STUDENT SUCCESS CENTER

AN INITIATIVE OF THE FLORIDA COLLEGE SYSTEM

Defining the Challenges

Results from the Mathematics Re-Design Pre-Meeting Survey

September 18, 2018

Purpose of the Survey

To gain perspectives about the challenges with implementing mathematics re-design and pathways across:

- high school to postsecondary
- FCS mathematics sequences
- college to university alignment

To inform the work of the Florida Mathematics Re-Design Workgroups

Methodology & Data Collection

Open-Ended:

What are the challenges with implementing mathematics pathways as it relates to 1) high school to postsecondary alignment, 2) FCS mathematics sequences, and 3) college to university alignment? 4) Comments

Coding:

- Responses were inductively coded using sampling and re-coding (manually)
- Independent-coder method & peer debriefing/checking were used to validate codes

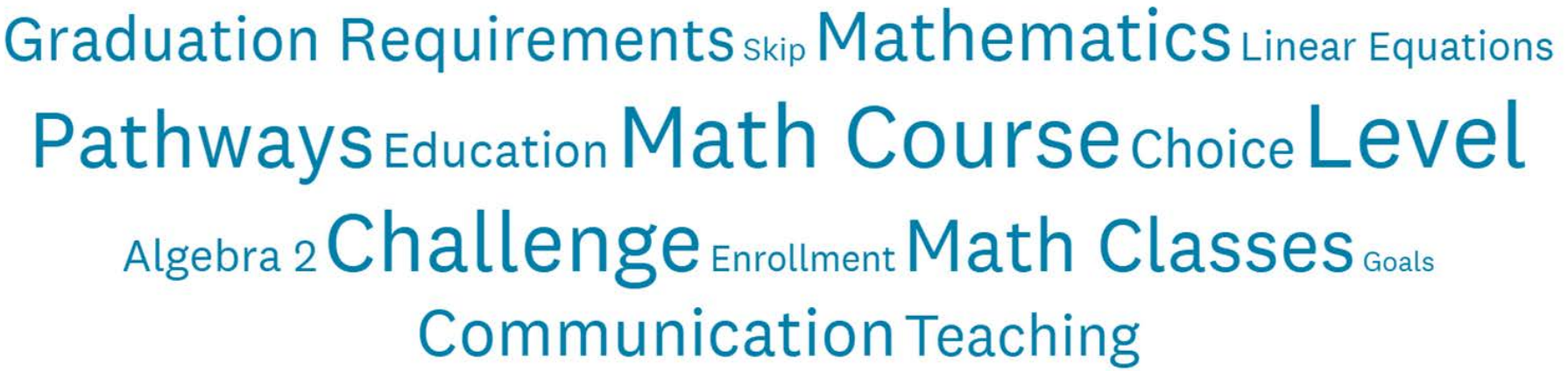
Methodology & Data Collection

Survey sent to members of Florida Mathematics Re-Design Workgroups (n=117)

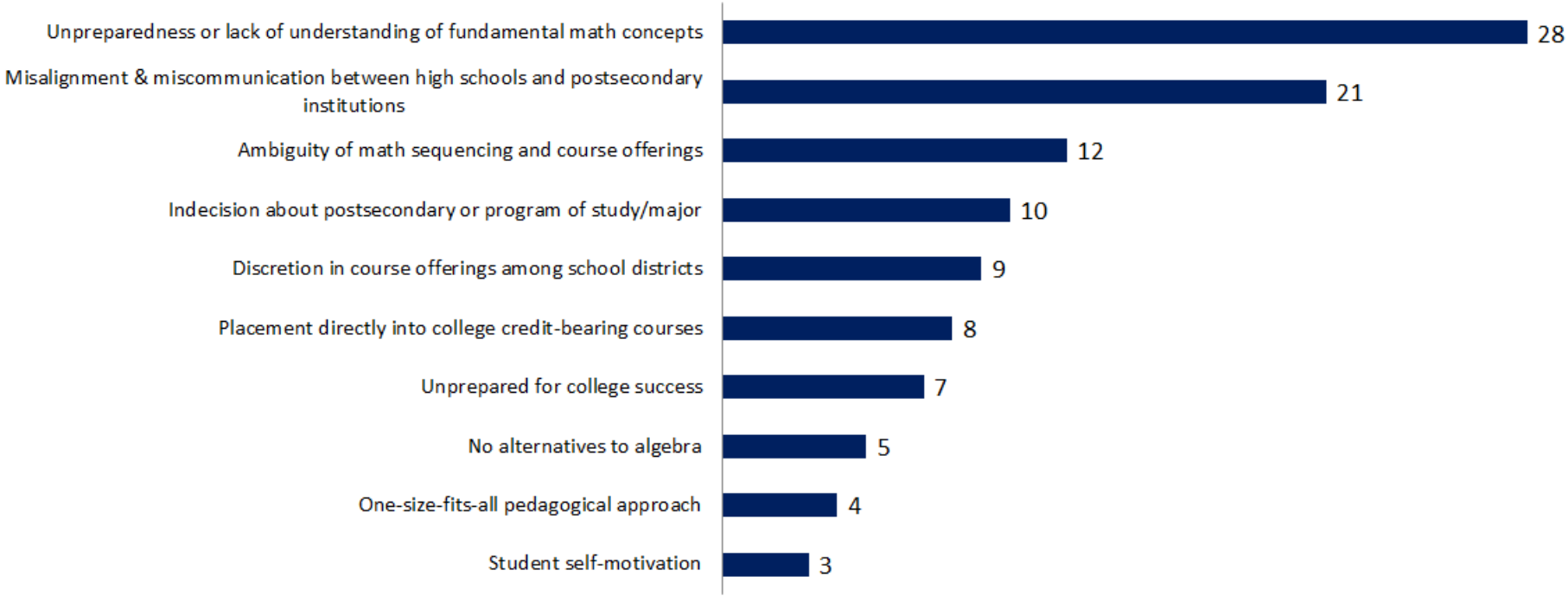
- high school to postsecondary
- FCS mathematics sequences
- college to university alignment
- at large

