

CURRICULUM VITAE

SIDDHI SONI

Assistant Professor, Mathematics Education
 Eastern Connecticut State University
 School of Education and Professional Studies
 Education Department
 sonis@easternct.edu

CV AT-A-GLANCE

- Ph.D. in Mathematics Education (2022), University of Central Florida
- 20+ **Peer-Reviewed Publications** published or in press since 2017
- 55+ **Presentations** Internationally, Nationally, Regionally, and Statewide since 2017
- **AMTE Dissertation Award**, Association of Mathematics Teacher Education (2024).
- **Associate Vice President of** Association of Mathematics Teacher Educator (AMTE) – Equity Committee (2025-2026)
- **Executive Board Member** of Association of Mathematics Teacher Educator of Connecticut (AMTEC) (2024-2027)

EDUCATION

- Ph.D., 2022 University of Central Florida, Orlando, FL
 Mathematics Education (with 18 graduate credits in Mathematics and Statistics)
Dissertation Title: Impact of Ethnomodeling Explorations on Secondary Mathematics Pre-Service Teachers' Perceptions of Teaching and Learning Geometry: A Multi-Case Study
Committee: Farshid Safi (chair), Sarah B. Bush, Janet Andreasen, Trena Wilkerson, Daniel Clark Orey
- M.Ed., 2019 University of Central Florida, Orlando, FL
 Secondary Education – Mathematics Education
- B.A., 2017 The College of New Jersey, Ewing, NJ
 Mathematics Secondary Education, Minor: Interactive Multimedia

PROFESSIONAL EXPERIENCES

- August 2025 – current **Assistant Professor of Mathematics Education** – Department of Education, Eastern Connecticut State University, Willimantic, CT.
- Teach undergraduate mathematics courses for elementary education majors.
 - Taught elementary and secondary mathematics education methods courses to undergraduate and graduate teacher candidates

- Supervise and evaluate student teachers in field placement.

- August 2024 – May 2025 **Assistant Professor of Mathematics** – Department of Mathematical Sciences, Central Connecticut State University, New Britain, CT.
- Teach undergraduate mathematics courses.
- August 2024 – May 2025 **Instructor of Mathematics Education** – School of Education, Fairleigh Dickinson University, Teaneck, NJ.
- Teach elementary education courses to undergraduate and graduate teacher candidates
 - Conduct NCTM/AMTE Early Career Grant research study
 - Mentor doctoral student
- August 2022 – May 2024 **Assistant Professor of Mathematics Education** – School of Education, Fairleigh Dickinson University, Teaneck, NJ.
- Taught elementary and secondary mathematics and science education courses to undergraduate and graduate teacher candidates
 - Developed new course and curriculum materials for two graduate elementary mathematics education courses
 - Initiated content revision for materials used in multiple undergraduate and graduate education courses to promote an equity-centered pedagogy
 - Maintained an active research agenda in mathematics education
 - Mentored undergraduate and graduate students in teaching and research
 - Supervised and evaluate student teachers in field placement
 - Engaged in school, university, state, and national service leadership opportunities
 - Provided professional development workshops within state and nationally
 - Built partnerships with local schools
 - Advisor for FDU Kappa Delta Pi chapter
- August 2019 – August 2022 **Graduate Research and Teaching Assistant** – University of Central Florida, Orlando, FL.
- Graduate Research Assistant for NSF-funded grant projects
 - Instructor of Record or Graduate Teaching Assistant for 10 different undergraduate and graduate elementary and secondary mathematics education courses
 - Supervised and evaluate student teachers in field placement
 - Provided professional development workshops in state and nationally
 - Assistant to mathematics secondary education program coordinator for course sequencing and planning, and accreditation paperwork (Summer 2020)
 - Co-founder and NCTM and Graduate Representative of UCF- Council of Teachers of Mathematics (UCF-CTM)
- August 2019 – May 2020 **High School Mathematics Teacher** – Seminole County Public Schools, Oviedo High School, Oviedo, FL.
- Taught: Liberal Arts 1 Mathematics, Algebra 1 Lab
 - Presented at state and national mathematics education conferences

August 2017 –
May 2019

Middle School Mathematics Teacher – Seminole County Public Schools,
Jackson Heights Middle School, Oviedo, FL.

- Taught: 7th Grade Advanced Mathematics, 8th Grade Pre-Algebra
- Led PLC for 7th Grade Advanced Mathematics (2018-2019)
- Presented at state and national mathematics education conferences

SCHOLARSHIP

Research Focus

- Integrating an ethnomodeling perspective (connections to mathematical modeling, culture, and history) to engage students in rich and meaningful mathematical experiences.
- Analyzing the evolution of the field of mathematics education and doctorate granting institutions from a research perspective.

Publications

* Denotes current or former undergraduate or graduate student as co-author

** Denotes former K-12 student as co-author

Note: 1. Siddhi Soni has also published under the name Siddhi Desai

2. First author is listed first.

National Policy & Position Statements

National Council of Teachers of Mathematics (NCTM) Writing Team Member (2023-2024), A Position of the NCTM: The Intersection of Culture and Mathematics,
<https://www.nctm.org/Standards-and-Positions/Position-Statements/The-Intersection-of-Culture-and-Mathematics/>

Invited Peer-Reviewed/Refereed Publications

Safi, F., & **Soni, S.** (2025). Promoting mathematical connections using 3-D manipulatives. Introduction by Abigail O'Brien and Zoe Chabria. *NCTM Mathematics Teacher: Learning and Teaching PK-12*. 118(2), 156-162. <https://doi.org/10.5951/MTLT.2024.0234>. Reprint from original article which appeared in *NCTM Mathematics Teaching in the Middle School in 2017*, 22(8), 488-492.

