

Data, Cognitive Science and Bespoke Education

Dr. Tristan Denley

Executive Vice Chancellor for Academic Affairs
and Chief Academic Officer

University System of Georgia

Tristan.Denley@usg.edu

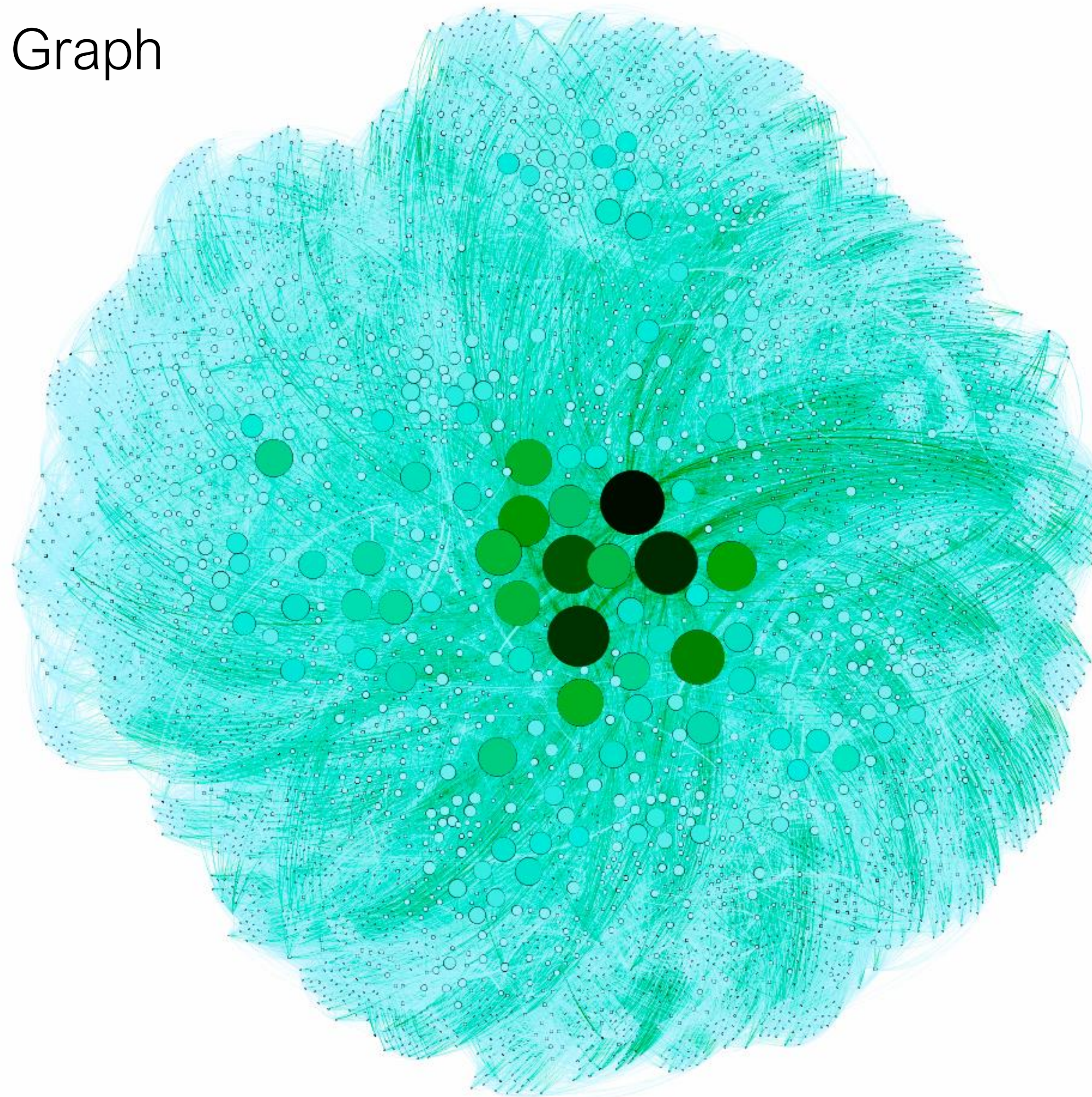
Twitter: @TDenley

A photograph of a wooden boardwalk path leading through a lush green forest. The path is made of several parallel wooden planks and recedes into the distance, creating a strong sense of perspective. The surrounding vegetation is dense and vibrant green, with some fallen leaves scattered on the path. The lighting is soft and natural, suggesting a daytime setting in a wooded area.

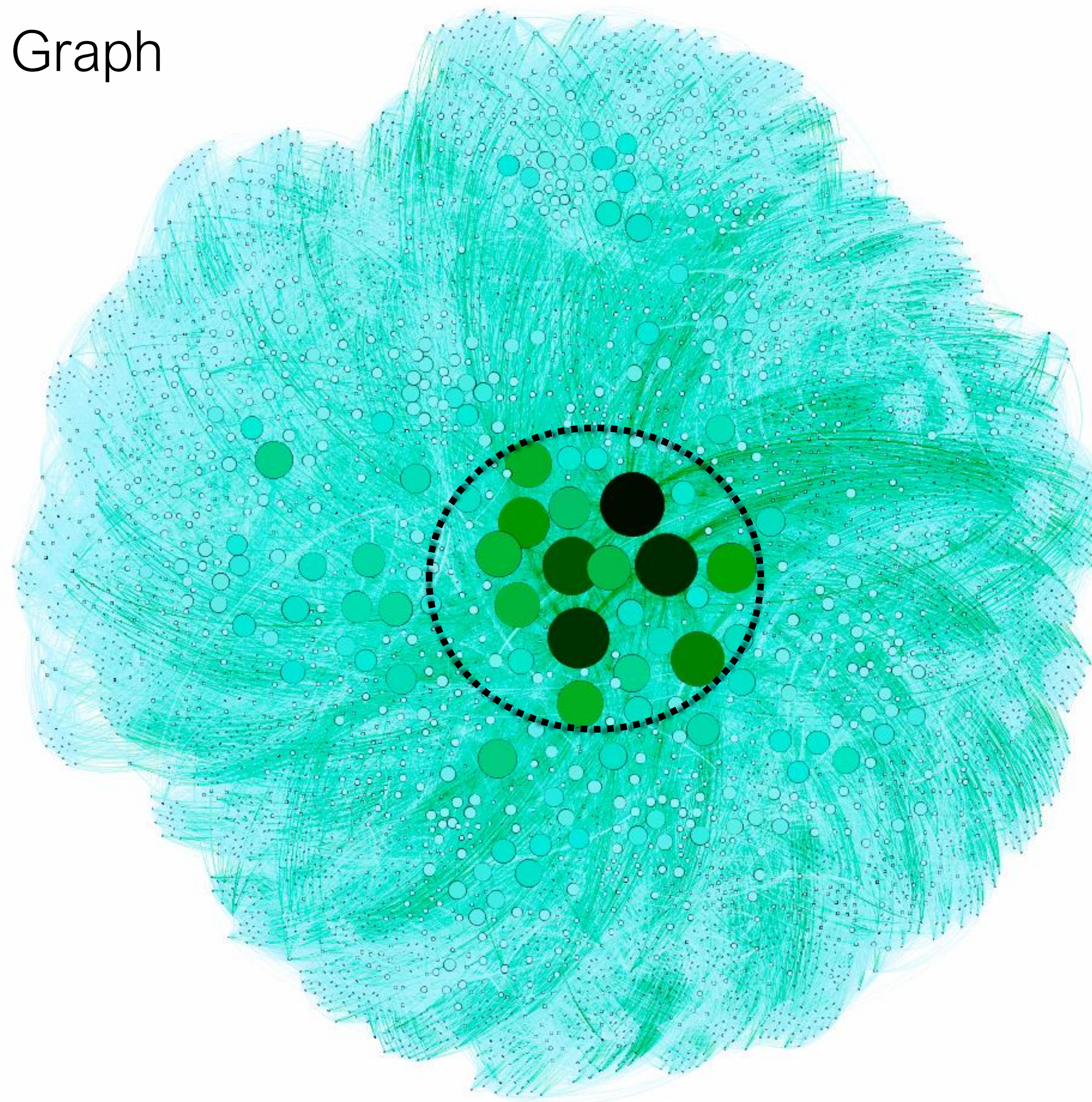
Creating Clear Degree Pathways to Success

WHAT DATA SAYS ABOUT THE PATHWAYS

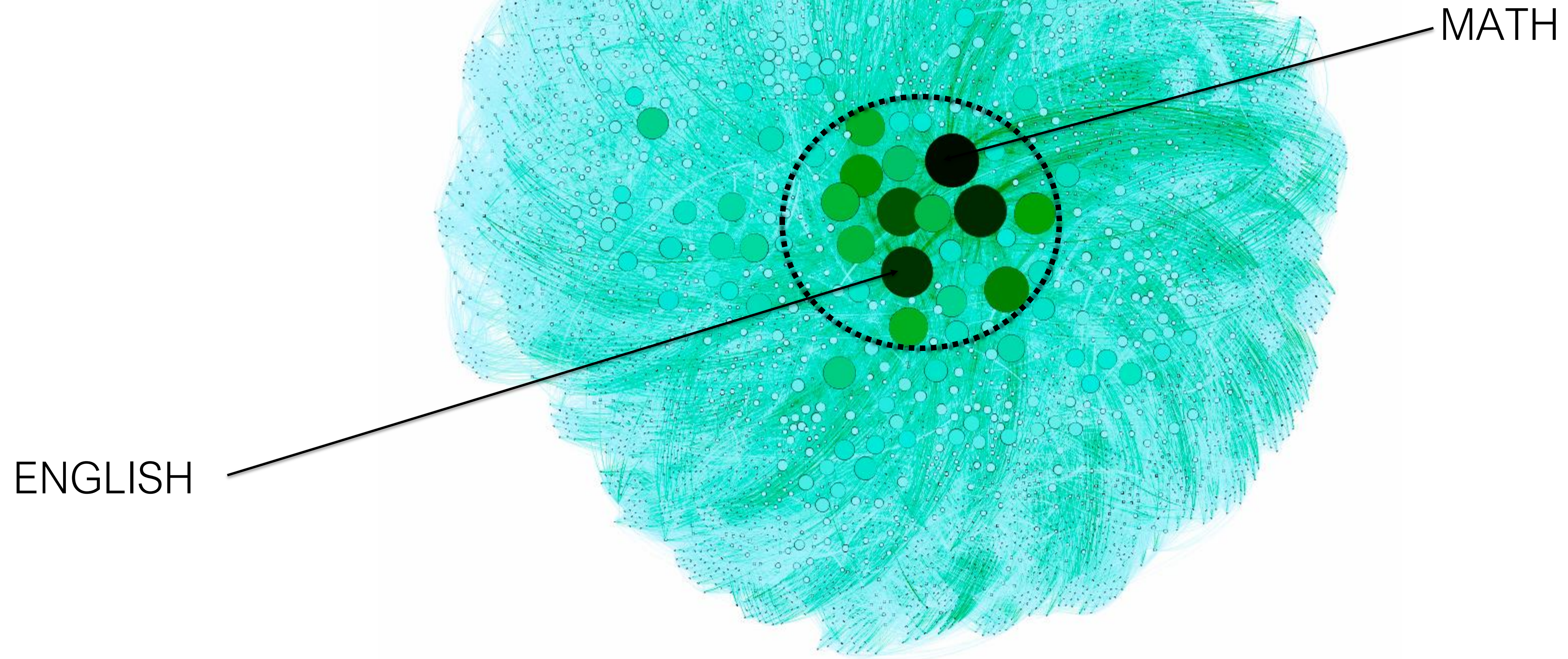
The Graduate Transcript Graph



The Graduate Transcript Graph

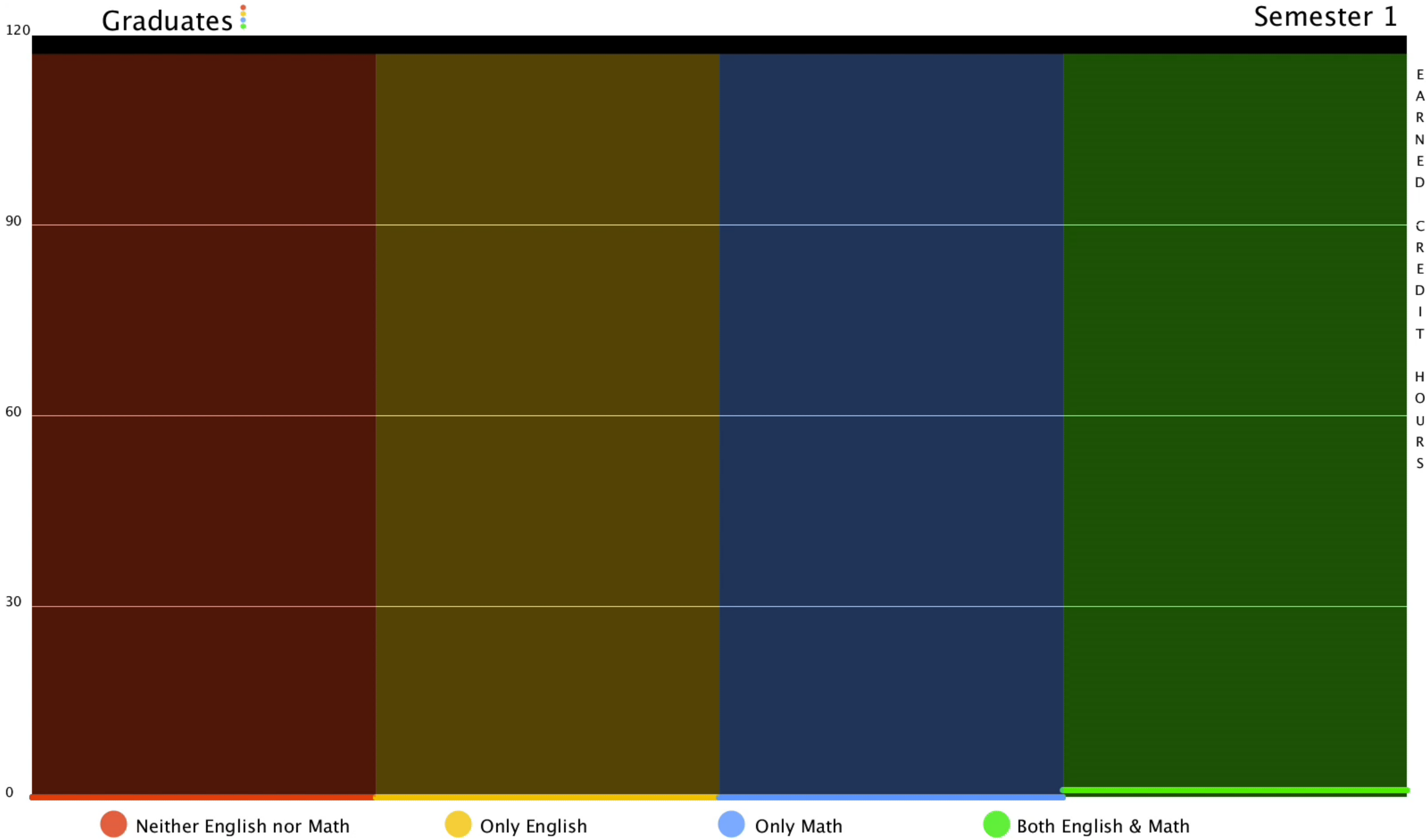


The Graduate Transcript Graph



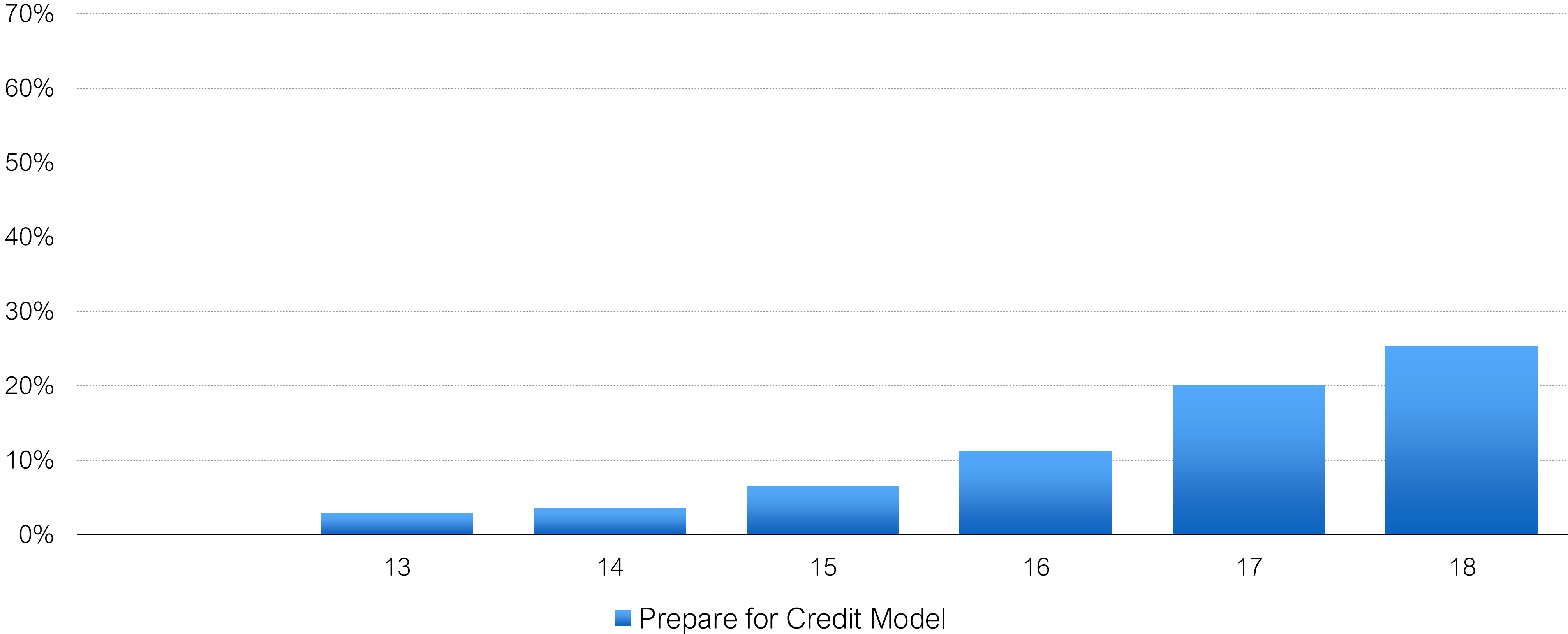
10,000 USG
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2,500 who
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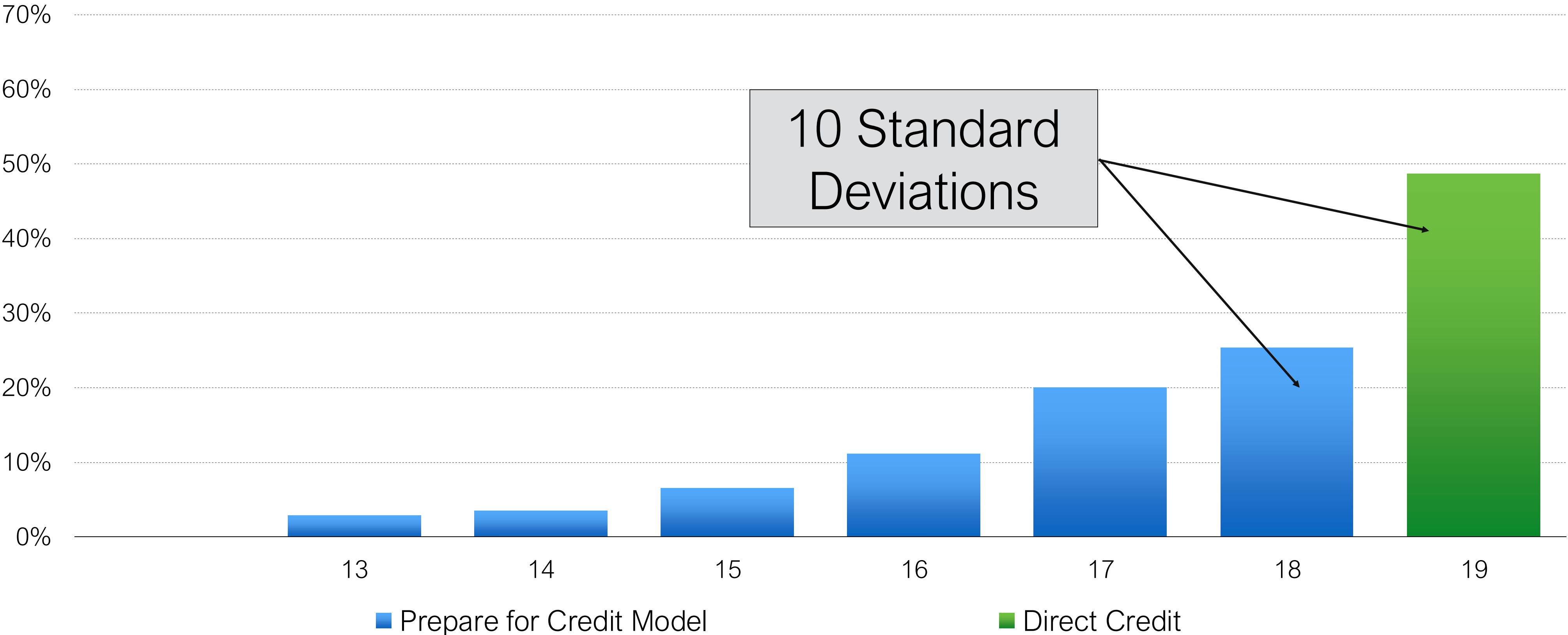


