

# Scaling Corequisite

## *Spanning the Divide*

---

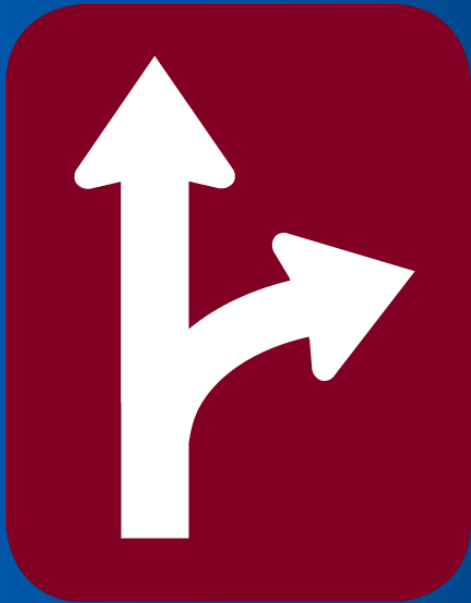
**Bruce Vandal**

Senior Vice President | Complete College America  
bvandal@completecollege.org  
@BruceatCCA

**COMPLETE COLLEGE** AMERICA

# Remediation

---



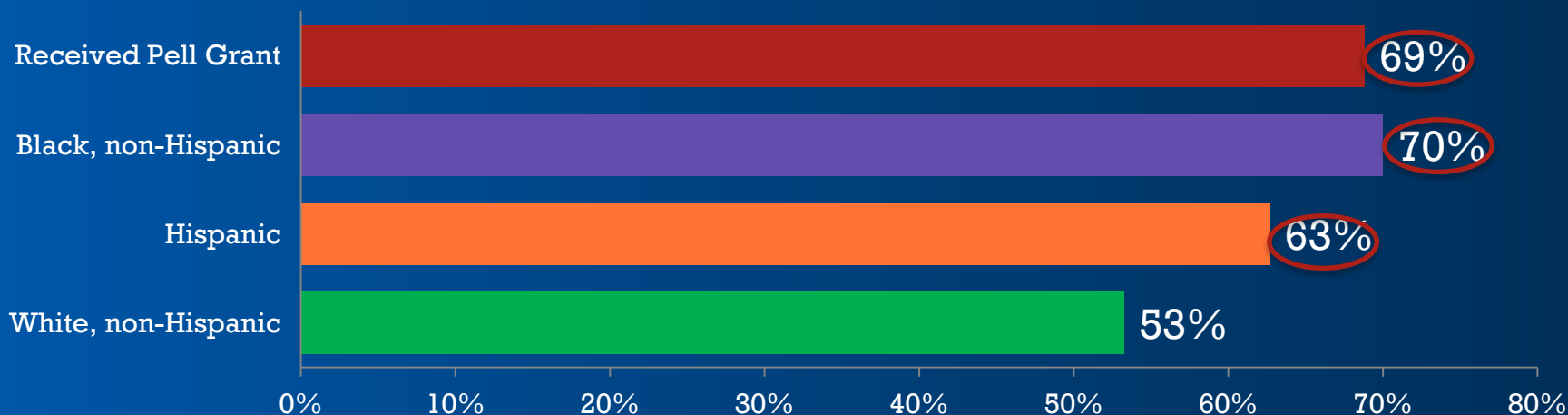
**Too many students  
start college in  
remediation.**

**61% in 2-year institution**

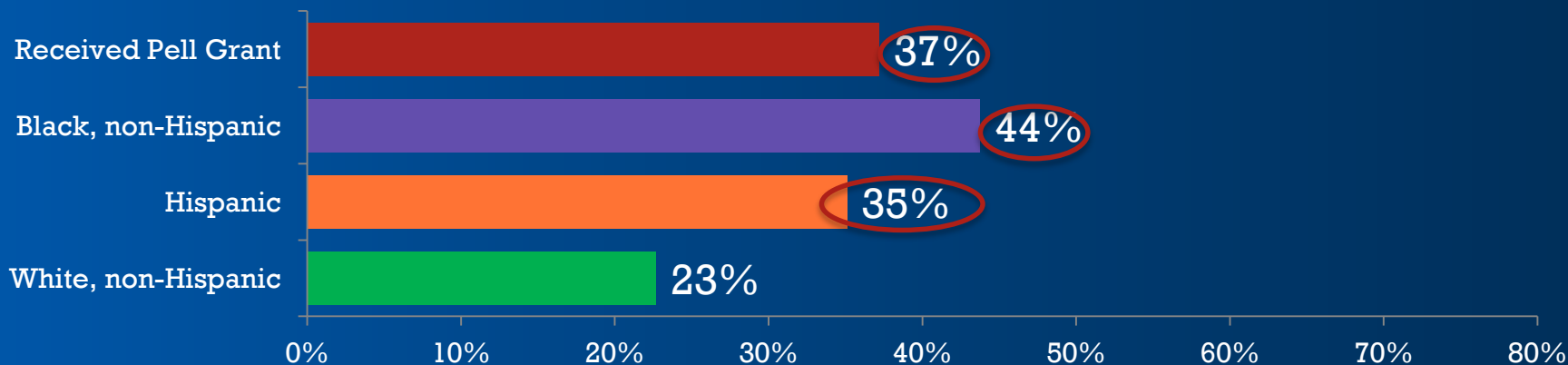
**28% in 4-year, non-  
flagship institution**