Desai, S., Safi, F., & Kurtz, B. (2021). Elevating students' mathematical identities: A mathematics heritage project. *NCTM Mathematics Teacher: Learning and Teaching PK-12*, 114(5), 408-410.

Safi, F., Bush, S. B., & **Desai, S.** (2022) Gerrymandering: When equivalent is not equal!. Introduction by Kevin Dykema. *NCTM Mathematics Teacher: Learning and Teaching PK-12*. 115(6), 444-451. doi: <https://doi.org/10.5951/MTLT.2021.0339>. Reprint from original article which appeared in *NCTM Mathematics Teaching in the Middle School Mathematics* in 2018, 24(2).

Peer-Reviewed/Refereed Publications

Soni S., & *Harbin, A. (Accepted). Barn Quilts Ethnomodeling Task: Mathematical Belonging in K-2.

Soni, S., King, B., Orr, S., Ramsay-Jordan, N., & Burris, J. (2024). Looking back to move forward: Examining past AMTE presentations on equity. *AMTE Connections*, 34(2).

- Schmidt, A., Rakes, C. R., Bush, S. B., Ronau, R., **Soni, S.**, Fisher, M., Amick, L., Viera, J., & Safi, F. (2024). Mathematics discourse in secondary teacher candidates' lessons: A mixed methods analysis. *Education Sciences*, 14(1286). <https://doi.org/10.3390/educsci14121286>
- King, B., Ramsay-Jordan, N., Burris, J., Orr, S., **Desai, S.**, & Bondurant, L. (2024). The equity committee book club: Deepening comprehension and elevating conversations about equity. *AMTE Connections*.
- Naresh, N., **Desai, S.**, & Kurtz, B. (2024). Fostering a new path: Empowering pre-service teachers to embrace ethnomathematics MathWalk tour creation. *Journal of Mathematics and Culture*, 18(1), 100-114.
- Desai, S.**, & Safi, F. (2023). Building and sustaining cultural traditions with ethnomodeling. *NCTM Mathematics Teacher: Learning and Teaching PK-12*, 116(10), 782-787.
- Desai, S.**, Safi, F., Bush, S. B., Wilkerson, T., Andreasen, J., & Orey, D. C. (2022). Ethnomodeling: Extending mathematical modeling research in teacher education. *Investigations in Mathematics Learning*, 14(4), 305-319. <https://doi.org/10.1080/19477503.2022.2139092>
- Cunningham, G.**, & **Desai, S.** (2022). 3D Printing to engage in architectural explorations. *NCTM Mathematics Teacher: Learning and Teaching PK-12*, 115(9), 692.
- Rakes, C., Bush, S. B., Fisher, M., Ronau, R., Stites, M., Safi, F., **Desai, S.**, Schmidt, A., Andreasen, J., Doering, J., Saderholm, J., Shen, J., Amick, L., Mohr-Schroeder, M., & Viera, J. (2022). Teacher candidate TPACK and their enactment of mathematics practices during full time student teaching. *Education Sciences*, 12(2), 133-149.
- Desai, S.**, Bush, S. B., & Safi, F. (2021). Mathematical representations in the teaching and learning of geometry: A review of the literature from the United States. *Electronic Journal for Research in Science and Mathematics Education*, 25(4), 6-22.
- Desai, S.**, & *Davis, B. (2021). Elementary pre-service teachers' explorations of culture, identity and literacy in mathematics. *FCTM Dimensions in Mathematics*, 41(2), 15-22.
- Desai, S.**, Kurtz, B., & Safi, F. (2021). Mathematics heritage project: An exploration empowering students' mathematical identity. *Journal of Humanistic Mathematics*, 11(2), 106-122.
- Abassian, A., **Desai, S.**, *Curry, H., & Eisenreich, H. (2021). Completing the incomplete: Making sense of completing the square. *FCTM Dimensions in Mathematics*, 41(1), 5-12.
- Desai, S.**, & Reeves, D. (2021). Geometric patterns in art and architecture. *NCTM Mathematics Teacher: Learning and Teaching PK-12*, 114(2), 168.
- Desai, S.**, & Safi, F. (2020). Developing 7th grade students' mathematical confidence through the process of self-reflection. *Journal of Teacher Action Research*, 6(3), 58-75.
- Desai, S.**, & Safi, F. (2020). Mathematical art: Lost in translation. *NCTM Mathematics Teacher: Learning and Teaching PK-12*, 113(1), 96.
- Safi, F., Bush, S. B., & **Desai, S.** (2018). Gerrymandering: When equivalent is NOT equal! *NCTM Mathematics Teaching in the Middle School*, 24(2), 82-89.
- Safi, F., & **Desai, S.** (2017). Promoting mathematical connections using 3-D manipulatives. *NCTM Mathematics Teaching in the Middle School*, 22(8), 488-492.

Books & Book Chapters

Soni, S., & Soni, Y. (2025). *Chandni and the New Moon*. Self-Published.

