



Ohio Higher Education Mathematics Steering Committee – Meeting Minutes

July 26, 2013 10:00-12:00

Ohio Board of Regents B-004

This was the inaugural meeting of the Ohio Mathematics Steering Committee. Present in the room were Andrew Tonge, Carl Stitz, Jeff Zeager, Paddy Dowling, Mary Ann Hovis (substitute for Rodney Null), Krista Maxson, Linda Chamblin, Michelle Younker, Joan Leitzel, Ricardo Moena, Mike Snider, Brian Roget, Randy Smith, Cathy Chudzinski, Stephanie Davidson, Brett Visger, Paula Compton, Hideo Tsuchida, Michelle Blaney and Stephanie McCann. Absent from the meeting were David Meel, Jeff McNeal, Rebecca Watts and Rodney Null.

I. Welcome and Introductions

Dr. Stephanie Davidson opened the meeting with a warm welcome and expression of gratitude to all who agreed to participate as a member of the Ohio Mathematics Steering Committee. She introduced the committee chair, Dr. Joan Leitzel, and read Dr. Leitzel's biography to the committee. Next, committee members each introduced themselves to the room. Once introductions were complete, the committee moved on to the second item on the agenda.

II. Purpose of the Ohio Mathematics Steering Committee

Dr. Davidson, with the assistance of Dr. Leitzel, Mr. Visger, Dr. Compton, and Dr. Moena, explained the background of various ongoing statewide initiatives that have the potential to impact mathematics education in Ohio. Beginning discussions earlier in the year culminated in the Ohio Mathematics Summit, a statewide meeting of University System of Ohio mathematics faculty, where it was proposed that a committee of mathematics experts be formed to study national trends, current initiatives and available statewide and national data, and subsequently to make recommendations for future mathematics curricula in Ohio. Notes gathered from group discussions with statewide faculty at the Ohio Mathematics Summit on May 8, 2013 were shared with the steering committee members prior to the meeting. Dr. Davidson acknowledged the work of the Ohio Articulation and Transfer Network (OATN) staff for arranging a well-organized summit and compiling the notes. Dr. Davidson also distributed a copy of the Uniform Statewide Standards for Remediation-Free Status, and two charts from Michel Handel, "What Do People Do at Work? A Profile of U.S. Jobs from the Survey of Workplace Skills, Technology, and Management Practices (STAMP)" detailing "Higher-Level Math Use by Job Type"

and “What Percentage of Americans Actually Use Math and Work?” A brief discussion occurred on the mathematics needed for various types of jobs.

III. Function and Structure of the Committee

Dr. Davidson and Dr. Leitzel discussed the formation of the steering committee and the function that the committee will serve within the University System of Ohio. Dr. Leitzel also cautioned the committee members to be objective and considerate of all the institutions that would be impacted by the work of this steering committee. Nationally, this is groundbreaking work that will likely be of interest to other states and educational entities once completed. Documents were shared with committee members prior to the meeting regarding a proposal from the Charles A. Dana Center at the University of Texas, Austin. Dr. Uri Treisman and his colleagues have offered to work with the Ohio Mathematics Steering Committee to guide research and processes beginning in August. Dr. Leitzel added that in her experience working with Dr. Treisman, his method of guiding states is not prescriptive in nature. Each state that has worked with him has developed a solution unique to that state. The steering committee members agreed via a unanimous vote that the Ohio Board of Regents should enter a contract with the Dana Center to guide the steering committee in producing faculty-driven, faculty-endorsed recommendations to update the mathematics curriculum in Ohio. Dr. Compton will proceed with processing the contract.

Dr. Leitzel began a discussion about the potential timeline of activities for FY 14. It was determined that Fridays would likely be the best day for the committee to meet. A later start time may need to be considered during the winter months. The next meeting date is to be determined. Dr. Leitzel also asked whether an option to call in should be available in the event that a committee member could not make it to a face-to-face meeting. The committee agreed that it would be ideal to have that option. Committee members also would like to know more information about local restaurants for lunch after the meetings.

IV. Specific Next Steps Discussion

Dr. Leitzel led a discussion about concerns that are currently on the minds of steering committee members.

