. **Soto, M.** (October 2014). Analyzing elementary students' mathematical explanations and attention to audience with screencasts. Presented at the San Diego State University Center for Research in Mathematics and Science Education Colloquium, San Diego, CA.

Scholarly Awards/Honors

- 1. 2015 Association of Mathematics Teacher Educators (AMTE) "Service, Teaching and Research" (STaR) Fellow, fellowship funded by the National Science Foundation
 - a. Featured in AMTE's Connections, "STaR Program Spotlight: Fostering Ongoing Collaborations"
- 2. University of California Davis School of Education Block Grant, 2012, \$6,000
- 3. University of California Davis Graduate Group in Ed Academic Distinction Award, 2011, \$500

Funded Research Grants

1. \$7,088 - Investigating Elementary Pre-service Teachers' Mathematical Knowledge for Teaching via Screencasts, Principal Investigator, SDSU University Grants Program, 63% Acceptance Rate, Spring 2015 – Summer 2016.

Funded Training Grants

- 1. \$1,360,911- FDOE Apprenticeship Grant "Pathways to Career Opportunities," Investigator-Curriculum Development related to STEM, Florida Department of Education, July 1, 2023 June 30, 2024.
- 2. \$56,437- San Diego Mathematics Project, Principal Investigator, California Subject Matter Project, 2022-2023.

- 3. \$30,373-Learning from and with Children: Addressing Unfinished Learning in Early Childhood Mathematics through Integrated Approaches to Formative Assessment, Principal Investigator, California Subject Matter Project, 2021-2022.
- 4. \$56,437-San Diego Mathematics Project, Principal Investigator, California Subject Matter Project, 2021-2022.
- 5. \$29,324 -CGI for Future Teacher Leaders: Diving Deeper into Children's Mathematical Thinking, Co-Principal Investigator, California Subject Matter Project, 2020-2022.
- 6. \$2,000 Supporting Pre-Service Teacher's Professional Noticing with TeachLivE, Principal Investigator, SDSU Center for Teaching and Learning, Fall 2018.
- 7. \$176,592 San Diego Mathematics Project, Co-Principal Investigator, California Subject Matter Project, 2017 2020. Funding for each year: 2017-2018: \$60,155; 2018-2019: \$56,437; 2019-2020: \$60,000

Research and Training Grants Submitted (Not Funded)

- 1. \$352,079 (PI)2: Enhancing Algebraic Thinking through Paper Play, Ideation, and Investigation, Co-Principal Investigator, U.S. Department of Education's Institute of Education Sciences, Fall 2022-Spring 2026. (Subaward from USD, total budget requested \$1,700,00)
- \$2,999,965 ATLUS, Advancing Teacher Leadership in Urban Schools: The SDSU Noyce Mathematics and Science Master Teaching Fellowship Program, Co-Principal Investigator, National Science Foundation, Robert Noyce Teacher Scholarship Program Track 3: The NSF Master Teaching Fellowships, Submitted for August 1, 2019 - July 31, 2025.
- 3. \$235,283- Advancing K-2 mathematics learning in multilingual classrooms through PhET Interactive Simulations, Co-Principal Investigator, National Science Foundation Federal DRK-12 grant, Submitted for August 2018-July 2021.
- 4. \$900,000- Next Generation Professional Learning Communities (NextGen-PLC): Serving Diverse Students in Science and Math, Co-Principal Investigator, S. D. Bechtel, Jr. Foundation

Participation in Professional Associations

- 1. Florida Council of Teachers of Mathematics, 2023-present
- 2. National Association for the Education of Young Children, 2022-2023
- 3. National Council of Supervisors of Mathematics, 2022-2023
- 4. TODOS: Mathematics for ALL, 2018-2021, 2023-present
- 5. California Association of Mathematics Teacher Educators, 2018-2020
- 6. Association of Mathematics Teacher Educators, 2014-2021, 2023-present
- 7. American Educational Research Association, 2012-2015; 2018, 2024
- 8. National Council of Teachers of Mathematics, 2009-present