Safi, F., **Desai, S.**, Kurtz, B., & Abassian, A. (2023). Chapter 2: Linking census data to redistricting and gerrymandering. In R. Hudson, S. Harper, & D. Cox (Eds.), *Modern Math Tasks to Provoke Transformational Thinking Grades 9-12*.

Conference Proceedings

Naresh, N., **Desai, S.**, & Kurtz, B. (2022). Teachers as MathWalk tour designers: Embracing an ethnomathematics perspective to connect academic mathematics and out-of-school contexts. In K. Owens (Ed.), *Proceedings for ICEm-7: International Conference on Ethnomathematics – Ethnomathematics: Embracing Diverse Knowledge Systems for Social Justice and Peace*. Philippines, Nepal, Indonesia, and Papua New Guinea.

Desai, S., Safi, F., Bush, S., Andreasen, J., Wilkerson, T., & Orey, D. C. (2022). Engaging prospective secondary teachers in geometry-focused ethnomodeling explorations. In A. E. Lischka, E. B. Dyer, R. S. Jones, J. Lovett, J. Strayer & S. Drown (Eds.), *Proceedings of the 44th Annual Meeting of The North American Chapter of the International Group for the Psychology of Mathematics Education*. Nashville, TN: Middle Tennessee State University.

Abbaspour, S., **Desai, S.**, Safi, F., & Andreasen, J. (2021). Consistency in terminology and its effect on equity in learning mathematics: The case of orientation. In S. Spitzer, D. Olanoff, & K. Johnson (Eds.), *Proceedings of the 43rd Annual Meeting of The North American Chapter of the International Group for the Psychology of Mathematics Education*. Philadelphia, PA.

Desai, S., & Safi, F. (2018). Tracing the evolution of mathematical knowledge for teaching from a longitudinal perspective. 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.

Peer-Reviewed/Refereed Manuscripts Under Review or in Progress

Soni, S., Wilkerson, T., Harbin, A.* (In Progress). Ethnomodeling: A vehicle for catalyzing change in teacher preparation.

Soni, S. (In Progress). Invited Book Chapter - Mathematics Beyond Borders: Cultural Connections through Art, Architecture, and Ethnomodeling. In R. Rycroft-Smith (Ed.), *The Arts in Mathematics Education - Pathways to Innovation and Impact*.

Presentations

* Denotes current or past student as co-presenter (undergraduate or graduate)

Note: Siddhi Soni has also presented under the name Siddhi Desai

Keynote, Featured or Other Invited

Soni, S. (2025, May 13). *Ethnomodeling: Supporting Social Justice Goals by Valuing and Centering Students and Teachers Identities in Mathematics Classrooms*. Invited presentation at Connecticut Math Teachers' Circle 4 Social Justice. Virtual.

Soni, S. (2025, February 6-8). *Ethnomathematics focused mathematical modeling tasks to broaden preservice teachers' perceptions of teaching and learning mathematics* [Dissertation Award]

Session]. Invited presentation at the Twenty-Ninth Annual Conference of the Association of Mathematics Teacher Educators. Reno, NV.

Desai, S. (2024, April 12). *Opening windows, mirrors, and sliding glass doors through ethnomodeling tasks*. Invited presentation for National Council of Teachers of Mathematics Virtual Conference - Ignite Session. Virtual.

Desai, S. (2023, May 12-13). Invited Delegate for Culturally Relevant Integration of CS and Mathematics Symposium. Kennesaw State University, GA.

Desai, S. (2023, March 20). *University woman: Conversation about life and work*. Women History Month Panel. Invited talk at Fairleigh Dickinson University, NJ.

Desai, S. (2022, October 26). *Ethnomodeling tasks: Attending to cultural relevance AND mathematical content connections*. Keynote Speaker for The College of New Jersey Mathematics Education Alumni Symposium. The College of New Jersey, NJ.

Safi, F., Andreasen, J., Bush, S. B., **Desai, S.**, Schmidt, A., Amick, L., & Rakes, C. (2022, February 10-12). *De-siloing prospective teachers' experiences in secondary methods courses* [Featured MTEP Session]. Presented at the Twenty-Sixth Annual Conference of the Association of Mathematics Teacher Educators. Las Vegas, NV.

Desai, S. (2022, February 8). *Engaging pre-service teachers in geometry-focused ethnomodeling exploration*. Invited Research Talk for Montclair State University Doctoral Seminar. Montclair State University, NJ. Virtual.

Desai, S. (2021, October 9). *Engaging students in culturally relevant mathematical activities: A journey around the world*. Invited presentation for Florida Council of Teachers of Mathematics Live Conference - Ignite Session. Virtual.

Desai, S. (2021, September 10). *Engaging students in the wonder, joy, and beauty of mathematics*. Invited presentation for Carolina Transition to Teaching program at University of South Carolina. University of South Carolina. Virtual.

Desai, S., & Nagarajan, J. (2021, March 11). *Math around the world: Exploring wonder, joy, and beauty*. Invited presentation for UCF-Council of Teachers of Mathematics meeting. Virtual.

Abassian, A., & **Desai, S.** (2021, February 5). *Completing the incomplete: Making sense of completing the square*. Invited talk at Georgia Southern University's Department of Mathematical Sciences Colloquium. Virtual.

