

Ohio Mathematics Initiative



Mathematics Chairs/Leads Network Meeting

Friday – January 23, 2015

Ohio Mathematics Initiative



**Subgroup 2 – Revision of the Ohio Transfer
Module (OTM) Criteria**

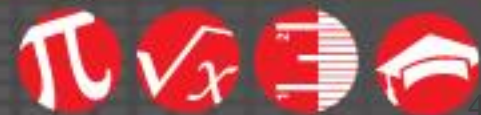
OBJECTIVES

1. Gain Your Endorsement for the Proposed Changes to the Ohio Transfer Module Mathematics, Statistics, and Logic Criteria (Phase I Work)
2. Update You on Phase II Work
3. Offer Revision and Submission Process on Future Submissions, Including Removal of Pre-Requisite for Already Approved OTM Courses and Non-OTM Approved Courses



PHASE I – PROPOSED CHANGES

1. Removal of the established pre-requisite requirement for acceptance into the Ohio Transfer Module Mathematics, Statistics, and Logic
2. Definition of a College-Level Mathematics Course
3. Removal of Credit-Hour Requirements from OTM Courses with Learning Outcomes (TMM001, 002, 003, 005, 006, 010, and 013)
4. Revision of Guideline 4 to Focus on Learning Outcomes, Rather than Variable Topics