Works-In-Progress

Media

- SDSU College of Education Informed & Inspired (October 2021) COE Difference Makers: Dr. Melissa Soto Examines How Kids Think About Math http://sdsucoenews.blogspot.com/2021/10/coe-difference-makers-dr-melissa-soto.html
- 2. Faculty Futures Lab @SDSU Podcast (Sept. 2020) "Normalize human!": Faculty Forward Award winners, part 3 https://podcasts.apple.com/us/podcast/1-6-normalize-human-faculty-forward-award-winners-part-3/id1515134930?i=1000490463247

- SDSU College of Education Informed & Inspired (May 2020) Striking Gold with Virtual Teacher Development Sessions http://sdsucoenews.blogspot.com/2020/05/striking-gold-with-virtual-teacher.html
- 4. SDSU College of Education Informed & Inspired (April 2020) *COE's Virtual Support Team Comes Through in Crisis* http://sdsucoenews.blogspot.com/2020/04/coes-virtual-support-team-comes-through.html
- 5. San Diego State University NewsCenter (Sept. 2019) *Aztec Pride—In a Stockton Classroom* http://newscenter.sdsu.edu/sdsu_newscenter/news_story.aspx?sid=77773
- 6. SDSU Faculty Instructional Technology "Learning Story" (Sept. 2015) *Making Your Syllabus Accessible* https://www.youtube.com/watch?time_continue=6&v=0vKxkx9MBt0
- 7. Education Week (May 2015) Frontiers of Digital Learning Probed by Researchers https://www.edweek.org/ew/articles/2015/05/06/frontiers-of-digital-learning-probed-by-researchers.html
- 8. San Diego State University NewsCenter (April 2015) *Uprooting Math Anxiety* http://newscenter.sdsu.edu/sdsu_newscenter/news_story.aspx?sid=75510

TEACHING

Courses Taught at UF

- MAE 4310: Mathematics Content & Methods for Teaching Mathematics in Inclusive Elementary Classrooms (face-to-face [F2F])
- MAE 4310L: Teaching Elementary Mathematics Lab (F2F; redesigned in Fall 2023)
- MAE 5347: Teaching K 8 Mathematics Methods (online: asynchronous [asyn])
- MAE 6349: Classroom Contexts that Support Self-Regulated Learning and Mathematical Understanding (online: asyn; redesigned in Fall 2023)

Courses Taught at SDSU

- **DLE 910**: Teaching Mathematics to Bilingual Students (*online: asyn*)
- **MSE 830**: Ph.D. Research Seminar (*F2F & online: synchronous [syn]*)
- MTHED 600: Teaching & Learning Math in the Early Grades (PreK-4) (F2F & online: syn & asyn)
- **TE 600**: Curriculum Development in Education (*F2F & online: syn & asyn*)
- **TE 677**: Research-Based Pedagogy for Diverse Learners (*online: asyn*)
- **TE 779**: Master's Seminar-Final Research Projects (*F2F*)
- **TE 901A**: Teaching Mathematics in the Elementary School (*F2F & online: syn*)
- **TE 966**: Student Teaching Supervision (*F2F*)

Co-taught:

• **ED 885**: Program Evaluation with Dr. Meredith Vaughn (*F2F*)

Thesis, Dissertation Committees, or Project Supervision at SDSU

Fall 2022	Samantha Ridgway, Ph.D. in Science Education, Dissertation Proposal Defense Committee Member
Fall 2021	Brinley Stringer, Ph.D. in Math Education, Teaching Practicum Supervisor
2020-2022	Nicole A. Suarez, Ph.D. in Science Education, Dissertation Committee Member
2019-2020	Robin Dozier & Kelly Smith, Masters, Title: Students' Strategies When Solving Fraction Comparison Story Problems, Project Advisor