International

Naresh, N., **Desai, S.**, & Kurtz, B. (2022, December 7-10). *Teachers as math walk tour designers: Embracing an ethnomathematics perspective to connect academic mathematics and out-of-school contexts*. ICEm-7: International Conference on Ethnomathematics.

Desai, S., Bush, S. B., & Safi, F. (2022, March 12). *Mathematical representations in the teaching and learning of geometry in the United States*. Presented at International Consortium for Research in Science and Mathematics Education. Virtual.

National

- Soni, S.,** & *Harbin, A. (2025, October 15-18). *Ethnomodeling Tasks: Honoring the stories of students, teachers, and communities*. To be presented at the National Council of Teachers of Mathematics 2025 Annual Conference. Atlanta, GA.
- Safi, F., Abassian, A., & **Soni, S.** (2025, October 15-18). *Exploring inclusive teaching practices with technology (including AI) to engage and empower students*. To be presented at the National Council of Teachers of Mathematics 2025 Annual Conference. Atlanta, GA.
- Soni, S.,** & *Harbin, A. (2025, April 2-5). *Ethnomodeling: Honoring and engaging in cultural relevance and elementary mathematical content*. Presented at the National Council of Teachers of Mathematics 2025 Virtual Conference. Virtual.
- King, B., Raygoza, M., Orr, S., **Soni, S.** (2025, February 6-8). *Moving forward working to humanize spaces within AMTE* [Equity Committee Session]. Presented at the Twenty-Ninth Annual Conference of the Association of Mathematics Teacher Educators. Reno, NV.
- Desai, S.** (2024, September 25-28). *Elementary prospective teachers engaging in ethnomathematics focused mathematical modeling explorations* [Interactive Workshop]. Presented at the National Council of Teachers of Mathematics Annual Research Conference. Chicago, IL.
- Desai, S.,** *Bower, C., & Safi, F. (2024, April 10-13). *Engaging in cultural relevance and mathematical content through upper elementary ethnomodeling tasks*. Presented at the National Council of Teachers of Mathematics 2024 Virtual Conference. Virtual.
- Burris, J., **Desai, S.,** Orr, S., King, B., & Ramsay-Jordan, N. (2024, February 8-10). *Looking back to move forward: Examining past AMTE presentations on equity* [Equity Committee Session]. Presented at the Twenty-Eighth Annual Conference of the Association of Mathematics Teacher Educators. Orlando, FL.
- Abassian, A., Edelen, D., & **Desai, S.** (2024, February 8-10). *Empowering mathematics learners through mathematical modeling in K-12 classrooms and teacher education*. Presented at the Twenty-Eighth Annual Conference of the Association of Mathematics Teacher Educators. Orlando, FL.
- Desai, S.,** Wilkerson, T., & Safi, F. (2024, February 8-10). *Ethnomodeling: Embodying the recommendations from NCTM's Catalyzing Change in teacher preparation programs*. Presented at the Twenty-Eighth Annual Conference of the Association of Mathematics Teacher Educators. Orlando, FL.
- Desai, S.,** Wilkerson, T., Bush, S., & Safi, F. (2023, October 25-28). *Ethnomodeling as a vehicle for catalyzing change in teacher education* [Session]. Presented at the National Council of Teachers of Mathematics Annual Conference. Washington DC.
- Abassian, A., Edelen, D., & **Desai, S.** (2023, October 25-28). *Empowering each and every student through mathematical modeling in K-12 classrooms* [Workshop]. Presented at the National Council of Teachers of Mathematics Annual Conference. Washington DC.
- Naresh, N., & **Desai, S.** (2023, October 25-28). *Take a MathWalk with me: Using MathWalks to connect students to the mathematics around them* [Workshop]. Presented at the National Council of Teachers of Mathematics Annual Conference. Washington DC.