Response rate of **47.9%**

Results: High School to Postsecondary Alignment



Results: High School to Postsecondary Alignment



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Key Takeaways: High School to Postsecondary Alignment

Goal:
Improve the depth of understanding of mathematical thinking.

"Jo Boaler is a leading voice for a wholly different pedagogy where speed is out, depth is in, and the journey to an answer can be as important as the destination. It's an approach where sense-making matters more than memorization and retaining "math facts" matters less than understanding how such facts interconnect."

Lack of Understanding of Fundamental Concepts

- Classroom Practices
- Assessment Practices
- Design Practices

Misalignment and Miscommunication

How do we improve dialogue in K-12?

Ambiguity of Math Sequencing and Course Offerings

How does the sequencing in K-12 prepare students for mathematical mindsets?

Results: FCS Mathematics Sequences

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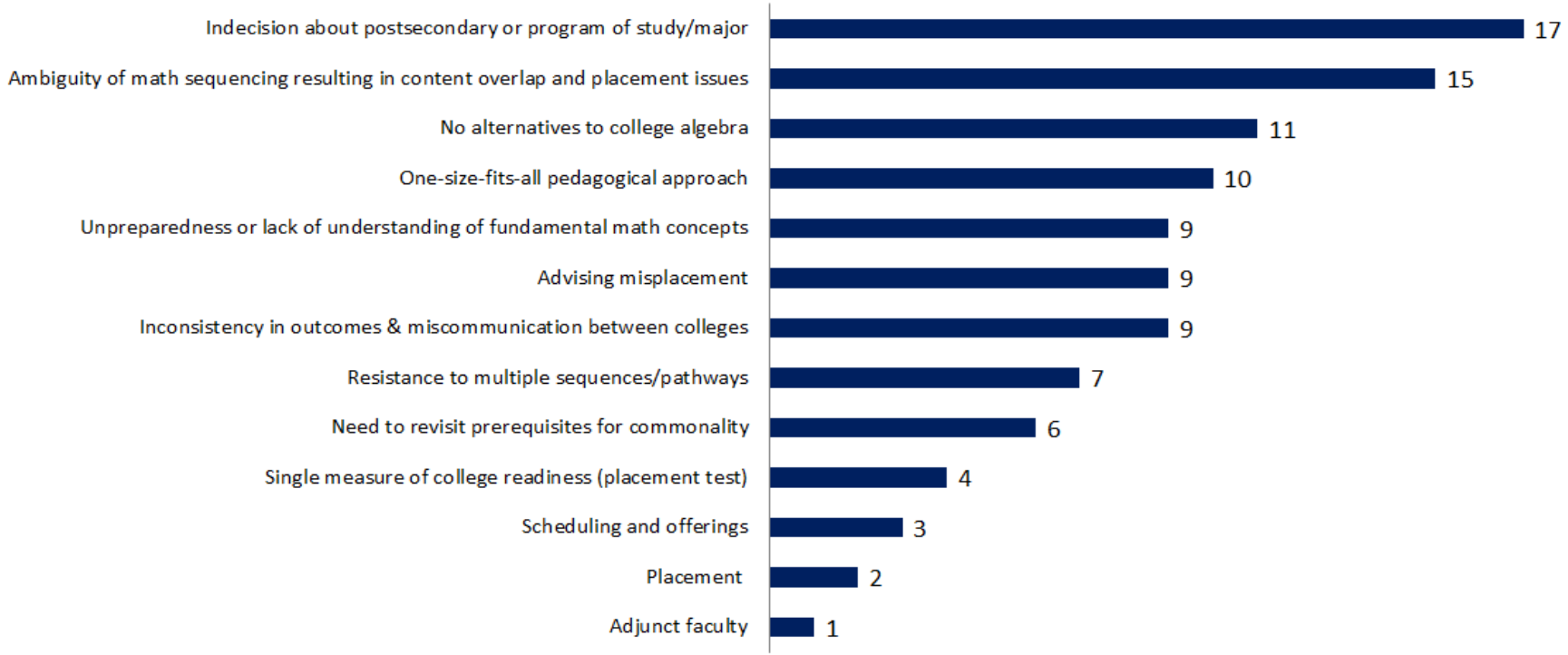