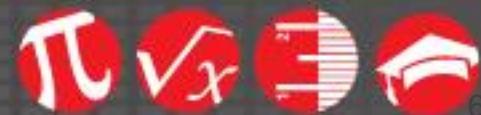


SURVEY RESULTS – PROPOSED CHANGES



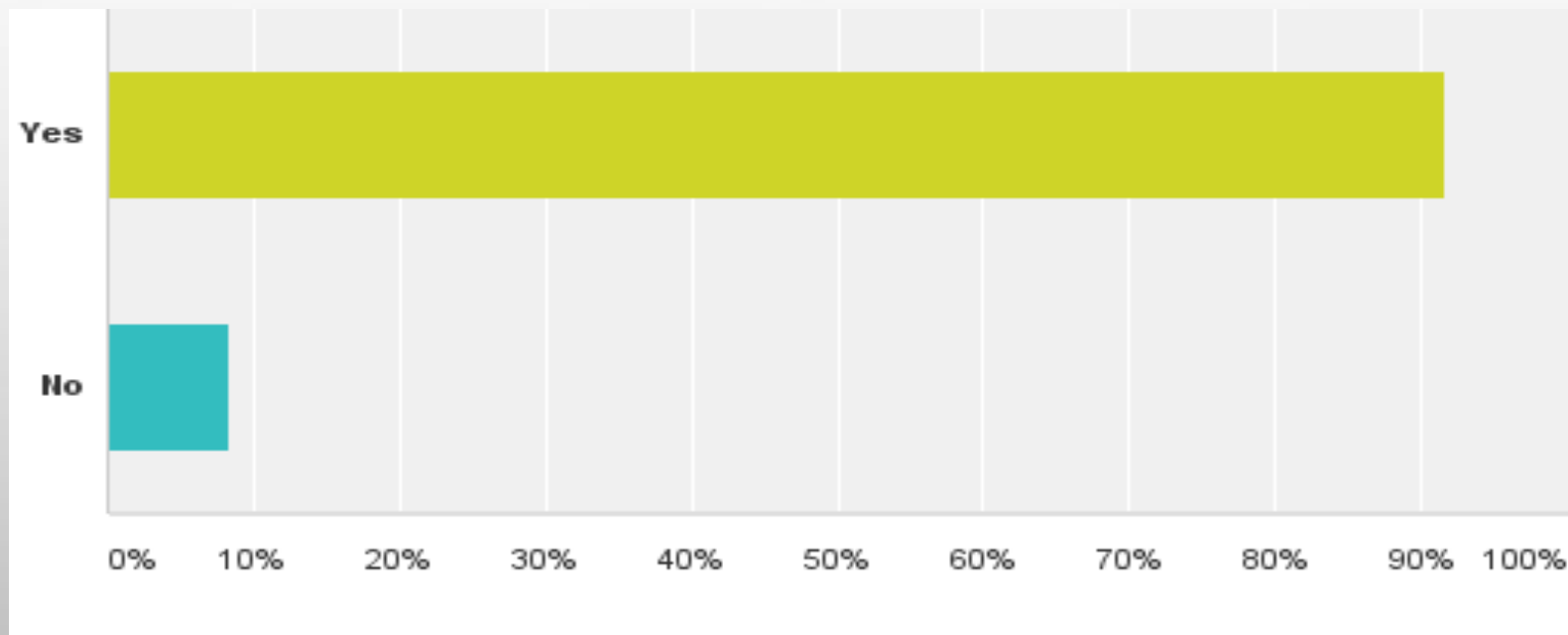
PROPOSED CHANGES – TODAY’S PROCESS

1. Provide the Synopsis of the Survey Results and Subgroup 2’s Final Proposals Based upon the Survey Results, Group Discussions and Consensus, and Endorsement by Key Stakeholders
2. Obtain Your Endorsement
3. Repeat the Above for Each of the Four Proposals



SURVEY RESULTS – PROPOSED CHANGES

- Q1: Do you support the removal of the established pre-requisite requirement from all Ohio Transfer Module gateway courses for acceptance into the Ohio Transfer Module Mathematics, Statistics, and Logic?



SURVEY RESULTS – PROPOSED CHANGES

- Do you support the removal of prescribed pre-requisite course requirements for acceptance into the Ohio Transfer Module Mathematics, Statistics, and Logic?

