SUNY Potsdam at Fall 2024 Conference of AMTNYS (Association of Math Teachers of New York State)

November 7-9, 2024 Albany NY Dr. Cornelia Yuen, Mathematics Emily Prest, Math and Sec. Ed. Major Alexis Price, Math and Sec. Ed. Major Dr. Blair Madore, Mathematics Dr. Pooja Saxena, Teacher Education

Learning Strategies

Lexi Price was able to attend the session named "Disability Awareness" by Jody Popple from Madison Oneida BOCES.

Here we learned about the different kinds of categories students can be placed in based on their struggles and disabilities. One of these that was focused upon was dyscalculia, which is very common, and many times overlooked. Participants completed an activity where we were able to experience what doing math feels like when you have this disability.

"I enjoyed this session and plan to use it in my future career of teaching math to elementary students. I have had the privilege of working in ICT classrooms and in the future, plan to teach one myself. This session gave me a deeper insight to teaching students with disabilities and the struggles they face on a daily basis." --Lexi

Emily Prest attended a session called "Using AI for Lesson Planning and Efficiency" by Jennifer Vibber of Penfield High School.

Participants learned about the different kinds of AI, their uses for things in the classroom, and how they can be helpful for unplanned situations. Some of the AI tools discussed were ChatGPT, Microsoft Copilot, Google Gemini, and MathGPT. These resources can be helpful for creating worksheets, giving students real life examples of the math they're learning, and even forming seating charts. Emily found this session was really informative and especially relevant because these AI tools will continue to become a bigger part of the education field, and she wants to keep learning about them.

"Now, I can successfully use some of these tools with a better understanding of what they can offer me as an educator." -- Emily





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Professional Development

Dr. Saxena participated in the "Leap into Computational *Thinking (CT)*" workshop led by Ellen Falk, of North Salem Middle-High School.

In this session peg puzzles were used to illustrate essentia computational thinking skills, including algorithms, decomposition pattern recognition, and abstraction. This session included discussions on connecting CT with mathematical concepts like functions, data organization, and sequences. It was an inspiring session, especially because these kinds of activities can fit right into the curriculum for secondary math classrooms and could be valuable for preservice teachers. Since Dr. Saxena is interested in integrating computational thinking into middle school math, this workshop was a perfect fit for her.





now a writer who is a math professor on the side. He was formerly a math professor who writes on the side, and he just published his fourth book "Math for English Majors".



Emily and Alexis were able to meet many teachers and administrators from across the state, including more than 10 Potsdam Alumni. Here they are pictured with Faith Gatto of Berlin CSD and Jillian Folino of Watertown CSD.



Algorithms

Dr. Yuen attended a Keynote Breakout session entitled "What Do Students See When They Look At Algebra?" by Ben Orlin.

Ben explained that mathematics is a language, and thus our students need to build strategies to learn how to read it properly. He used three specific algebraic expressions to foster discussions on how experts (instructors) can help novices (students) see the structure beneath all those letters and symbols. There were a few middle school teachers as well as high school teachers at Dr. Yuen's table and she found it very interesting to hear their thoughts and experiences. While she learned some new ideas, she was also glad to hear that some of the strategies she has been using in her upper division course for the past couple semesters to help her students to focus on the structures of mathematical writing were recommended by the presenter.