# African Americans, Hispanics and Pell Students are Over Represented

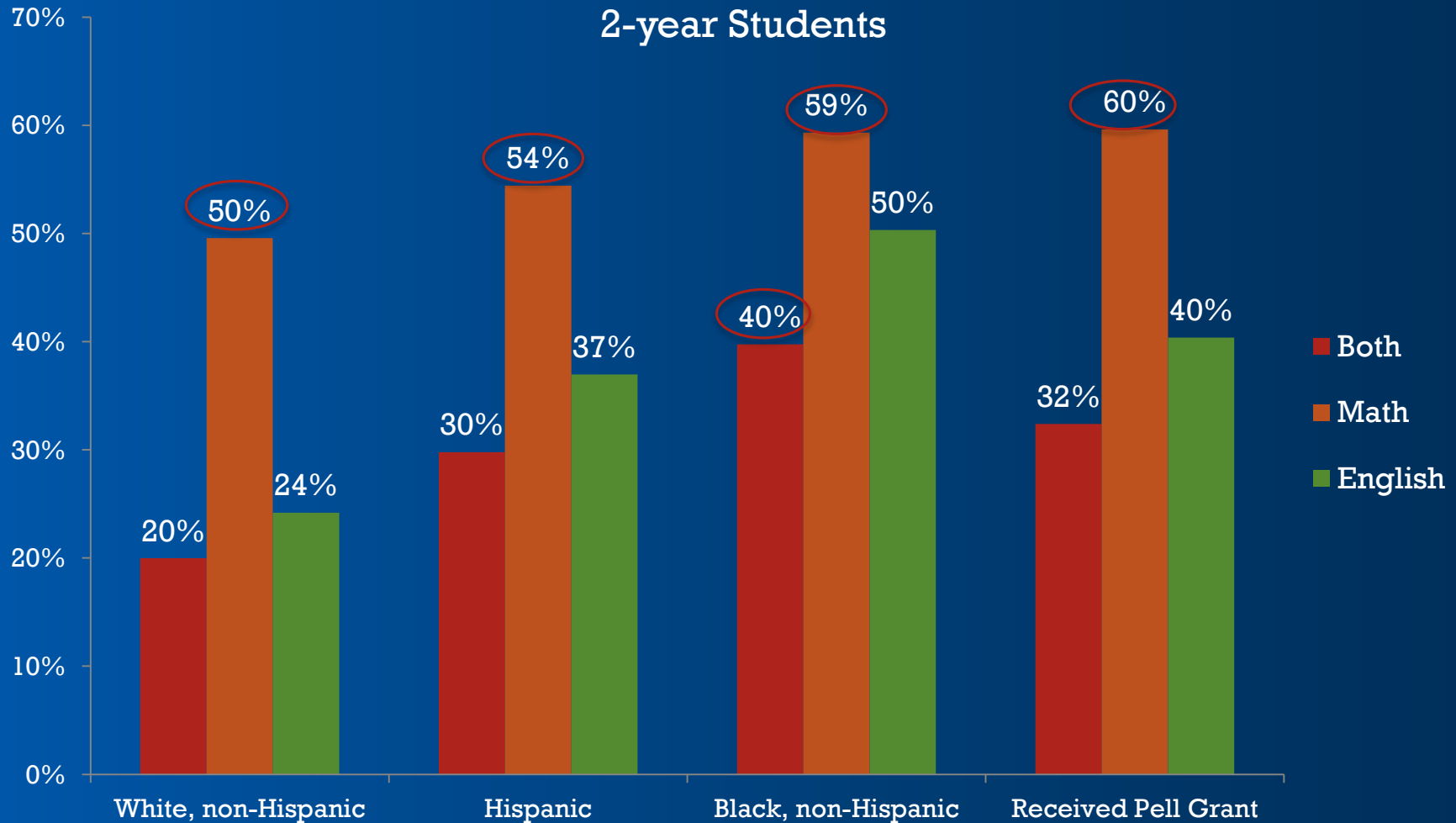
## 2-year Students



## 4-year Non-Flagship Students



# Most are in Math – Far Too Many Require Both Math and English



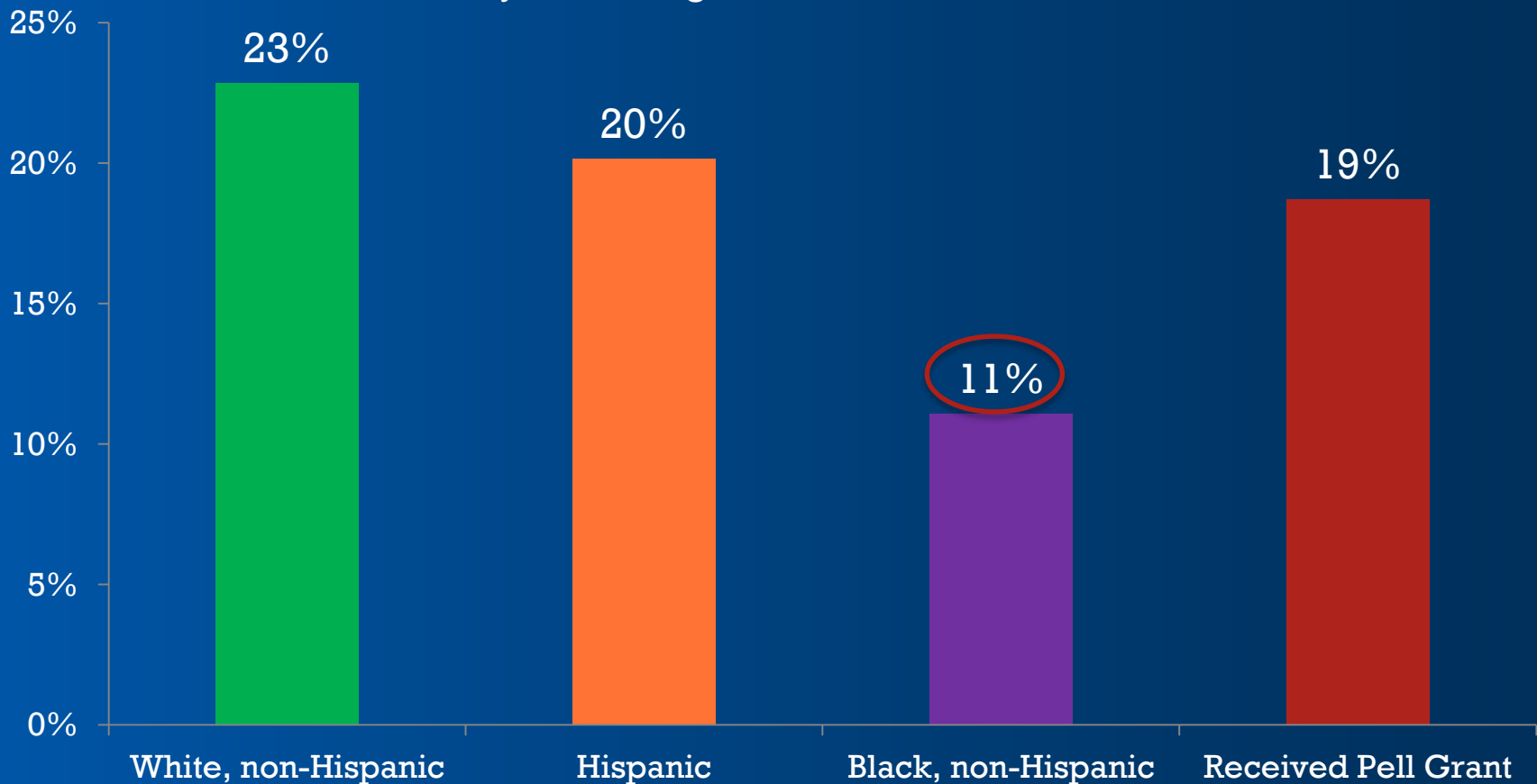
# Access to College or Remediation

---

For too many students, a remedial class is their first and their last college experience.

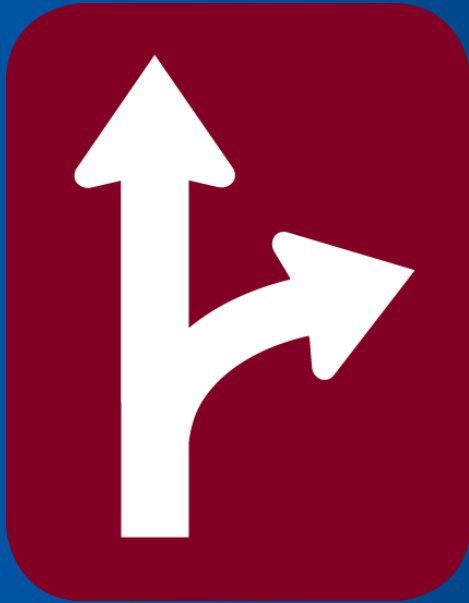
# The System Does Not Work, Particularly for African Americans

