



**The Ohio Articulation and Transfer Network (OATN)
Ohio Mathematics Chairs/Leads Network Meeting**

Friday, November 2, 2018

10:00 am to 2:00 p.m.

The Ohio State University
Columbus, Ohio

Present: Ricardo Moena, Paul Zachlin, Jean LaFont, Brad Findell, Emily Boyer, Blerta Ereditario, Aner Shaw, Aaron McClure, Tyler Malet, Donald White, Todd Eisworth, Arunasalam Rahunanthan, Phil Blau, Michael House, Allen Shore, Melanie Devine, Lee Wayand, Patrick Dowling, Brian Murphy, Michael Wilkins, Ivan Soprunov, David Redett, Mysti Hobson, Kevin Sreider, Karl Hess, Luis Casian, Sandy Siegrist, Greg Goodhart, Elizabeth Bonawitz, Michelle White, Thomas Wakefield, Robert Raupach, Andrea Faber, Sara Rollo and Thomas Watfield

ODHE/OATN Staff: Stephanie Davidson, Paula Compton, Brett Visger, Brenda Hess, Anna Cannelongo, Michelle Blaney, Candice Grant, Kevin Sosa and Jessi Spencer

I. Welcome & Introductions

Dr. Luis Casian welcomed attendees and provided an overview of the agenda. Dr. Casian announced his new position as Dean of Natural Sciences and Mathematics at the Ohio State University, however he will continue to support the Ohio Mathematics Initiative. He went on to welcome the Interim Chair of Mathematics, Jean LaFont.

II. Update on the Strong Start to Finish Initiative

Mr. Brett Visger provided an overview of Strong Start to Finish geared at increasing the percentage of student who complete gateway Mathematics and English in first year. This grant aims at aligning mathematics, pathways and co-requisites. A total of 30 Ohio public institutions are involved and receiving funding to assist with raising rates from thirty-three percent to fifty-five percent in the next three years and address equity gaps. Of the remaining five Ohio public institutions are participating with technical assistance. On October 4th and 5th a convening was held to discuss reaching the fifty-five percent, at this conveying some institutions identified a stronger need in English. Some institutions are now focusing more in English while others are focusing more on Mathematics. A Chairs and Leads Network will now be formed with English departments. Mr. Visger went on to announce a grant opportunity available for institutions to receive a none competitive funding to identify gaps that need filled, institutions participating in the strong start to finish grants are welcome to also apply for funding. These award proposals will be due in December.

III. Update on the Ohio Guaranteed Transfer Pathways

Dr. Candice Grant provided an update on the Ohio Guaranteed Transfer Pathways (OGTP). Roughly 30 pathways are in development through spring 2019 including Health Sciences and Information Technology. Education, Engineering and Engineering Technology are currently out for endorsement. Twenty-one pathways are in the implementation phase including

Mathematics. In this phase faculty are completing pathways course templates to showcase courses needed to complete a degree. A website is under construct that will serve as the officially repository for all pathways with a fall 2018 launch date. An implementation policy is in development and awaiting Chancellor approval, this policy addressed preferred mathematics pathways for students building upon work from the Ohio Mathematics Initiative. Institutions should explore ways to offer mathematic pathways if not already having within three years of implementation. If an institution cannot offer preferred pathways they can submit a letter of justification for exceptions, which will be reviewed by the OGTP Steering Committee and Oversight Board. Dr. Grant mentioned that with a range in mathematics requirements, some institutions are not using approved OTM mathematics in associates of arts and associate of science degrees, which cause students to retake needed mathematics courses when transferring to a four-year institution. Better engagement with transfer advising needs to occur on campuses to eliminate myths of strictly using college algebra and rigor. Some institutions shared that their mathematics departments are meeting with different departments to discuss mathematic pathways possibilities. Others are working on QR course submissions as pathways for a range of disciplines. Subgroup three members are also attending panel meetings to discuss how mathematics will work within each created pathways.

IV. Update from Faculty Groups

Subgroup One: Karl Hess provided an update on new and alternative pathways. This group reformed in 2017 to focus on co-requisites, with 2017-2018 focusing on what was being done in the state. They collected data from over 30 institutions on co-requisites and found three models: 1. paired course model where co-requisites is a separate course, 2. one on one plus model with one class expanded time and 3. technology mediated model where co-requisites takes form in lab and assistance with tutors. The goal of the subgroup was to host a symposium to discuss what is being done and bring people together to collaborate. This gathering was held at the end of October where faculty, registrars and advisors discuss each area related to co-requisites. The next phase is following up on data and conveying results and helping attendees get more connected with presenters and filling gaps within each area. Dr. Hess discussed how to manage this through sending presentation materials to chairs and visiting campuses. Dr. Compton mentioned utilizing Knowledge Base to house resource materials in a secured site. Ms. Michelle Blaney also mentioned connecting with subgroup three to visit campuses for engagement about co-requisites. Attendees discussed professional development for adjust professor to teach co-requisite courses and lack of funding for credentialing and training for adjust professors and faculty with only bachelors degrees.

