Faculty Workshop
Co-Requisite Math Instruction

Ohio Mathematics Initiative 2019-2020
AGENDA

• Overview of Co-Requisites in Mathematics

• Instructional Delivery in Co-requisite Math

• Online Co-Requisite Courses: The Good, Bad, and Ugly

• Audience Reflection and Feedback

• Learning Behaviors: College Level Expectations for Underprepared Students

• Audience Reflection and Feedback

• Conclusion

*Copies of slides will be available online
Participating Today

✓ Keep audio muted. Unmute your mic when needed.
✓ Use chat functionality for technical issues and ad hoc questions.
✓ Virtually raise your hand in the participant window next to your name for questions.
✓ Open interactive components in separate web tab or on mobile phones.
Ohio Mathematics Initiative Subgroup 1

• Goal to improve student success in entry level courses by exploring new and alternative college-level math pathways

• Led by Ohio math faculty

• Resource and forum for questions and discussion on co-requisite math
What is the challenge?

Too few students placed in traditional systems of remediation successfully complete gateway mathematics
Remediation: The effect of attrition.

Students assigned 3 or more semesters of math remediation.

- Completed 1st semester of remediation.
- Completed 2nd semester of remediation.
- Completed 3rd semester of remediation.
- Passed gateway course.

Enrolled and completed
Did not complete
Did not enroll or stopped enrolling

LOST
LOST
LOST
LOST

The remediation system is broken. More students quit than fail.

Co-requisite Remediation

• Students enroll in entry level college-level courses while simultaneously participating in mandatory extended class periods or customized, just-in-time academic support.

• Academic support is aligned to learning objectives of the gateway course.

• Not just adding a traditional developmental course to a gateway course.
Multiple Models

• Paired course
• 101 Plus
• Technology-mediated

Paired Course Model

- Provides support skills in a separate course aligned to the learning objectives of the gateway course. The separate course is paired with the gateway course and delivered in the same semester.
101 Plus Model

- Offers academic support as an extension of the gateway course
Technology-Mediated Model

- Requires students to complete online lab support.
Corequisites Result in Dramatic Improvements In Gateway Course Success

TBR Community College Gateway Math Success in One Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-Requisite Model 2012-13</th>
<th>Corequisite Full Implementation 2015-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;13</td>
<td>2.7%</td>
<td>32.9%</td>
</tr>
<tr>
<td>14</td>
<td>3.0%</td>
<td>45.5%</td>
</tr>
<tr>
<td>15</td>
<td>6.8%</td>
<td>55.3%</td>
</tr>
<tr>
<td>16</td>
<td>11.5%</td>
<td>63.4%</td>
</tr>
<tr>
<td>17</td>
<td>19.7%</td>
<td>70.1%</td>
</tr>
<tr>
<td>18</td>
<td>25.6%</td>
<td>79.5%</td>
</tr>
<tr>
<td>No ACT</td>
<td>13.1%</td>
<td>48.7%</td>
</tr>
<tr>
<td>Overall</td>
<td>12.3%</td>
<td>54.8%</td>
</tr>
</tbody>
</table>

Tennessee Board of Regents Danley, 2016
Survey
www.menti.com
Code: 72 72 61
In implementing math co-requisites at your institution, how challenging are…?
✓ Academic mindset/learning behaviors
✓ Balancing faculty workload
✓ Faculty buy-in/support
✓ Online/hybrid instructional options
✓ Professional development and instructional resources
Implementing Co-Requisite Math

✓ Curricular design and alignment to programs of studies
✓ Placement guidelines
✓ Course registration and transcription processes
✓ Scheduling
✓ Advising and course enrollment
✓ Faculty assignment, workload, and professional development

✓ Instruction
  ✓ Delivery
  ✓ Soft Skills Support/Learning Behaviors
Thank You

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Instructional Delivery

Brian Cafarella, Sinclair College
Instructional Delivery

Tyler Maley, Marion Technical College
Online Delivery of Math Co-Requisites

Linda Hunt, Shawnee State University
Additional Resources

Suggestions from previous faculty workshops
Using Open Educational Resources
Identifying quality open educational resources (OER)

https://ohiolink.oercommons.org/hubs/OOEC
Statistics Course Content

Introductory statistics course developed through the Ohio Department of Higher Education OER Innovation Grant. The course is part of the Ohio Transfer Module and is also named TMM010. For more information about credit transfer between Ohio colleges and universities please visit: www.ohiohighered.org/transfer.

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Ohio OpenEd Collaborative
ADOPT + SHARE + CREATE + LEAD
Other Resources to Aid Instruction

- https://edpuzzle.com/

LMS Integrations

Edpuzzle is now integrated with Canvas, Schoology, Moodle, PowerSchool and Blackboard, among others, so students can do their edpuzzles right from your LMS!

- https://edpuzzle.com/whats-new

- https://www.aleks.com/
Other Resources to Aid Instruction

- https://flglobal.org/
- http://scaleinstitute.com/
- https://www.learningscientists.org/
Your Thoughts

Menti.com, Code 72 72 61

What instructional strategies and tactics have been most helpful for you?

What challenges do you anticipate next year?
Learning Behaviors

Sandra Robinson, University of Toledo
Nearpod.com

For this presentation go to: Nearpod.com and use the code XEUIB
Resources

Co-Requisite Remediation
https://www.ohiohighered.org/B2S/co-requisite-remediation

Ohio Mathematics Initiative
https://www.ohiohighered.org/math

Ohio Strong Start to Finish
https://www.ohiohighered.org/SSTF
National Strong Start to Finish: University of Cincinnati feature


THANK YOU FOR JOINING US

Take a moment to complete this survey. Click link from chat window.

https://www.surveymonkey.com/r/May1CoReqMath

Questions?
Contact Calista at csmith@highered.ohio.gov