- Desai, S.,** & Safi, F. (2023, October 23-25). *Engaging elementary prospective teachers in ethnomodeling explorations* [Session]. Presented at the National Council of Teachers of Mathematics Annual Research Conference. Washington DC.
- Desai, S.,** & Safi, F. (2023, February 2-4). *Impact of secondary mathematics preservice teachers' engagement in geometry focused ethnomodeling explorations* [Brief Report]. Presented at the Twenty-Seventh Annual Conference of the Association of Mathematics Teacher Educators. New Orleans, LA.
- Desai, S.,** Safi, F., & Wilkerson, T. (2022, November 17-20). *Engaging prospective secondary teachers in geometry-focused ethnomodeling explorations* [Brief Research Report]. Presented at 44th North American Chapter of the International Group for the Psychology of Mathematics Education Conference. Nashville, TN.
- Desai, S.,** Abassian, A., Kurtz, B., & Safi, F. (2022, September 28 – October 1). *Ethnomodeling: Connecting art, history, culture, and mathematical modeling* [Workshop]. Presented at the 2022 National Council of Teachers of Mathematics Annual Conference. Los Angeles, CA.
- Bharath, D., & **Desai, S.** (2022, September 28–October 1). *Kolam: Connecting math, art, and culture* [Session]. Presented at the 2022 National Council of Teachers of Mathematics Annual Conference. Los Angeles, CA.
- Safi, F., & **Desai, S.** (2022, June 29 – July 1). *Integrating technology to center student thinking* [Session]. Presented at the CGI 2022 National Conference. Orlando, FL.
- Safi, F., & **Desai, S.** (2022, June 29 – July 1). *Exploring the impact of CGI on secondary education* [Session]. Presented at the CGI 2022 National Conference. Orlando, FL.
- Safi, F. K., Nagarajan, J., & **Desai, S.** (2022, June 29–July 1). *Lifting student's voices through culturally relevant stories* [Session]. Presented at the CGI 2022 National Conference. Orlando, FL.
- Harper, S. R., Cox, D. C., Abel, T., Alyami, H., **Desai, S.**, Glassmeyer, D., Safi, F., & Knurek, R. (2022, February 10-12). *Developing the mathematical literacy of prospective secondary mathematics teachers through interdisciplinary and relevant contexts* [Session]. Presented at the Twenty-Sixth Annual Conference of the Association of Mathematics Teacher Educators. Las Vegas, NV.
- Nagarajan, J., **Desai, S.**, & Safi, F. K. (2021, November 17-20). *Celebrating our cultures and identities through mathematics* [Session]. Presented at the National Council of Teachers of Mathematics 2021 Virtual Conference. Virtual.
- Desai, S.**, Abbaspour, S., Andreasen, J., & Safi, F. (2021, November 17-20). *Clarity with orientation: Supporting multilingual learners* [Session]. Presented at the National Council of Teachers of Mathematics 2021 Virtual Conference. Virtual.
- Desai, S.**, Abassian, A. & Kurtz, B. (2021, September 22-25). *Beyond tessellations: Mathematical modeling through a lens of art and culture* [Session]. 2021 National Council of Teachers of Mathematics Annual Conference. Atlanta, GA. (Conference canceled – COVID-19)
- Kurtz, B., **Desai, S.**, & Safi, F. (2021, September 22-25). *TechQuity: Exploring zero-cost digital resources for algebra, geometry, & statistics* [Workshop]. 2021 National Council of Teachers of Mathematics Annual Conference. Atlanta, GA. (Conference canceled – COVID-19)

- Desai, S., & Kurtz, B.** (2021, April 21-24). *The mathematics heritage project: Empowering students through identity exploration* [Workshop]. Presented at the 2021 National Council of Teachers of Mathematics Annual Conference. Virtual.
- Kurtz, B., **Desai, S., & Safi, F.** (2021, April 21-24). *The imperfect storm: Using NOAA hurricane models to teach confidence intervals* [Session]. Presented at the 2021 National Council of Teachers of Mathematics Annual Conference. Virtual.
- Safi, F., Yeh, C., & **Desai, S.** (2021, April 21-24). *Promoting equitable teaching AND focus on connections: Don't settle for only one* [Session]. Presented at the 2021 National Council of Teachers of Mathematics Annual Conference. Virtual.
- Safi, F., Bush, S. B., & **Desai, S.** (2019, April 3-6). *Empower student understanding of gerrymandering: When equivalent is NOT equal* [Workshop]. Presented at the 2019 National Council of Teachers of Mathematics Annual Conference. San Diego, CA.
- Safi, F., & **Desai, S.** (2019, February 7-9). *Trends in mathematics education dissertation research focus area (who, where and when): A longitudinal perspective* [Session]. Presented at the Twenty-Third Annual Conference of the Association of Mathematics Teacher Educators. Orlando, FL.
- Desai, S., & Safi, F.** (2018, November 22-25). *Tracing the evolution of mathematical knowledge for teaching from a longitudinal perspective* [Poster session]. Presented at the 40th North American Chapter of the International Group for the Psychology of Mathematics Education Conference. Greenville, SC.
- Van der Sandt, S., & **Desai, S.** (2017, April 3-5). *Trends in technology use in K-12 mathematics classrooms* [Paper presentation]. Presented at the National Council of Teachers of Mathematics Research Conference. San Antonio, Texas.

Regional

- Desai, S., & Andreasen, J.** (2022, November 30 - December 2). *Lifting student's voices through ethnomodeling explorations* [Session]. Presented at National Council of Teachers of Mathematics Regional Conference. Baltimore, MD.
- Desai, S., Nagarajan, J., & Safi, F. K.** (2022, February 2-4). *Geometry around us: A cultural exploration* [Workshop]. Presented at National Council of Teachers of Mathematics Regional Conference. New Orleans, LA.
- Kurtz, B., **Desai, S., & Safi, F.** (2022, February 2-4). *Notice, (CDC) Wonder: Using CDC wonder to explore public health with regression activities*. Presented at 2021 National Council of Teachers of Mathematics Annual Conference. New Orleans, LA.
- Abassian, A., **Desai, S., & *Curry, H.** (2020, November 11-14). *Completing the incomplete: Making sense of completing the square* [Session]. Presented at the 2020 National Council of Teachers of Mathematics Regional Conference. Virtual.
- Safi, F., Bush, S. B., & **Desai, S.** (2019, September 25-27). *Empowering students: Understanding the mathematics of gerrymandering - When equivalent is NOT equal!* [Workshop]. Presented at the National Council of Teachers of Mathematics Regional Conference. Boston, MA.

Desai, S., & Safi, F. (2017, October 18-20). *Promoting mathematical connections using 2-D and 3-D manipulatives* [Session]. Presented at the National Council of Teachers of Mathematics Regional Conference. Orlando, FL.

State/ Local

Desai, S. (2024, March 25). *Opening windows, mirrors, and sliding doors through ethnomodeling tasks*. Presented at The Associated Teachers of Mathematics in Connecticut Annual Conference. New Haven, NJ.