Gateway Course Completion in 2 years  
2-year college remedial students



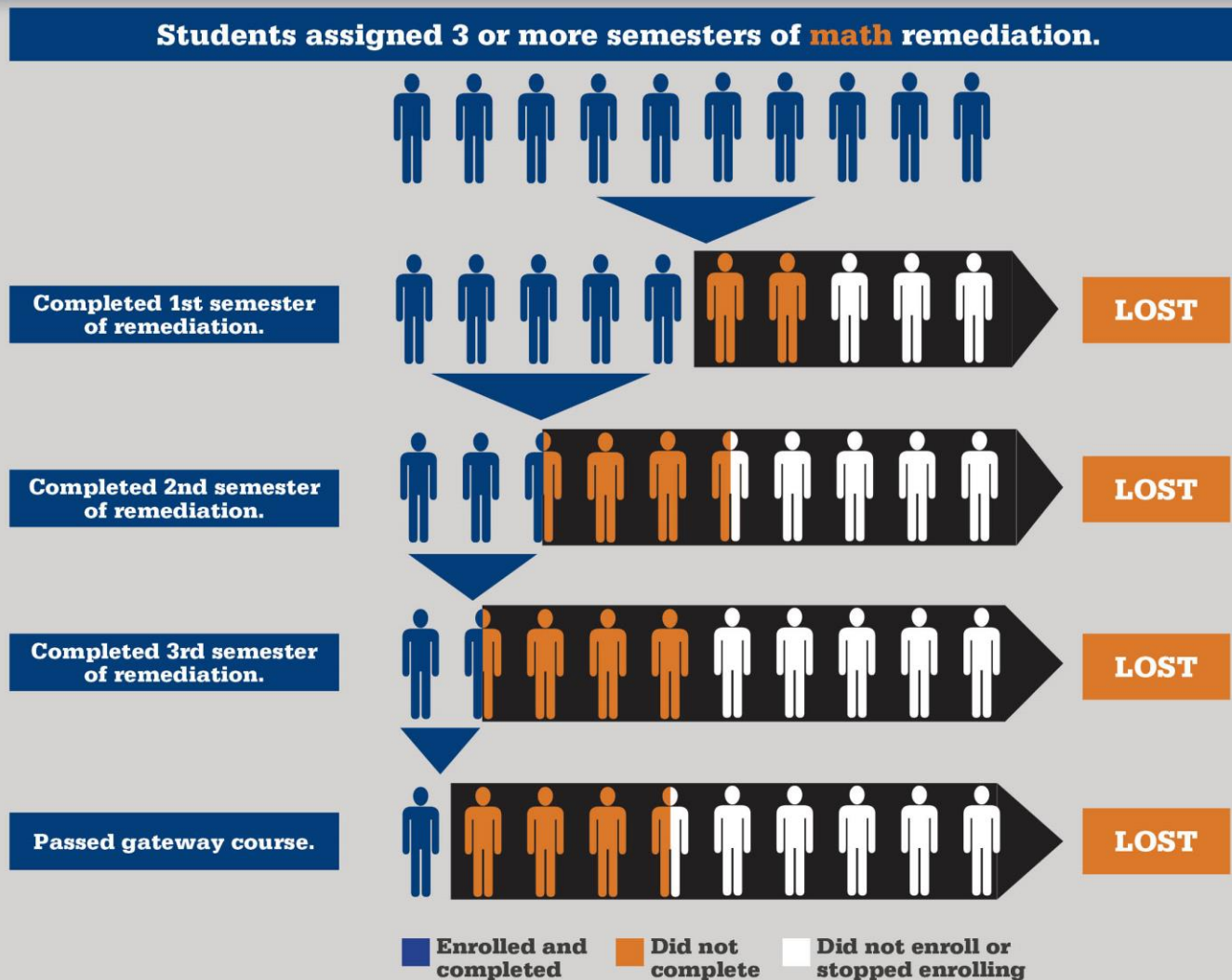
# Remediation

---



**Student attrition is  
at the heart of the  
matter...**

# Remediation: The effect of attrition.



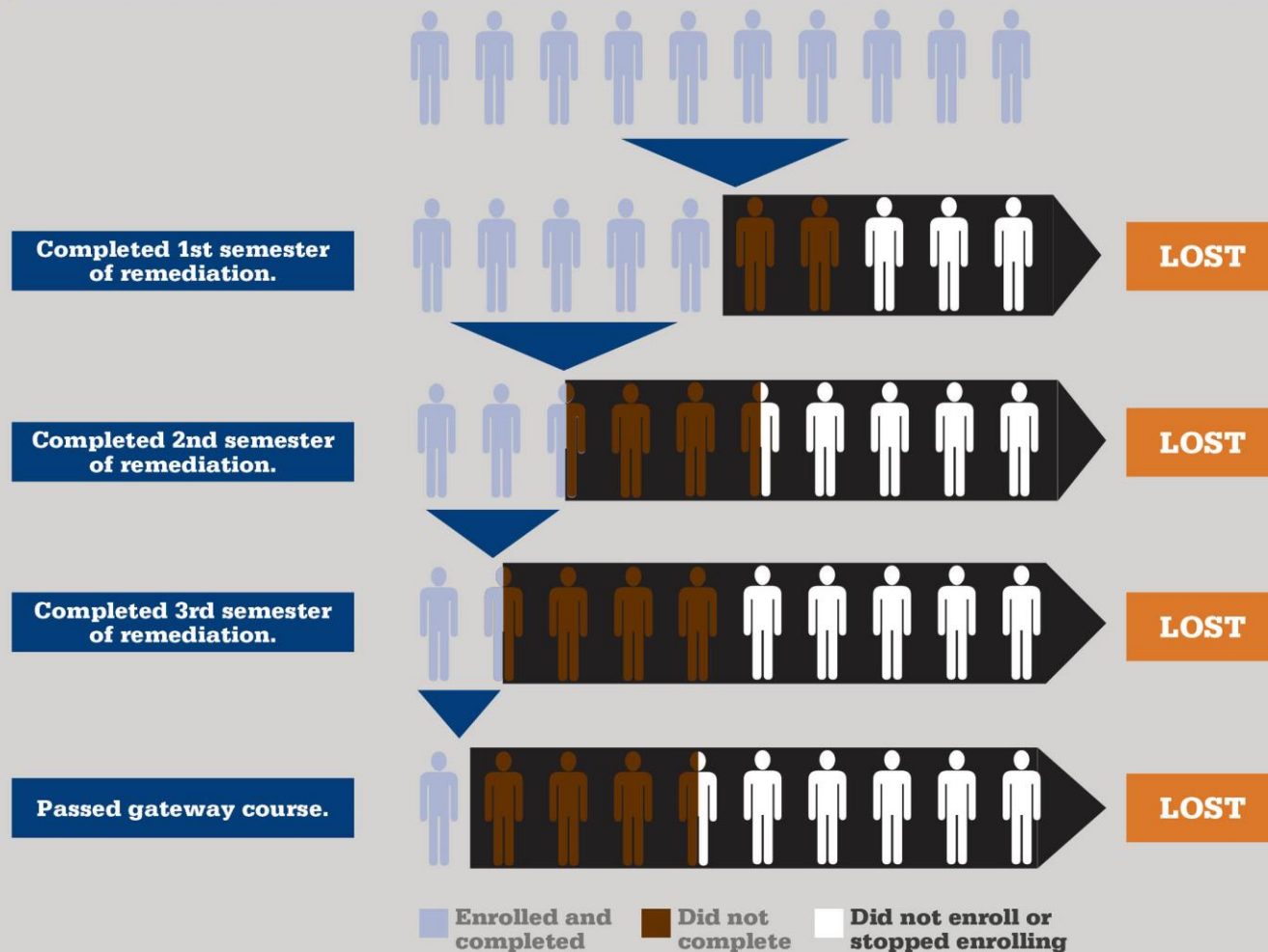
## KNOW THIS

**The remediation system is broken. More students quit than fail.**



# Remediation: The effect of attrition.

Students assigned 3 or more semesters of **math** remediation.



## KNOW THIS

The remediation system is broken. More students quit than fail.