2019-2020	Samantha Enger & Brooke Test, Masters, Title: Counting Collections to Reinforce Place Value Understanding for Elementary Students, Project Advisor
2019-2020	Cassandra Eyer & Tracy Provins, Masters, Title: Proportional Reasoning, Project Advisor
2018-2019	Carren Walker, Ph.D. in Math Education, Dissertation Committee Member
2017-2018	Crystal Murdock & Megan Mullins, Masters, Title: Dividing Fractions, Project Advisor
2017-2018	Yolanda Abel & Maricela Cruz, Masters, Title: Multiplication Understanding Across Grade Levels, Project Advisor
2017-2018	Kira Jones, Masters, Thesis Title: Promoting Stress Reduction Using Mindfulness for Educators in Military Based Child Development Centers, Thesis Committee Member
2015-2016	Teresa McCarthy & Stephen Phan, Masters, Title: Fractions on Number Lines, Project Advisor
2015-2016	Lisa Milligan & Alison Sternal, Masters, Title: Making 'More' Sense of Comparison Problems, Project Advisor
Fall 2015	Afsaneh Ezzatyar, Masters, Thesis Title: Art Therapy Curricula in After School Programs, Thesis Committee Member

Teaching Awards/Honors

- 1. 2024 Bucknell University Distinguished Visiting Professor Recipient
- 2. 2020 SDSU Faculty Forward Award, \$500
- 3. 2018 Bucknell University Distinguished Visiting Professor Recipient
- 4. 2018-2019 Nominated for the San Diego State University Senate Excellence in Teaching Award
- 5. 2014-2015 Nominated for the San Diego State University Senate Excellence in Teaching Award

SERVICE

Service for the Department

At UF

- 1. 2024-Present Mathematics Education Program Coordinator
- 2. 2023-Present Faculty Mentor for Mathematics Ed Graduate Students
- 3. 2023-Present Mathematics Education Graduate Admission Committee

At SDSU

- 1. 2022 Graduate Advisor: Online MAT Elementary Education
- 2. 2021-2022 TE 910A Mathematics Methods Instructor Mentor
- 3. 2016-2019 Member, STE New Hire Search Committees
 - Educational Psychology, Assistant/Associate Professor (Spring 2019)
 - STE Director, Associate/Full Professor (Fall 2017)
 - Literacy Education, Assistant Professor (Fall 2016)
- 4. 2016-2019 Guest Speaker
 - ED 808: Research & Publishing in Education (Spring 2019)
 - ED 801: Social & Cultural Foundations of Multicultural Ed (Spring 2018)
 - Liberal Studies 498: Senior Seminar (Fall 2016, Fall 2017)

- 5. 2016-2018 edTPA Coordinator, SDSU School of Teacher Education (STE)
- 6. 2014-2022 Member, SDSU School of Teacher Education
 - Personnel Committee (2019-2020; 2021-2022)
 - Curriculum Committee (2019-2020)
 - Advisory Board: Multiple Subject Representative (2019-2020)
 - STE Policy Council (2017-2020)
 - Multiple-Subjects Admission & Retention Committee (2014-2020)
 - o Chair (2018-2020)
 - o Interim Chair (Spring 2017)

Service for the College

At SDSU

- 1. 2019-2022 New Faculty Mentor
 - Mentee: Dr. Melissa Navarro (DLE) (2021-2022)
 - Mentee: Dr. Nicholas Johnson (STE) (2019-2020)
- 2. 2017-2022 San Diego Mathematics Project
 - Director (2021-2022)
 - Co-Director (2017-2021)
- 3. 2016-2018 Guest Speaker, College of Education New Faculty Luncheon
- 4. 2015-2022 Member, SDSU College of Education (COE)
 - Assessment Committee (2021-2022)
 - Personnel Committees
 - o Department of Dual Language & English Learner Education (DLE)
 - Chair (Fall 2021)
 - o Child and Family Development (Spring 2020 & Fall 2022)
 - Committee to Promote Diversity, Equity and Outreach (Spring 2019)
 - Election Committee (2018-2020)
 - o Co-Chair (2018-2020)
 - Research Committee (2017-2019)
 - Honors & Awards Committee (2015-2016)