Desai, S. (2024, March 15). *Bread around the world: An ethnomodeling exploration*. Presented at Association of Mathematics Teachers of New Jersey Spring 2024 Conference. New Brunswick, NJ.

Desai, S., & Soliman, A. (2023, October 20). *Promoting equitable teaching through building thinking classroom practices*. Presented at Association of Mathematics Teachers of New Jersey Fall 2023 Conference. Middletown, NJ.

Desai, S. (2023, October 20). *Equity in a thinking classroom*. Presented at Association of Mathematics Teachers of New Jersey Fall 2023 Conference. Middletown, NJ.

Desai, S. (2023, June 2). *Catalyzing change through an ethnomodeling approach*. Presented at the 2023 New Jersey Association of Mathematics Teacher Educators Annual Conference. Ewing, NJ.

Desai, S., Abassian, A. & Safi, F. (2021, June 10-12). *Mathematical modeling through a lens of art and culture* [Workshop]. Presented at the 2021 Florida Council of Teachers of Mathematics Annual Conference. Orlando, FL.

Abbaspour, S., **Desai, S.**, & Andreasen, J. (2021, June 10-12). *Orientation in school mathematics and how it causes confusion for English Language Learner Students*. Presented at the 2021 Florida Council of Teachers of Mathematics Annual Conference. Orlando, FL.

Abassian, A., & **Desai, S.** (2021, June 10-12). *Where did all this come from?: Exploring the concept of completing the square*. Presented at the 2021 Florida Council of Teachers of Mathematics Annual Conference. Orlando, FL.

Desai, S., & Safi, F. (2020, April 24). *Editing google slides during sessions* [Virtual session]. Presented at Remote Learning Community Mini Pop-in Conference. University of Central Florida, Orlando, FL.

Desai, S. (2020, April 1). *Research trends in mathematics education doctoral dissertations at University of Central Florida* [Poster session]. UCF Graduate Research Forum. University of Central Florida, Orlando, FL. (Conference canceled – COVID-19)

Desai, S., Kurtz, B., & Safi, F. (2019, October 17-19). *Integrating student identity and cultural heritage in mathematical explorations* [Session]. Presented at the 2019 Florida Council of Teachers of Mathematics Annual Conference. Jacksonville, FL.

Safi, F., Bush, S., & **Desai, S.** (2018, October). *Gerrymandering: When equivalent is NOT equal* [Session]. Presented at the 2018 Florida Council of Teachers of Mathematics Annual Conference. Daytona Beach, FL.

Grants and Other Funded Projects

Funded

Elementary prospective teachers' perceptions of teaching and learning mathematics through ethnomodeling tasks: A multi-case study. (2024-2025). **Soni, S.** (PI). National Council of Teachers of Mathematics - Mathematics Education Trust (MET) Early Career Research Grant. \$10,000. (funded)

Impact of ethnomathematics focused mathematical modeling explorations on elementary prospective teachers' perceptions of teaching and learning mathematics: A multi-case study. (2023-2024). **Desai, S.** (PI). Fairleigh Dickinson University. \$5,999. (funded)

Grant in Aid Program. (2023-2024). **Desai, S.** (PI). Fairleigh Dickinson University. \$4,000. (funded)

Other Grant Contributions

Collaborative research: Transforming undergraduate mathematics teacher preparation programs using the Professional Development: Research, Implementation, and Evaluation framework. (2020-2024). National Science Foundation (NSF): Improving Undergraduate STEM Education (IUSE). Award ID: 2013266. Rakes, C. (Overall & UMBC PI), Bush, S. B. (UCF PI), Mohr Schroeder, M. J. (UK PI), Saderholm, J. C. (BC PI), Stites, M. (UMBC Co-PI), Andreasen, J. (UCF Co-PI), Safi, F. (UCF Co-PI), Amick, L. (UK Co-PI), Fisher, M. (UK Co-PI), & Viera, J (BC Co-PI). \$2,975,413 (funded). **Role: Graduate Research Assistant (2020-2022), Collaborator (2022-Present).**

Empowering STEM teachers with earned doctorates: A UCF-OCPS Noyce program for elementary and middle school mathematics teachers. (2021-2026). National Science Foundation (NSF): Noyce Track 3. Bush, S. B. (PI), Dixon, J. K. (Co-PI), Brooks, L. (Co-PI), Butler, M. (Co-PI through 2021), & Moore, B (Co-PI). \$1,459,394 (funded). **Role: Graduate Research Assistant (Summer 2021).**

Other Scholarly Activity

Webinars and Podcasts

Desai, S. (December 2022). Ethnomodeling and collaborating around mathematical curiosities. *Teaching Math Teaching Podcast.* <https://www.teachingmathteachingpodcast.com/71>

Desai, S., Bush, S., Safi, F. (April 2022). Math Ed Podcast. https://www.podomatic.com/podcasts/mathed/episodes/2022-04-18T14_14_26-07_00

Desai, S. (September 2021). How can we humanize the teaching and learning of mathematics through representation and identity explorations? *Math 4 All Show.* <https://youtu.be/9fNri9XvOLO>

Blog Contributor

Desai, S. (October 2022). Lantern Task (contributed to the Introduction - history, culture, and traditions of Diwali). *Math Happenings* by Jenn Suh. <http://mathhappenings.onmason.com/2022/10/24/celebrate-diwali/>