# SUCCESS AT SCALE

---

**Academic Support as a Corequisite**

**Math Pathways Aligned to Programs of Study**

**Purpose, Not Placement**

# Corequisite Support

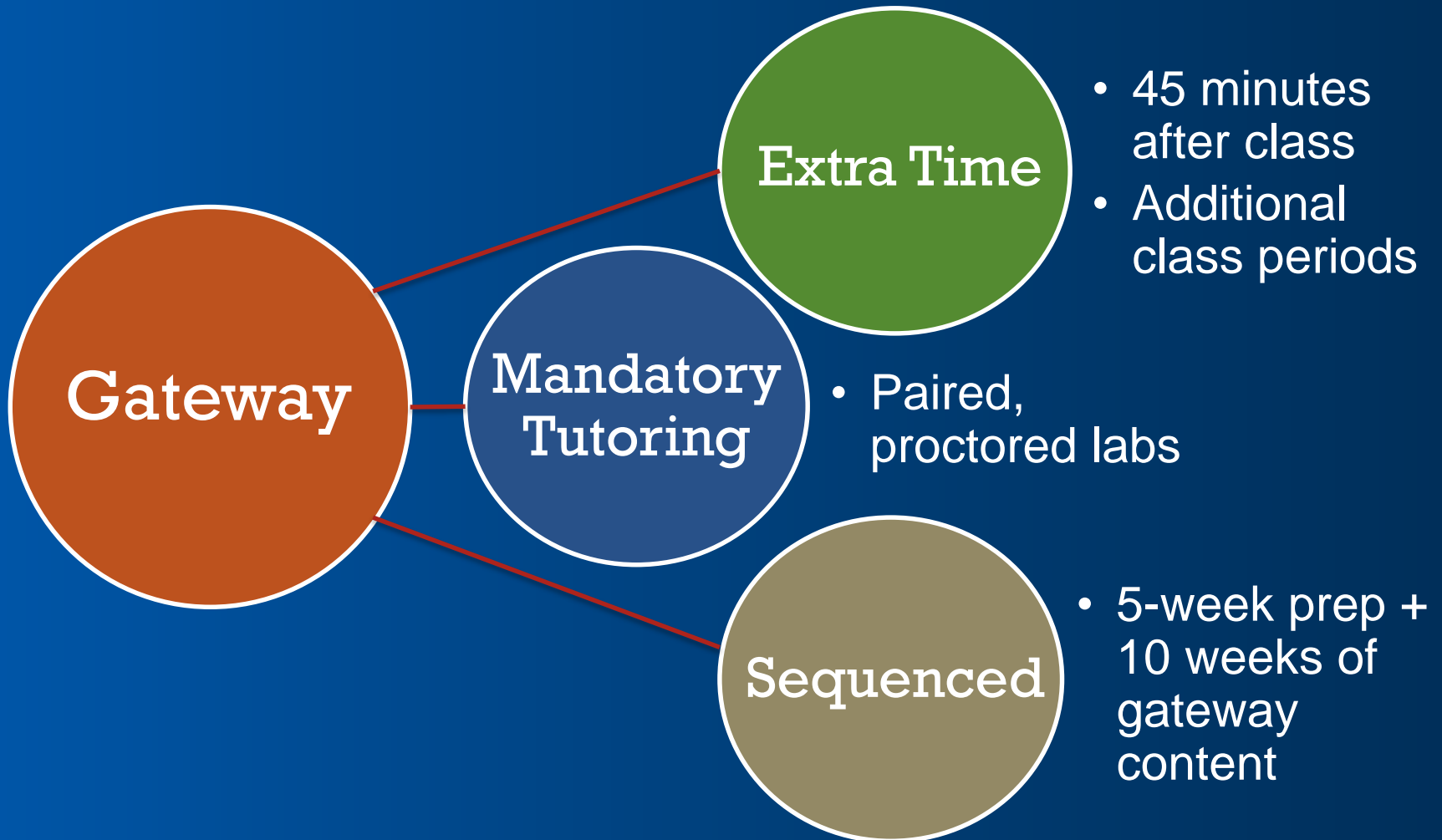
# The Corequisite Strategy

---

More time on task and help  
for students when they need  
it (just in time)