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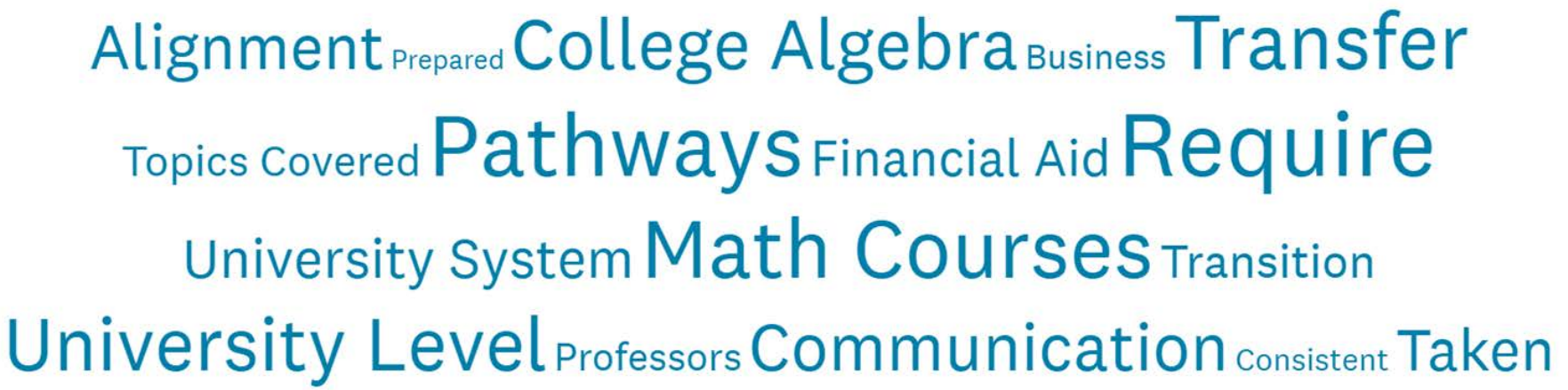
Key Takeaways: FCS Mathematics Sequences

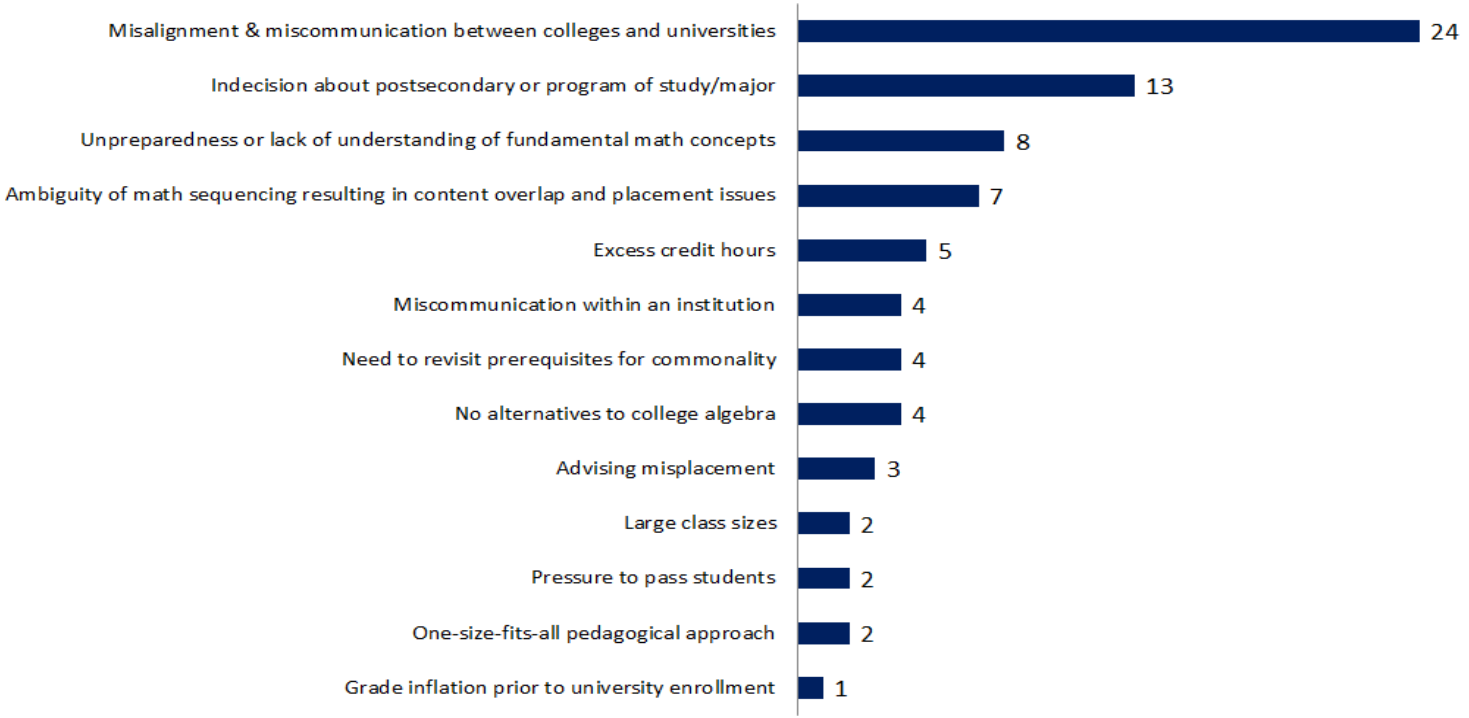
Results Match Themes in National Conversations