System-wide Math Completion for students beginning in Developmental Mathematics



ACT Math Subscores

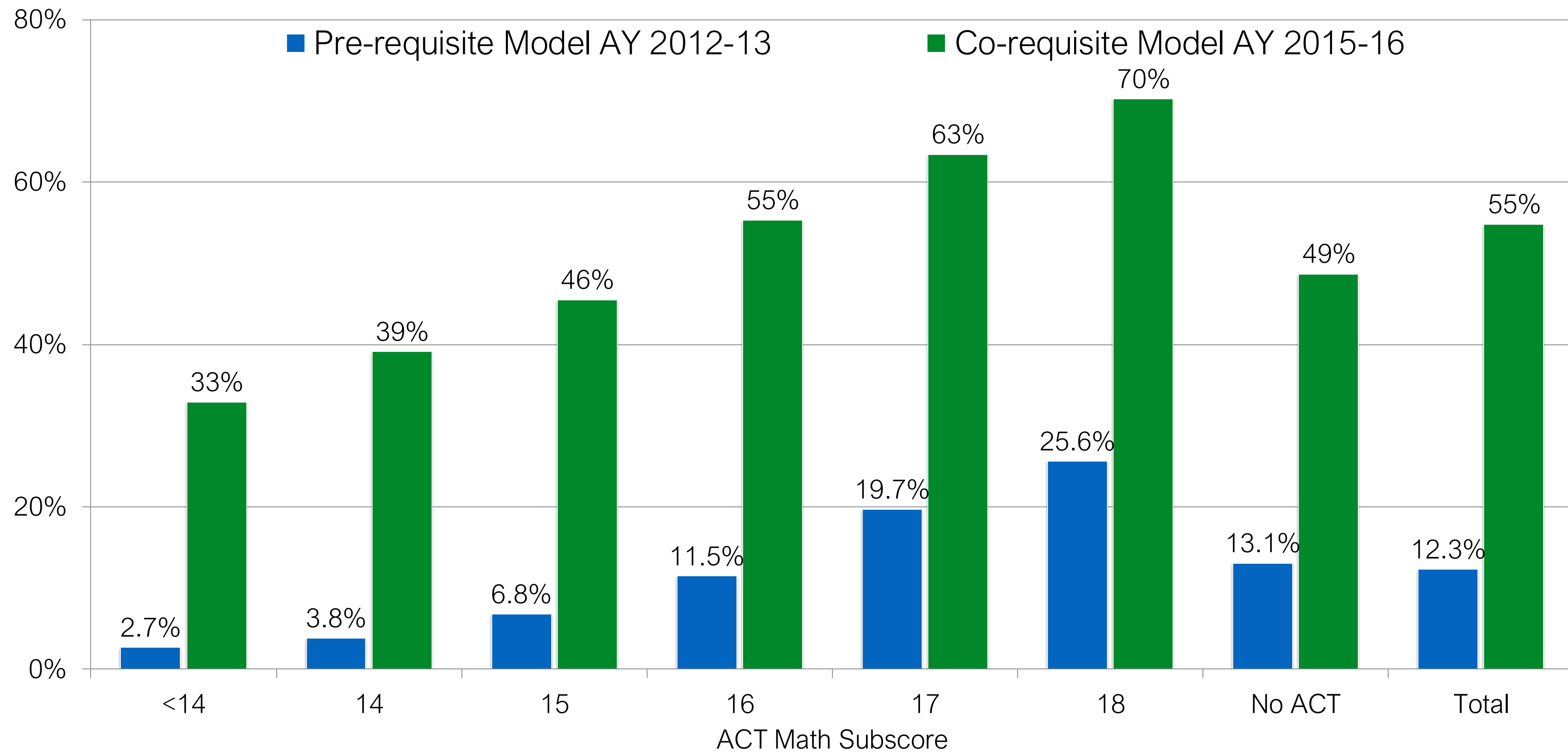
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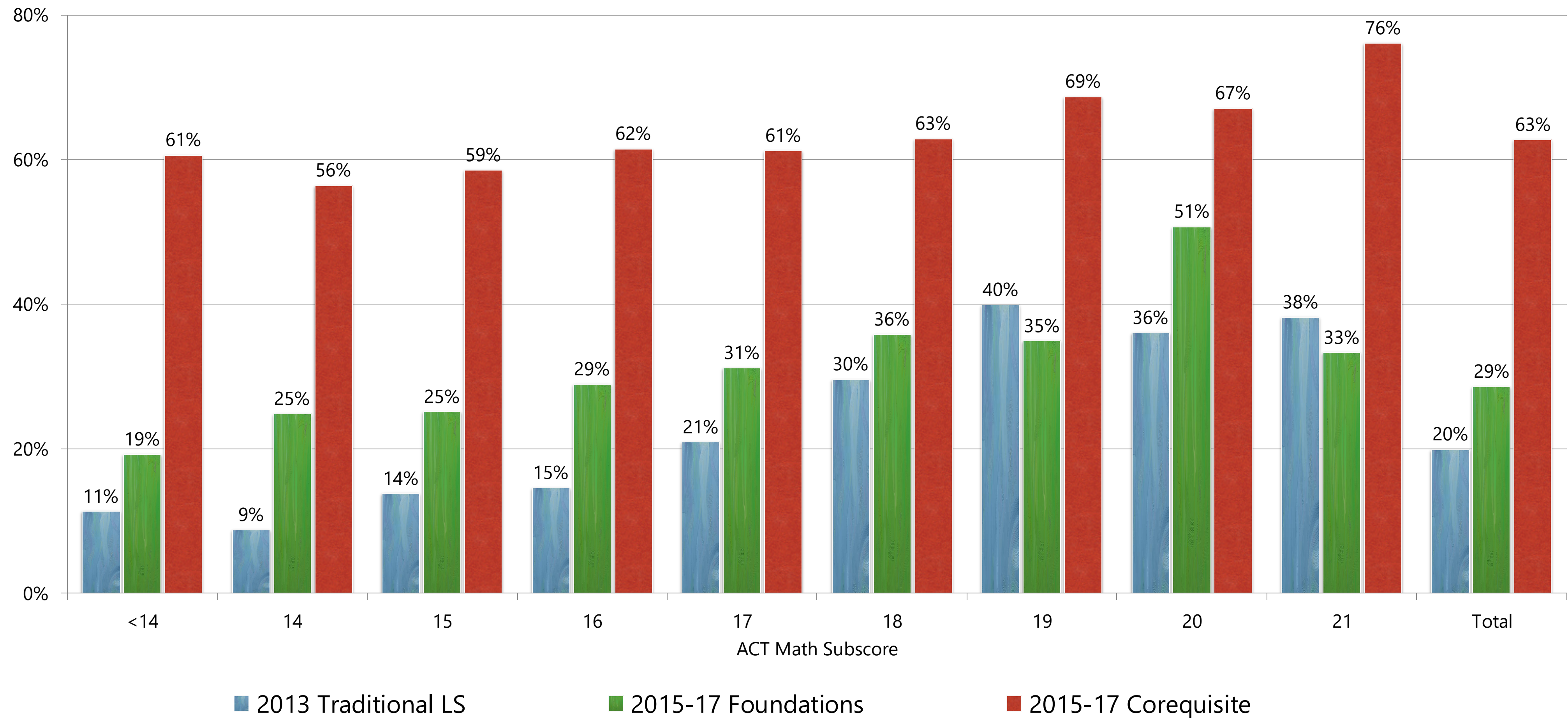
ACT Math Subscores

Completion of Gateway Math by ACT Sub-score

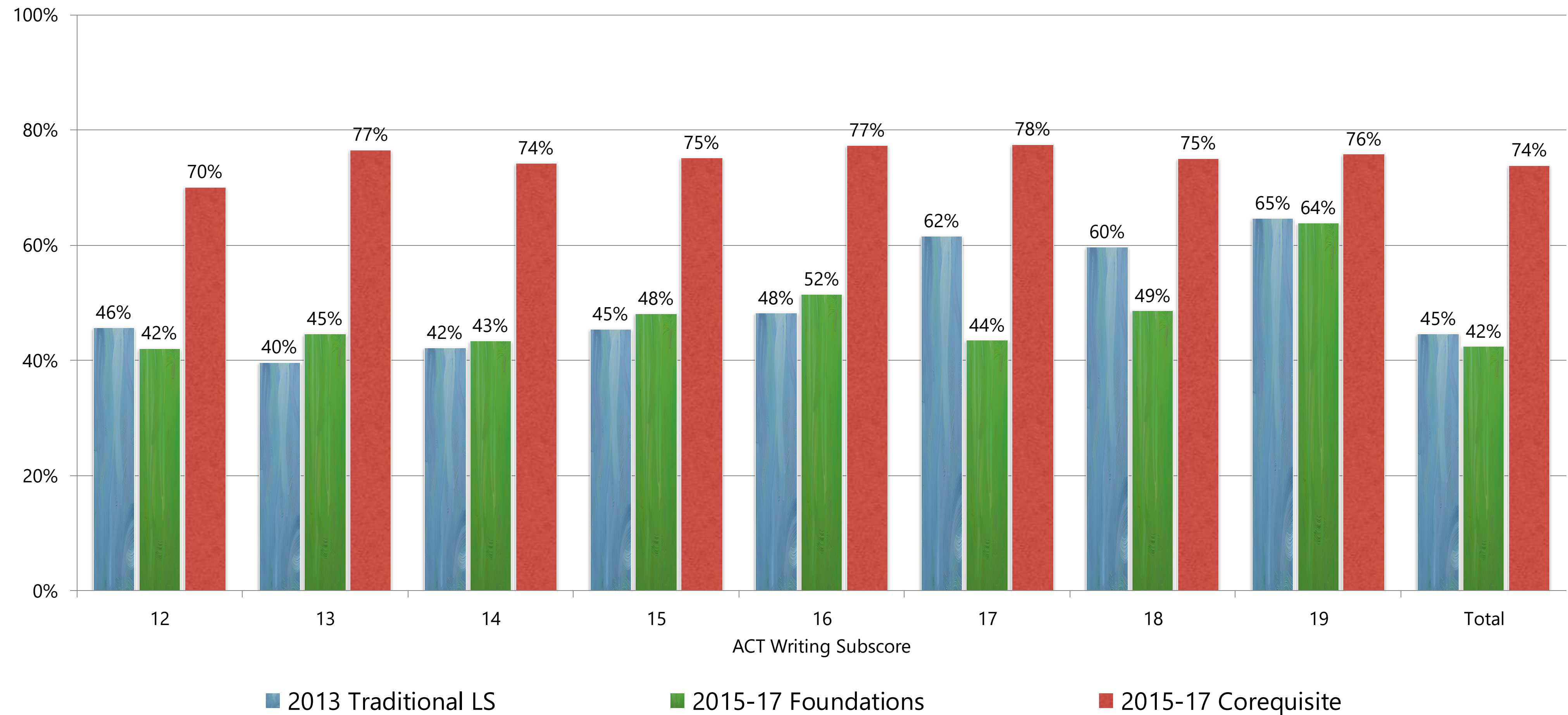
Community College Pre-requisite Model vs. Co-requisite Model



System Comparison of Success in Gateway Math Classes

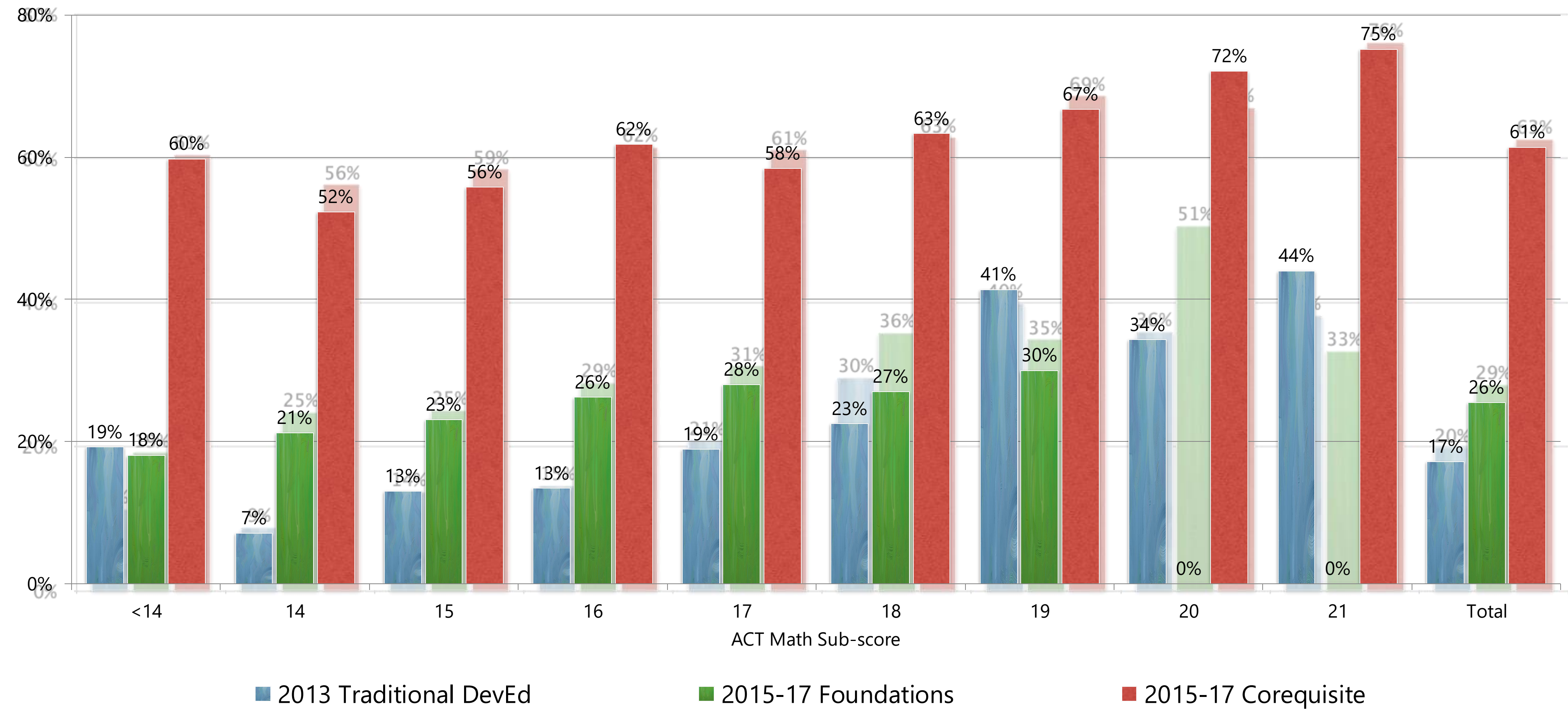


System Comparison of Success in Gateway English Classes



USG System-wide Comparison of Success in Gateway Math Classes

African American Students



Productive Academic Mindset

A background image of a young man with dark hair, wearing a green sweater, sitting at a desk in a library. He is looking directly at the camera with his hands resting on his cheeks. In front of him is an open book. To his left and right are stacks of various books. The background shows tall bookshelves filled with books, creating a warm, studious atmosphere.

Perceived purpose of coursework

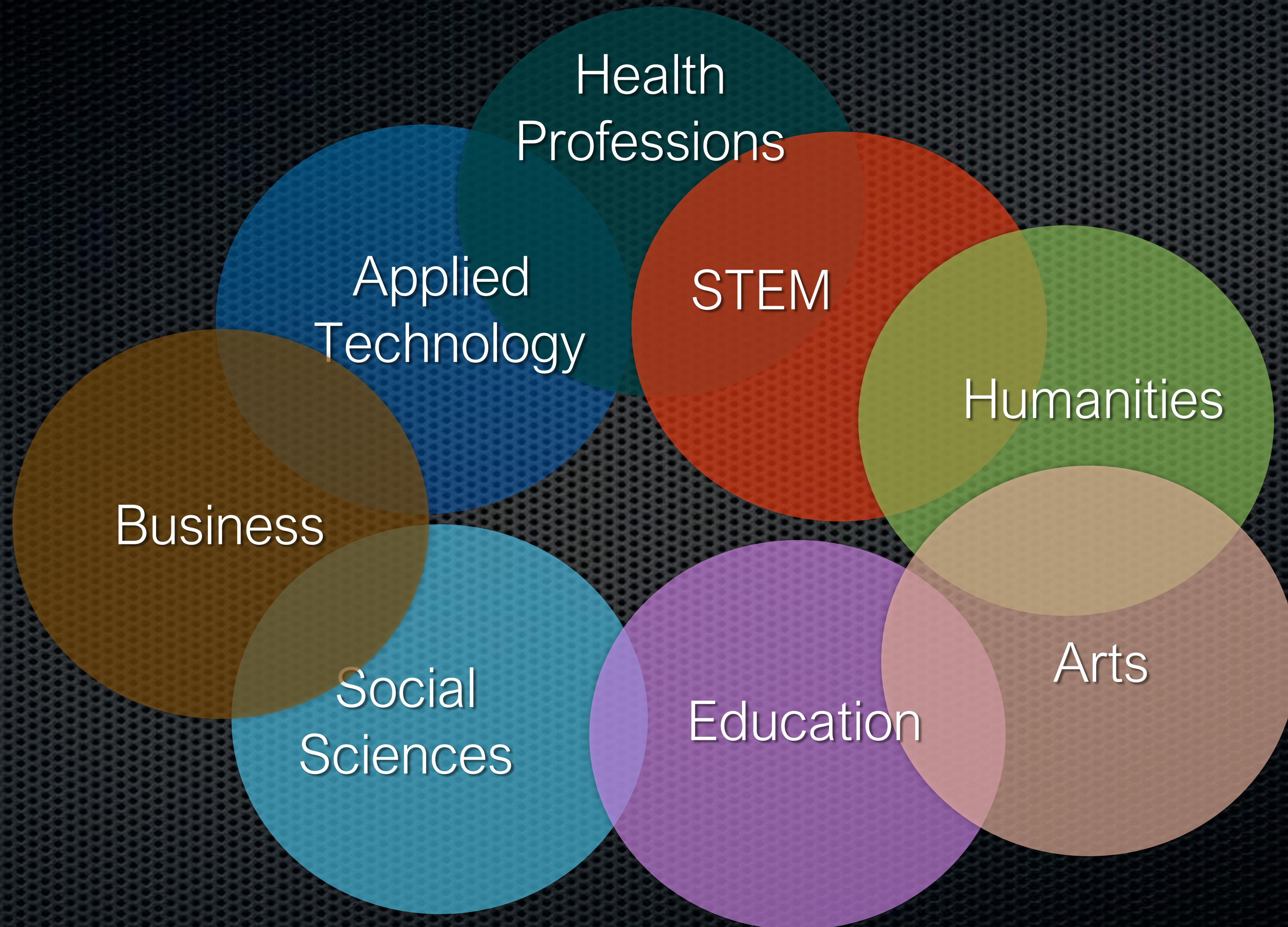
Feel connected to their institution
and that they belong...