# One Semester Redesigned Gateway

---

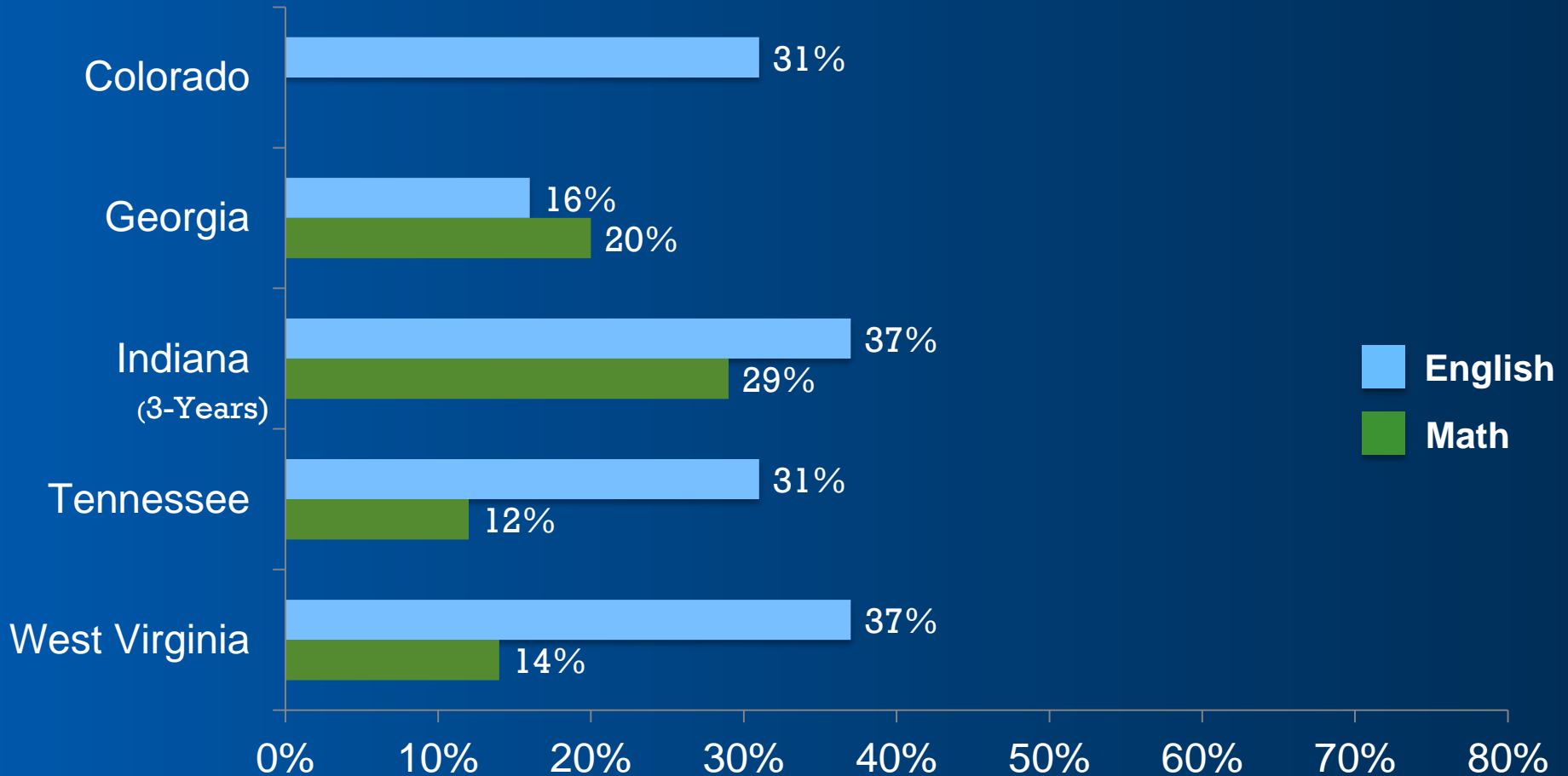


**#CoreqWorks**

# Traditional Remediation Results

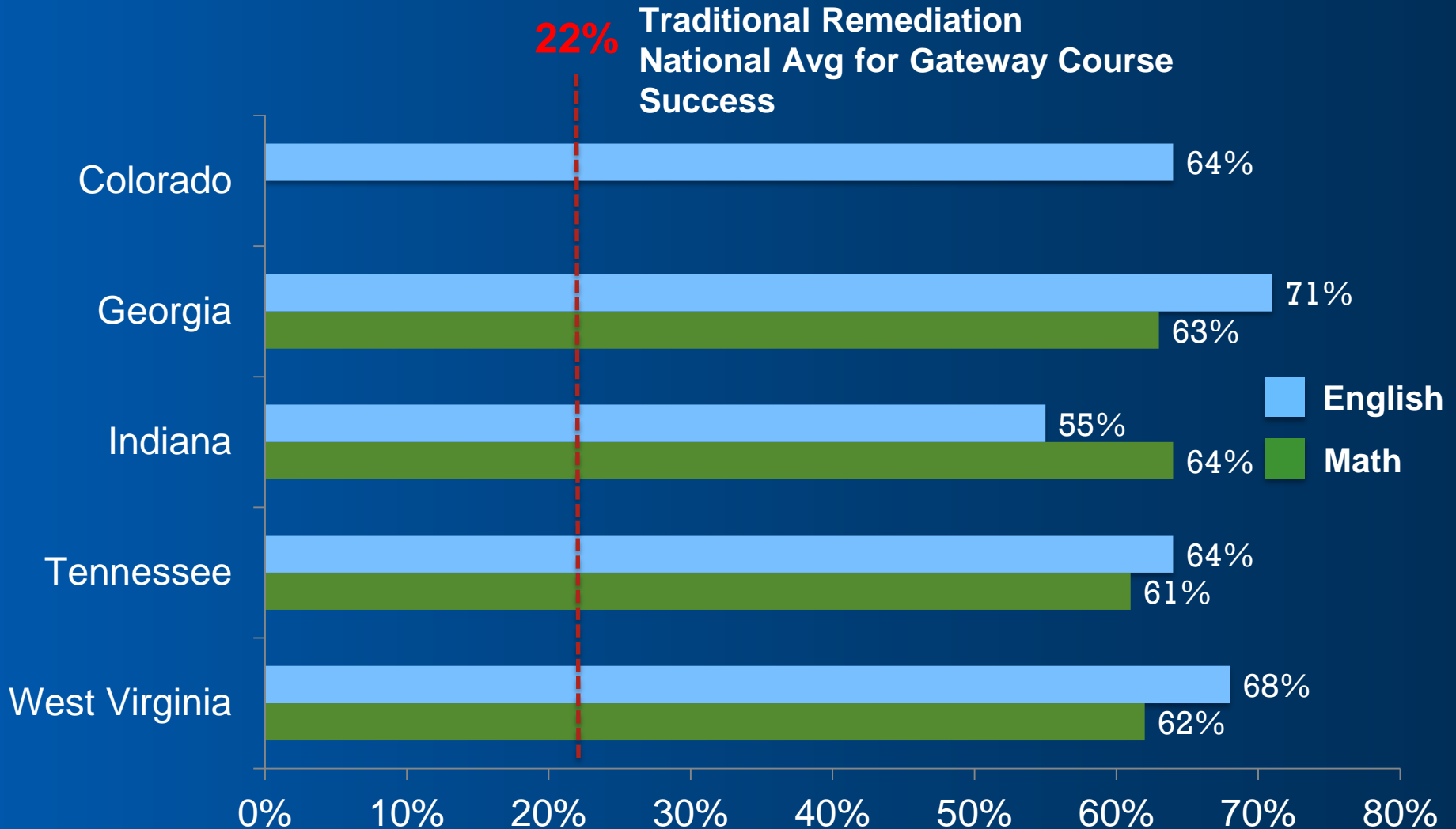
## 2 Years

---