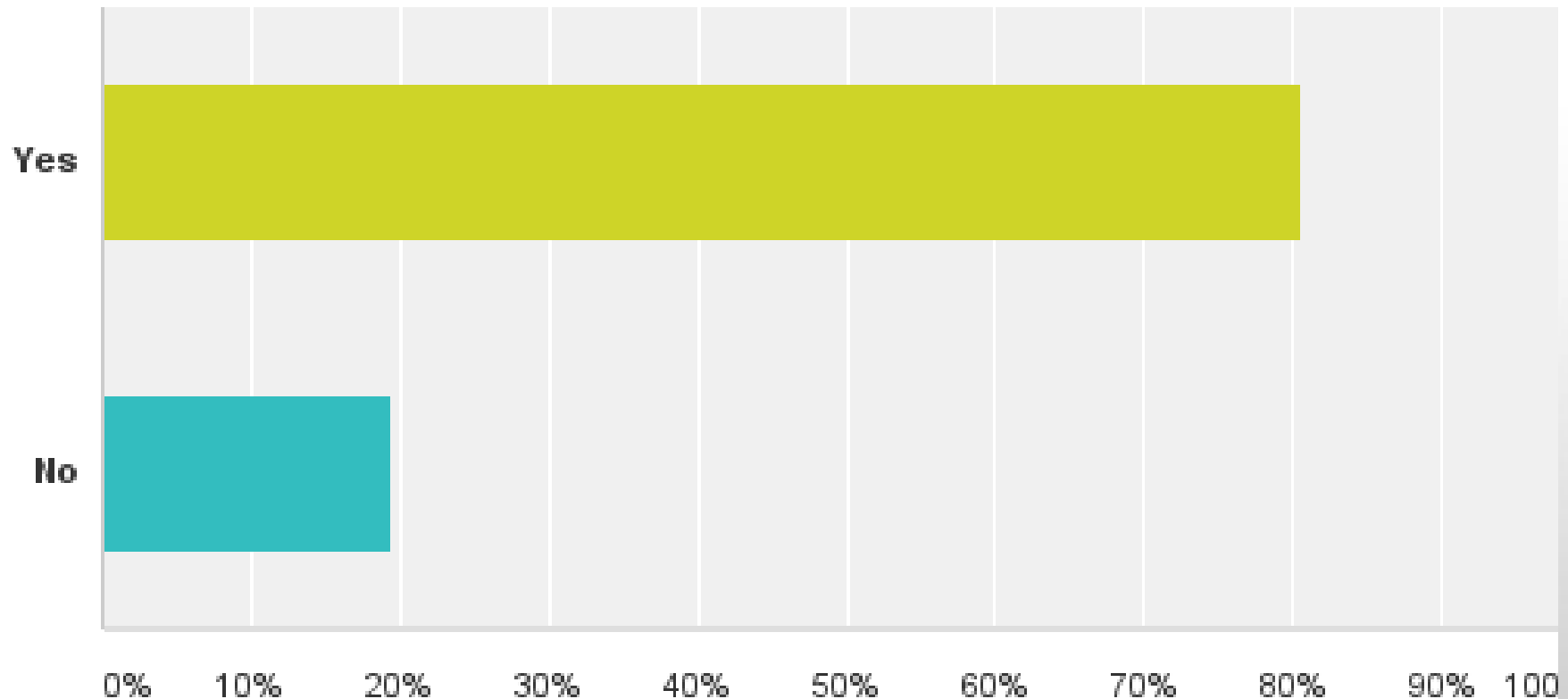


SURVEY RESULTS – PROPOSED CHANGES

- Q2: Do you support the following definition of a college-level course to be used for the acceptance of courses into the Ohio Transfer Module Mathematics, Statistics, and Logic?
- "A credit-bearing, college-level course in Mathematics must meet the standards required for high-school graduation in the State of Ohio AND 1) broaden, 2) deepen, and/or 3) extend the student's learning."



SURVEY RESULTS – PROPOSED CHANGES



SURVEY RESULTS – PROPOSED CHANGES

- "A credit-bearing, college-level course in Mathematics must meet the standards required for high-school graduation in the State of Ohio AND 1) broaden, 2) deepen, and/or 3) extend the student's learning."