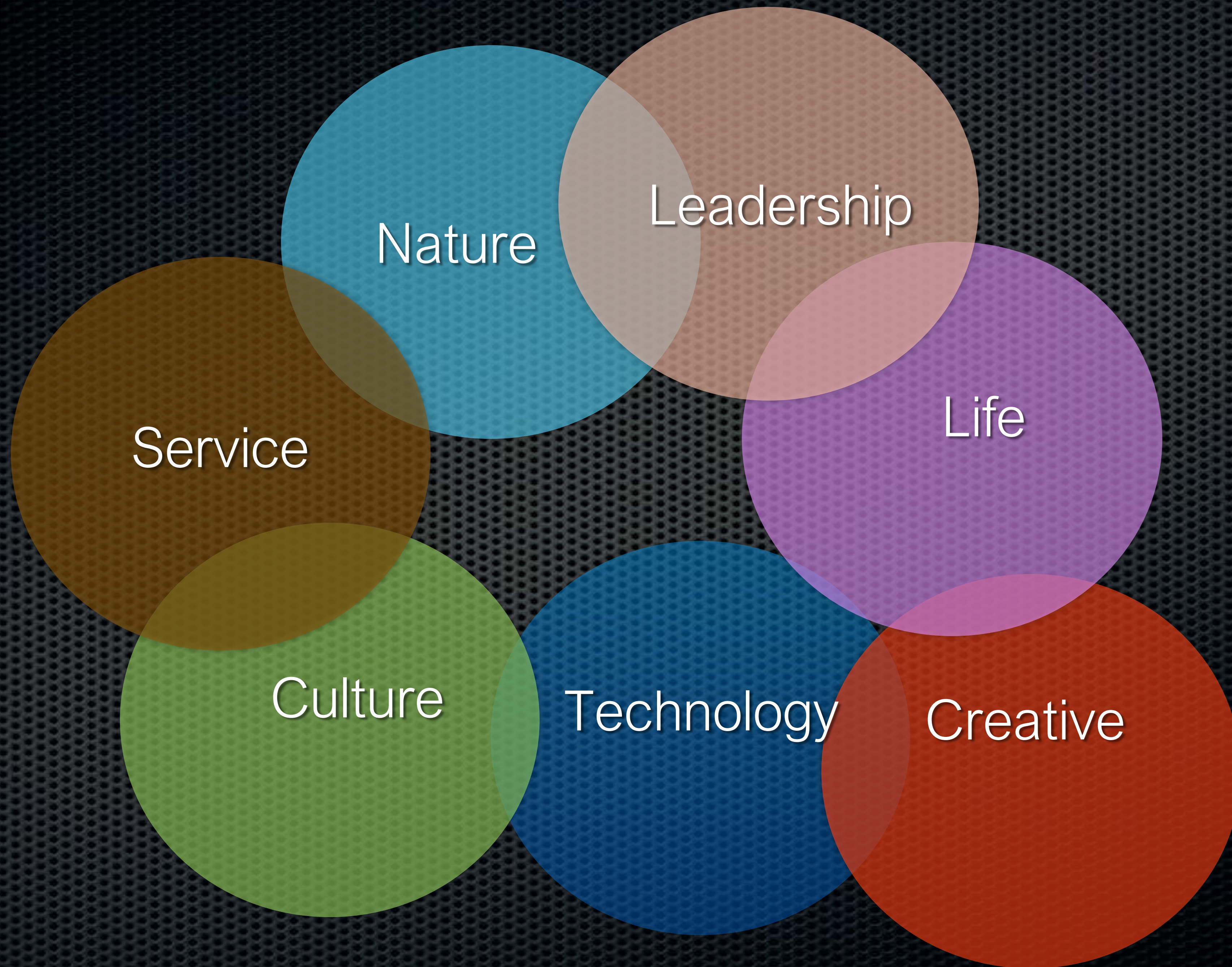
Believe they are capable of learning the
material...

Confidence interacting with Faculty and Staff

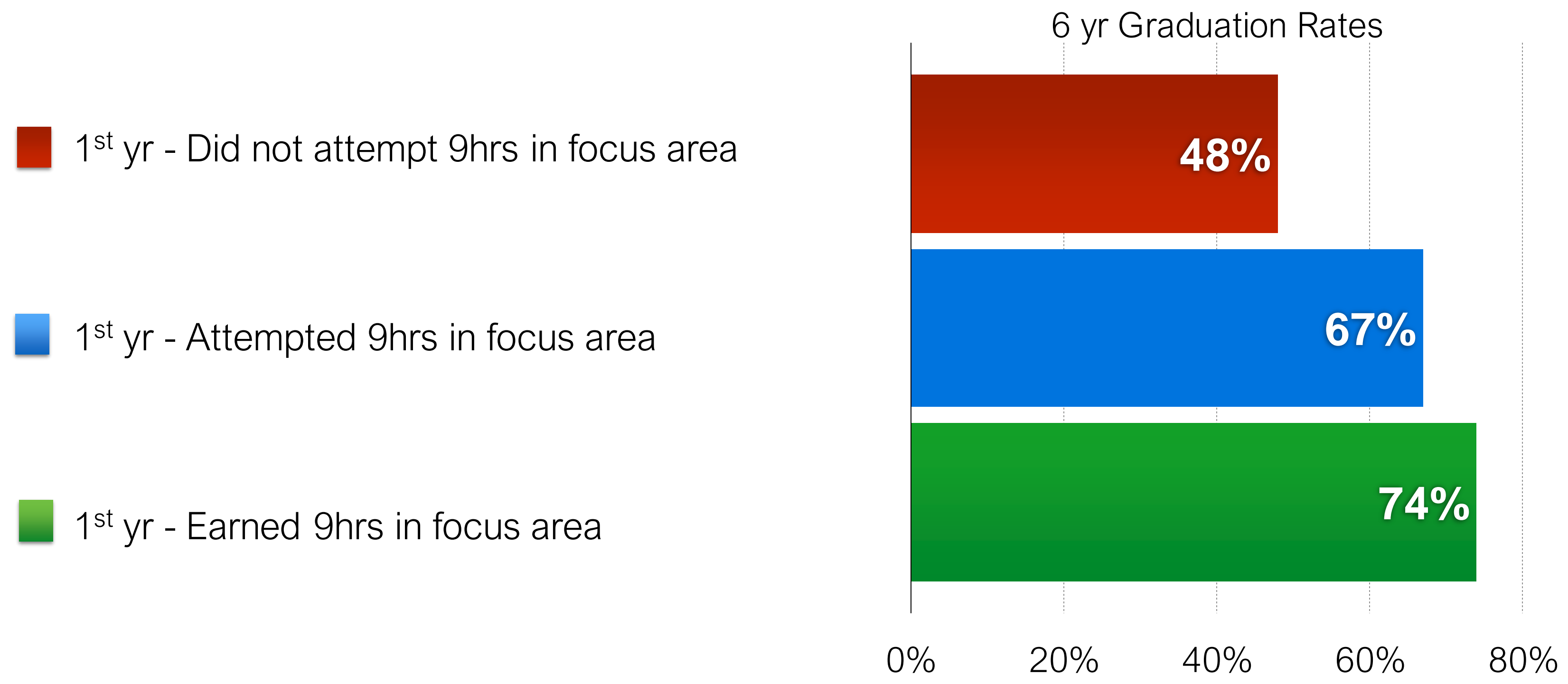
GRIT and Perseverance







The effect of course enrollments in the first year on graduation rates





Math Pathways



- 18 Credit Hours + 42 Hour General Education Core
- Including:
 - 6 Hours of Experiential Learning
 - 12 Hours at 3000+ Level
 - Curriculum designed in partnership with a major industry with faculty designing to those specifications

nexus degrees approved



Post-production Film
Cybersecurity in Financial Technology



Block-chain Machine Learning and
Block-chain Data Analysis

USG Momentum Year

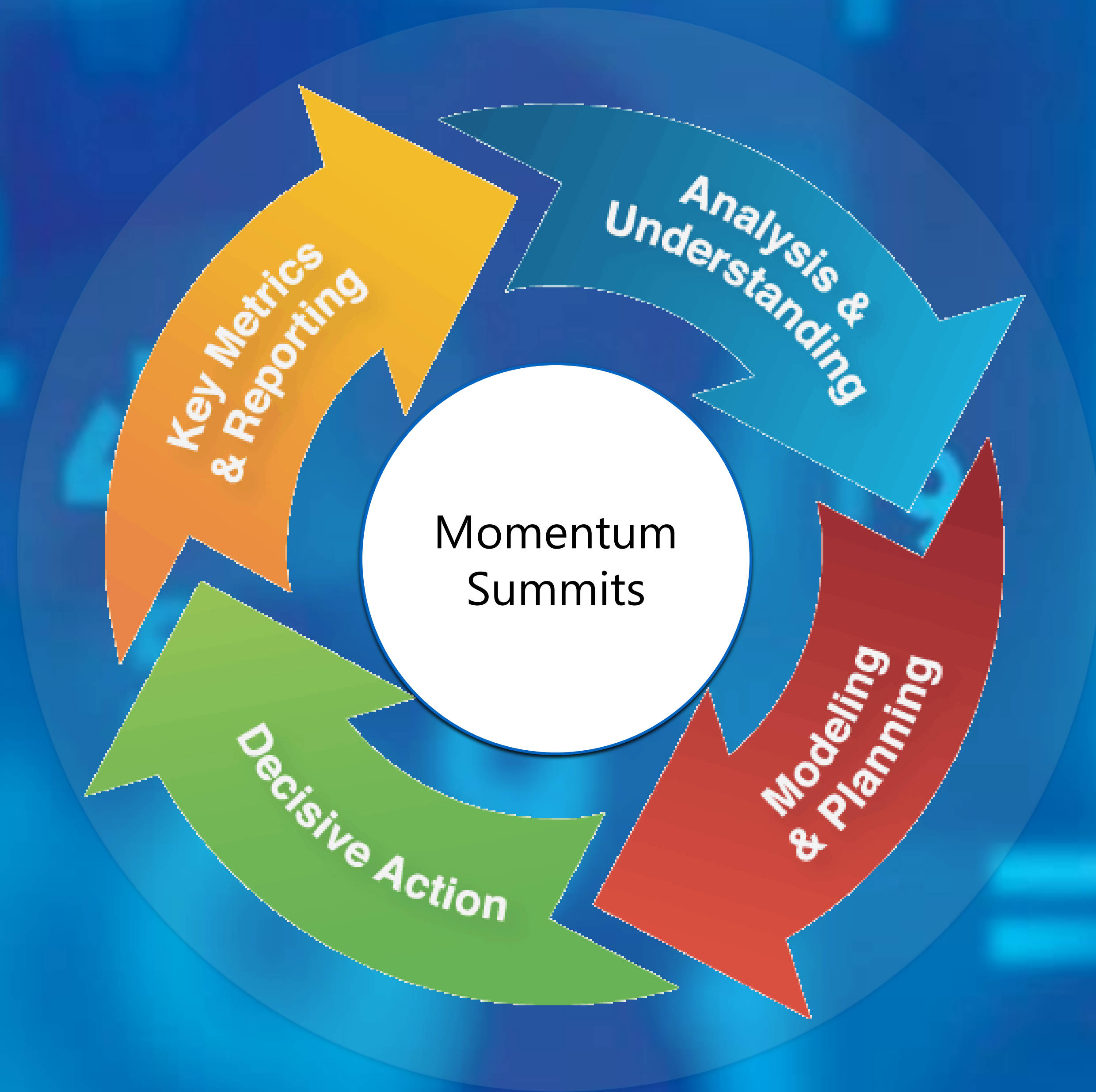
Making a *purposeful* program choice

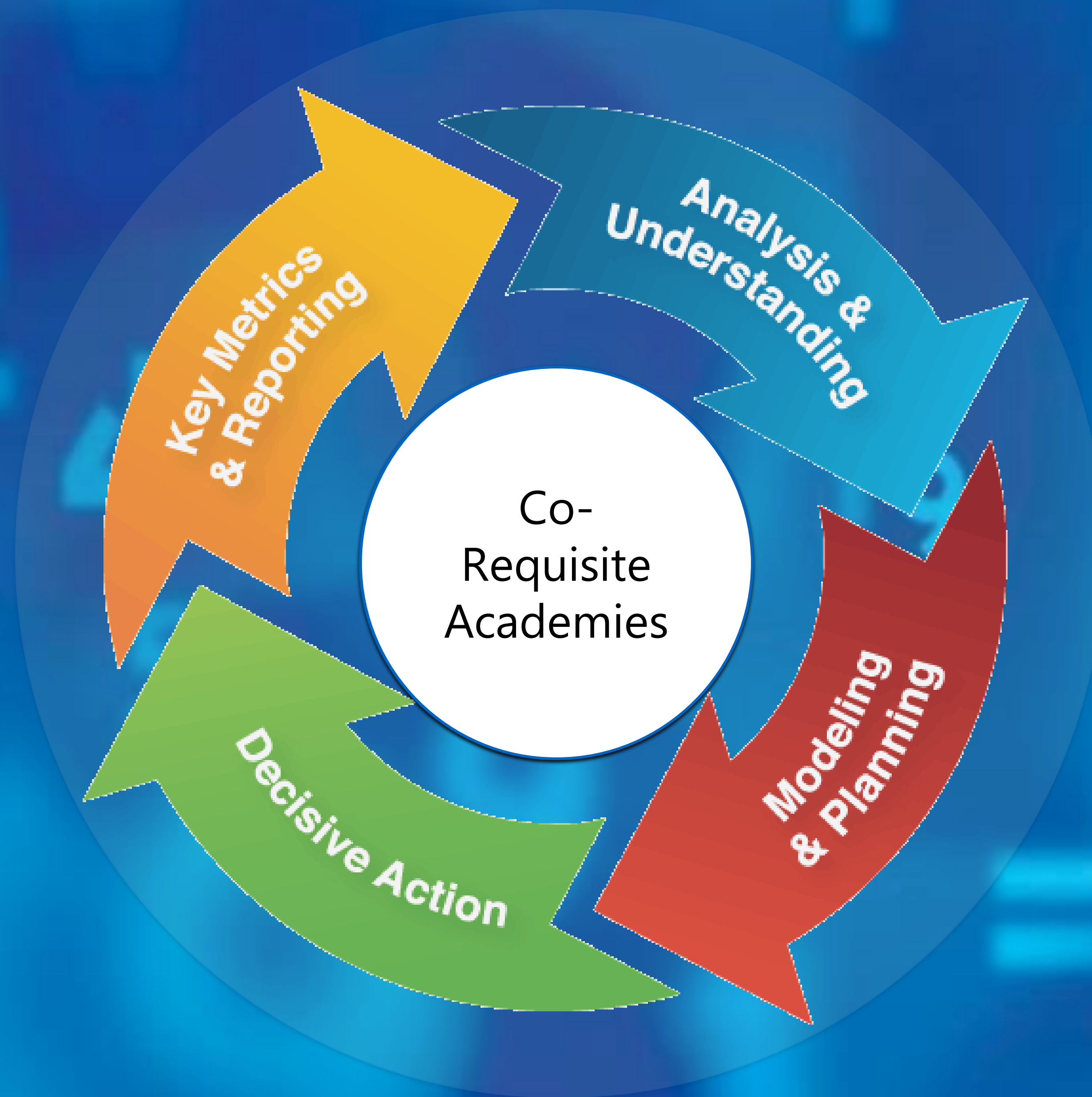
Creating a *productive* Academic Mindset

Attempting the first *30 hours* of a *Clear*
Pathway

Attempting *9 hours* in Academic Focus

Complete initial English and Math





Momentum
Summits

Co-
Requisite
Academies

Momentum
Summits



Advising
Summit

Key Metrics
& Reporting

Analysis &
Understanding

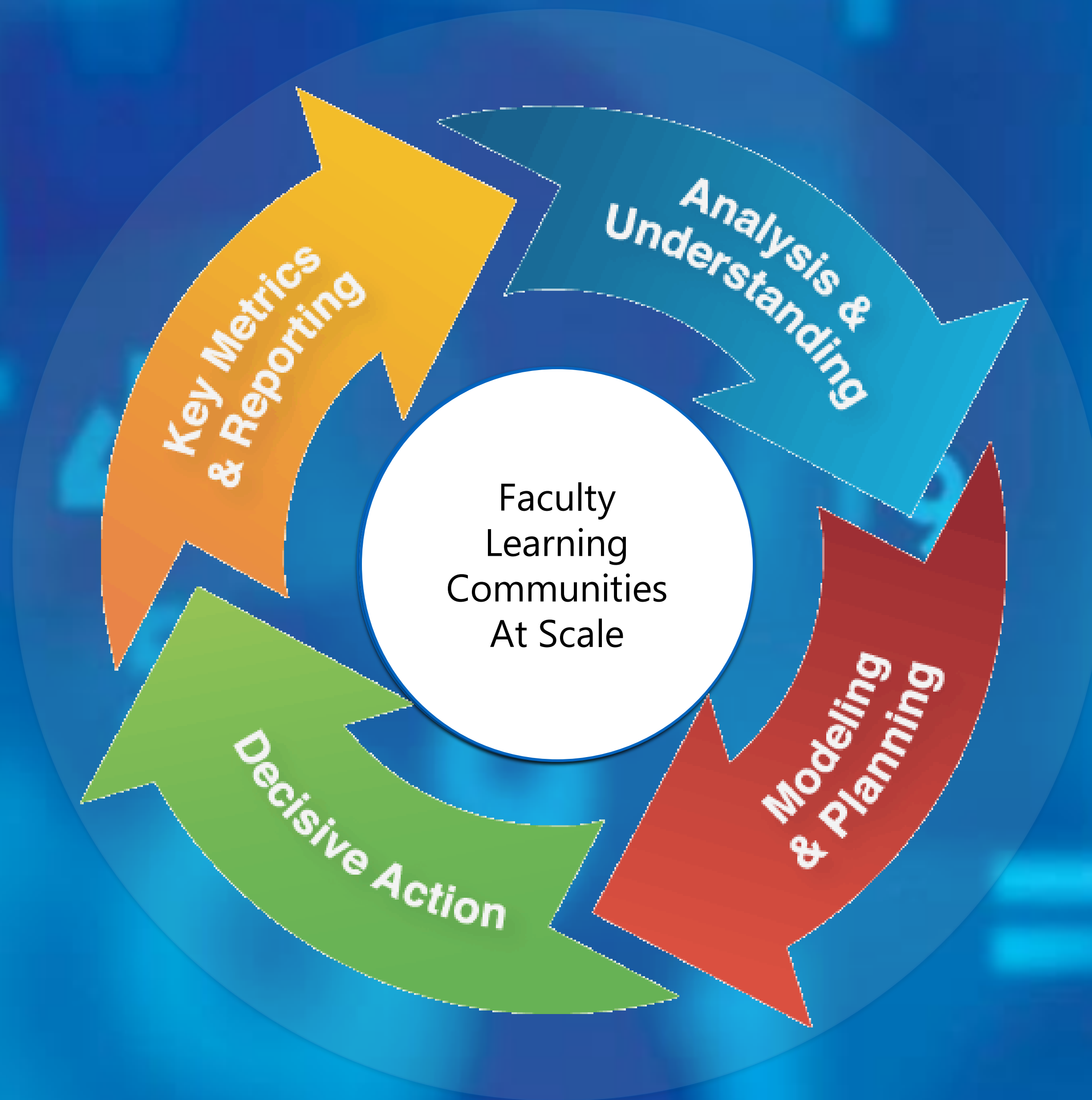
Modeling
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Decisive Action

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Faculty
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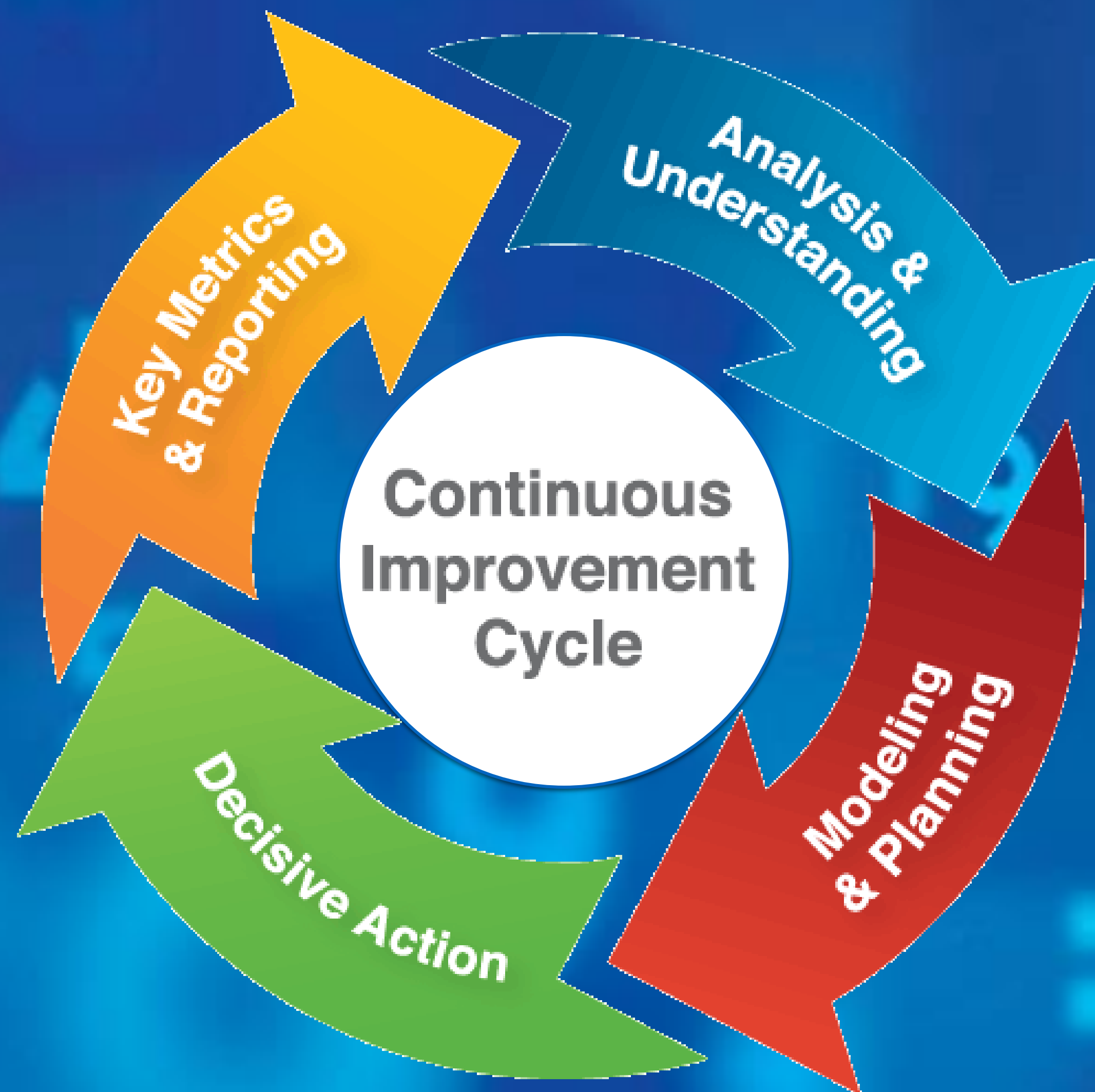
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UNIVERSITY SYSTEM OF GEORGIA