Service for the University

At SDSU

- 1. 2021 COE Representative, University Research Council (Fall)
- 2. 2020, 2021 Faculty Peer Mentor, SDSU Flexible Course Design Summer Institute
- 3. 2019-2022 Faculty Fellow, Instructional Technology Services Universal Design for Learning
 - Hiring Committee: User Services Information Tech Consultant (Spring 2022)
 - UDL/Accessibility Faculty Ambassador (2021-2022)
 - Hiring Committee: UDL/Accessibility Student Fellow (Fall 2019)
- 4. 2018 Chair, Faculty Hearing Committee-Selected to Hear Statutory Grievance (Fall)
- 5. 2017 Judge, SDSU Student Research Symposium (Spring)
- 6. 2015 Guest Speaker, SDSU President's Cabinet Meeting (Spring)
- 7. 2014 Guest Speaker, Instructional Technology Services' Blackboard User Group (Fall)
- 8. 2014-2022 Member, SDSU/UCSD Joint Math & Science Education Doctoral Committee

Service for the Profession

- 1. 2021 External Reviewer, Tenure & Promotion Review (Summer)
- 2. 2019-2020 AMTE Manuscript Review Group-Mentor (2019, 2020)
- 3. 2018-2022 Reviewer, Lesson Study Book Chapters
 - Teacher professional learning through lesson study in virtual/hybrid environments: Opportunities, challenges, and future directions (2022), Routledge
 - Theory and practices of Lesson Study in mathematics: An international perspective (2018), Springer
- 4. 2017-2019 Co-Editor, NCTM Teaching Children Mathematics' iSTEM Department
- 5. 2016-2022 Reviewer, U.S. National Science Foundation (NSF)
 - 2022 virtual panelist
 - 2020 virtual panelist
 - 2018 panelist
 - 2016 virtual panelist
- 6. 2015-2022 Journal Reviewer:
 - Mathematics Teacher Educator (2021-2022)
 - AERA (American Educational Research Association) Open (2020-2022)
 - International Journal for Lesson and Learning Studies (2020-2022)
 - Journal for Research in Mathematics Education (2020-2022)
 - Teacher Education Quarterly (2018-2022)
 - Teaching and Teacher Education (2018-2022)
 - Mathematical Thinking and Learning (2015-2022)
- 7. 2014-2016 Member, NCTM Principles to Action Working Group
- 8. 2011-Present Conference Proposal Reviewer
 - International Congress on Mathematics Education (ICME) 2023
 - North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA) 2011, 2016, 2018, 2020

Service for the Community

- 2021-2022 Member, San Diego Enhanced Math Initiative External Advisory Committee
- 2021-2022 Lesson Study
 - Facilitator:
 - o 5th grade team (science focus), Lemon Grove School District (2021-2022) o 3rd-5th grade team, Chula Vista Elementary School District (Spring 2021)

 - Equity Commentator:
 - o 6th grade team, Chula Vista Elementary School District (Spring 2021)
 - Mathematics Commentator:
 - o K-2nd grade team, Rialto School District (Spring 2021)
- 2016 Course Redesign Studio presented at Chaminade University, Honolulu, HI
- 2014-Present Invited Presenter:
 - San Diego Mathematics Project, "Scaffolding Young Children's Mathematical Thinking as they Solve Compare Problems," Virtual Session (Fall 2023)

- Carlsbad Unified School District, "CGI Using Counting Collections across Elementary," Carlsbad, CA (Fall 2022)
- Carlsbad Unified School District, "Introduction to CGI," Carlsbad, CA (Fall 2021)
- Santee School District, "Engaging Students in Problem Solving," Santee, CA (Spring 2019)
- DEEP's "Molding Mathematical Minds," San Diego, CA (Spring 2019)
- Santee School District, "Counting Collections," Santee, CA (Fall 2018)
- Sacramento County Office of Education, Sacramento, CA (Fall 2017)
- Mathematics Parent Night in Paragould, AR (Fall 2014)
- 2013-2022 CGI Professional Development Facilitator:
 - San Diego Math Project (2016-2022)
 - California Math & Science Partnership, Clovis, CA (Summer 2016)
 - Teachers Development Group, West Lynn, OR (2013-2016)