

Curriculum Vitae

Su Liang

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Educational Background

University of Connecticut, Storrs	Mathematics	PhD	2010
University of Connecticut, Storrs	Mathematics	MS	2007

Professional Employment History

8/2016 – present	Associate Professor, University of Texas, San, Antonio
7/2016 – 8/2018.	Associate Professor, California State University, San Bernardino
9/2010 – 7/2016	Assistant Professor, California State University, San Bernardino
8/2006 – 5/2010	Teaching Assistant, University of Connecticut

Awards and Honors

1. Doctor Dissertation Competition Award, University of Connecticut, summer, 2010
2. Graduate Student Fellowship, University of Connecticut, summer, 2010
3. Graduate Research Assistant, NSF Robert Noyce Scholarship Program, University of Connecticut, 2009-2010
4. Provost Travel Award, University of Connecticut, January, 2010
5. The Marjory C. Gelfenbien Scholarship, Neag School of Education, University of Connecticut, April, 2006

Publications

1. Liang, S. (2022). Habits of Mathematical Thinking and Development of Heuristics. *Contemporary Mathematics and Science Education*, 3(1), ep22002. <https://doi.org/10.30935/conmaths/11521>
2. Liang, S. (2022). The Observed Impact – Implementing Inquiry-Based Learning at a Calculus Class. *European Journal of Mathematics and Science Education*, 3(1), 1-8. ISSN: 2694-2003. <http://www.ejmse.com/>
3. Liang, S. (2021). Deepening Mathematics Learning by Making Variation Available in Teaching. *Journal of Higher Education Theory and Practice*, 21(12), 2021. DOI: <https://doi.org/10.33423/jhetp.v21i12>
4. Liang, S. (2021). Equivalence and substitution: tools for teaching meaningful mathematics. *For the Learning of Mathematics*, 41(1), 41-43.
5. Liang, S. (2021). Group Formation - Finding-Your-Matching-Card in a Collaborative Learning Classroom. *HEAd'21 7 proceedings* (the International Conference on Higher Education Advances), 545-553.
6. Liang, S. (2019). Helping Preservice Secondary Mathematics Teachers Construct Pedagogical Content

Knowledge, *International Journal of Contemporary Education*, 2(2), 93-99.

7. Liang, S. (2019). Enquiry-Based Learning in College Mathematics Education: Theory and Practice. The Mathematics Education for the Future Project, *Proceedings of the 15th International Conference* (8/4-8/9, 2019 Maynooth University, Kildare, Ireland), *Theory and Practice: An Interface or a Great Divide?* Page 324 – 329. Edited by Alan Rogerson and Janina Morska.
8. Liang, S., Mira, R. V., Patterson, C., Prasad, P. V. (2019). Improving our practice as mathematics teacher educators through teaching research. *International Journal for the Scholarship of Teaching and Learning*, 13(2), Article 12.
9. Liang, S. (2018). History of Mathematics and Connected Mathematics Ideas for Pre-service Mathematics Teachers. Proceedings of the 8th ICMI-East Asia Regional Conference on Mathematics Education, p57 – 62.
10. Liang, S. (2018). Helping college students claim ownership of their mathematics learning. *European Journal of Science and Mathematics Education*, 6(2), 36 – 43.
11. Prasad, P., V., Mira, R. V., Patterson, C., & Liang, S. (2018). Task design and revision as a vehicle for developing mathematical knowledge for teaching teachers. 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.
12. Liang, S. (2017). A book chapter -Learning from Developing and Observing Public Lessons, How Chinese acquire and improve mathematics knowledge for teaching, published in 11/2017, Sense Publishers.
13. Liang, S. (2015). Integrating Teaching Research with Teaching Practice: A Modified Chinese Model of Professional Development, *Journal of Mathematic Education*, 7(2).
14. Liang, S. (2014). Middle-grades Mathematics Classroom Instruction in China: A Case Study, *Mathematics Teaching-Research Journal*, Winter 2013/2014, Volume 6(4), *Mathematics Teaching-Research Journal*.
15. Liang, S. (2014). College mathematics classroom for pre-service teachers: developing students' ability of communication that promotes deeper learning, *Scientific Journal of Pure and Applied Sciences*, 3(1).
16. Liang, S. (2013). The Development of Teaching Expertise from an International Perspective, *The Montana Mathematics Enthusiast: Monograph Series in Mathematics Education*, The University of Montana.
17. Liang, S. (2013). An Example of Coherent Mathematics Lesson, *Universal Journal of Educational Research*, 1(2), 57 -64. doi: 10.13189/ujer.2013.010204.
18. Liang, S. (2012). A Book Chapter: Teaching and Teacher Education in the US: What does the literature tell us? Organizing and Improving School Environment, 7-16, Athens Institute for Education and Research, Cyprus.

19. Liang, S., Glaz, S., DeFranco, T., Vinsonhaler, C., Grenier, R., & Cardetti, F. (2012). An examination of the preparation and practice of grades 7- 12 mathematics teachers from the Shandong Province in China, *Journal of Mathematics Teacher Education*, 16(2), 149 -160.
20. Liang, S., Glaz, S., & DeFranco, T. (2012). Investigating Characteristics of Award-Winning Grades 7- 12 Mathematics Teachers from the Shandong Province in China, *Current Issue in Education*, 15(3), 1-12.
21. Liang, S. (2011). Open Class – an Important Component of Teachers’ In-service Training in China, *Education*, 1(1), 1-5.
22. Liang, S. (2009). Nail down the misconception: $(a+b)/(a+c)=b/c$, *the MAA Online Innovative Teaching Exchange*, 9/2009, http://www.maa.org/t_and_l/exchange/exchange.html
23. Glaz, S. & Liang, S. (2009). Modeling with poetry in an introductory college algebra course and beyond, *Journal of Mathematics and the Arts*, 3(3), 123-133.
24. Liang, S. (2009). Validating the Instrument - Students’ perceptions on learning calculus, Proceedings of North Eastern Educational Research Association’s 40th Anniversary Conference, 10/23, 2009.

