



**The Ohio Articulation and Transfer Network (OATN)
Ohio Mathematics Initiative (OMI) Chairs/Leads Network Meeting
WebEx Virtual Meeting**

Friday, May 8, 2020

10:00 am to 12:30 p.m.

Present: Xiang Yan, Kelly Stady, Karl Hess, Krista Maxson, Patrick Dowling, Michael Goldberg, Arun Rahunathan, Luis Casian, Todd Eisworth, Marianna Doolittle, Tom Wakefield, Don White, Tyler Maley, Lee Wayand, Ivan Soprunov, Paul Zachlin, Irina Chernikova, Aaron McClure, Serita McGunia, Elizabeth Bonawitz, John Davidson, Phil Blau, Greg Goodhart, Chelle Younker, Cosmin Roman, Ricardo Moena, Andrea Faber, Andrew Tonge, Blerta Ereditario, Sara Rollo, Kevin Kreider, Monica Delgado, Brad Findell, David Redett, Stephanie Stafford, Claire Merriman, Sandra Siegrist, Jim Fowler

ODHE/OATN Staff: Zoe Woodbury, Krista Maxson, Paula Compton, Jared Shank, Candice Grant, Steph McCann, Michelle Blaney, Anna Cannelongo, Stephanie Davidson, Jessi Spencer, Calista Smith

I. Welcome and Introduction

Dr. Luis Casian and Dr. Paula Compton welcomed the meeting attendees.

II. General Discussion: How are things going?

- Pass/Fail Grades

Ms. Michelle Younker began the discussion by reviewing the pass/fail grade policies of several institutions during the Spring 2020 semester. Ms. Younker went on to identify COVID-19 updates listed on the Ohio Department of Higher Education (ODHE) website as an institutional information resource. This includes information such as the restriction on virtual natural science lab experiences being temporarily suspended for the Spring and Summer 2020 term, as well as College Credit Plus guidance.

- Proctoring of Tests

Ms. Younker recognized academic integrity as another major concern amid the changes to the Spring and Summer term. The group discussed different proctoring software and methods used to administer tests and ensure proper academic conduct. Many institutions used ProctorU or WebEx, but issues began arising with students using Google Hangouts and other applications as a form of misconduct. Generally, there was a move away from high-stakes assessments and towards thought-provoking, reflective assessments.

- Plans for Summer 2020 and Fall 2020

Regarding institutional plans for the Summer and Fall 2020 terms, those in attendance discussed that many institutions have not identified a definite course of action. Teaching remotely has been a consideration for universities, and some, such as the University of Cincinnati and Rio Grande, have already designed plans for online course delivery. Overall, there was a consensus among the group for considering remote delivery courses in some form to take preventative health measures. However, lab courses have mostly remained in-person.

III. **Alternative Algebra 2 Courses**

Ms. Anna Cannelongo, Education Program Specialist- Education at the Ohio Department of Education (ODE) and Dr. Krista Maxson Associate Vice Chancellor of P- 16 Initiatives at the Ohio Department of Higher Education began their presentation recognizing alternative courses to Algebra 2. They discussed that a problem begins with high school math courses failing to provide enough options for students that would not benefit from an Algebra 2 to Pre-Calculus or Calculus math pathway due to differing degree requirements. Algebra 2 has also served as a roadblock for high school graduation and the continuation of secondary education due to some students struggling in the pathway or having different goals. ODE and ODHE have partnered with Education Strategy Group and The University of Texas at Austin Charles A. Dana Center to strengthen Ohio's high school math pathways. Through the use of the Math Pathway Advisory Council, OMI Subgroup 5 Math Pathway Architect group, and focus groups, ODHE and ODE have begun to gather information and work towards developing an equitable, rigorous, flexible, and coherent math pathway.

The new potential high school math pathway begins with an Algebra 1 and Geometry sequence, and then moves to Algebra 2 or equivalent courses. The options after Geometry are divided into four course options: Algebra 2 for STEM to Pre-Calculus, Discrete Math 1 (Foundations of Computer Science) to Discrete Math 2 (Advanced Computer Science), Probability and Statistics, and Quantitative Reasoning (QR). School districts will be able to choose how many and which Algebra 2 Equivalency courses to offer. The placement of Data Science is still unknown. Math course requirements for various potential careers may vary by institution.