Subgroup Two: Ricardo Moena and Lee Wayand provided an update on revisions of the Ohio Transfer Module (OTM) Criteria. The group is redefining objectives for statistics, quantitative reasoning and STEM pathways. Currently seven institutions have approved QR courses with eight additional institutional in the pipeline for review and approval, once complete over fifty percent of Ohio public institutions will have approved QR courses. This course is reasoning based not skills based with the goal of accessing reasoning. Attendees discussed need for professional development and training for professors. To increase

engagement the subgroup hopes to input shared QR materials into Knowledge Base and using published QR textbooks. They went on to discuss announcement of TMM005 Calculus I and TMM006 Calculus II revised learning outcomes that focus on active approaches and STEM fields. The subgroup is also working on calculus re-sequencing for teaching in the classroom, as well as technical mathematics and how this may intertwine in the Ohio Guaranteed Transfer Pathways.

Subgroup Three: Michelle Blaney provided an update on communication, outreach and engagement. The group has been presenting on the OMI at professional organizations and conference in Ohio and out of state. The upcoming year the subgroup hopes to develop Fast Fact on co-requisites, college credit plus and open educational resources. Also hosting webinars in areas such as professional development and also exploring ideas on campus outreach with areas to include pathway work. The subgroup is available to provide presentations upon request after completing an outreach form located on the OMI website.

Subgroup Four: Donald White provided an update on Data Collection, Analysis and Sharing. This subgroup hopes to look at data in QR and Co-requisites courses. The subgroup is also in the process of locating a new co-chair to replace John Holcomb. The group will work on mid-level data analysis with pre and post data analysis as the six-year mark approaches. The subgroup also hopes to reach out to institutions to request data. This may come in the form of a fill-in template, free form, or mixture of both. The group will analyze and compile a report. Dr. Stephanie Davidson mentioned using strong start to finish data in report to identify the number of students taking courses, subgroup one co-requisite courses, and QR courses. Eventually with a goal to identify retention rates and completion.

Subgroup Five: Brad Findell and Anna Cannelongo provided an update on the alignment between secondary and postsecondary content and instruction. The subgroup is working with the Ohio Department of Education on creating a high school QR transition course. The subgroup has formed an advisory and planning group to assist with developing this course. A number of schools are pre-piloting this course with a full pilot phase in the 2019-2020 academic year. The goal is to launch in the following year and targets high school students that have completed three years of mathematics and that intend to attend colleges but are not college ready such as students who have earned an ACT score between 18-21. The group also described professional development with peer mentors meeting weekly with high school faculty. They hope to reduce weekly meeting to bi-weekly and eventually monthly and request postsecondary faculty volunteers that could help with professional development mentoring in QR.

V. Lunch

The group disbanded for a short lunch break.

VI. OMI Goals in Need of Updating

Attendees discussed goals for the upcoming academic year these include:

1. Discuss institutional best practices at future meetings.
2. Create regional mathematic chairs/leads subgroup committees to meet prior to statewide mathematics chairs/leads network meetings.

3. Create a survey to identify Ohio Mathematics Initiative interests such as new courses/math major, areas in calculus, applied calculus, pre-calculus (STEM pathways), also to include an area to prioritize projects with survey sent to provost with the state “complete survey to let your chair know of your interest”. Attendees suggested that the survey can also ask for those interested in leadership positions to assist in areas, as well as include a question on technical mathematics/career technical pathways. Those in attendees also suggested adding a question on online courses with lecture and assessments (e.g. QR: what were the experiences and how did institutions deliver QR courses online). Another opportunity to include is open-source textbooks to reduce cost of instruction and a section asking for volunteers to join the QR and Calculus faculty networks.

VII. Business Statistics (OBU013) and Mathematics Introduction to Statistics (TMM010) Discussion

Ricardo Moena and Lee Wayand discussed minor changes to TMM010 Mathematics Introduction to Statistics. The change was made to help students transfer from program to program. This change will allow students completing TMM010 Mathematics Introduction to Statistics to transfer this course as equivalent to Business Statistics OBU013.

VIII. Quantitative Reasoning Course Discussion

Ricardo Moena and Lee Wayand discussed QR course and the need to create databases to assess and upload open educational resource QR materials for students and the classroom. Areas could include notes, instructor knowledge, project examples and presentations. The goal is to take this material and create a starter packet for those teaching QR courses, which can be updated per semester or academic year and will be available to all. They went on to discuss using Knowledge Base for QR, as well as Co-requisites. Another area of interest is utilizing Ximera at The Ohio State University for assessment. Both these areas are free resource platforms but will require collaboration to build. Attendees again suggested adding QR networks volunteers within the survey. Ricardo and Lee discussed hosting another QR workshop maybe statewide or regionally to provide professional development for faculty. Dr. Compton urged attendees to reach out if they have grant funding sources to host another QR workshop for faculty teaching QR courses.

IV. For the Good of the Order

Dr. Compton thanked OSU for hosting the Ohio Mathematics Chairs/Leads Network meeting. Dr. Casian thanked the Chairs and Leads for their attendance, and wished the attendees safe travels home.