# One Semester Scaled Results

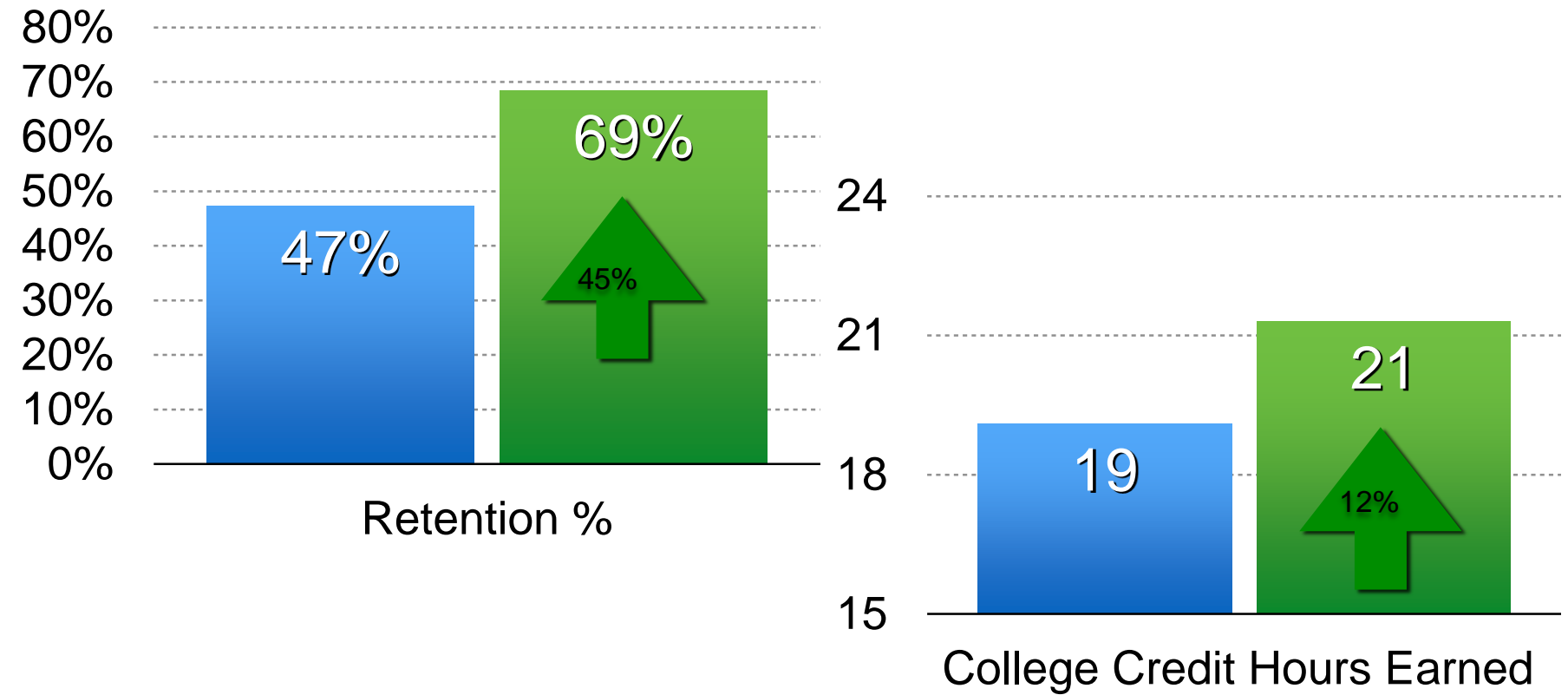
One Semester





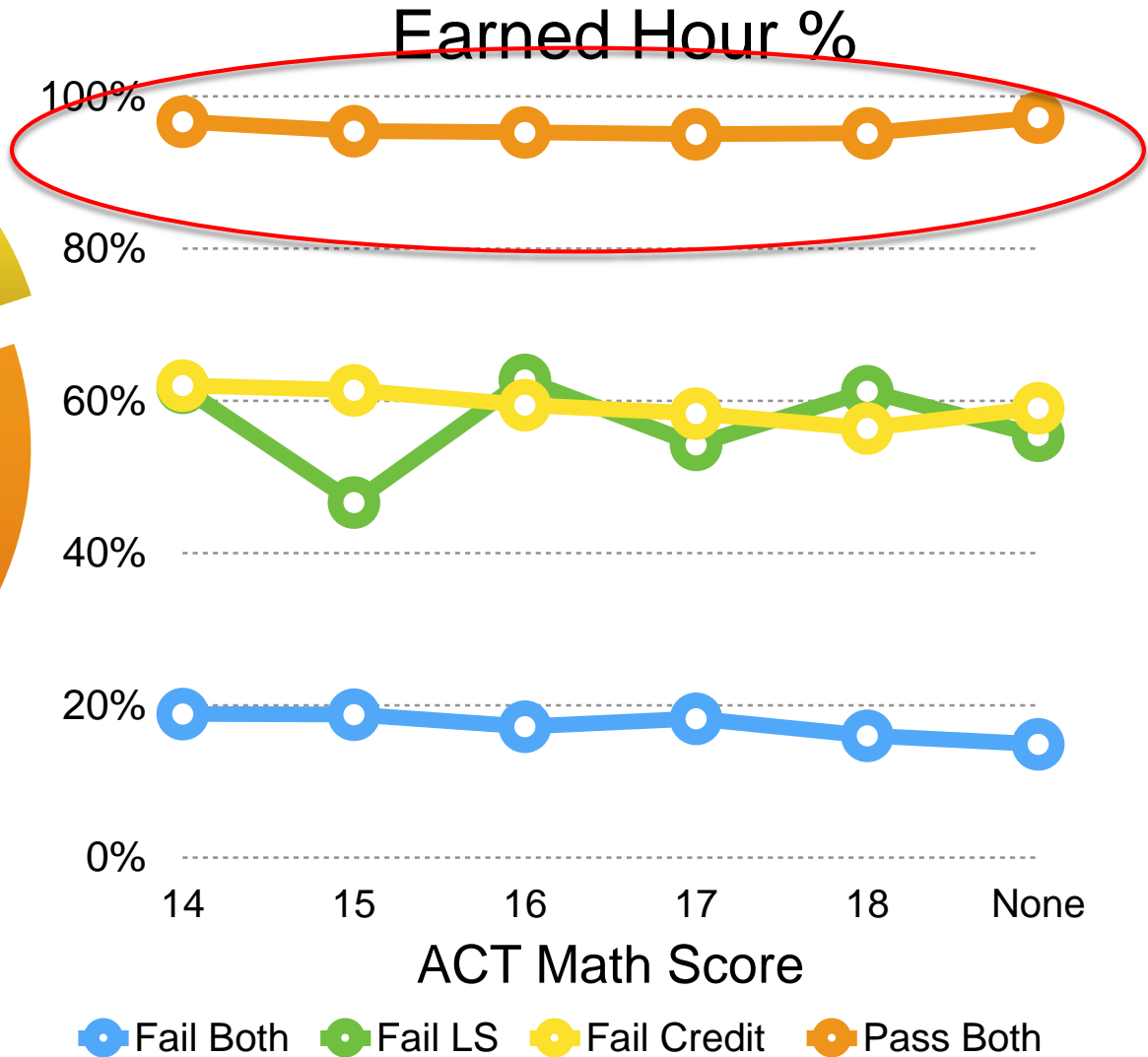
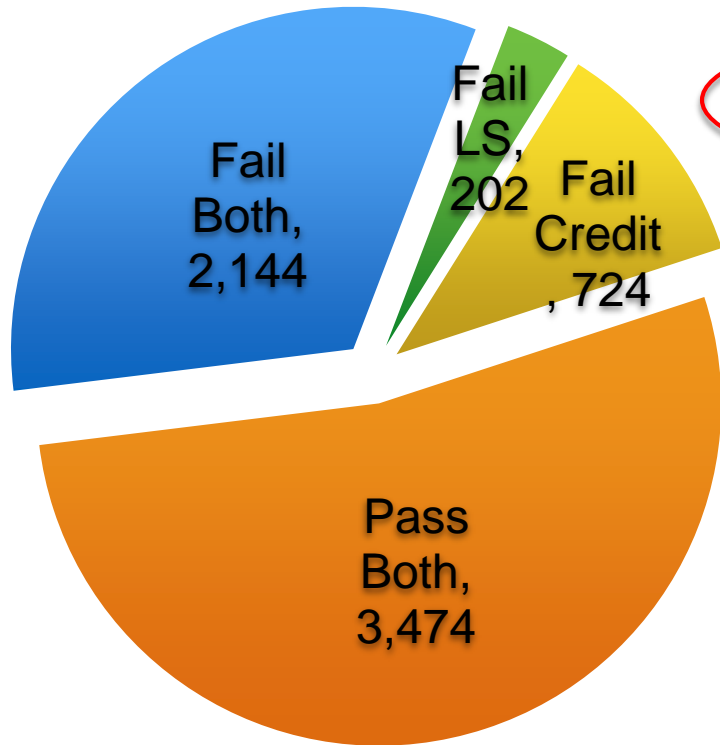
**Do Corequisite  
Students Continue to  
Succeed?**