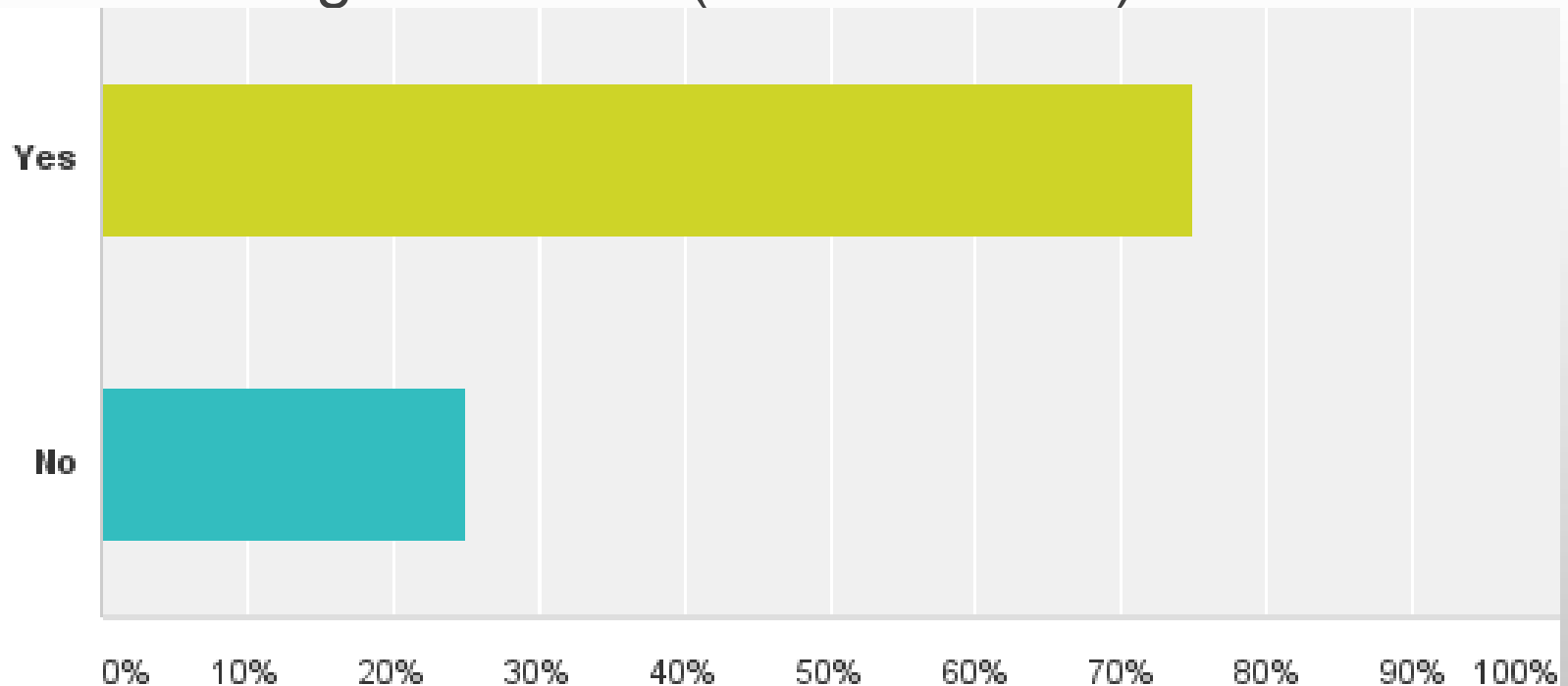
SURVEY RESULTS – PROPOSED CHANGES

- Proposed Definition:

“A credit-bearing, college-level course in Mathematics must use the standards required for high school graduation by the State of Ohio as a basis and must do at least one of the following: 1) broaden, or 2) deepen, or 3) extend the student’s learning.”

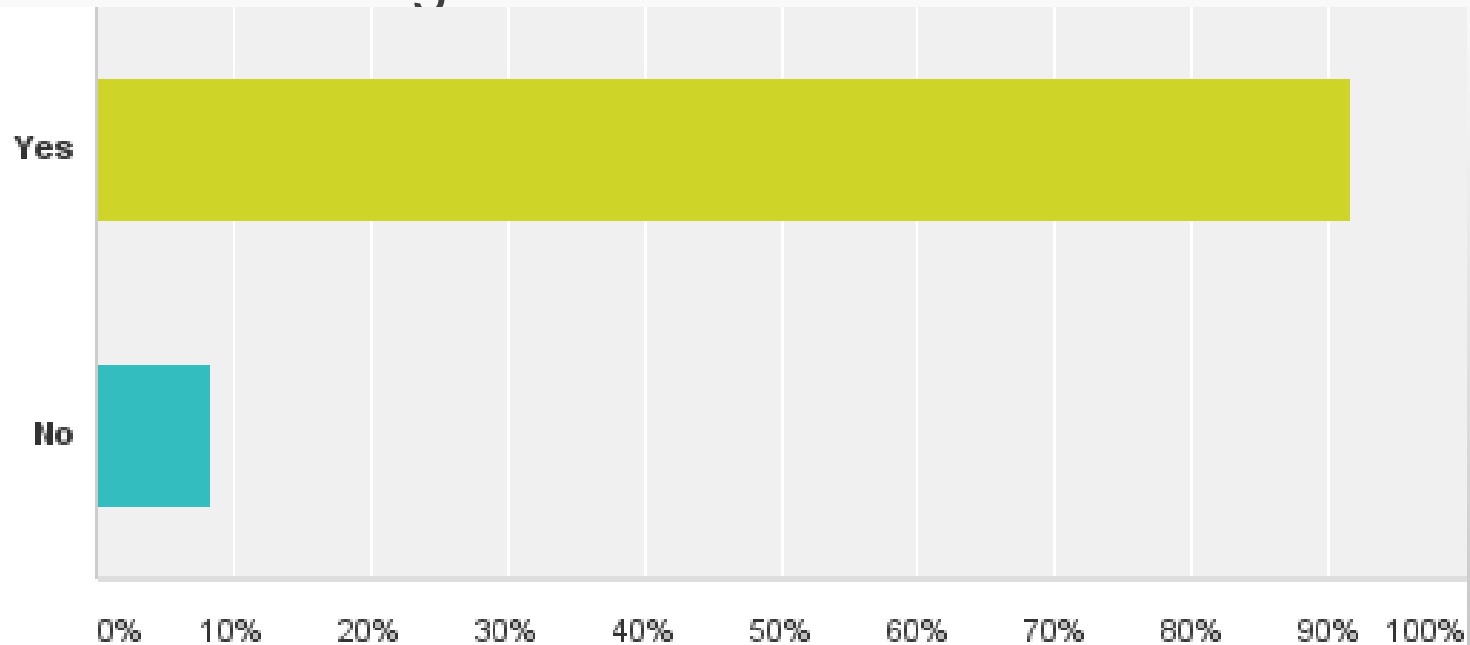
SURVEY RESULTS – PROPOSED CHANGES

- Q3: Do you support the removal of the credit-hour requirements from all Ohio Transfer Module courses with learning outcomes (TMM001-013)?



