

Math Ed Listserv

Get email updates about program events, as well as job opportunities that get sent our way. Contact Aaron (brak@bu.edu) to be added to the email list.

Newsletter

Welcome to our first newsletter for the Math Education program here at BU Wheelock. Our goal is to publish once per semester. We hope to share upcoming happenings for current students and alumni, as well as notable events involving math education students, faculty, and alumni. We can't wait to reconnect with you all of you!

BU Wheelock Magazine Feature

Check out the newest BU Wheelock Magazine that features an article highlighting many of the mathematics education faculty as they talk about their newest Noyce grant, which focuses on joy and equity in the mathematics classroom (and provides tips for beginning math teachers to have a more inclusive and justice oriented classroom). The article in the newest issue can be found here: <https://www.bu.edu/wheelock/magazine/articles/2024/the-joy-of-math/>



THE JOY
OF MATH

Seminar Series



Designing Early Mathematics Interventions in Multi-Tiered Systems of Support (MTSS) to Enhance Access to the General Curriculum for Students With or At Risk for Mathematics Learning Disabilities (MLD).

On Monday, November 18th, Dr. Nancy Nelson (Boston University) gave a presentation on her work at the intersection of Special Education and Mathematics Education. The recording of the seminar can be access here, and a description of her talk is included below.

Link to Recording: https://mymedia.bu.edu/media/t/1_cjlaeh02

Description: This presentation will describe the role of mathematics interventions in MTSS to facilitate student engagement in mathematical learning. Students experiencing difficulties learning mathematics in early elementary school often struggle to demonstrate basic number sense and benefit from explicit instruction targeting whole number concepts to promote access to the general curriculum in prevention-oriented systems. Drawing on research evidence and learning theories, this presentation will describe a process for mathematics intervention design and evaluation, instantiated through NumberShire, an early mathematics, game-based intervention that teaches whole number concepts aligned with the Common Core State Standards for Mathematics in grades K-2.

Preparing Elementary Teachers to Support Students With Disabilities in Mathematics



Please join us for the next talk in our seminar series on **Wednesday, December 4th** from 6:00pm-7:15pm which can be attended either in-person (in room 423 of 2 Silber Way, Boston, MA 02215), or on Zoom (email Aaron Brakoniecki, brak@bu.edu for Zoom link). We will be welcoming Dr. Nate Jones (Boston University); a description of his presentation is included below.

Description: A significant yet often overlooked issue in education is ensuring equitable outcomes for students with disabilities (SWDs), who make up nearly 15% of K-12 students. However, preservice general education teachers often lack training to support SWDs in math. This presentation shares findings from a four-year NSF-funded study that tested a two-week interactive course for preservice education teachers on metacognitive modeling. Using mixed reality simulations and coaching, candidates showed large improvements in instructional quality. The presentation will describe the overall large effects on candidates' instructional quality and will address challenges, including integrating new materials into busy coursework, designing control conditions, developing new measures, identifying key outcomes, and exploring AI's role in reducing assessment burdens.

Current Research



Simulations for Learning and Assessing in Teacher Education (SimulaTE)

Meghan Shaughnessy has a project - Simulations for Learning and Assessing in Teacher Education (SimulaTE) - funded by the National Science Foundation. This project explores the ways in which thoughtfully designed simulations can provide preservice teachers with formative assessment opportunities that serve as a complement to, or alternative to as needed, feedback derived from field placement contexts. A set of simulations are being designed with a focus on eliciting and interpreting student thinking. These simulations are being used with preservice teachers in three elementary teacher preparation programs of varying sizes and demographics. Data is being collected to understand the ways in which the feedback from engaging in the simulations serves to strengthen preservice teachers' abilities to elicit and interpret student thinking through an analysis of performance in the simulations, interviews with preservice teachers, and feedback from teacher educators. An associated study is establishing the reliability and validity of the simulations as assessment tools. The project is a collaboration between Boston University, the University of Michigan, and Horizon Research, Inc. BU team members include Brit Claiborne (PhD student), Ben Freeburn (Research Scientist), Beth Greene (CAGS student), and Jeongeun Lee (EdM student).

BU Math Education at the AERA Annual Conference

In April of 2024, Math Education faculty and graduate students presented their work at the annual conference in Philadelphia, Pennsylvania.

- "A Meme-ingful Way to Collectively Analyze Mathematical Cultural Beliefs" - K. Elizabeth Hammonds, **Greg Benoit**, Gregory Beaudine
- "Exploring the "Co-"Ness of Group Teaching: Distributed Authority and Collective Responsibility in Youth Pedagogical Development" - Eli Tucker-Raymond, **Xi CiCi Yu**, Juan Miguel Gutierrez, Katherine K. Frankel, Maria C. Olivares, Ashley Houston-King, **Clifford Freeman**, Perpetua Djamency Wisvens Saintine, Arianna M Gaston
- "Remixing the Word and the World: Critical Computational Literacies in Virtual and Physical Spaces" - Clifford H. Lee, Eli Tucker-Raymond, Brian E. Gravel, Clara Mabour, Yume Menghe Xu, **Clifford Freeman**
- "Building Community Through Collaborative Observation: Structures and Moves to Intervene on Biases and Support More Equitable Instruction" - **Meghan M. Shaughnessy**, Nicole Garcia, Deborah Loewenberg Ball, Darrius D. Robinson
- "Identifying and Recontextualizing Problems of Practice Using Representations of Leading Classroom Mathematics Discussions" - Hala N. Ghouseini, Sam Prough, **Eric Cordero-Siy**
- "Facilitating Mathematics Discussions: Case Study of Attending to Mathematical Language and Mathematical Development and Participation" - **Eric Cordero-Siy**, Sam Prough, Hala N. Ghouseini, Elzena McVicar

