Florida Mathematics Re-Design Update

Wednesday, April 3, 2019

www.floridacollegesystem.com
Webinar Logistics

Participants will be on mute for the duration of the webinar.

Material from today’s webinar:
In the handouts area you will find a copy of today’s presentation.

How to submit questions:
To submit questions during the webinar, please utilize the Questions function. During the Q&A portion of the webinar, questions will be addressed.
Agenda

• Mathematics Workgroups
• Milestone Updates
• Next Steps
• Q&A
• Florida Standards
## Florida Mathematics Re-Design

### Charge

Explore complex issues surrounding mathematics pathways to prepare: high school students for transition into postsecondary; Florida College System students for success in gateway courses aligned to their programs; and Florida College System students for transition into four-year universities.

### Guiding Values

Transparency, collaboration, respect, diversity, evidence-based inquiry

### Deliverables

1. Cataloging evidence-based practices designed for scale
2. Developing recommendations for state policy and institutional policy and practice around mathematics re-design
# Mathematics Workgroups

<table>
<thead>
<tr>
<th>High School to Postsecondary Alignment</th>
<th>FCS Mathematics Sequences</th>
<th>FCS to University Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explore how high school curriculum in mathematics aligns with postsecondary expectations</td>
<td>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</td>
<td>Examine how FCS curriculum in mathematics aligns with university expectations, particularly for students in transfer programs</td>
</tr>
</tbody>
</table>

- ~30 faculty and administrators per workgroup representing K-12, Florida College System and State University System
- ~40 members at-large who will engage through newsletters and webinars and submit feedback in the collection of evidence-based practices and policy recommendations
## Milestones

**Defining the Challenges**
- **Milestone 1** Complete
  - Administer survey on key challenges & synthesize findings

**Prioritizing the Challenges**
- **Milestone 2** Complete
  - Prioritize the challenges and assign members to huddles—smaller working groups

**Gathering Information**
- **Milestone 3** Complete
  - Identify factors contributing to challenges, evidence & drivers or root causes

**Linking Challenges & Solutions**
- **Milestone 4** Complete
  - Brainstorm & evaluate potential solutions to the challenges previously identified

**Prioritizing Solutions**
- **Milestone 5** Complete
  - Propose and prioritize formal recommendations

**Policy Recommendations & Evidence-Based Practices**
- **Milestone 6** May 2019
  - Identify policy recommendations and evidence-based practices

---

Milestone Progress
## Recommendations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Click here to enter text.</th>
</tr>
</thead>
<tbody>
<tr>
<td><em><em>Is this a policy or a practice</em> recommendation?</em>*</td>
<td>☐ Policy ☐ Practice</td>
</tr>
<tr>
<td><strong>Is this an institutional (local) or state effort?</strong></td>
<td>☐ Institutional (local) ☐ State</td>
</tr>
<tr>
<td><strong>What is the strategy?</strong>&lt;br&gt;1-2 bullets describing the “what” (i.e., solution).</td>
<td>• Click here to enter text.</td>
</tr>
<tr>
<td><strong>Why does this recommendation need to be implemented?</strong>&lt;br&gt;1-2 bullets explaining “why” this recommendation needs to be implemented and the impact it will have.</td>
<td>• Click here to enter text.</td>
</tr>
<tr>
<td><strong>What resources are needed?</strong>&lt;br&gt;1-2 bullets identifying the resources needed.</td>
<td>• Click here to enter text.</td>
</tr>
</tbody>
</table>
## High School to Postsecondary – (Draft) Samples

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No recurring opportunities for communication and engagement to align content between high schools and colleges</td>
<td>Hold a statewide mathematics meeting day where all K-20 mathematics instructors meet to align curriculum and vision through K-20</td>
</tr>
<tr>
<td>Mathematics requirements for teacher preparation programs differ from institution to institution</td>
<td>Compare teacher preparation program requirements within Florida colleges and universities for consistency and depth of coverage</td>
</tr>
<tr>
<td>Limited access to high-quality mathematics content and standards for teachers who need to refresh or review</td>
<td>Create a web-based repository on mathematics content that teachers can access to refresh/review content they must teach</td>
</tr>
</tbody>
</table>
## FCS Math Sequences – (Draft) Samples

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
</table>
| Limited resources in academic advising                                   | • Strengthen advising across institutions through:  
  • Informal math faculty advising with prof. development or college service  
  • Greater awareness for the Florida Virtual campus common pre-req manual  
  • Increased funds for more advisors                                                                 |
| Content of gateway mathematics courses may not be aligned to the needs of today’s college students, in terms of both their fields of study and workforce aspirations | • Change the state policy to discourage over-reliance on College Algebra as a default gateway course  
  • Develop and administer a statewide survey to academic disciplines in order to identify the mathematical skills and topics most relevant to students majoring in specific programs of study  
  • Once empirically-based information about mathematical needs is gathered, recommendations about common math course requirements for each program can be made |
FCS to University – (Draft) Samples

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences in course content within, and between, both FCS and SUS</td>
<td>• Encourage internal alignment within each institution&lt;br&gt;• Divide the FCS and SUS into distinct regions and encourage curriculum alignment discussions amongst math faculty&lt;br&gt;• Identify key SLOs that have to be mastered and embedded in exams. These should be included in syllabi so that students should know or expect</td>
</tr>
<tr>
<td>institutions</td>
<td></td>
</tr>
<tr>
<td>Liberal Arts Math course prerequisites (MGF1106 and MGF1107) and Statistics</td>
<td>• Suggest a common set of prerequisites per pathway. This could be based on the common course numbering system for the requirements within the pathway&lt;br&gt;• Suggest a common course description as part of this process</td>
</tr>
<tr>
<td>(STA2014 and STA2023) are inconsistent among SUS institutions</td>
<td></td>
</tr>
</tbody>
</table>
Save the Date

Mathematics Institute

June 27, 2019

Hilton University of Florida Conference Center
1714 SW 34th Street
Gainesville, FL 32607
Mathematics Re-Design Next Steps

June

• Workgroups will share Policy and Practice Recommendations related to mathematics pathways and re-design

July – September

• Findings will be shared with key stakeholders for input and feedback (CIA/CSA, ACC, HECC, etc.)

October

• Task force will prioritize the recommendations and develop teams for implementation
Executive Order #19-32

Governor Ron DeSantis issued Executive Order 19-32, outlining a path for Florida to improve its education system that includes:

- Eliminating Common Core from Florida’s standards
- Providing a roadmap to make Florida’s standards #1
- Creating opportunities for public input
- Improving the quality of instructional curriculum
- Suggesting innovative ways to streamline testing
- Focusing on civics literacy
- Outlining a pathway to become the most literate state
Takeaways

• Standards review will be conducted during 2019, with recommendations due to Governor DeSantis January 1, 2020

• No changes to statewide assessments or school grades calculation in 2018-2019 and 2019-2020 related to the Executive Order

• Extensive public input opportunities will be available, before the recommendations are submitted and again through State Board of Education rulemaking process

• Members of the Florida Math Re-Design workgroups are serving as experts in 9-12 mathematics standards

For more information, visit http://www.fldoe.org/standardsreview/
Guided Pathways

The following outlined resources are to help Florida College System institutions explore implementing guided pathways and mathematics pathways redesign. This section includes guided pathways information from the American Association of Community Colleges (AACC) Guided Pathways Project, Community College Research Center and Florida College System Institutions participating in the AACC Guided Pathways Project.