One Year later....



■ Completed Math Remediation - ...

# Disaggregation by Student Group

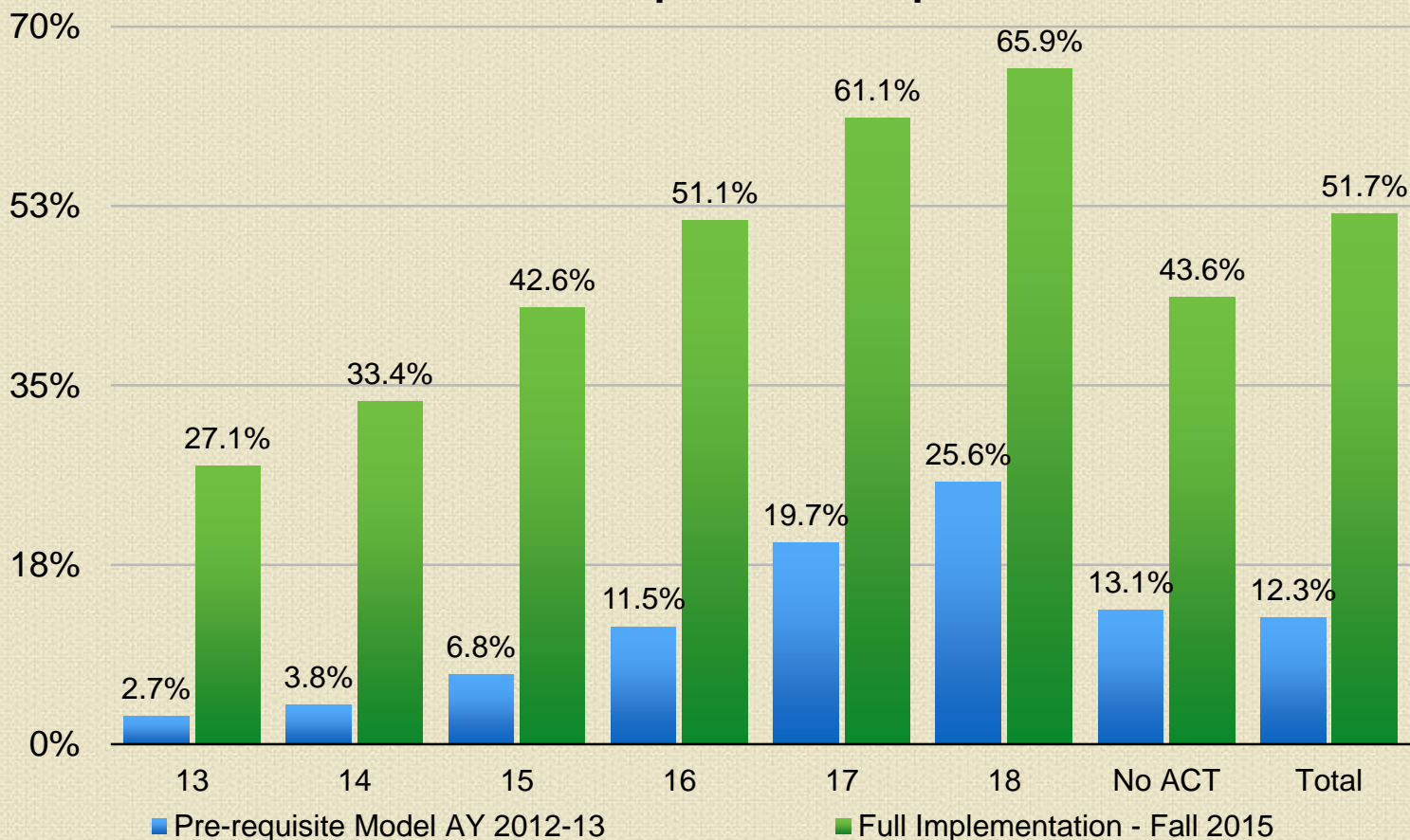


**What about the  
lowest level students?**

# Completion of Gateway Math by ACT Sub-score

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

## Results of TBR Co-requisite Full Implementation

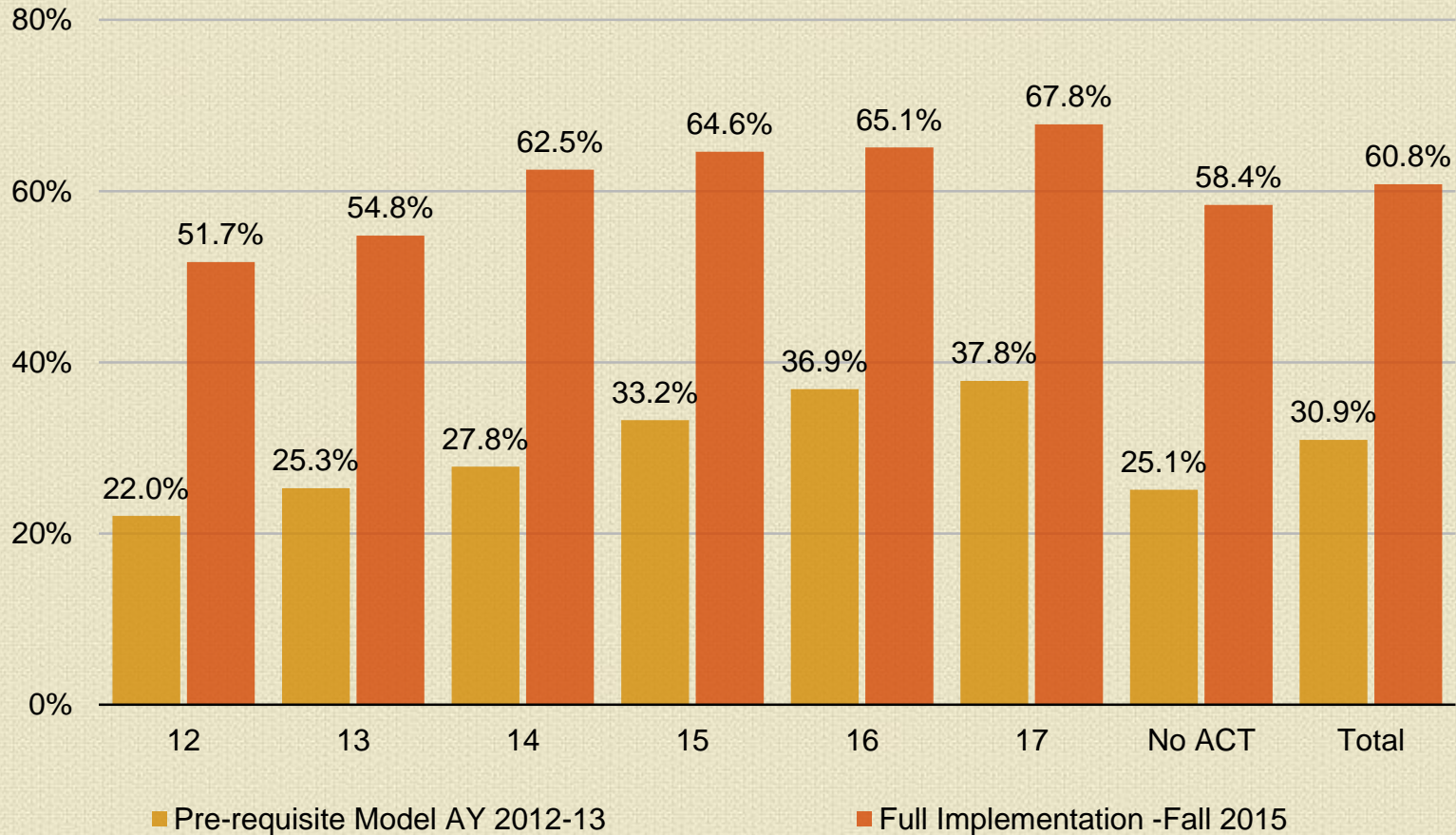


TENNESSEE BOARD OF REGENTS

# Completion of Gateway English by ACT Sub-score

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

## Results of TBR Co-requisite Full Implementation

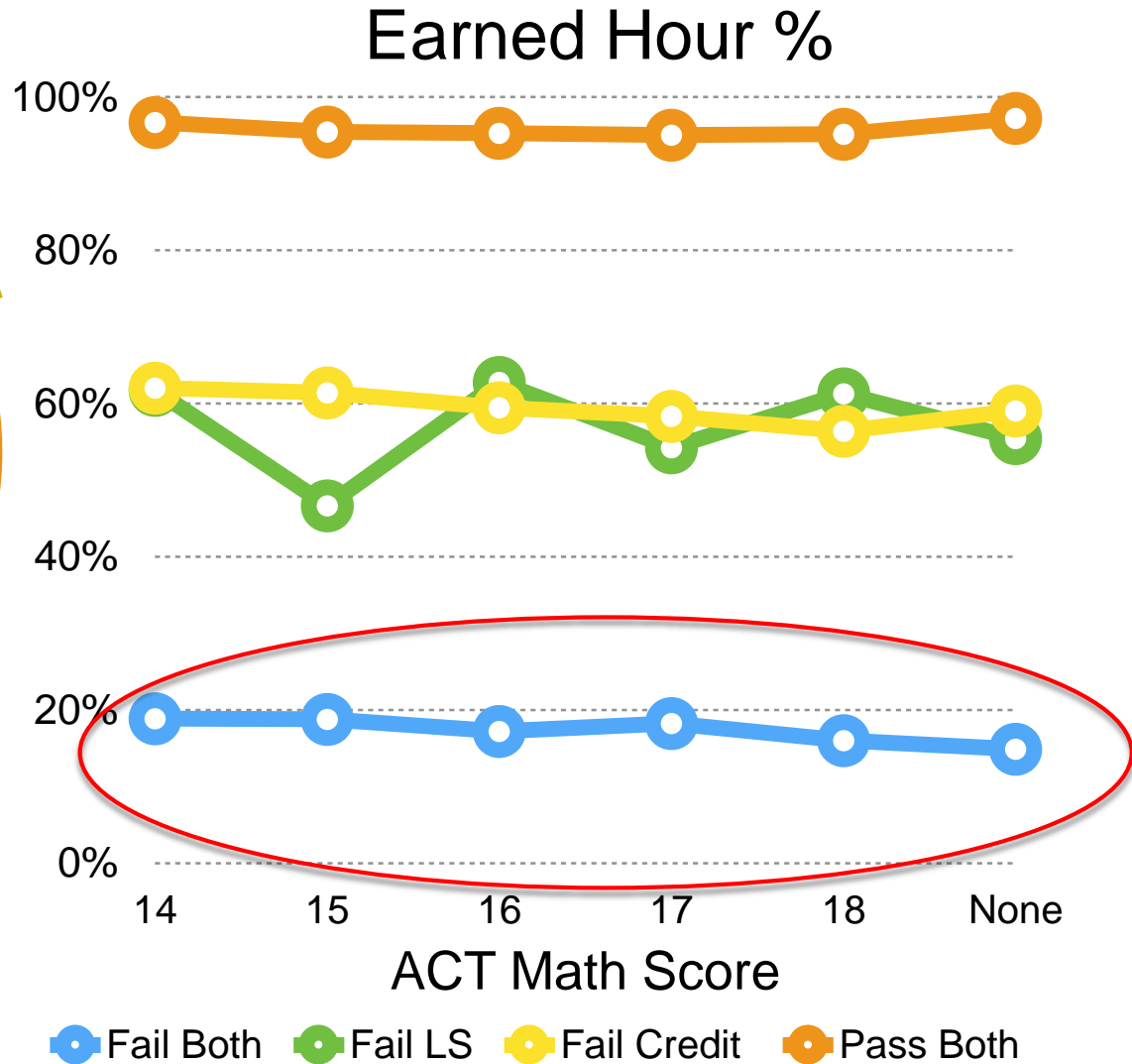
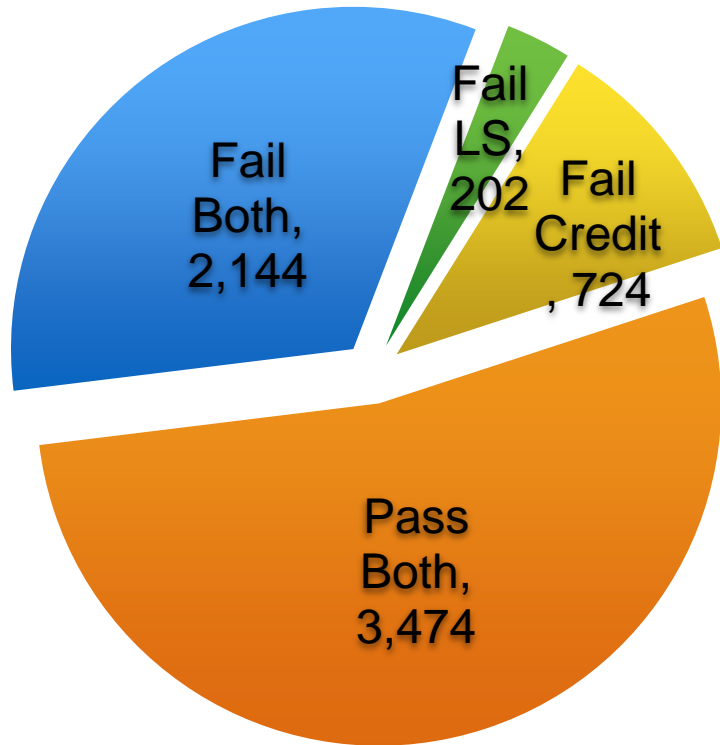


TENNESSEE BOARD OF REGENTS



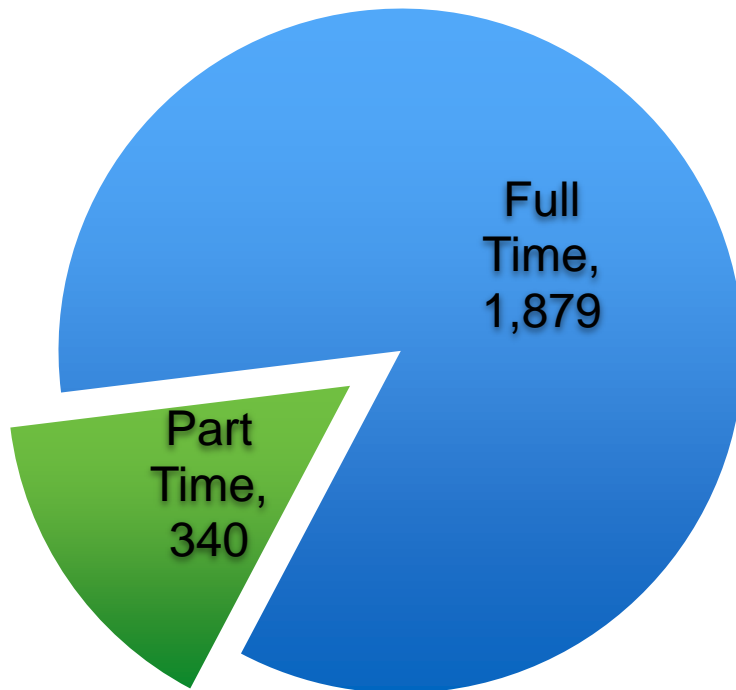
**What about those  
who fail corequisites?**