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Momentum Metrics

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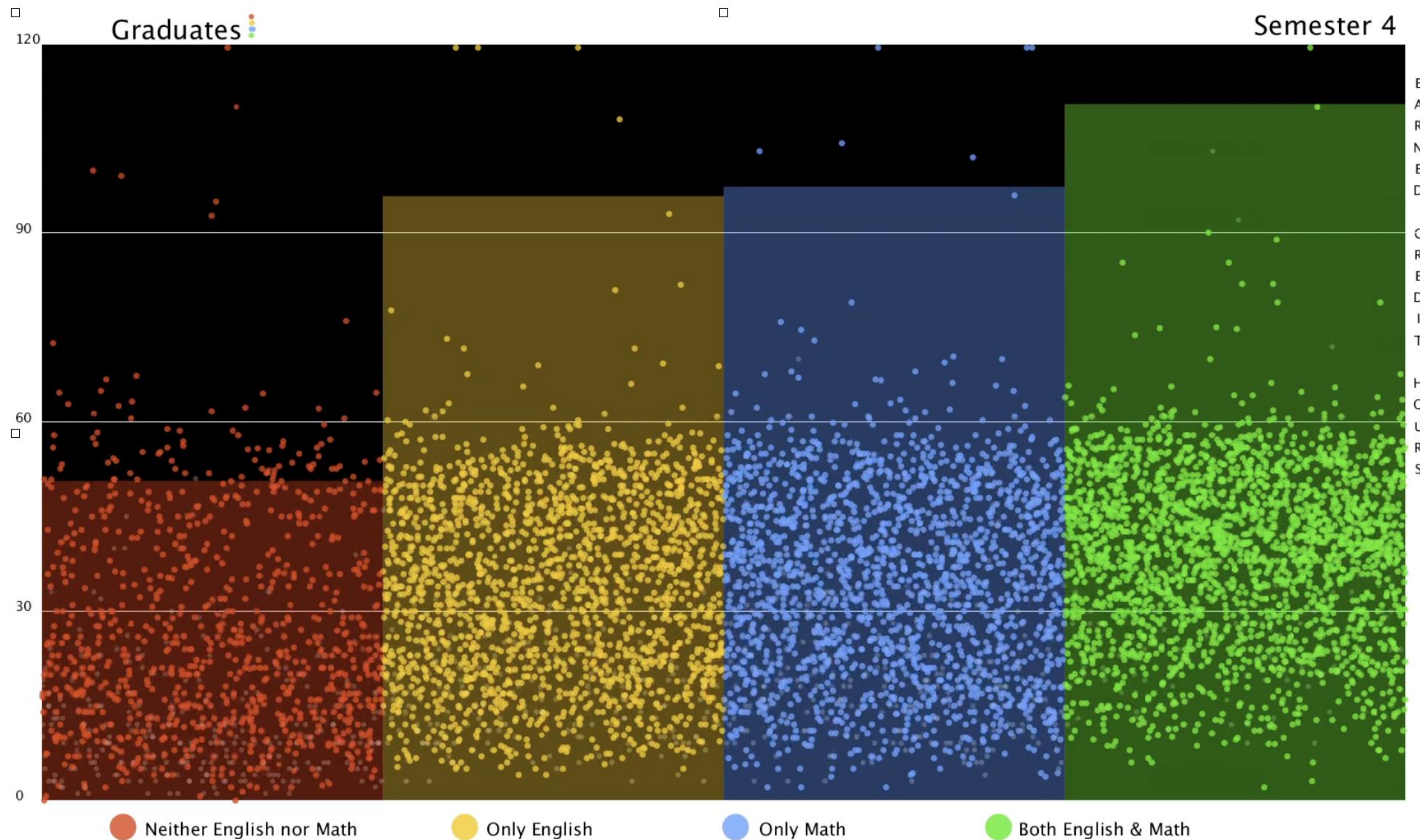
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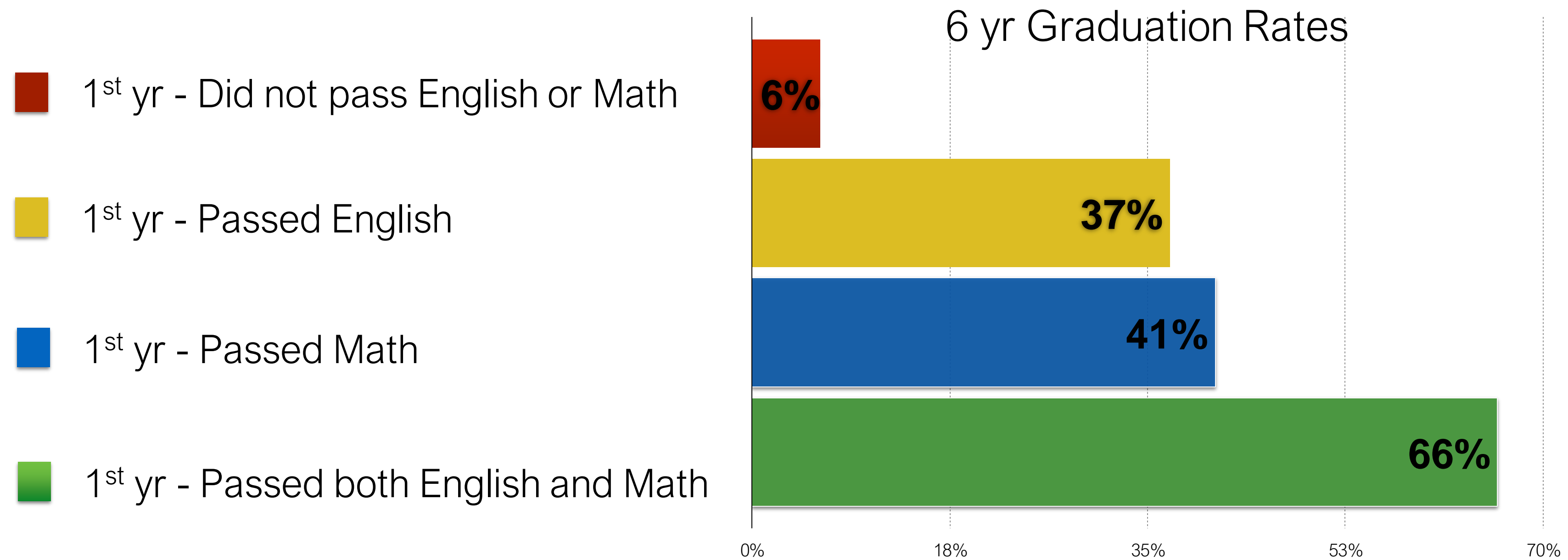
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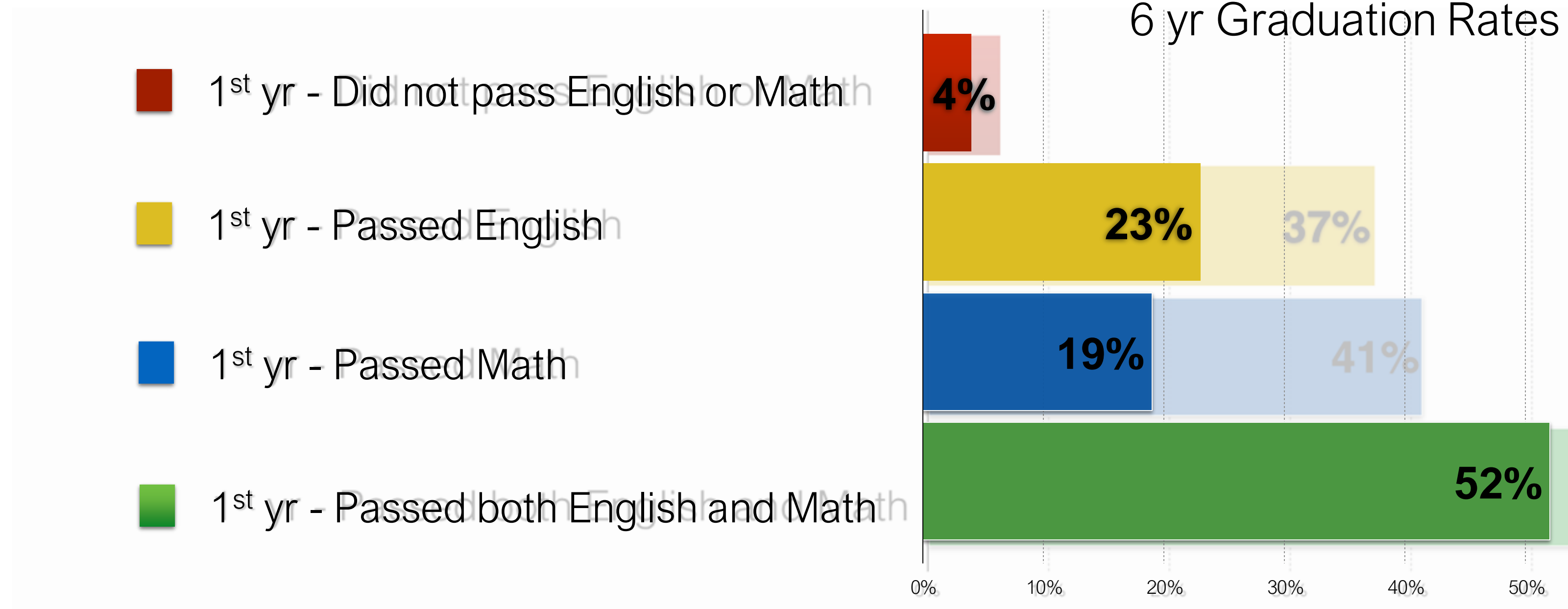