Desai, S. (Summer 2020). #MathArtChallenge 80, 81, & 85. *100 Day #MathArtChallenge* by Annie Perkins. <https://arbitrarilyclose.com/home/>

Creative Works

- Website to compile online resources to support secondary and post-secondary resources during COVID-19 Pandemic - <https://viralmathematics.weebly.com/>
- Online resource for NCTM COVID-19, Coronavirus, and Pandemics – Math Resources - <https://www.nctm.org/Coronavirus-and-Pandemics-Math-Resources/>

Curriculum Development

- | | |
|------|--|
| 2024 | <p>Revise course and curriculum materials for elementary mathematics education courses</p> <p style="padding-left: 40px;">Revise elementary mathematics education courses based on new mandates and state legislation regarding number of credits prospective teachers need for PK-3 and K-6 mathematics.</p> |
| 2023 | <p>Developed new course and curriculum materials- <i>EDUC 6821: Early Elementary Mathematics Content and Pedagogy</i></p> <p style="padding-left: 40px;">Course designed to prepare teacher candidates to teach mathematics in the early elementary grades (P-3). Course developed based on essential knowledge, skills, and dispositions recommended in AMTE's Standards for Preparing Teachers of Mathematics in early elementary grades (AMTE, 2017).</p> <p>Developed new course and curriculum materials- <i>EDUC 6822: Upper Elementary Mathematics Content and Pedagogy</i></p> <p style="padding-left: 40px;">Course designed to prepare teacher candidates to teach mathematics in the upper elementary grades (3-6). Course developed based on essential knowledge, skills, and dispositions discussed in AMTE's Standards for Preparing Teachers of Mathematics in upper elementary grades (AMTE, 2017). updated course materials with recent research.</p> <p>Piloted new course for <i>EDUC 3403 – Field Experience III</i></p> <p style="padding-left: 40px;">Course designed for undergraduate elementary and secondary education majors gaining on-site field experiences. Revisions included: (1) new co-requisite course to provide mentorship and on-site support from university mentor, (2) deeper focus on anti-bias and social justice education.</p> |
| 2022 | <p>Revised the content and materials used in <i>EDUC 6820 – Problem-Based Strategies for Elementary Mathematics</i></p> <p style="padding-left: 40px;">Course designed for undergraduate and graduate elementary education majors in developing pedagogical and content knowledge for teaching mathematics. Revisions included: (1) deeper focus on anti-bias and social justice education, (2) updated course materials with recent research.</p> <p>Revised the content and materials used in <i>EDUC 6570: Standards-Based Curriculum/Methods: Secondary Math</i></p> <p style="padding-left: 40px;">Course designed for undergraduate and graduate secondary mathematics education majors in developing pedagogical content knowledge for teaching mathematics. Revisions included: (1) deeper focus on anti-bias and social justice education, (2) updated course materials with recent research.</p> <p>Revised the content and materials used in <i>EDUC 6566: Standards-Based Curriculum/Methods: Secondary Science</i></p> |

2020

Course designed for undergraduate and graduate secondary science education majors in developing pedagogical content knowledge for teaching science. Revisions included: (1) deeper focus on anti-bias and social justice education, (2) Assisted in revising mathematics secondary education program - 5 courses for undergraduate and graduate students

TEACHING

Eastern Connecticut State University

Undergraduate Courses

- EDU 411: Methods in Elementary Mathematics
- EDU 464: Principles and Practice of Teaching Mathematics
- MAT 139P: Number Systems Plus
- MAT 140: Geometry/Probability for Elementary Teachers
- Supervise Pre-Student Teaching and Student Teaching

Graduate Courses

- EDU 546: Issues/Applications in Secondary Mathematics

Central Connecticut State University

Undergraduate Courses

- MATH 099: Elementary Algebra
- MATH 102: Applied Algebra
- MATH 102C: Applied Algebra Combo

Fairleigh Dickinson University

Undergraduate Courses

- EDUC 3403: Field Experience III

Graduate Courses (taken by undergraduate students in 5-year BA+MAT program as well as traditional MAT students)

- EDUC 6566: Standards-Based Curriculum/ Methods: Secondary Science
- EDUC 6570: Standards-Based Curriculum/ Methods: Secondary Math
- EDUC 6584: Computer as a Teachers' Aide
- EDUC 6820: Problem-Based Strategies for Elementary Mathematics
- EDUC 6821: Early Elementary Mathematics Content and Pedagogy
- EDUC 6822: Upper Elementary Mathematics Content and Pedagogy

University of Central Florida (2019-2022)

Undergraduate Courses

- MAE 3310: Elementary Mathematics for Teaching I (co-taught and instructor of record)
- MAE 3311: Elementary Mathematics for Teaching II (co-taught)
- MAE 4333: Teaching Geometry in the Secondary Schools (co-taught)
- MAE 4339: Teaching Algebra in the Secondary Schools (co-taught)
- MAE 4360: Mathematics Instructional Analysis - Secondary Methods II (co-taught and instructor of record)

Graduate Courses (co-taught)

- MAE 5327: Teaching Middle School Mathematics
- MAE 5336: Current Methods in Secondary School Mathematics
- MAE 6338: Teaching Geometry in the Secondary Schools
- MAE 6339: Teaching Algebra in the Secondary Schools
- MAE 6641: Problem Solving and Critical Thinking

LEADERSHIP AND SERVICE TO THE PROFESSION

National**Association of Mathematics Teacher Educators (AMTE)**

- Equity Committee, 2023 – 2026.
 - Associate Vice President, 2025-2026
- Conference Proposal Reviewer, 2019 – Present.
- Local Arrangements Committee, AMTE Annual Conference, Orlando, FL, 2019.