Questions:

- Can we find out how the Common Core will be implemented?

- Mr. Roget said that ODE has an implementation plan, and he would be happy to explain key aspects of the Standards and the plans for implementation at the next steering committee meeting.
- Postsecondary faculty were very much involved in the writing of the Common Core Standards.
- How is “college-level” defined, and how will this dovetail with the Common Core standards?
- What level of mathematical knowledge is attained by students who master the Common Core standards?
- What current data exist about the Ohio Transfer Module (OTM) Mathematics Panel outcomes for courses that have been disapproved most often? OATN staff will report back to the steering committee.
- What do we know about the impact of OTM on students? OATN/HEI staff will report back to the steering committee.
- Are there data available on the Sinclair pilot that used Quantway as an alternate pre-requisite? Dr. Moena agreed to contact Sinclair and report back to the steering committee.
- With the remediation-free standards in place, will College Algebra still be considered a “college level” course?
- During his keynote at the Ohio Mathematics Summit, Dr. Treisman mentioned a research study about “Algebra II is the key.” What is this study? A bibliography of resources for current research would be very helpful to the steering committee.
- What guidance can the committee provide for “what is a college level course”?

Concerns/Comments:

- Financial aid restrictions are a barrier to having summer boot camps or short bridge/refresher courses.
- There is a need to find efficient ways to address the gap in individual students’ preparedness in mathematics. One committee member shared that 30% of incoming freshmen at one institution do not understand decimals, per placement test data.
- Levels of student preparedness differ not only individually, but between traditional and non-traditional student groups.
- Universities will no longer be funded for remedial courses. This may include a redefinition of what it means for a course to be remedial.
- College Algebra courses are starting to be eliminated at some institutions.
- The Steering Committee work needs to be data driven. Dr. Treisman will be able to provide advice on the types of data that need to be collected.
- Cultural change is needed. Students shouldn’t finish college just happy to have gotten through mathematics. They should understand why it was a valuable and useful area to have studied.
- The desirable outcome from students taking a course in mathematics is that they would perceive the importance of mathematics and that passing a single course is not the last time they encounter mathematics. This is why some majors have courses specific to a degree

program or field of study (Mathematics for teachers, Calculus for engineers and scientists) to link mathematics with specific career/degree goals.

- A definition of “college-level” would apply not only to Associate of Arts/Associate of Science, but also to technical two-year degrees. This could potentially impact OBR’s program approval manual in the section about General Education Requirements.
- A steering committee member suggested that we may wish to have someone leading change discussions at each institution. The leadership group should also be having meetings with their own departments to begin discussions about Common Core, PARCC, remediation-free standards, and the impacts that the new statewide initiatives will have on them.
- There should be a forum/opportunity for all the chairs of mathematics to be in one room to discuss what is happening in mathematics and how to move forward. This steering committee (or OBR) should develop a mechanism to do that.
- A representative from the chairs of mathematics group should be included in the steering committee, so that there is a continuous relationship and discussion between the steering committee and those responsible for implementation in the field.

OTM Related Comments:

- Some of the topical lists from the OTM Mathematics Panel need to be simplified and clarified.
- The current guidelines may be too prescriptive.
 - There is a perception among external constituents that OTM mathematics criteria have prevented them from being innovative.
- The current guidelines are outdated.
 - Many good courses are being disapproved due to the outdated guidelines.
 - Changes in the field of mathematics require the state to look at updating the guidelines.
- Some institutions seem to be having difficulties granting OTM area credit when a specific equivalency does not exist.
 - Mr. Tsuchida and Ms. Blaney are working with a few institutions to clarify OTM policy and provide assistance in brainstorming solutions.
- Our processes are too rigid. There is a tension between curriculum coverage and approach.
- There are currently no statewide transfer agreements for courses in Finite Mathematics, Discrete Mathematics, and Mathematics for Elementary Teachers.
- Dr. Zeager suggested that TAGs and CTAGs need to be brought into the conversation. There needs to be a better understanding of statewide articulation initiatives.

V. For the Good of the Order

With no additional comments or questions, the inaugural Mathematics Steering Committee meeting was adjourned.