SURVEY RESULTS – PROPOSED CHANGES

- Q4: Do you support the change of the language for Guideline 4 from "Course does not cover variable content from term to term" to "Course does not cover variable learning outcomes from term to term"?



PHASE II WORK – GUIDELINES 5, 7, AND 8

5) Course is not a special topics course.

7) Course is not a narrowly-focused technical or pre-technical course.

8) Course cannot be narrowly focused, such as courses specifically designed to satisfy the requirements of a particular program.

PHASE II WORK – GUIDELINES 5, 7, AND 8

- Proposal:
Elimination of Guidelines 5, 7, and 8

REVISION AND SUBMISSION PROCESS

1. Removal of Pre-Requisite

Please work through your OTM Coordinator first and provide an updated syllabus, as well as the beginning term and year of the revised course.

2. Submission of Non-OTM Approved Courses

Your submission of new courses can begin immediately. The next submission deadline is March 13, 2015. Fall submission deadline is the first week of October 2015.

CONTACTS

- Ricardo Moena, Lead for Subgroup 2/OTM Mathematics, Statistics, and Logic Review Panel
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- Hideo Tsuchida, Director of Articulation and Transfer Policy
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USEFUL WEBSITES

- OTM Guidelines/Learning Outcomes:

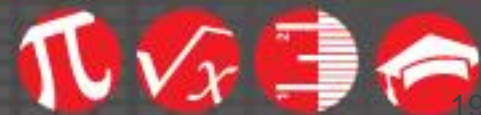
http://regents.ohio.gov/transfer/policy/OTMGuidelines_AllDisciplinesOct08.pdf

- OTM with Learning Outcomes (TMM Courses)

<https://www.ohiohighered.org/transfer/transfermodule/learningoutcomes>

- Ohio Mathematics Initiative

<https://www.ohiohighered.org/mathematics-initiative>



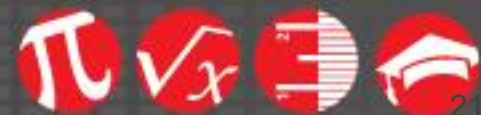
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Subgroup 1 – New & Alternative Pathways

SUBGROUP 1 CHARGE

- Investigate new and alternative pathways for students to engage in college-level Mathematics within their programs of study and to provide co-requisite strategies to those students for whom a full sequence of remedial coursework would be counter-productive



THE DELIVERABLES

- A clear and concise set of statewide guidelines so that everyone – students, their parents, high school guidance counselors, college academic advisers and faculty from outside of Mathematics – know which class a student should take for his/her course of study
- A publically accessible collection of OTM-approved courses (and supporting material such as syllabi) which serve as models for alternative pathways or as “best practice” co-requisite strategies

OUR WORK

- Survey sent to the members of Subgroup #1 to see what pathways/co-requisite strategies already exist in Ohio

Mathematics Pathway Information: Courses

This form is NOT intended for broad distribution and response; it is intended for Subgroup 1 member use only.

Please complete this form for all *entry-level*, credit-bearing Mathematics courses which count toward a degree at your institution, it is NOT necessary to complete this form for all Mathematics courses offered.

Institution:

Course Name:

Brief Course Description:

Learning Outcomes:

Credit Hours:

Associated/related co-requisite courses and/or supplemental courses (if any):

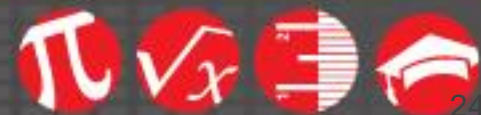
Which majors/courses of study utilize this course?

What additional Mathematics course(s) would the student take following this course to continue with their degree?