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English and Math



English and Math

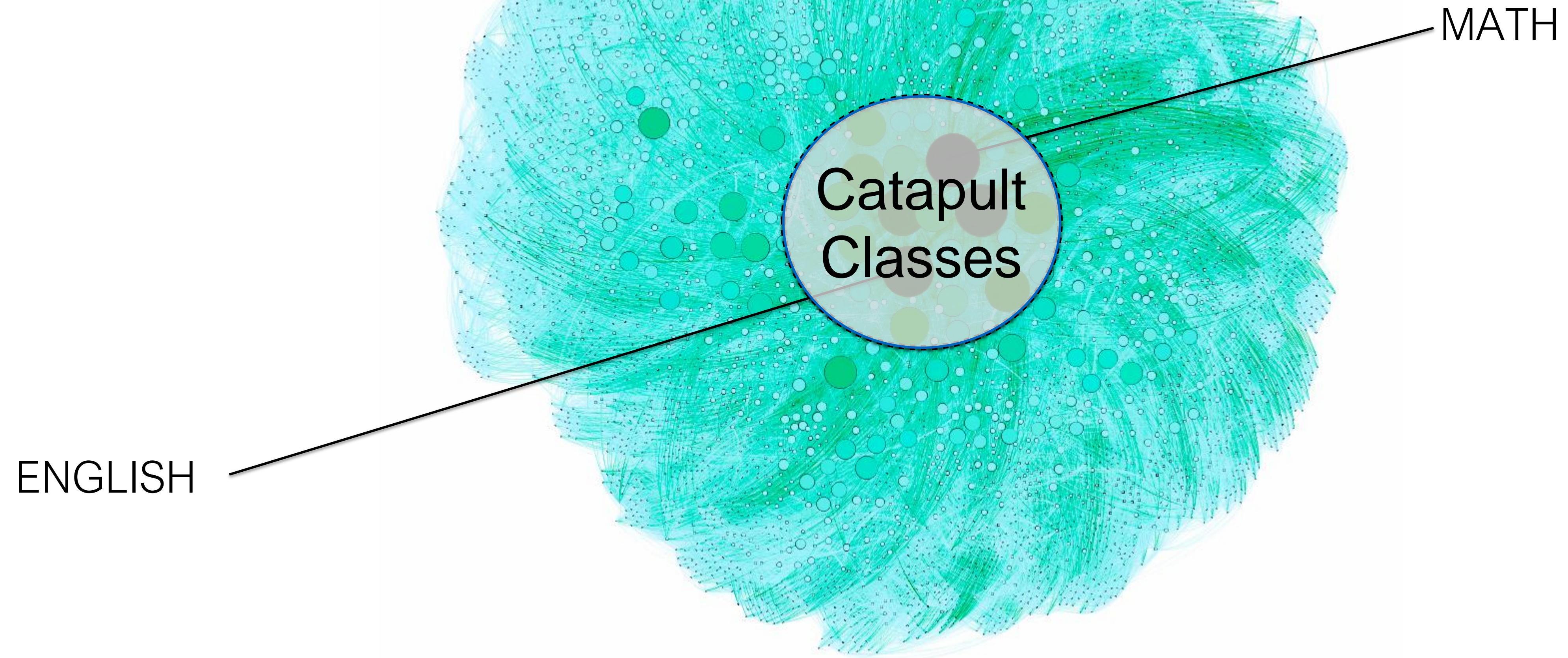


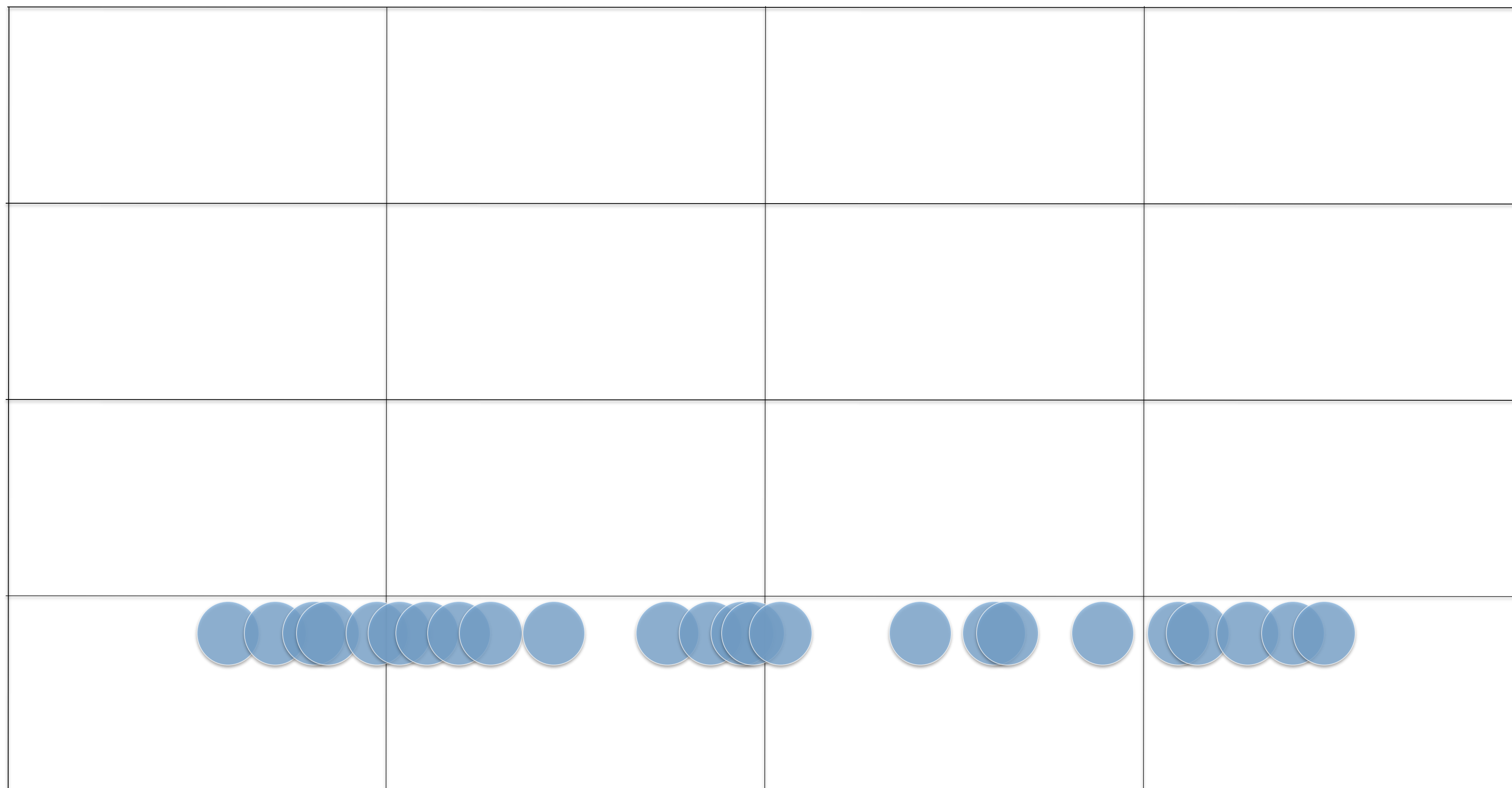
34%
Complete
Both

40%
Complete
Neither

A State College

The Graduate Transcript Graph





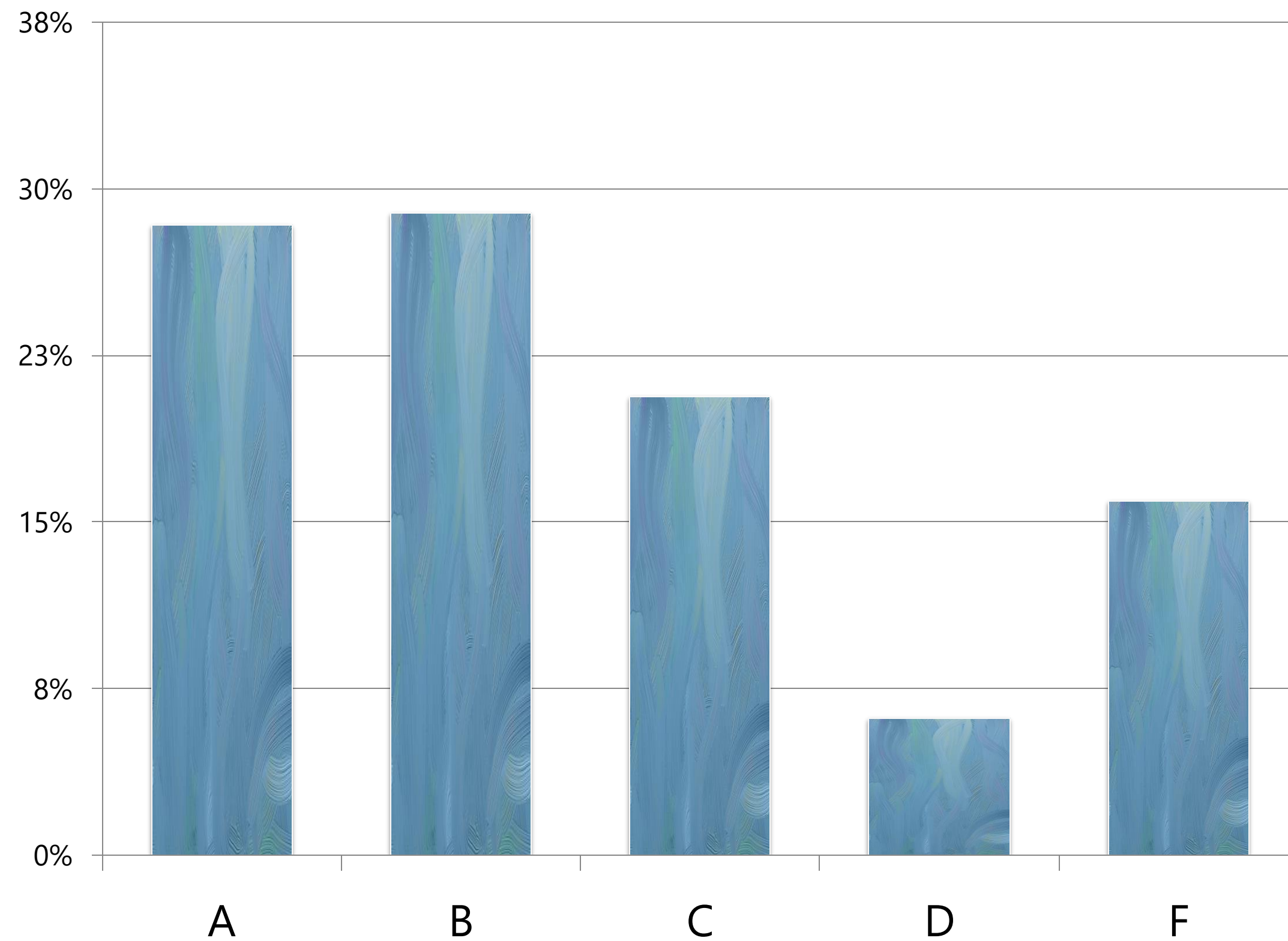
Impact of Student Enrollment



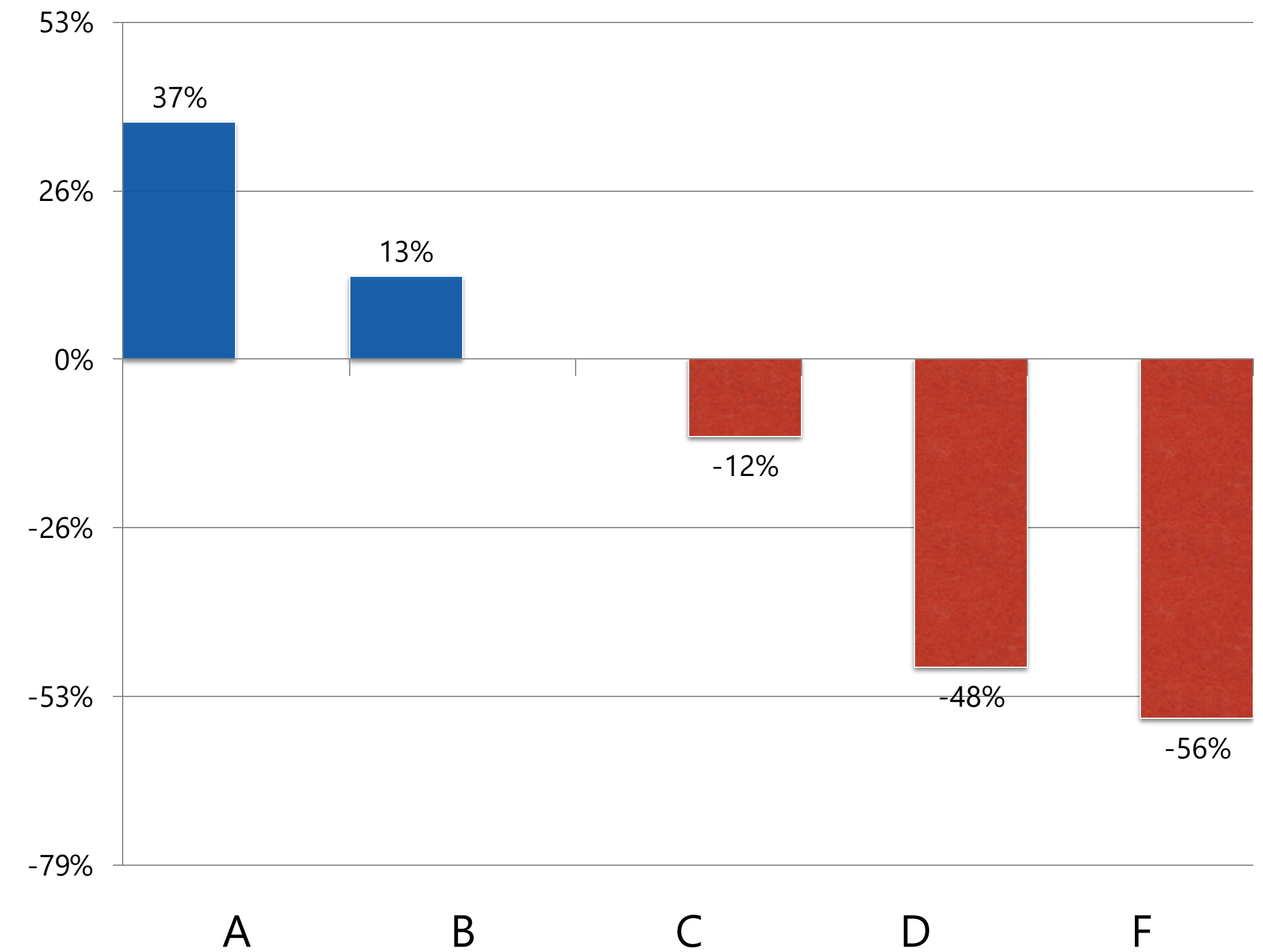
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ENGL 1101 - English Composition I

Course Grade Distribution

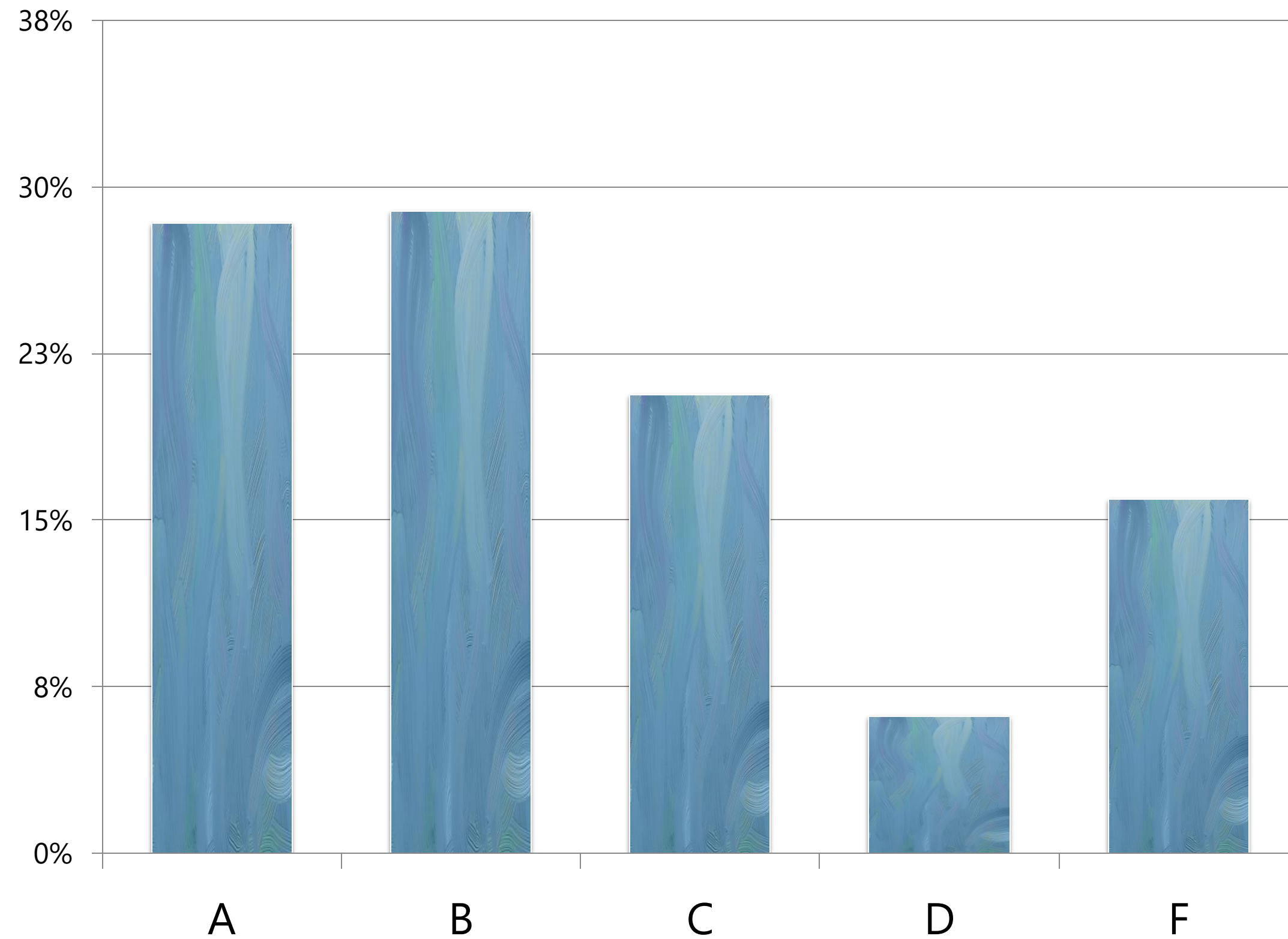


Impact on Graduation Rate

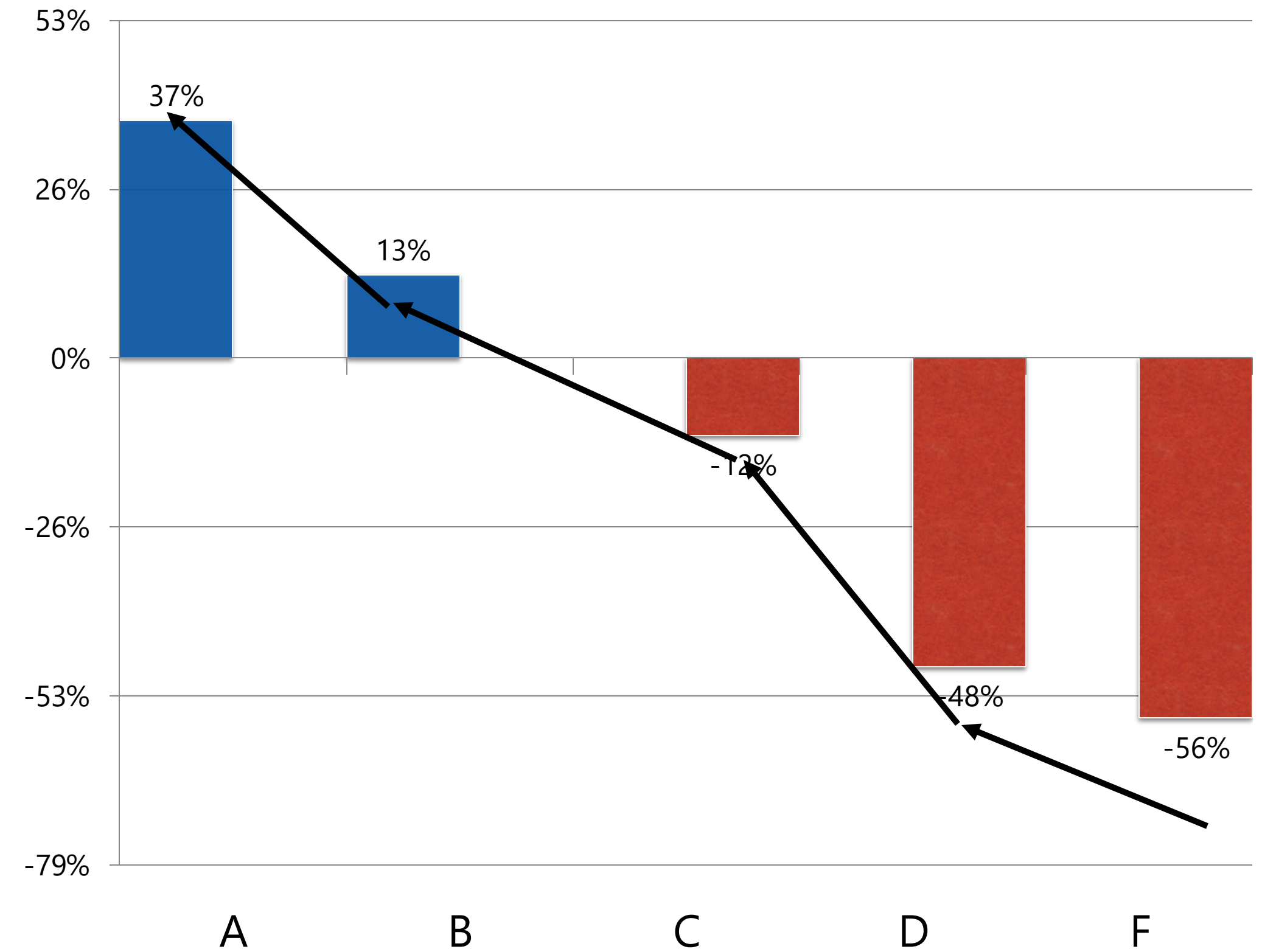


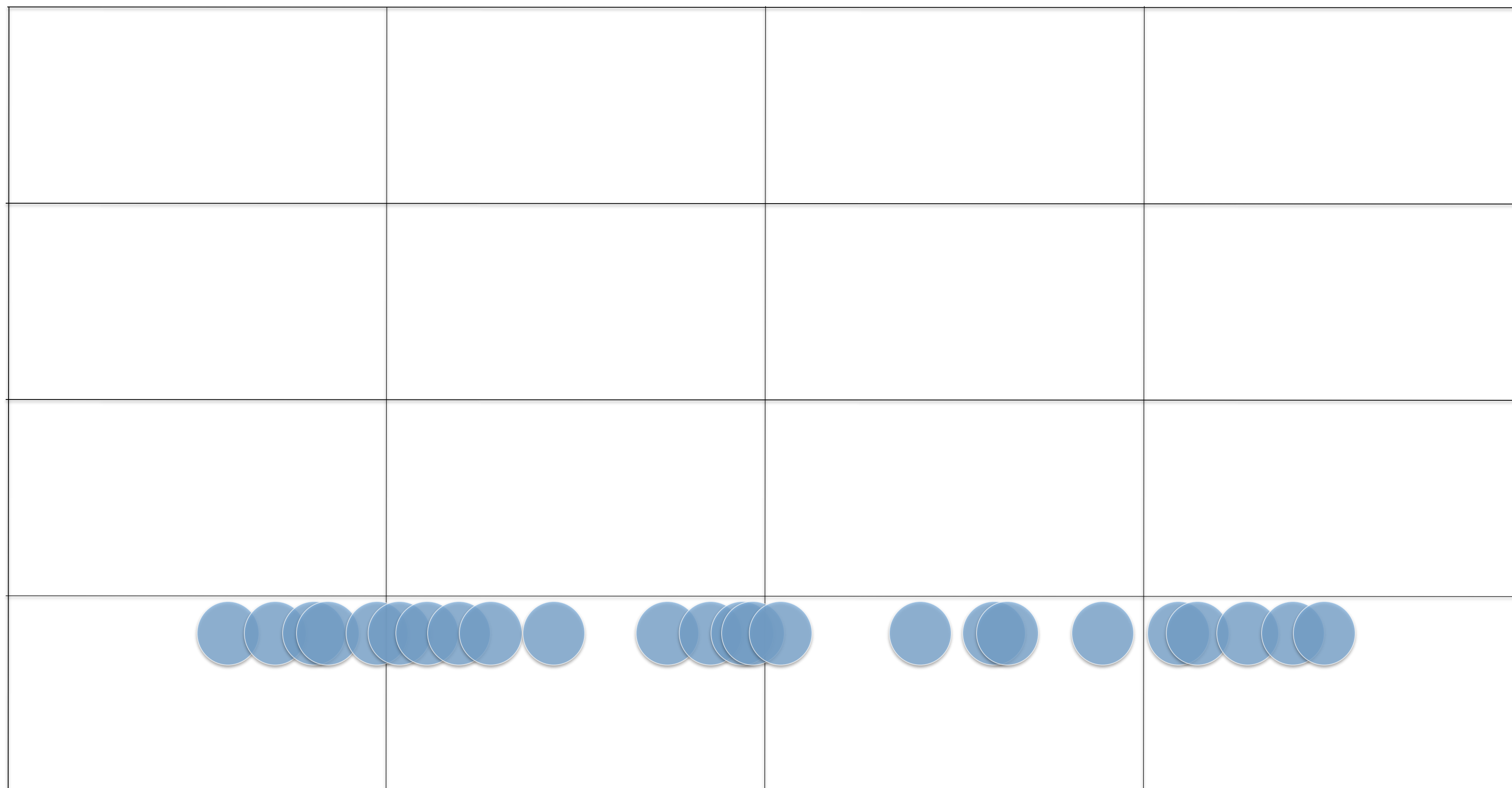
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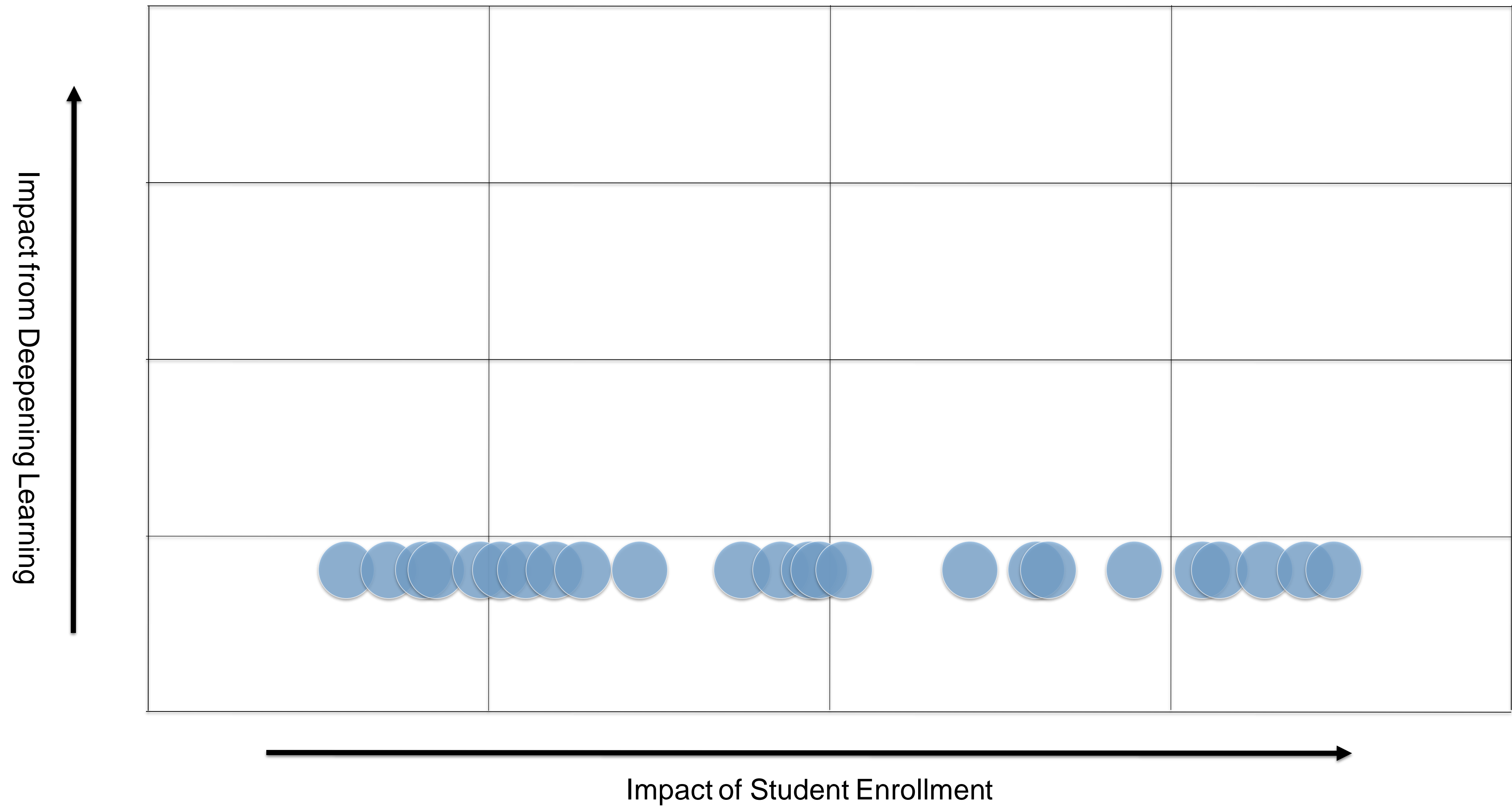


