

Presentation Schedule for the UW System Math Initiative Showoff/Showdown

January 13, 2021 10:00 a.m.-12:00 p.m.

Time Slot	Active Learning Track	Building Community Track
10:00 a.m.- 10:20 a.m.	<p>“Student Video Assignments in Elementary Statistics” <i>Melissa Bingham (UW-La Crosse)</i></p> <p>While online homework systems work for students to practice skills in math and statistics courses, it can sometimes be difficult for the instructor to really tell what students understand based off this homework. In this talk, I will go through how I used student submitted video assignments as a form of assessment in my (asynchronous online) Elementary Statistics course in Fall 2020. Both pros and cons of this form of assessment will be discussed.</p>	<p>“These Practices Gave Me a Successful Semester” <i>Xianwei Van Harpen (UW-Milwaukee)</i></p> <p>In my presentation I will share several new practices I adopted this semester in my synchronous online math content course for elementary teachers. Many of my ideas came from the UW System Active Learning workshop. Based on my students’ feedback, I was able to engage them in their learning as well as make them feel that I cared about their success.</p>
10:20 a.m.- 10:40 a.m.	<p>“Using Mastery-Based Grading in Online Calculus Classes” <i>Kevin Bombardier (UW-Platteville)</i></p> <p>We will discuss a mastery-based grading system used in my online calculus courses during the Fall 2020 semester. In this type of system, the stakes are higher on exams: solutions must be correct to “pass” a concept. There is no partial credit. However, students can attempt concepts again on future exams.</p>	<p>“Use of Online Discussion Boards for Community Building and Student Engagement” <i>Holly Attenborough (UW-Platteville)</i></p> <p>This fall, for the liberal arts math class at UW-Platteville, I made use of discussion boards in our LMS (Canvas). For the first few discussions, the students watched videos from Youcubed.org (created by Jo Boaler of Stanford University), wrote response posts and replied to each other. The discussions then shifted to preparing for a presentation on “Math in Culture.” Each student uploaded their “Math in Culture” presentation to a discussion board to which other students replied. This was a great addition to the course and the students had a lot of fun with it. These discussions and presentations could be easily adapted for other math courses.</p>

<p>10:40 a.m.- 11:00 a.m.</p>	<p>“Building a Stable of Resources for Flipped Learning in Elementary Statistics” <i>Abra Brisbin (UW-Eau Claire)</i> Flipped classrooms are a powerful tool for promoting active learning, but they can also be daunting for instructors in the amount of preparation required. In this presentation, I’ll discuss how I leveraged the challenge of a newly-hybrid course (which naturally required additional preparation) to build a collection of videos that will enable flipped learning in honors elementary statistics even after the end of the COVID-19 pandemic.</p>	<p>“Radical Group Work” <i>Nathan Warnberg (UW-La Crosse)</i> To help build community and a robust support system, I decided that almost all assessments would be group assessments. This included quizzes, in-class exams and even the final exam. I will discuss what the students thought about the dynamic, how my assessments changed, and how it impacted final grades. Overall, I will tell you what I learned from this experiment and how I plan on changing it for Spring 2021. (Student populations: College Algebra - First Year Students, Majors with “light” math requirements and Calculus I - First and Second Year Students, Majors with “heavy” math requirements)</p>
<p>11:00 a.m.- 11:20 a.m.</p>	<p>“Cultivating Active Learning in a Synchronous Online Learning Environment” <i>Shubhangi Stalder (UW-Milwaukee at Waukesha)</i> Drawing from what I learned at the summer Math Initiative Active Learning session, I will demonstrate Jamboard, Desmos, and GeoGebra projects from my synchronous online courses in Fall 2020 (Geometry for Elementary Teachers, Corequisite Model of Algebra Literacy I and II, and Calculus II). The projects can introduce topics using inquiry-based learning, allow students to visualize the three-dimensional nature of objects (e.g., solids of revolution), or reinforce general understanding of topics (e.g., transformations of functions). Beyond the active-learning benefits, students could anonymously spread their mathematical wings without the worry of judgment or scrutiny by the teacher or classmates.</p>	<p>“Encouraging Students to Participate” <i>Mary Elvi Paler (UW-Platteville)</i> I will talk about some strategies I used to motivate students to participate. First is polling to draw students’ attention at the very beginning of class. Poll questions include what they are feeling (a time to encourage), whether or not they have done the homework (to serve as a reminder), or questions on previous material (to serve as a review). Second is making use of the chat box to let students ask questions. Third is giving them exercise to work as a group and dividing them into breakout rooms. I would then let each group write their answers in the group discussion forum.</p>

<p>11:20 a.m.- 11:40 a.m.</p>	<p>“Virtual Polls with Multiple-Choice Questions to Create One-on-One Engagement during AltDelivery” <i>Kirthi Premadasa (UW-Platteville at Baraboo Sauk County)</i> We used a good multiple-choice question bank to work as virtual polls while teaching Calculus II. Students would work out most of the answers individually but would brainstorm as groups for the more challenging questions. As the responses were either A, B, C, D, or E, students found it convenient to submit the answers via the instructor only chat feature in Zoom. Not only did this method generate significant engagement throughout the class period, but it also allowed the professor to have more one-on-one sessions than regular face-to-face delivery. During this presentation, I plan to share the best practices and three useful multiple-choice question databases.</p>	<p>“Facilitating Group Work in an Online Classroom Using Google Jamboards” <i>Michael Loper (UW-River Falls)</i> I will discuss how I used Google Jamboards (a shared virtual whiteboard) to facilitate group work in a precalculus class that had a mix of asynchronous and synchronous students. Examples of student work will be shared, and I’ll mention challenges and successes of using the tool to encourage student communication and discussion.</p>
<p>11:40 a.m.- 12:00 p.m.</p>	<p>“Breakout Groups for Active Learning Online in Math Major Courses” <i>Cindy McCabe (UW-Stevens Point)</i> In Abstract Algebra and in Topology, each week we met twice through Zoom and once through asynchronous means. When we met synchronously, students used randomly-assigned breakout groups to address one or two questions. Students chose roles (Scribe, Timekeeper, etc.), opened a shared Word doc, and worked together for 10 minutes in the middle of class. After class, each student uploaded a copy of their group file after adding a question or comment. Students were engaged, I got immediate feedback, and class was much more interesting. I plan to do it again.</p>	<p>“Transforming Weaknesses into Strengths: Creating a New Culture for Learning, Collaborating, and Assessing in the Virtual World” <i>Christine Lucas (UW-Milwaukee)</i> In this session we will see how the learning in one virtual class of students evolved through the use of Jamboards, Interactive (Homemade) Videos, Canvas Peer Reviews, and select activities. The context is a Mathematics course for elementary teachers, but I’ll give some tips on a couple of new and easy technologies I found, as well as comment on which pedagogies worked well and which did not.</p>