Florida Mathematics Re-Design: Update and Recommendations

October 22, 2019

#FLStudentSuccess
About the Florida Student Success Center

In 2018, the Florida College System launched the Florida Student Success Center in partnership with Jobs for the Future, Helios Education Foundation, and the Florida College System Foundation. The Florida Student Success Center is part of the national Student Success Center Network and supports Florida's 28 state and community colleges' efforts to develop student-centered pathways and increase student completion rates. Mathematics pathways re-design and content alignment were the primary initiatives in the center's first year.

The center works collaboratively with colleges to create a coherent, statewide strategy so colleges can integrate their varied student success efforts, share best practices with one another and maximize resources. In addition, the center represents the collective voice of practitioners in state-level policy discussions.
## Workgroups

### High School to Postsecondary

- Explore how high school curriculum in mathematics aligns with postsecondary expectations
  - Clarify college entrance-requirements alignment with high school assessments and courses
  - Examine longitudinal student data on mathematics sequencing and student success rates
  - Engage high school and college mathematics faculty in dialogue about postsecondary expectations
  - Identify strategies that promote greater alignment

### FCS Mathematics Sequences

- Examine multiple pathways for students to enter based on programs of study as well as the re-design of course structures to maximize support for students
  - Identify course and institutional structures that promote and deter success
  - Encourage the modernization of mathematics content
  - Review data on student success across algebra and non-algebra pathways
  - Identify a sequence of courses in the context of a student’s intended transfer major/meta-major

### FCS to University Alignment

- Examine how FCS curriculum in mathematics aligns with university expectations, particularly for students in transfer programs
  - Clarify university mathematics requirements
  - Examine the longitudinal student data on mathematics sequencing and student success rates
  - Engage FCS and SUS mathematics faculty in dialogue about postsecondary expectations
  - Identify strategies that promote greater alignment

[www.flstudentsuccess.org](http://www.flstudentsuccess.org)
Arriving at Recommendations

Identify the problem

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<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td>What are the challenges associated with math pathways implementation?</td>
<td>What evidence do we have that this problem exists?</td>
<td>What is the root cause of the problem?</td>
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Brainstorm solutions

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<tr>
<td>What are the promising solutions to address this problem?</td>
<td>Have the solutions been implemented elsewhere and with what success?</td>
<td>What are the highest priority solutions?</td>
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Develop recommendations

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<td>What statewide policy solutions would address the problem at scale?</td>
<td>What institutional policies would address this problem at the local level?</td>
<td>What practices would address this problem?</td>
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Scope and Type

**Statewide Policy.** Far reaching results at scale, across educational delivery systems.

**Institutional Policy.** Larger changes within an institution (intra) and between institutions (inter).

**Practice.** Instruction, actions or activities that produce results (institutional or individual).
Policy Recommendations

**Recommendation 1:** Create common mathematics pathways by aligning mathematics courses to programs, meta-majors and careers in Florida.

**Recommendation 2:** Use a "multiple measures" model to help improve placement, especially in mathematics.

**Recommendation 3:** Ensure mathematics prerequisites align with mathematics pathways.

**Recommendation 4:** Revise the statewide learning outcomes for developmental and gateway mathematics courses and identify essential mathematical processes.

**Recommendation 5:** Encourage colleges and universities to implement instructional models (such as the co-requisite model) that place students, when appropriate, directly into college-level mathematics courses carrying general education credit.
Practice Recommendations

**Recommendation 6:** Create recurring opportunities for K-20 stakeholders to promote collaboration to strengthen mathematics pathways for students via standing advisory groups/working groups and "big meetings."

**Recommendation 7:** Determine the K-12 standards that align with the postsecondary courses identified for each major or meta-major to inform student course selection in high school.

**Recommendation 8:** Offer professional development opportunities for instructors.

**Recommendation 9:** Establish on-demand foundational mathematical skills modules for students to access in high school and postsecondary.

**Recommendation 10:** Increase the availability of advising resources and enlist the help of mathematics faculty, where appropriate.

**Recommendation 11:** Ensure parents/guardians are informed of how to support and advise high school students into mathematics sequences aligned with the student's college and career pathway.
Next Steps

• The Florida Student Success Center will continue to serve as a convener to move the work forward

• Implementation of the recommendations will require collaboration across the educational sectors
  • Articulation Coordinating Committee
  • Statewide mathematics discipline committee
Q&A