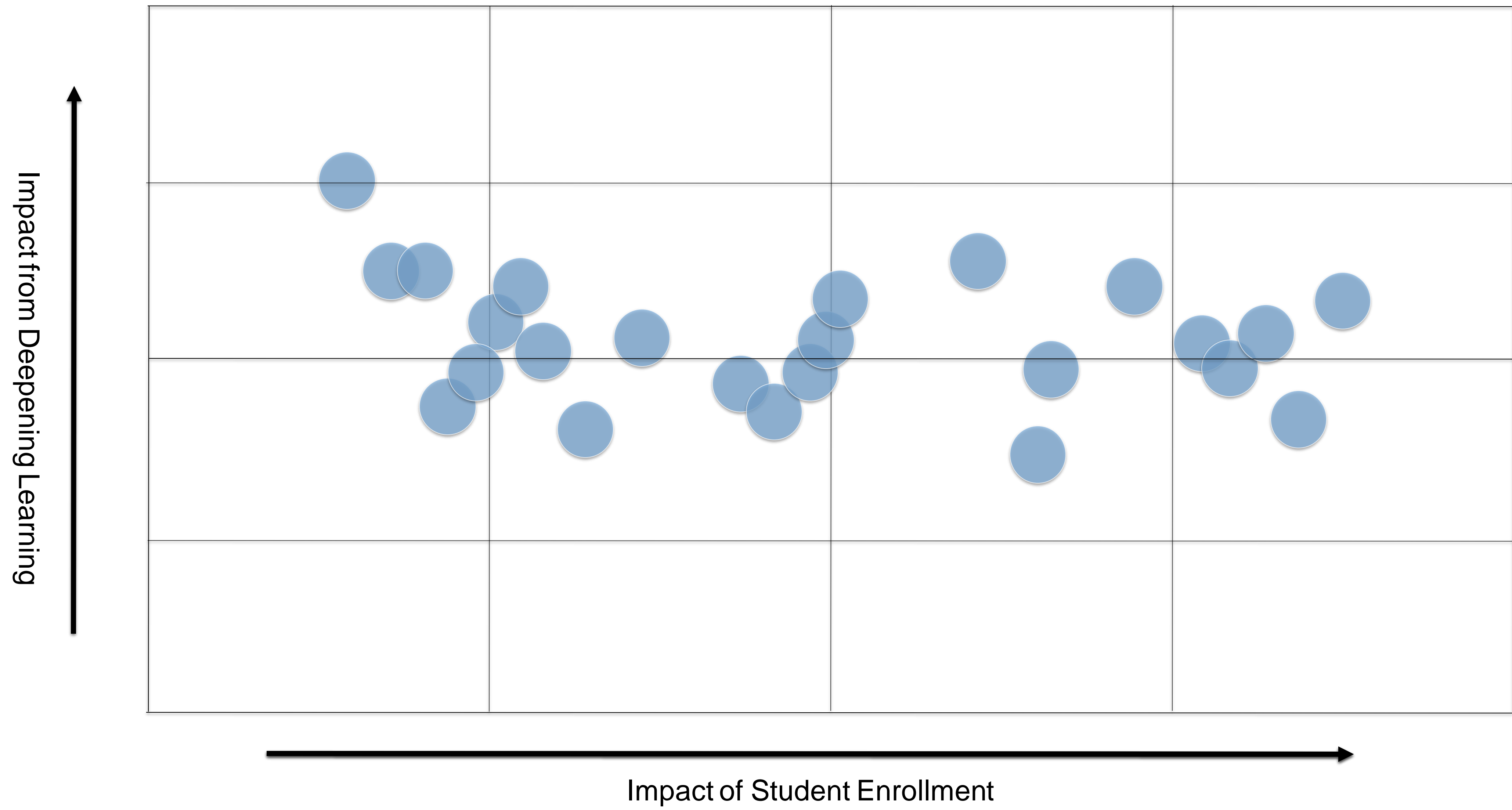


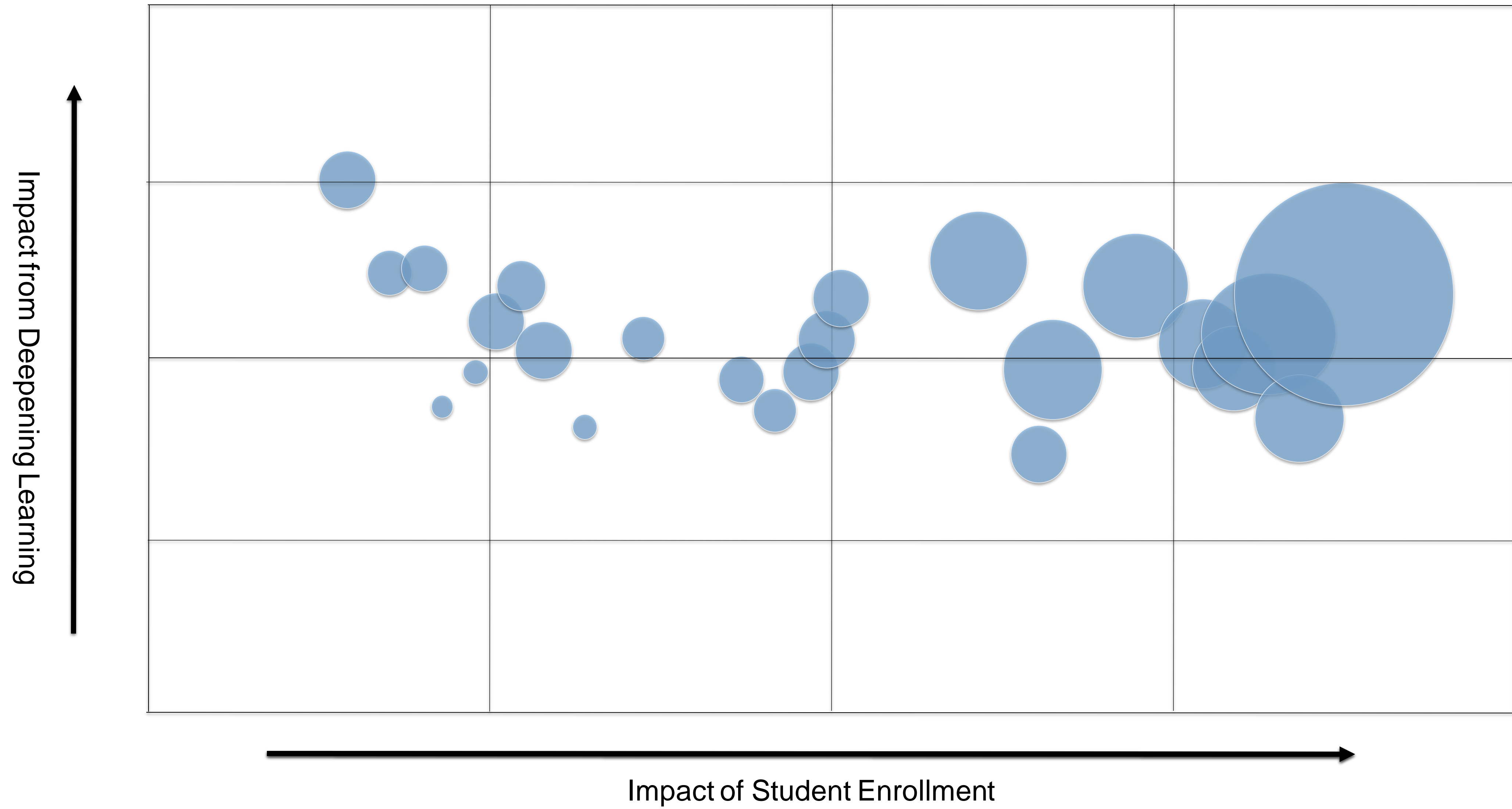
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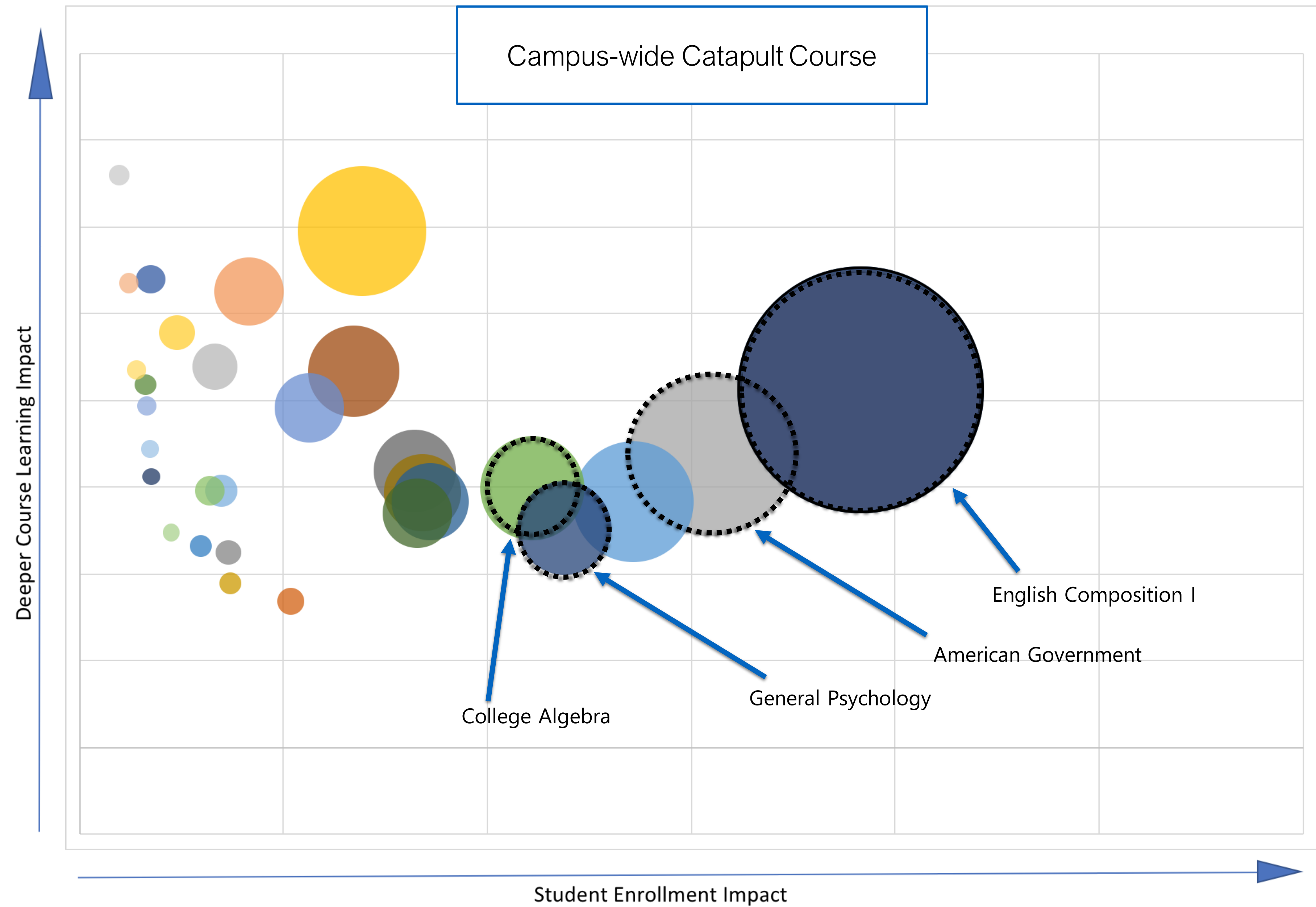


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Size of "bubble" depicts the overall impact of increased learning in each class on overall student success metrics.

Productive Academic Mindset

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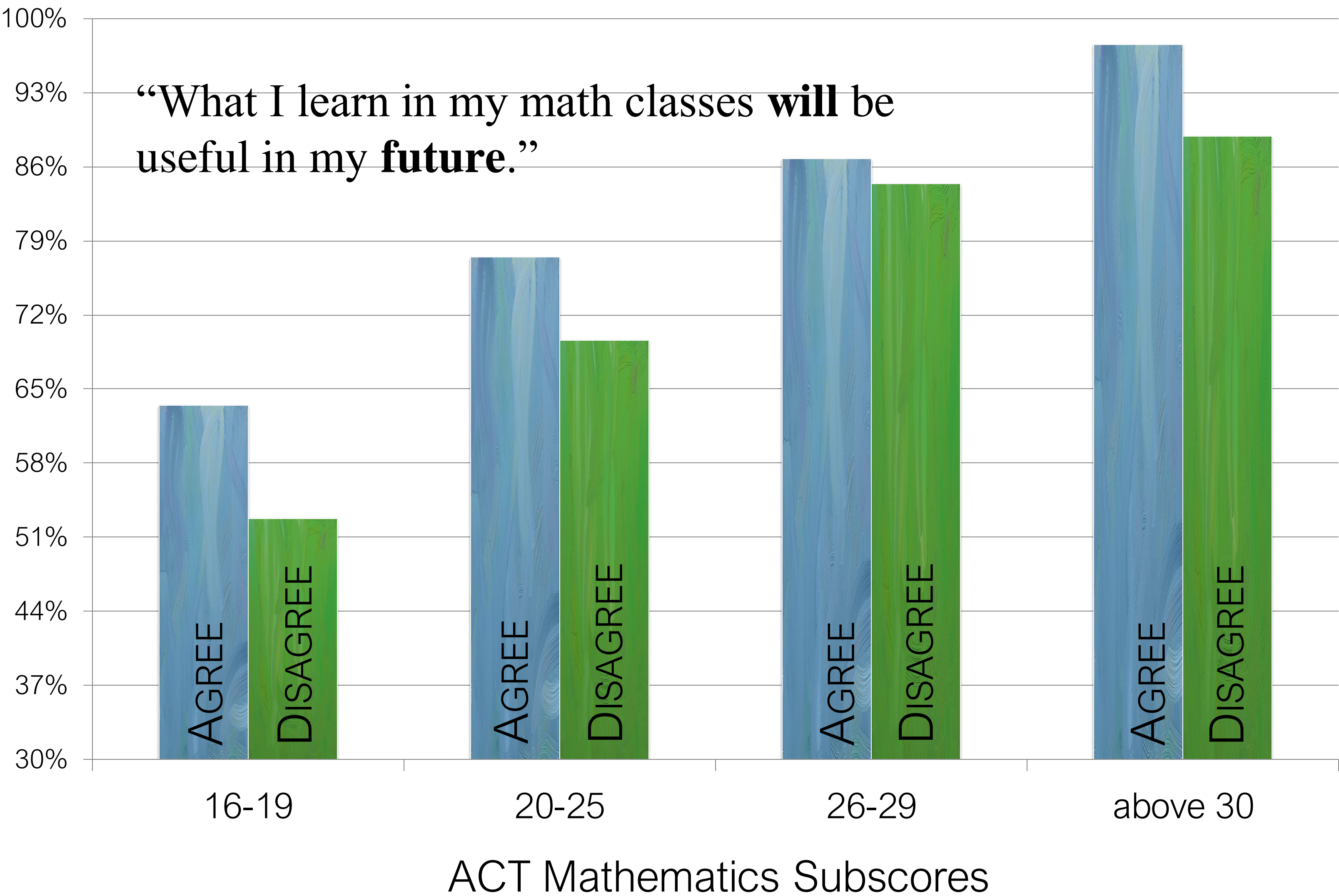
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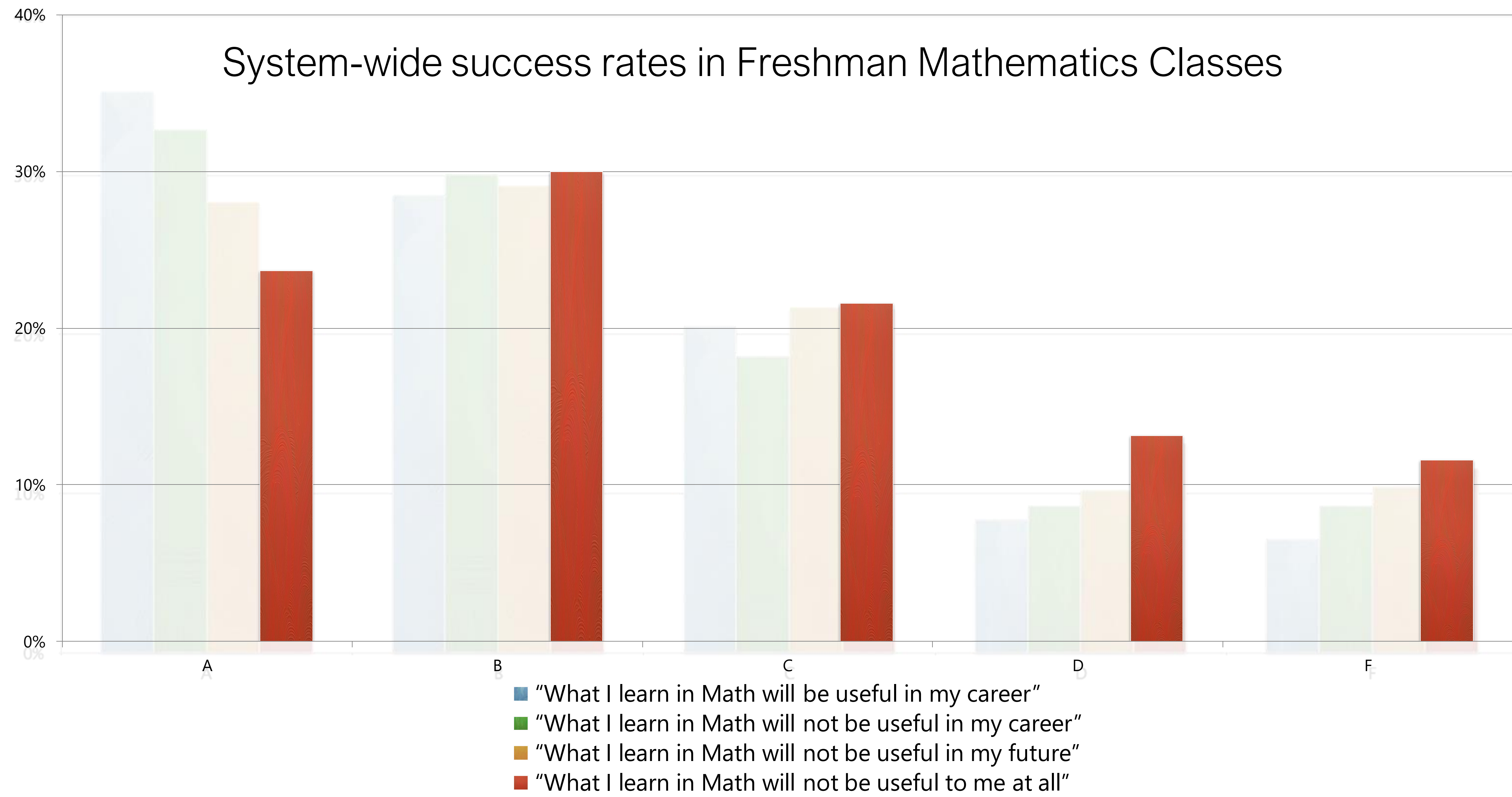
System-wide success rates in Freshman Mathematics Classes