- Communication Malfunction Junction
  - Faculty ‘Buy-in’
  - Blame game
  - Vocabulary
- Initiative Fatigue
- Data Distrust

Results: College to University Alignment



Results: College to University Alignment



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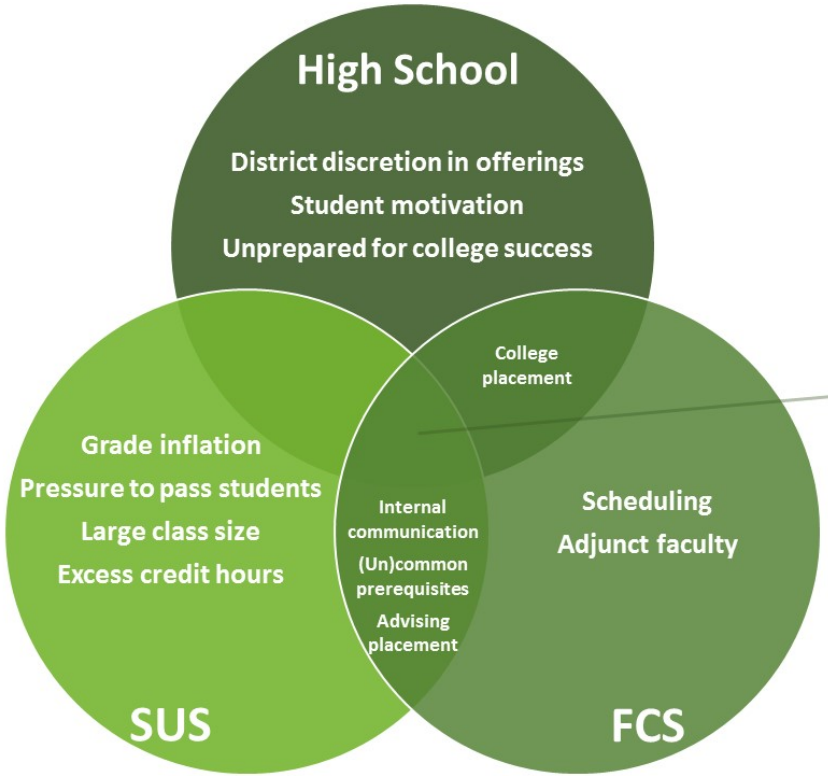
Key Takeaways: College to University Alignment

- Communication
  - Between Systems/Institutions
  - To Students
- Alignment
  - Curriculum/Content
  - Standards/Assessment
  - Program/Degree/Major Requirements
- Transfer and Transition

Identifying Commonalities



Shared

Ambiguity in sequencing

Student indecision re: college or program

Misalignment/ miscommunication between systems

No algebra alternatives

One-size-fits-all pedagogy

Lack of fundamental understanding of math

Linking Challenges to Solutions

- Defining the challenges is the first milestone
- During afternoon break out sessions, each workgroup will discuss & prioritize the top challenges related to mathematics pathways re-design implementation as areas of focus over the next year
- At the end of the day, we will do a group report out to determine where there may be areas for collaboration across the workgroups
- Throughout the year, the workgroups will link challenges with evidence-based practices and solutions