National Council of Teachers of Mathematics (NCTM)

- Program Committee, NCTM 2024 Annual Conference, 2023 – 2024.
- Writing Committee, Position Statement: Mathematics and Culture, 2023 – 2024.
- Department Co-Editor, For the Love of Mathematics Department, *Mathematics Teacher: Learning and Teaching PK-12*, 2022 – 2024.
- Manuscript Reviewer, *Mathematics Teacher: Learning and Teaching PK-12*, 2019 – Present.
- Manuscript Reviewer, *Mathematics Teaching in the Middle School*, 2017 – 2019.
- Volunteer, NCTM Regional Conference, Atlantic City, NJ, 2015; Philadelphia, PA, 2016.

Other

- Conference Proposal Reviewer, International Group for the Psychology of Mathematics Education- North America, 2018 – Present.
- Manuscript Reviewer, *Investigations in Mathematics Learning*, 2020 – Present.
- Manuscript Reviewer, *The Journal of Teacher Action Research*, 2019 – 2020.

State**Association of Mathematics Teacher Educators of Connecticut (AMTEC)**

- Executive Board Member, 2024-2027.
- Steering Committee – Counted Out Screening, 2024-2025

New Jersey Association of Mathematics Teacher Educators (NJAMTE)

- Executive Board – Four-Year College Representative, 2022 – 2024.

Association of Mathematics Teachers of New Jersey (AMTNJ)

- Executive Board – Executive Director of Student Outreach, 2023.
- Volunteer, AMTNJ Annual Conference, East Windsor, NJ, 2013, 2016; New Brunswick, NJ, 2014.

Florida Council of Teachers of Mathematics (FCTM)

- Committee Member, Access and Equity Committee, 2021 - 2022.

Fairleigh Dickinson University

Department – School of Education

- Advise students in QUEST Program, 2023 – Present.
- Build partnerships with local schools
 - Organized field trip for 150+ 3rd and 4th grade students to FDU campus for a Math Field Day (May 2023)
 - After school math tutoring program at local elementary school (Spring 2024)
- Committee Member, Reimagining QUEST, 2022 – Present.
- Chapter Counselor, Alpha Kappa Gamma Chapter of Kappa Delta Pi – Education Honor Society, 2023 – Present.
- Committee Member, School of Education Policy Committee (SEPC), 2022 – Present.
- Committee Member, Balloting and Nominations Committee, 2022 – Present.
- Recruitment Events, School of Education Representative, 2022 – Present.
 - Major Madness (March 2023)
 - QUEST Open House

University

- Faculty-Student Mentoring, 2024 – Present.
- Committee Member, Library Committee, 2022 – Present.

University of Central Florida (UCF)

- Co-founder, Graduate and NCTM Representative of University of Central Florida Council of Teachers of Mathematics (UCF-CTM), 2020 – 2022.

The College of New Jersey (TCNJ)

- TCNJ School of Science Student Advisory Board, Ewing, NJ, 2015 – 2017.
- TCNJ Mathematics and Statistics Department Student Advisory Board, Ewing, NJ, 2015 – 2017.
- Co-founder and President of The College of New Jersey Council of Student Teachers of Mathematics (TCNJ-CSTM), 2014 – 2017.

AWARDS AND HONORS

- *AMTE Dissertation Award*, Association of Mathematics Teacher Education (2024).
- Selected as an Association of Mathematics Teacher Educator STaR Fellow (2023).
 - Support for early career mathematics educators in Service, Teaching, and Research (STaR)
- *UCF CCIE Award for Excellence in Graduate Student Teaching*, University of Central Florida (2022).
- *AMTE Susan Gay Travel Scholarship*, Association of Mathematics Teacher Education (2021).
- *Delores A. Auzenne Fellowship*, University of Central Florida (2019-2020, 2020-2021).
- *Graduate Dean's Fellowship*, University of Central Florida (2019-2020).
- *Graduate Presentation Fellowship*, University of Central Florida (2018-2019, 2019-2020).
- PME-NA Conference Registration Scholarship (2018).
- *Graduate Summer Mentoring Fellowship*, University of Central Florida (2017).
- *Dean's List*, School of Science, The College of New Jersey (Spring 2016, Spring 2017).
- *Senior Leadership and Service Award* – Mathematics and Statistics Department, The College of New Jersey (2017).
- *First Student Affiliate Recognition*, Association of Math Teacher of New Jersey (2014).

PROFESSIONAL AFFILIATIONS

- Association of Mathematics Teacher Educators of Connecticut (AMTEC)
- Association of Mathematics Teacher Educators (AMTE)
- National Council of Teachers of Mathematics (NCTM)
- North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)
- New Jersey Association of Mathematics Teacher Educators (NJAMTE), 2022 – 2024.
- Association of Mathematics Teachers of New Jersey (AMTNJ), 2013 – 2017, 2022 – 2024.
- Florida Council of Teachers of Mathematics (FCTM), 2017 – 2022.