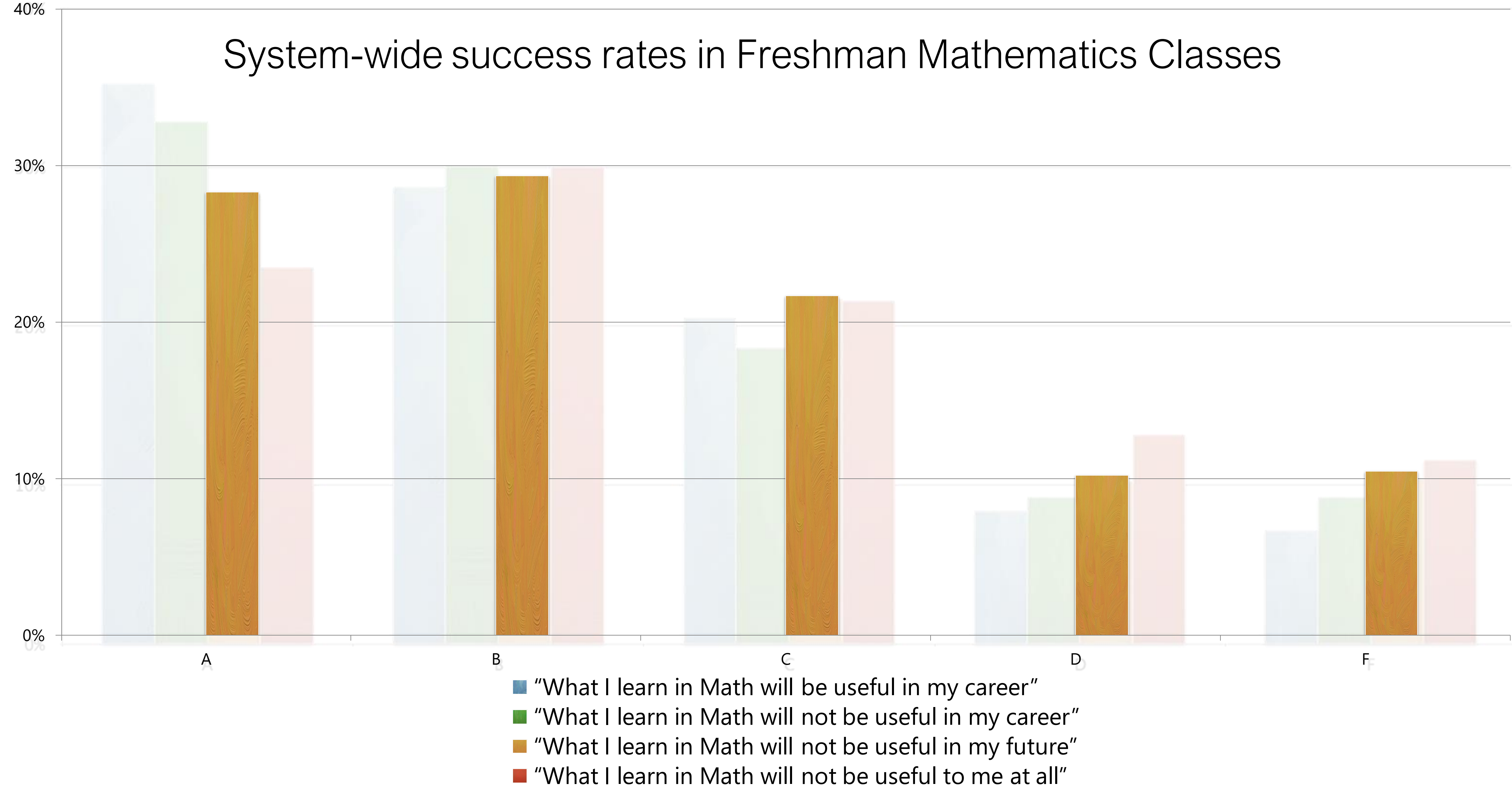
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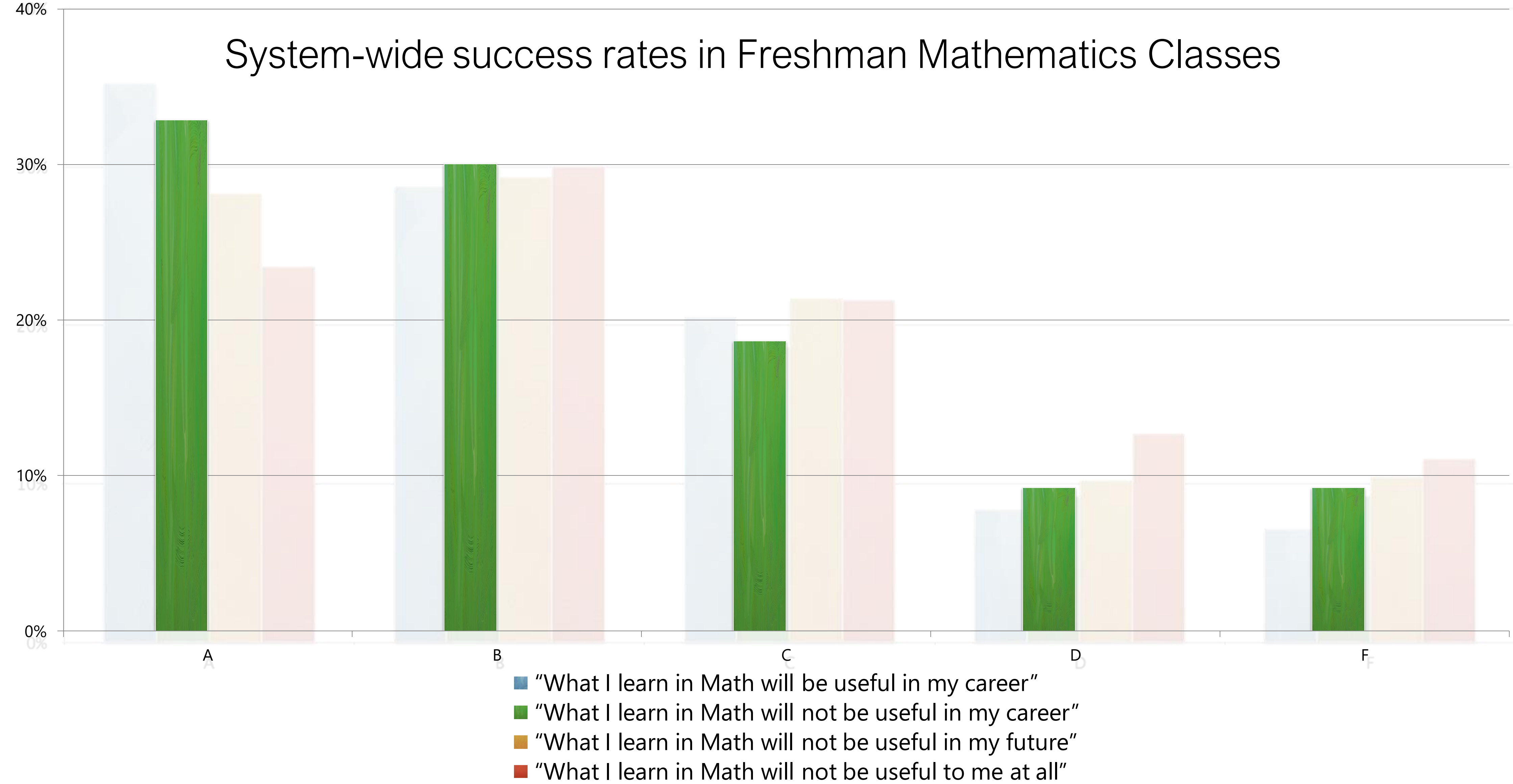
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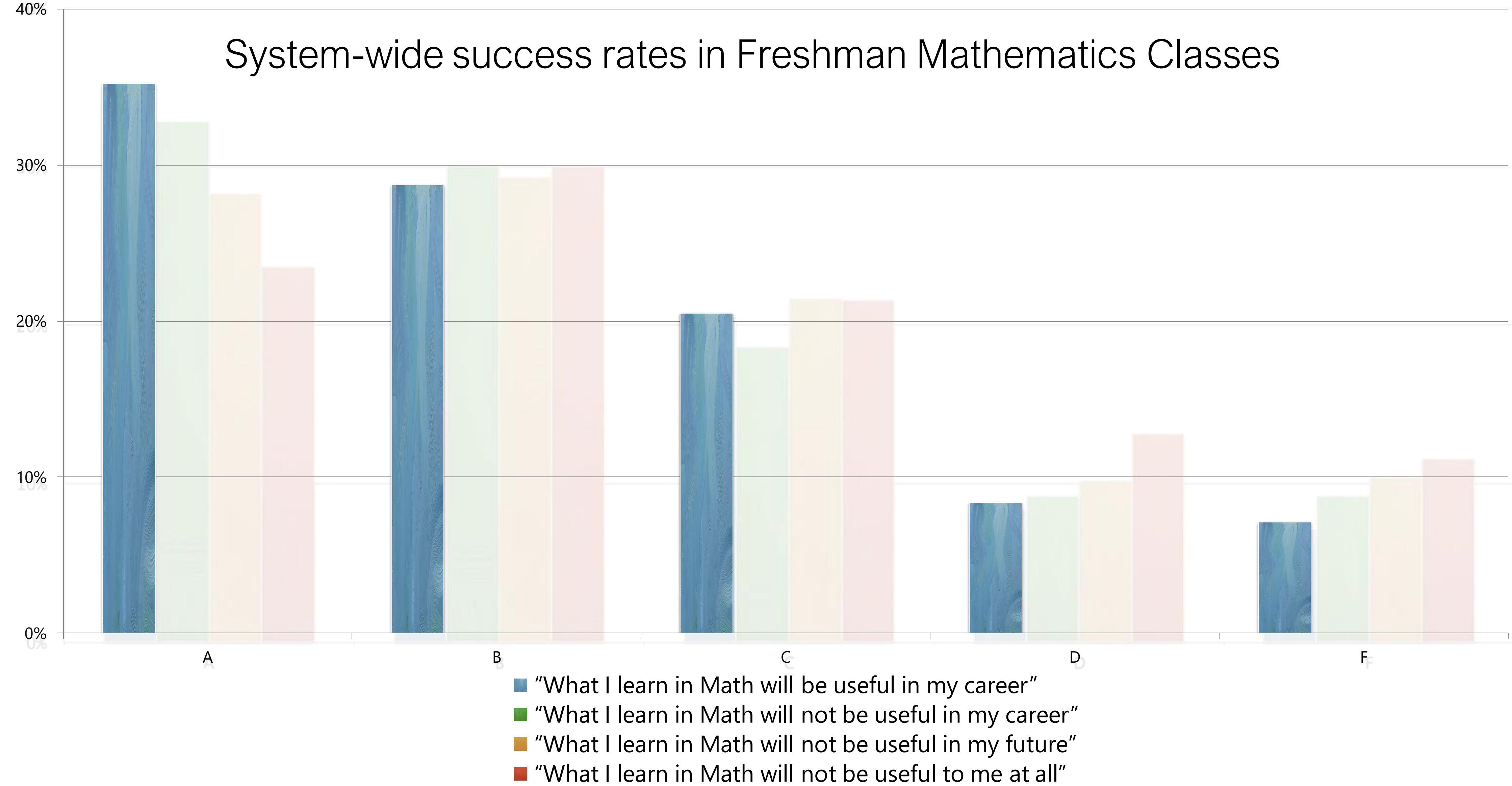
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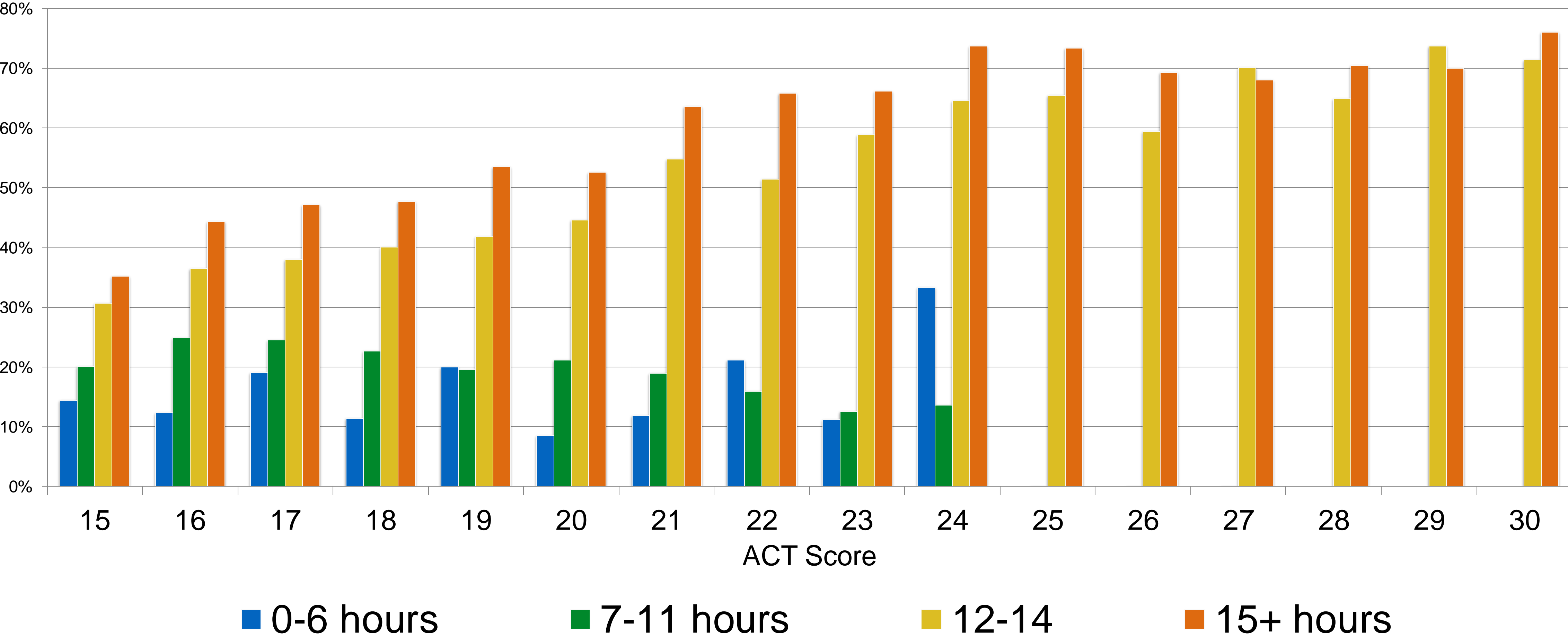
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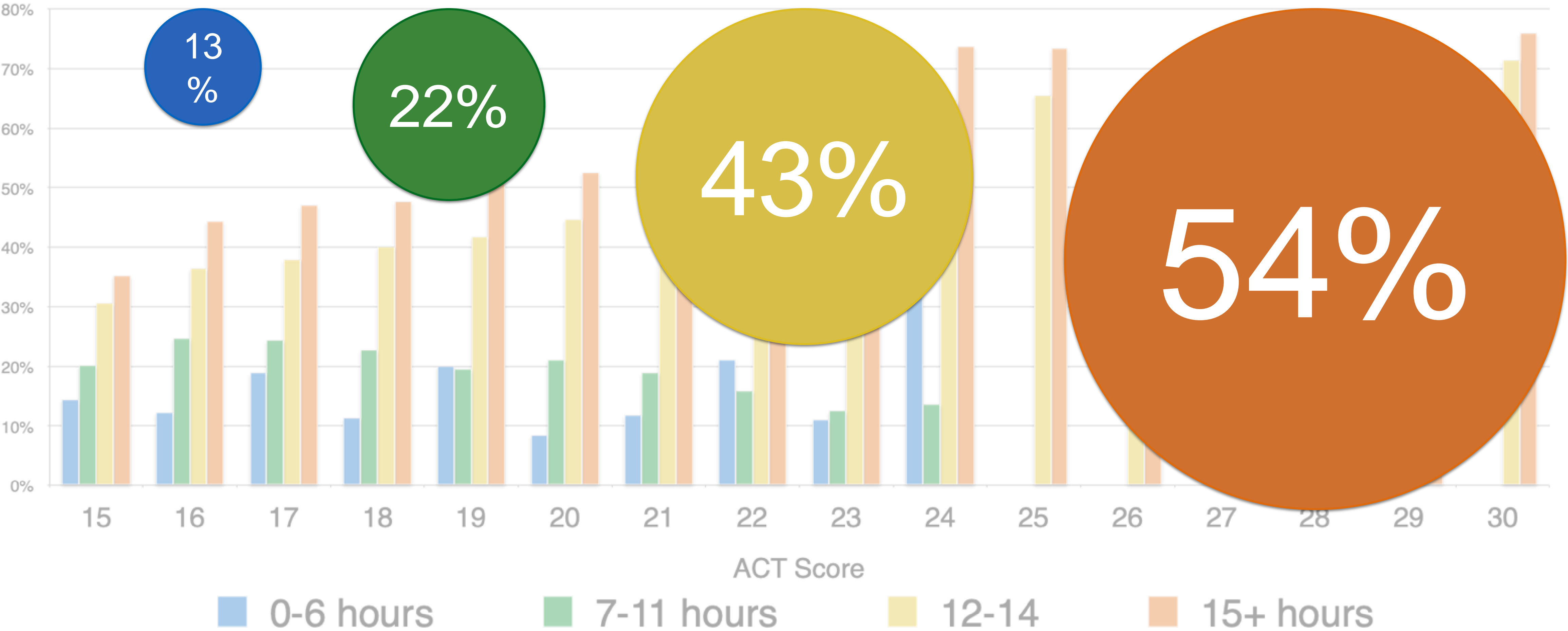
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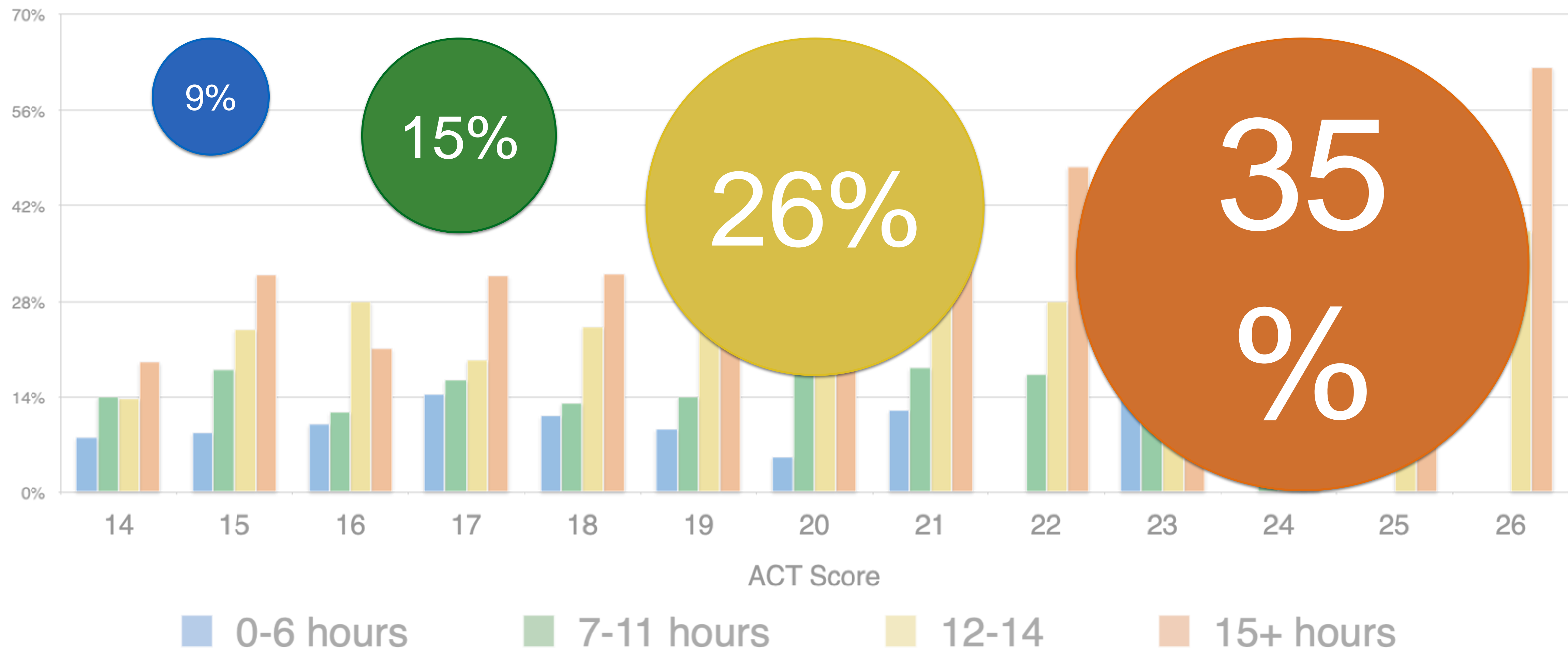
State University 6year Graduation Rates based on hours enrolled in First Semester



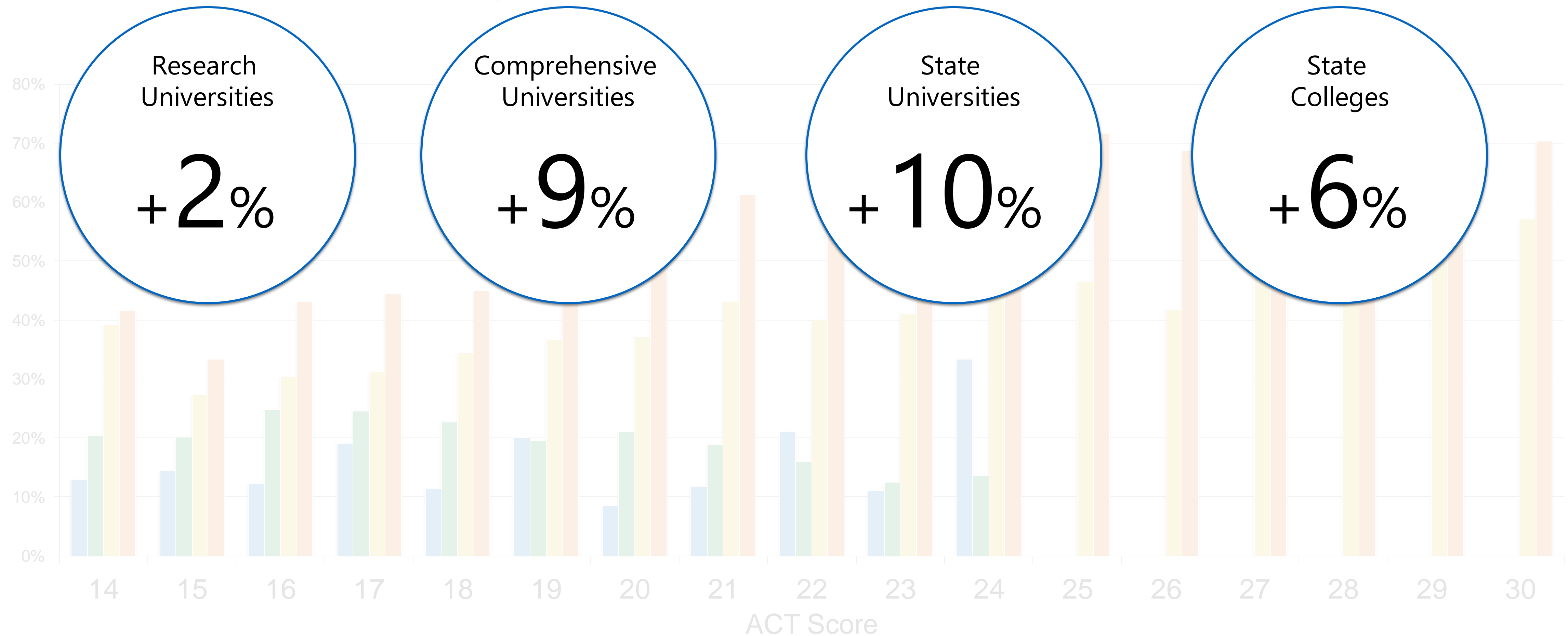
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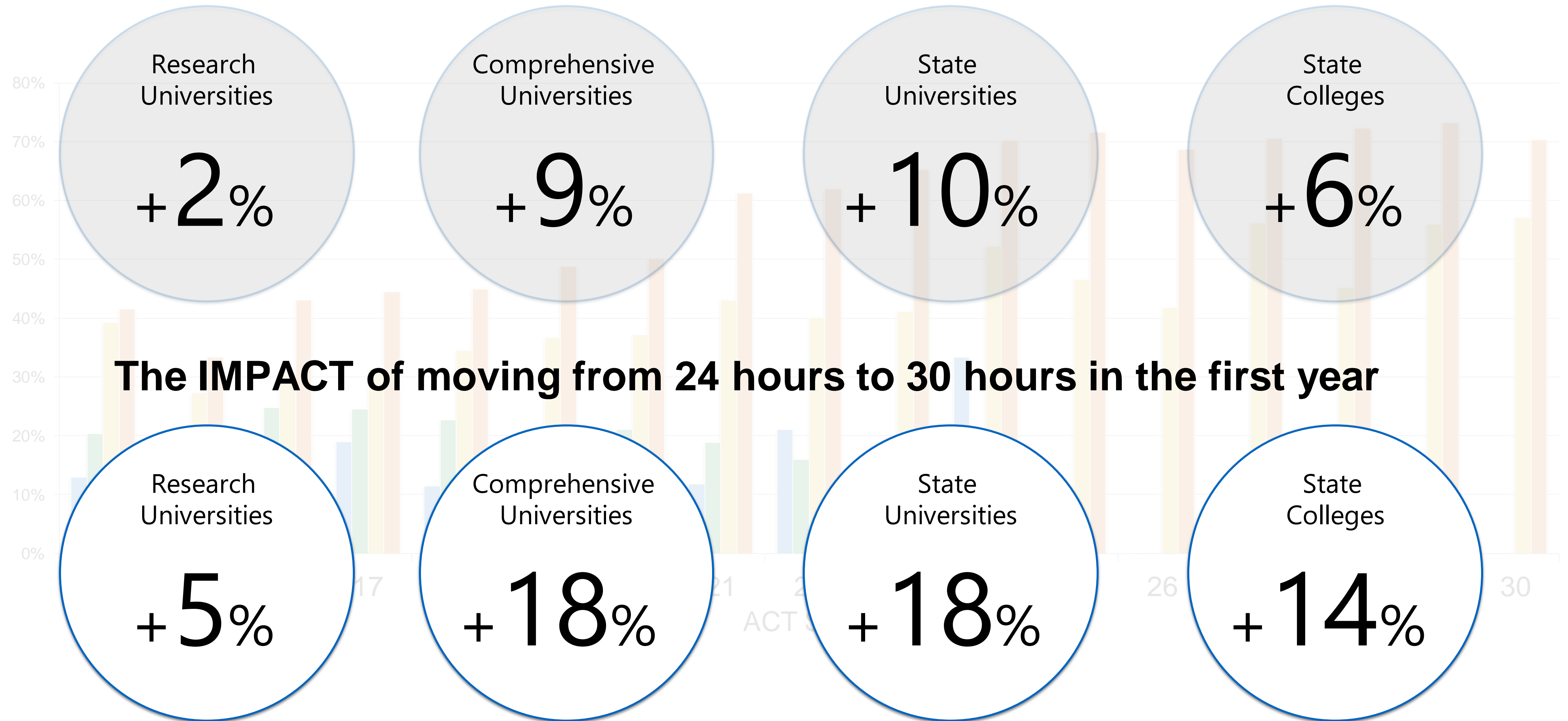
State College 6year Graduation Rates based on hours enrolled in First Semester



The IMPACT of moving from 12-14 hours to 15 hours in the first semester



The IMPACT of moving from 12-14 hours to 15 hours in the first semester



Momentum Data: **System Total**

Select Another Institution

System Total

Student Type

Undergraduate

Group

Total

Degree

Bachelor's

Note: Some filter combinations may result in no data for display in some charts.

