Mathematics Pathways for Student Success: Supporting K-20 Transitions through Cross-Sector Collaboration

July 14-15, 2022
Welcome
Thank you to the planning committee!

- Bonnie Smith, Chipola College
- Leslie Sterrett, Indian River State College
- Lynne O’Dell, Indian River State College
- Olivia Shand, Miami Dade College
- Bridget Rogers, Palm Beach State College
- Joi B. Davies, St. Petersburg College
## Day 1: Updates on Major Statewide Policies and Initiatives

<table>
<thead>
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<th>Time</th>
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| 9:00 – 9:05 a.m. | Welcome  
Abbey Ivey, Florida Student Success Center                                                                                       |
| 9:05 – 10:05 a.m. | Panel Presentation: Statewide Mathematics Pathways  
Tommy Minton, Seminole State College of Florida  
Julie Phelps, Valencia College  
Abbey Ivey, Florida Student Success Center (moderator)                                                                 |
| 10:15 – 11:15 a.m. | Florida’s New B.E.S.T. Standards and High School Mathematics Courses  
Patricia Duncan, Florida Department of Education  
Courtney Starling, Florida Department of Education                                                                                   |
| 11:25 a.m. – 12:00 p.m. | Focused Breakout Session                                                                                                              |
Day 1 Discussion Prompts

• What ideas/suggestions do you have to continue strengthening the alignment between the postsecondary math pathways and the B.E.S.T. high school math courses?
• What supports would you need to implement math pathways and/or B.E.S.T. standards?
• What concerns do you have about implementing math pathways and/or B.E.S.T. standards?
• What excites you about math pathways and/or B.E.S.T. standards?
Mathematics Pathways Panel

Dr. Tommy Minton, Seminole State College of Florida
Dr. Julie Phelps, Valencia College
Abbey Ivey, Florida Student Success Center (moderator)
What is the Florida Student Success Center?

• Supports Florida's 28 state colleges' efforts to develop student-centered pathways and increase student completion rates
• The 15th state to join the national Student Success Network
• Launched in 2018 in partnership with
  • Jobs For the Future
  • Helios Education Foundation
  • Florida College System Foundation
Florida Mathematics Re-Design Recommendations

• Culmination of the year-long Florida Mathematics Re-Design Initiative

• Includes 11 recommendations for state policy, institutional policy and evidence-based practices designed for scale

• One of the recommendations was to “create common mathematics pathways by aligning mathematics courses to programs, meta-majors and careers in Florida”
Mathematics Pathways Legislation

• The pathways recommendation is reflected in SB 366 from the 2021 legislative session

• The bill states:

To facilitate seamless transfer of credits, reduce excess credit hours, and ensure students take the courses needed for their future career, the articulation agreement must establish three mathematics pathways for students by aligning mathematics courses to programs, meta-majors, and careers. A representative committee consisting of State University System faculty, faculty of career centers established under s. 1001.44, and Florida College System institution faculty shall collaborate to identify the three mathematics pathways and the mathematics course sequence within each pathway which align to the mathematics skills needed for success in the corresponding academic programs and careers.
Committee Details

• Members of the committee began collaborating in fall 2021 to identify the three mathematics pathways and corresponding course sequences.

• The committee is composed of:
  • 8 members representing the State University System (SUS)
  • 8 members representing the Florida College System (FCS)
  • 2 members representing the school district career centers
  • 1 non-voting member who serves on the Articulation Coordinating Committee - Dr. Kathleen Ciez-Volz
Going into the work...

• Florida has identified general education core mathematics courses.
  • MAC X105 College Algebra; MAC X311 Calculus I; MGF X106 Liberal Arts Mathematics I; MGF X107 Liberal Arts Mathematics II; STA X023 Statistical Methods.

• In total, there are currently 765 courses in the mathematics discipline in the Statewide Course Numbering System.

• Additionally, there is no statewide commonality for course-level prerequisites.
Scope of Statewide Pathways

**Associate in Science/Applied Science**
- General Education (Gen Ed) Core Course in Pathway
  - (1 course from pre-defined course numbers in Gen Ed Core rule)

**Associate in Arts**
- Gen Ed Core Course in Pathway
  - (1 course from pre-defined course numbers in Gen Ed rule)
  - Institutional Course
    - (Meets common learning outcomes and is aligned with CPM; Course numbers are recommended, but institutions have flexibility in deviating if SLOs are met)

**Bachelor’s**
- Gen Ed Core Course in Pathway
  - (1 course from pre-defined course numbers in Gen Ed rule)
  - Institutional Course
    - (Meets common learning outcomes and is aligned with CPM; Course numbers are recommended, but institutions have flexibility in deviating if SLOs are met)
Proposed Pathways

- Algebra through Calculus
- Statistical Reasoning
- Mathematical Thinking in Context
# Timeline

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<th>Activity</th>
<th>Expected Timeline</th>
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<tr>
<td>Committee finalizes mathematics pathways and course sequences</td>
<td>April 2022</td>
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<tr>
<td>Discipline assignments/survey</td>
<td>May—June 2022</td>
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<td>ACC considers proposed mathematics pathways and course sequences</td>
<td>July 21, 2022</td>
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<td>Florida Department of Education (FDOE) initiates rule development process/Office of the Board of Governors (BOG) initiates regulation development process to incorporate math pathways</td>
<td>July 2022</td>
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<td>State Board of Education/Florida Board of Governors considers mathematics pathways rule/regulation revisions</td>
<td>October 2022</td>
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<tr>
<td>FDOE/BOG notify institutions and provide technical assistance</td>
<td>October 2022 (T.A. ongoing)</td>
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<td>State and institutional curriculum processes (curriculum committees, curriculum frameworks, catalog updates, staff training, etc.)</td>
<td>2023-24 academic year</td>
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<td>Mathematics pathways effective for entering students in associate and baccalaureate degree programs</td>
<td>2024-25 academic year</td>
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Florida’s New B.E.S.T. Standards and High School Mathematics Courses

Patricia Duncan, Florida Department of Education
Courtney Starling, Florida Department of Education
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# Day 2: K-20 Transitions: Cross-Sector Approaches

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<td>From Random Acts to Dual Enrollment Equity Pathways</td>
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<td>John Fink, Community College Research Center</td>
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<td>Maggie Fay, Community College Research Center</td>
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<td>10:00 – 10:45 a.m.</td>
<td>Cross-Sector Curricular Alignment: DirectConnect to UCF and the Curriculum Alignment Consortium Initiative</td>
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<td>Teresa Dorman, University of Central Florida</td>
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<td>10:55 – 11:40 p.m.</td>
<td>Supporting Student Progression through Co-Requisite Intensive Mathematics Courses</td>
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Day 2 Discussion Prompts

• What are your main takeaways from the presentation?

• Given the presentation takeaways,
  • Identify one key priority for your institution.
  • Identify what actions your institution can take in the next six months to achieve that priority.

• Who else within your institution should be aware of these ideas / practices? What is the best way to share this information?
From Random Acts to Dual Enrollment Equity Pathways

John Fink and Maggie Fay
Community College Research Center
Cross-Sector Curricular Alignment: DirectConnect to UCF and the Curriculum Alignment Consortium Initiative

Teresa Dorman, University of Central Florida
Supporting Student Progression through Co-Requisite Intensive Mathematics Courses

Julie Phelps, Valencia College