Please attach a copy of the course syllabus

OUR WORK, CONTINUED

- Meet this Spring to review survey results and to begin work on the pathways structure
- Coordinate with Subgroup #2 in the creation of a set of learning outcomes for a college-level QL/QR course
- Work with OBR to create a repository of courses and material for others to use



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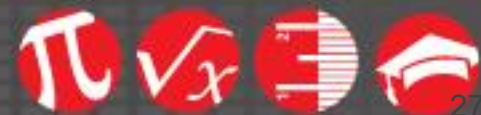
Subgroup 3 – Communication, Outreach & Engagement

SUBGROUP 3 CHARGE

- Improve communication among mathematics faculty and stakeholders across institutions
- Encourage and promote mathematics faculty participation in meetings of professional groups
- Engage the larger (mathematics) community with disseminations from the various subgroups of the Ohio Mathematics Initiative

CONSIDERATIONS

- Who is in that larger (mathematics) community and how can our communications inform their discussions and decisions?
- Communication needs to be both inward and outward; how do we forge those outward connections?
- How do we encourage the sharing of ideas, resources and information amongst the subgroups and consumers of the Math Initiative?



PROJECTS

- Create a network of presenters who can come to your campus or event and speak about the initiative.
- Online request form for presenters.
- Voiceover presentations about the initiative and the national and state data driving the changes.
- Communication pieces sharing the work of the subgroups, what's happening at your institutions, and changes taking place.
- Projects that address the needs of the other subgroups, the Chairs Network, and the initiative.



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Subgroup 4 – Data Collection, Analysis & Sharing

SUBGROUP 4 CHARGE

- Develop quality measures for improving student success in mathematics; then collect, analyze and share relevant data

DISCUSSION POINTS

- State level data does not effectively provide course sequencing information currently
 - Recall survey on sequence of courses
- Distinction between what can be done at the state level and what can be done at the campus level
- Difficulty of obtaining data at local level varies from institutions

CURRENT ACTIVITIES

- OBR is currently looking at the transfer module courses to examine student performance
- Possibility of recruiting graduate students to help with data mining and analysis.
- The subgroup has been encouraged to review restricted HEI queries to familiarize themselves with available state-level data

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Subgroup 5 – Alignment Between Secondary & Postsecondary Content and Instruction

SUBGROUP 5 CHARGE

- Conduct National Scan of best and promising practices designed to align secondary and postsecondary content and instruction.
- Plan and Host a Student Success Summit
- Study the effects of Ohio's Remediation-Free Standards
- Study the impact of institution strategies to address the effect of the state cut-scores for Remediation-Free Status, e.g. ACT 22.
- Conduct regional meetings and workshops to generate ongoing conversation among secondary and postsecondary faculty, as well as state education policy leaders about:
 - Aligning K-12 and higher education curricula and policies
 - Preparing and equipping new and existing math teachers
 - Building infrastructure to accomplish this work
- Share best practices with USO institutions and High Schools.

OBJECTIVES

Focus Area 1: Teachers

- Identify best/promising practices for secondary and postsecondary mathematics.
- Ensure broad-based buy-in.
- Identify the root of the current misalignment.

Focus Area 2: Students

- Recognize wide individual differences between students.
- Ensure broad-based buy-in.
- Potentially explore barriers to student motivation.

Focus Area 3: Ohio Requirements, Learning Standards, Outcomes

- Understand middle school and secondary school requirements, e.g. Ohio Learning Standards, school culture.
- Evaluate middle school mathematics courses and outcomes.

OBJECTIVES, CONTINUED

Focus Area 4: Aspirational Curricula and Pathways

- Define what's important in Algebra.
- Identify the appropriate quantitative courses after Algebra.
- Determine if the fourth year of high school is the optimal time for students to begin pathways courses.
- Evaluate accreditation requirements vs. best mathematics practices.

WORK TO DATE

- Expanded membership to include high school mathematics faculty members.
- Reviewed current Ohio High School Graduation Requirements.
- Reviewed Ohio Transfer work to define college level coursework and provide prerequisite flexibility for OTM courses.
- Reviewed existing alignment work under way in Ohio.
- Discussed shared concerns in mathematics courses in high school and college.
- Identified future discussion topics:
 - the use of technology in classes and homework
 - fourth year courses in high school
 - expectations for student learning in all courses; the ways students learn mathematics
 - impact of selectivity in college admissions on students.

WORK TO DATE, CONTINUED

- Commenced planning of the Ohio Mathematics Initiative Spring 2015 Student Success Summit. Set for Friday, April 24, 2015.
 - Named Summit Planning Sub-Committee to present proposal for Summit structure and format to Subgroup 5 members by end of January 2015.

QUESTIONS