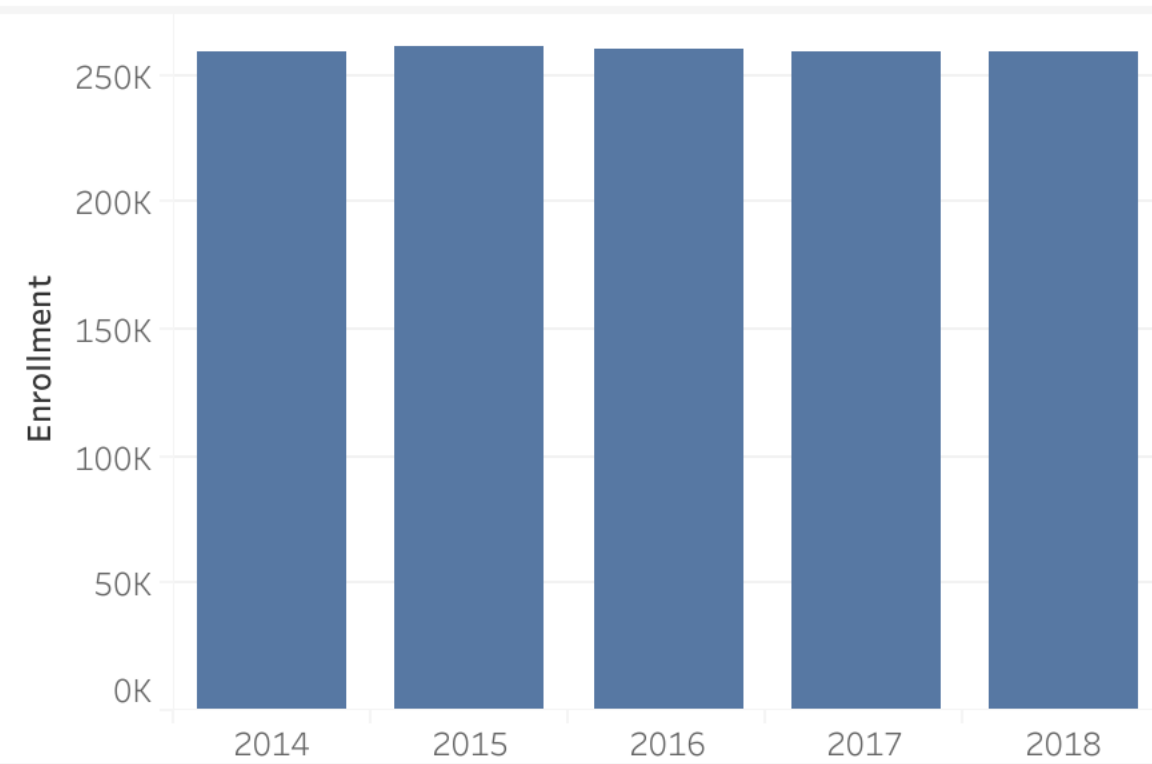
Credits at and Time to Degree: Full-time

Average Credit Hours Attempted	135.2
Average Time to Degree (years)	5.1

Full-time/Part-time

Full-time

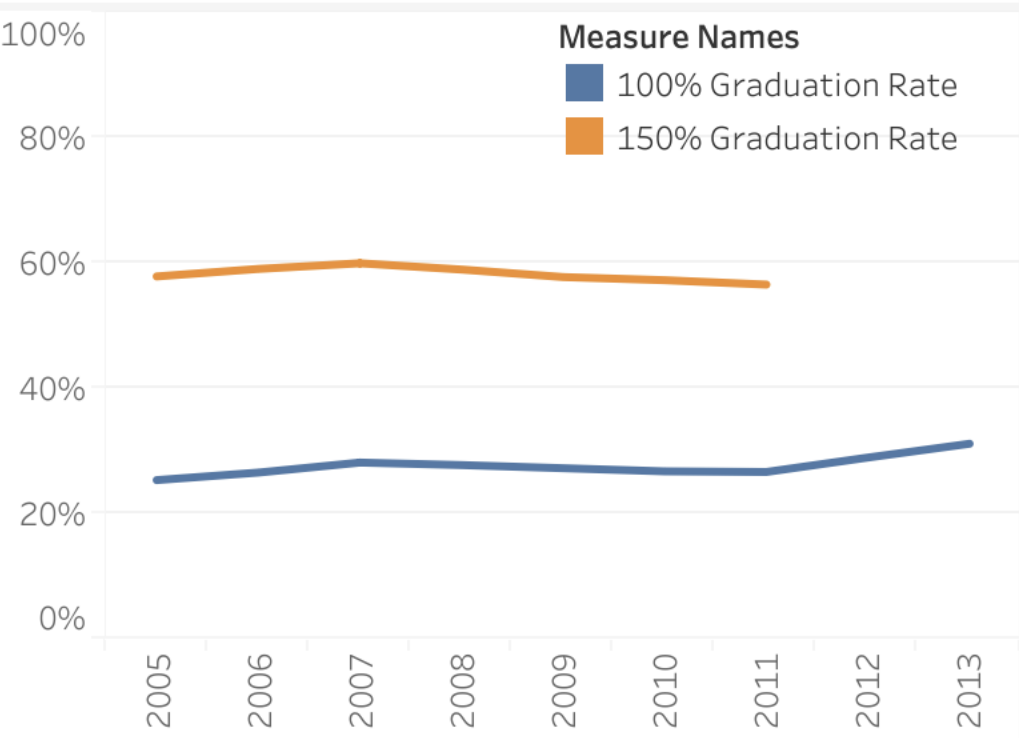
Fall Enrollment - Undergraduate: Total



Mindset Survey Responses

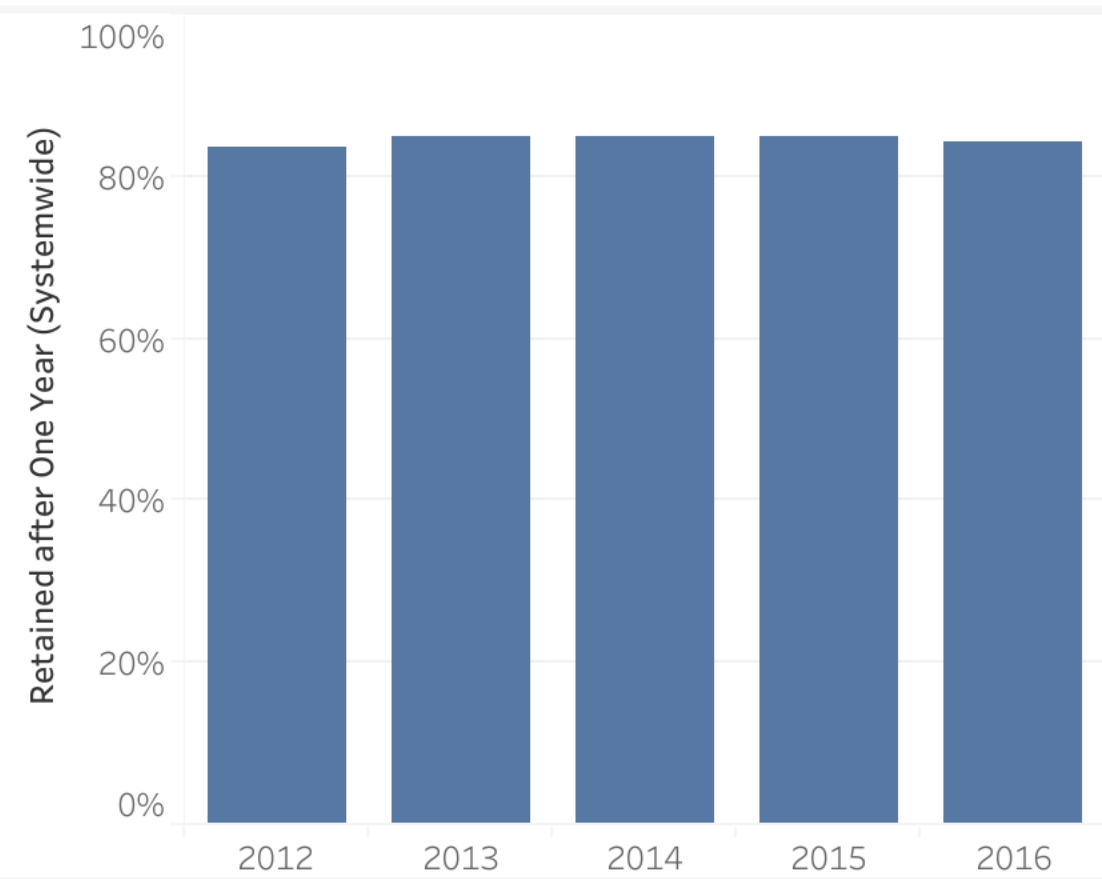
Survey Responses	14,216
Survey Response Rate	18%

Bachelor's Graduation Rate (Systemwide): Total



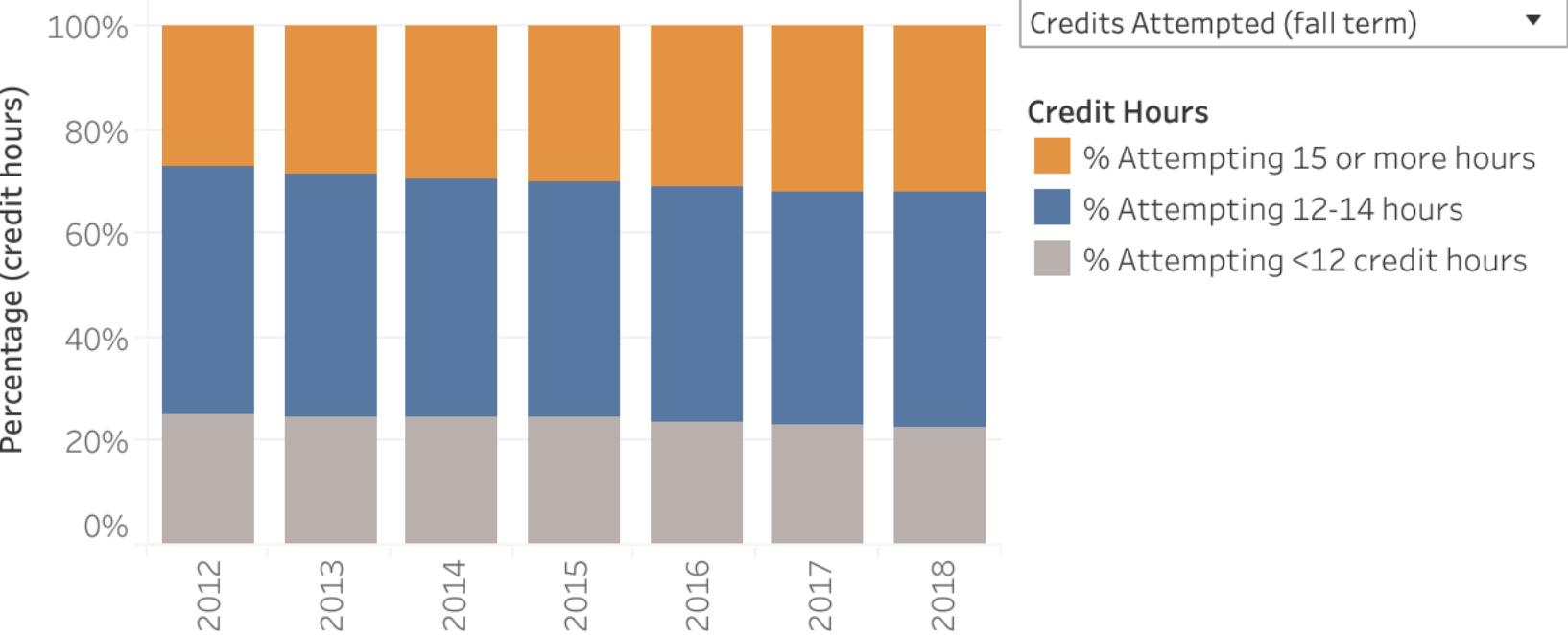
100% Graduation Rate is 2 years for Associate Degrees and 4 years for Bachelor's Degrees. 150% Graduation Rate is 3 years for Associate Degrees and 6 years for Bachelor's Degrees. Data is suppressed for cell sizes less than 10 to protect student privacy. Gaps in the trend line reflects cell sizes fewer than 10.

Bachelor's One-Year Retention (Systemwide): Total



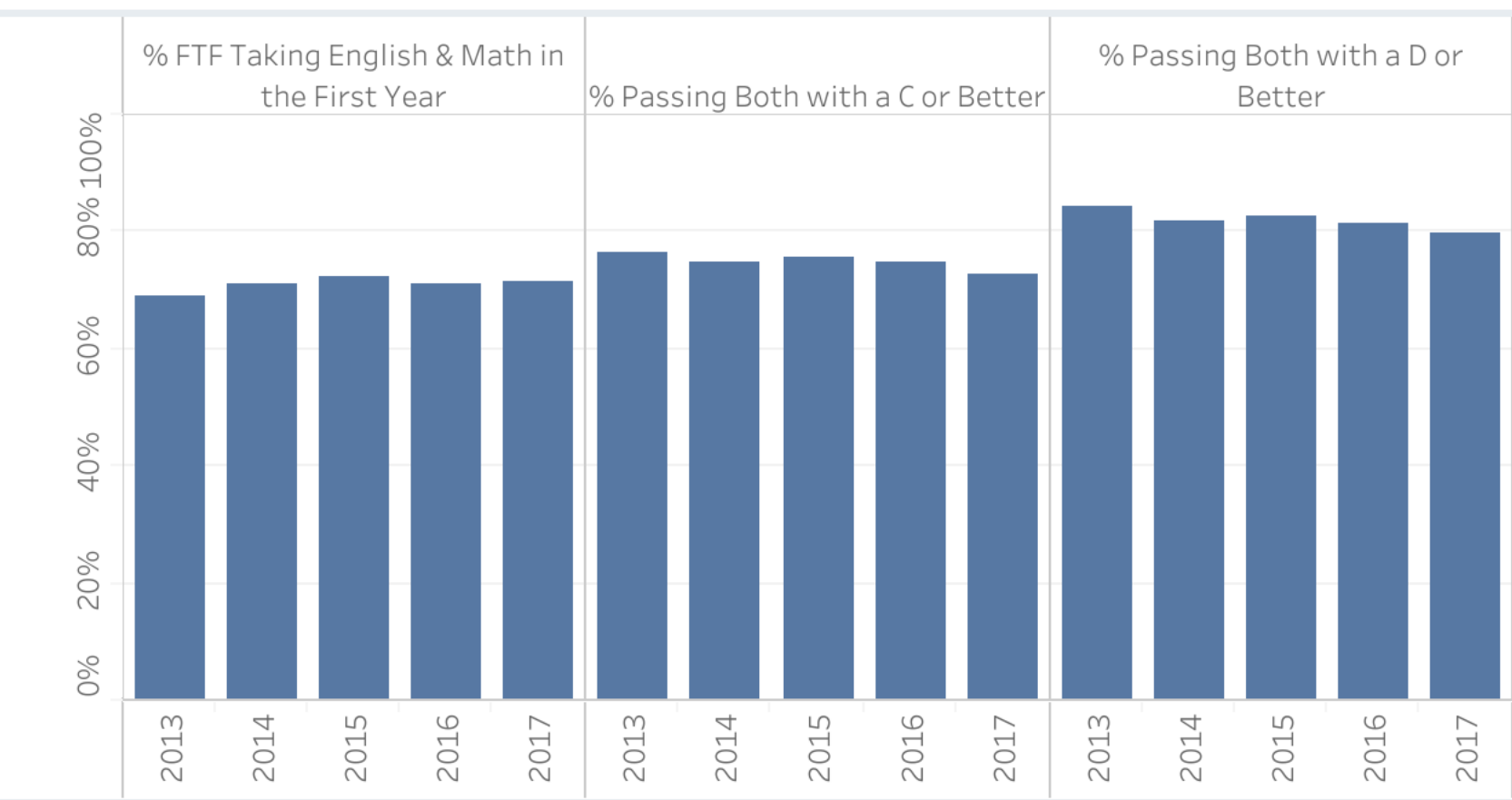
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Credit Taking: Undergraduate

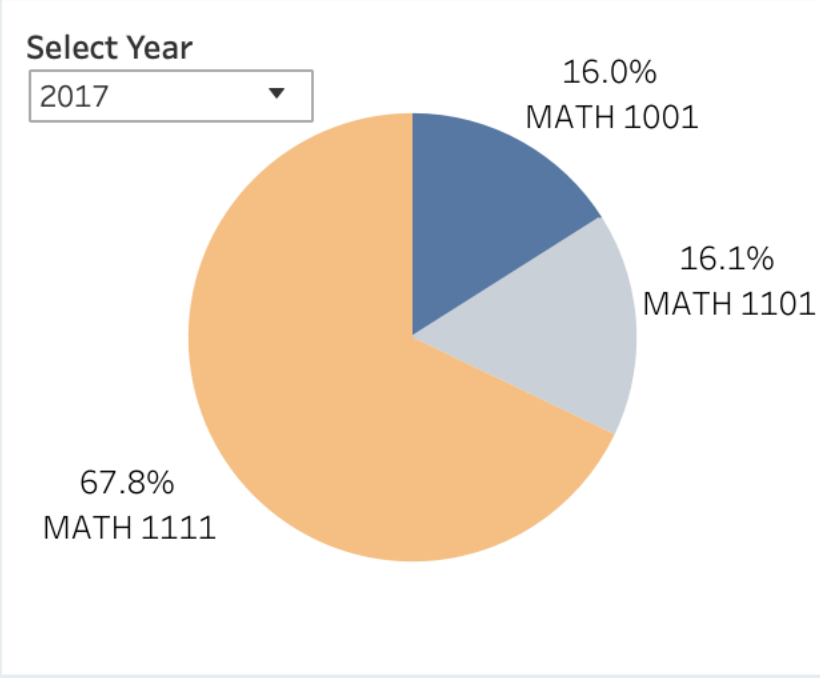


Color shows details about credit hours *attempted* in the fall semester or *earned* in the year. The data is filtered on Institution, Student Type and Credit Attempted (Fall)/Earned (Year). Change the Student Type filter above to toggle between First-time Freshmen and Undergraduates.

Math and English in the First Year: Total



Gateway Math Course : 2017



Gateway math course enrollment for students taking Math 1001, Math 1101, or Math 1111. Math courses above Math 1111 are not included.



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