IV. **Update from Faculty Group Two**

- Technical Mathematics I & II

Dr. Ricardo Moena, Assistant Department Head and Professor of Mathematical Sciences at the University of Cincinnati updated the group on several new course approvals. Technical Mathematics I and II have been approved. A set of learning outcomes has been defined to add to the Ohio Transfer Module (OTM) after students have had trouble transferring these courses. This course serves as the first technical math course to be included in the OTM.

- Elementary Education I & II

Dr. Moena went on to discuss that after receiving feedback, Subgroup 2 has been working to finalize learning outcomes for Mathematics in Elementary Education I and II to be sent out for statewide endorsement in the coming weeks.

- Discrete Mathematics

Dr. Moena mentioned that by request of certain programs, the subgroup will be meeting in early June to further discuss Discrete Mathematics with projected endorsement fall 2020.

- Other

Dr. Moena concluded that the subgroup is continuing to develop Life Science for Calculus with the goal of having learning outcomes completed by fall 2020. A Data Sciences course is also in development with an expected endorsement in the near future. Finally, the subgroup met in April 2020 meeting and formed a research alternatives to Calculus subgroup in order to improve student success rates after taking Pre-Calculus.

V. Update from Faculty Group One

Mr. Karl Hess, Chair of Mathematics at Sinclair Community College and Dr. Cosmin Roman, Associate Professor of Mathematics at The Ohio State University updated attendees on Subgroup 1 work finding ways to adopt and expand co-requisite and remediation math courses. Dr. Roman updated the group on a recent meeting at The Ohio State University at Lima, emphasizing the need to continue the subgroups work, as well as the thoughtful organization of its work. Ms. Calista Smith, ODHE consultant provided attendees feedback from the subgroups most recent workshop that was held digitally. She discussed that the subgroup is working towards finding an academic mindset and the learning behaviors of students was found to be the most challenging aspect of institutional implementation of math co-requisites. During the meeting institutions also expressed concern for balancing the faculty workload and online/hybrid instructional options. However, she explained that faculty and staff have begun to feel more confident about online instruction following the Spring 2020 transition to distance learning. Mr. Hess introduced feedback regarding the most helpful instructional strategies and tactics used to implement co-requisites. Some methods included using ALEKS instead of creating co-requisites, collaborating across all institutional levels and being open to data, and requiring more low-stakes assignments and supplemental instructors. In review of the anticipated institutional challenges with delivering math co-requisites next year, alignment and workload were found to be significant variables.

VI. Update from Faculty Group Four

Dr. Donald White, Professor and Chair of the Department of Mathematics and Statistics at the University of Toledo encouraged the group to explore the knowledge database and gather their own data and results of transitions to QR, co-requisites, pathways, or

other OMI outcomes. Dr. White asked attendees to send reports on their institutions, documenting successes and challenges amid the processes.

VII. OSU Outreach Programs

Ms. Monica Delgado, Associate Director of Outreach at The Ohio State University and Dr. Claire Merriman, Ross Assistant Professor at the Ohio State University, respectively, gave a presentation to introduce their outreach initiatives from the Department of Mathematics. Dr. Merriman informed attendees about the initiatives third summer camp program, which was held virtual this year and encourages female and gender non-conforming students to apply and increase diversity and program reach to women and minorities. The Buckeye Aha! Math Moments (BAMM) also hosts workshops once a month on Saturdays that introduce students to math-based games and puzzles. Within day-to-day activities, BAMM implements a two-week long mini course at Metro Middle School and several visits to elementary schools, Museum visits, a partnership with LASER and the African American and African Studies Community Extensions Center, and several other programs that have faced issues due to COVID-19. Programs focused more on the Department of Mathematics include a recreational math course, a recreational math seminar, and an origami December holiday decorations workshop. Dr. Merriman and Ms. Delgado mentioned that a major task for BAMM at the moment is managing the start-up of programs amid cancellations and transitions to virtual activities as a result of COVID-19. Through the work of BAMM, students and youth can be introduced to math in a non-traditional manner in order to spark an interest and promote future values of mathematics in the academic mindset.

VIII. For the Good of the Order

With no further points for the group to discuss, the meeting was adjourned by Dr. Casian.