Scholarly Presentations

1. July 17, 2021, The Observed Impact – Implementing Inquiry-Based Learning at a Calculus Class. 14th International Congress on Mathematics Education (ICME-14).
2. June 22, 2021, Group Formation – Finding-Your-Matching-Card in a Collaborative Learning Classroom. 7th International Conference on Higher Education Advances (HEAd’21).
3. April 17, 2021, Variation and Sameness in Mathematics Teaching. The 2021 Alamo STEM Ecosystem Virtual Conference.
4. January 7, 2021. Visualizing Connected Mathematics through Problem Solving. The 2021 Joint Meeting of AMS and MAA.
5. September 21, 2019, Having Preservice Secondary Mathematics Teachers Envision a Deeper and Wider Picture of Mathematics. The 7th Annual Fall Conference of the Association of Mathematics Teacher Educations in Texas.
6. September 21, 2019, Fostering PST’s Understanding of Data Analysis: A Curriculum Project. The 7th Annual Fall Conference of the Association of Mathematics Teacher Educations in Texas.
7. August 6, 2019, Enquiry-Based Learning in College Mathematics Education: Theory and Practice. The 15th International Conference (8/4-8/9, 2019), Maynooth University, Kildare, Ireland.
8. *What Can Mathematics Teacher Educators Do To Develop Their Knowledge Bases?* with Raquel Vallines Mira, Cody Patterson, & **Su Liang**, National Council of Teachers of Mathematics Research Conference, Apr. 2019, San Diego, CA.
9. February 25, 2019, Helping Preservice Mathematics Teachers Envision the Connections between College and Secondary School Mathematics. The 3rd Conference for Academic Research in Education (CARE), University of Nevada, Las Vegas, College of Education, February 24-26.
10. February 10, 2018, Learning to Teach Pre-service Teachers Similarity through Teaching Research, AMTE 2018.
11. July 26, 2016, Integrating Teaching Research with Classroom Practice at ICME-13, Hamburg, Germany.
12. September 30, 2016, Helping Students Become Self-Directed Learners and Critical Thinkers, Instructor’s Colloquium, Department of Mathematics, UTSA.

13. July 11, 2015, the 7th Classroom Teaching Research for All Students Conference, California State University, Long Beach, *Implementing Inquiry-Based Learning in Mathematics Problem Solving Classes for Pre-service Teachers*.
14. February 22, 2014, Lilly Conference College and University Teaching and Learning, Newport Beach, CA, *Helping Students Develop the Ability of Communicating Mathematics Ideas in College Classroom*.
15. March 1, 2014, MaTHink Conference, Division of Educational Services, Riverside County Office of Education, *Nail down the misconception: $\frac{a+b}{a+c} = \frac{b}{c}$* .
16. December 8, 2014, Academic Career Panel for Academic Career Development Boot Camp Event aiming at helping students to better understand the different types of academic careers that are available to them after graduating, UC Riverside.
17. January 12, 2013, Joint Mathematics Meetings, Convention center, San Diego, CA, MAA Session on Communicating Mathematics, *Let students talk and write their mathematics ideas*.
18. July 13, 2012, the 12th international Congress on Mathematical Education, Coex, Seoul, Korea, TSG Session 3A, Teaching research as an effective in-service training tool.
19. April 27, 2012, Spring Quarter Professors Across Borders Workshops at CSUSB, *Mathematics Classroom Instruction in China: A Case Study*.
20. June 14, 2011, 5th Annual International Conference on Mathematics, Statistics and Math Education, Athens, Greece, *Teaching and Teacher Education in the US: What does the literature tell us?*
21. Nov. 20, 2010, The 3rd Annual Southern California Women in Math Symposium, Pomona College, California, *Nail down the misconception: $\frac{a+b}{a+c} = \frac{b}{c}$*

Grant Activities

Grant at UTSA

External Grants Awarded:

- 7/1/2021 – 6/30/2025 NSF Level 3, Engaged Student Learning project in the IUSE program for pre-service teachers.
Titled: Constructive Mathematics Pathways Leveraging Experiences for Advancing Prospective Teachers' Learning (COMPLEAT).

Internal Grant Awarded:

- The 2021 Adopt-a-Free-Textbook Grant.
- The 2017 Sawtelle Financial Teaching Innovation Grant at UTSA.

Grants at CSUSB

External Grants Awarded:

- RISE (Research Initiative for Scientific Enhancement), a five-year project, Co-PI with Professor Cynthia Crawford in department of psychology at CSUSB, was awarded by The National Institute for General Medical Science (NIGMS) in March 2013.

Internal Grants Awarded:

- The Course Re-design Grant from the Office of Student Research
- Spring 2015 Innovative Course Development Grants
- Winter 2013 TSSA Award
- 2012 Evans Travel Fund

- Spring 2012 TSSA Award
- Professor Across Borders Travel Grant 2011-2012
- Faculty Professional Development Mini-grant 2010-2011, CSUSB Fall 2010.
- Summer 2011 Innovative Course Development Grants