# Disaggregation by Student Group

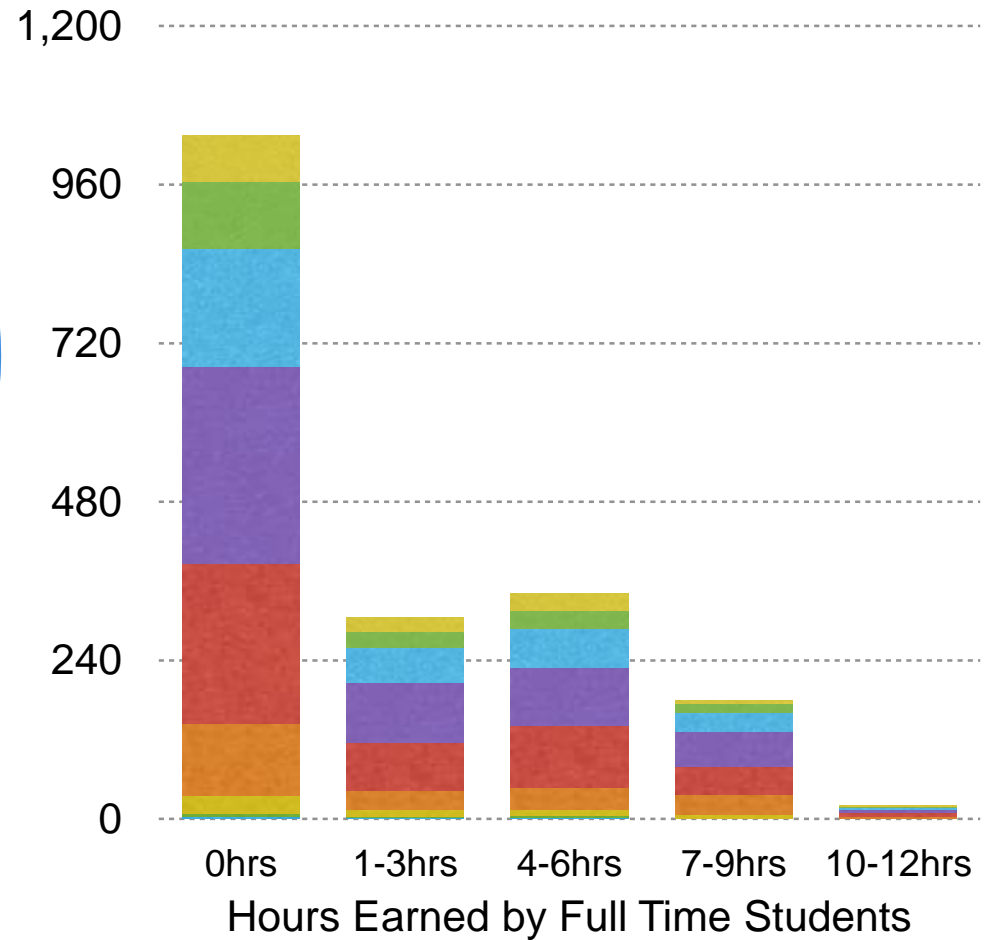




# Students who Failed Both Courses



## Earned Hours



■ <12 
 ■ 12 
 ■ 13 
 ■ 14 
 ■ 15 
 ■ 16 
 ■ 17 
 ■ 18 
 ■ No ACT

**Are Corequisites  
Quality Learning  
Experiences**

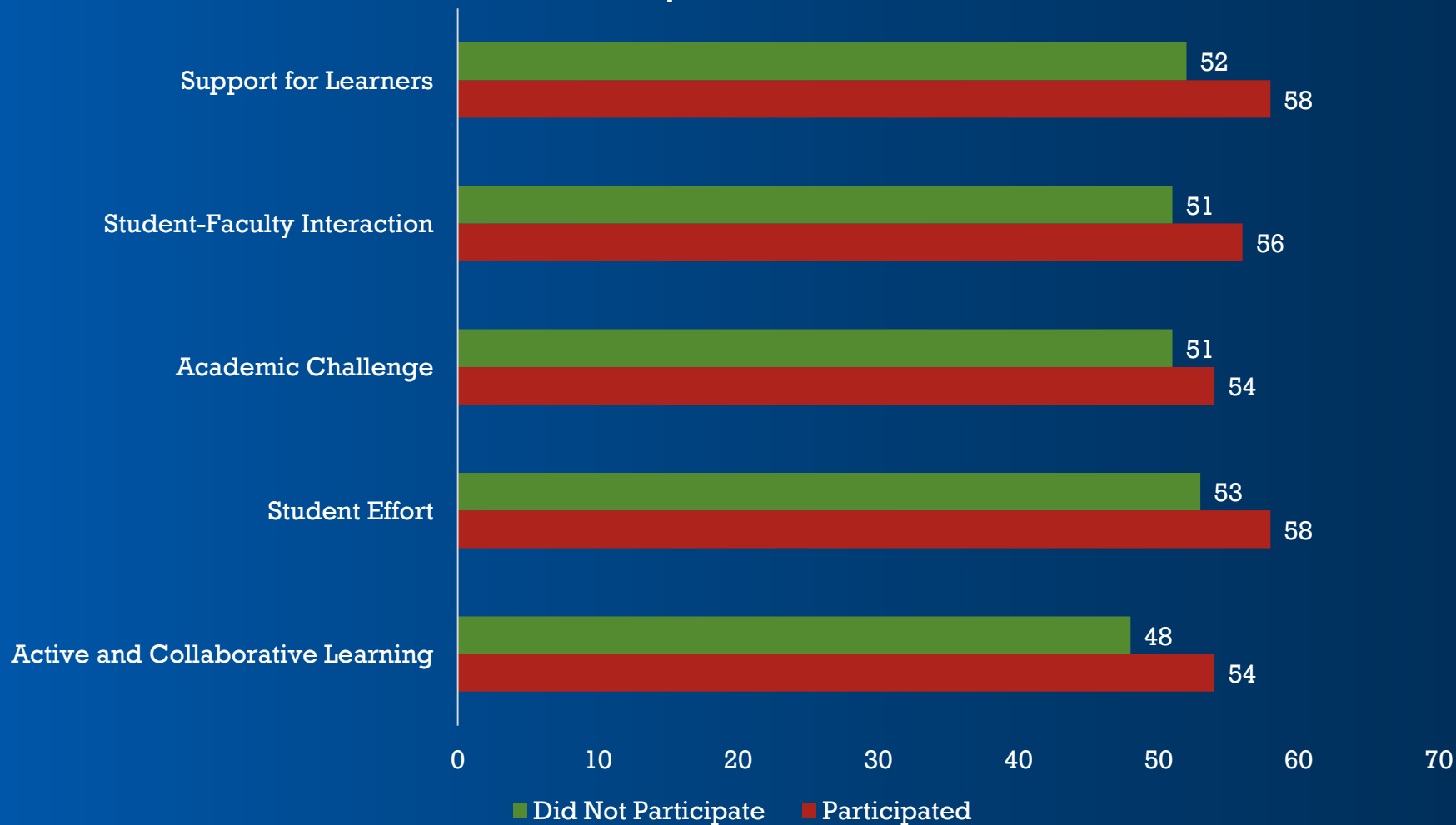
# Corequisite Students are Engaged Learners

... students who took a corequisite course were more engaged learners, which means they're more likely to be successful in college

Evelyn Waiwaiwole, Center for  
Community College Engagement  
Inside Higher Ed, 2/23/2016

# Corequisite Students are Engaged Learners

## Corequisite Math



Expectations meet Reality: The Underprepared Student and Community Colleges, Center for Community College Engagement, Feb. 2016

# SUCCESS AT SCALE

---

**Academic Support as a Corequisite**

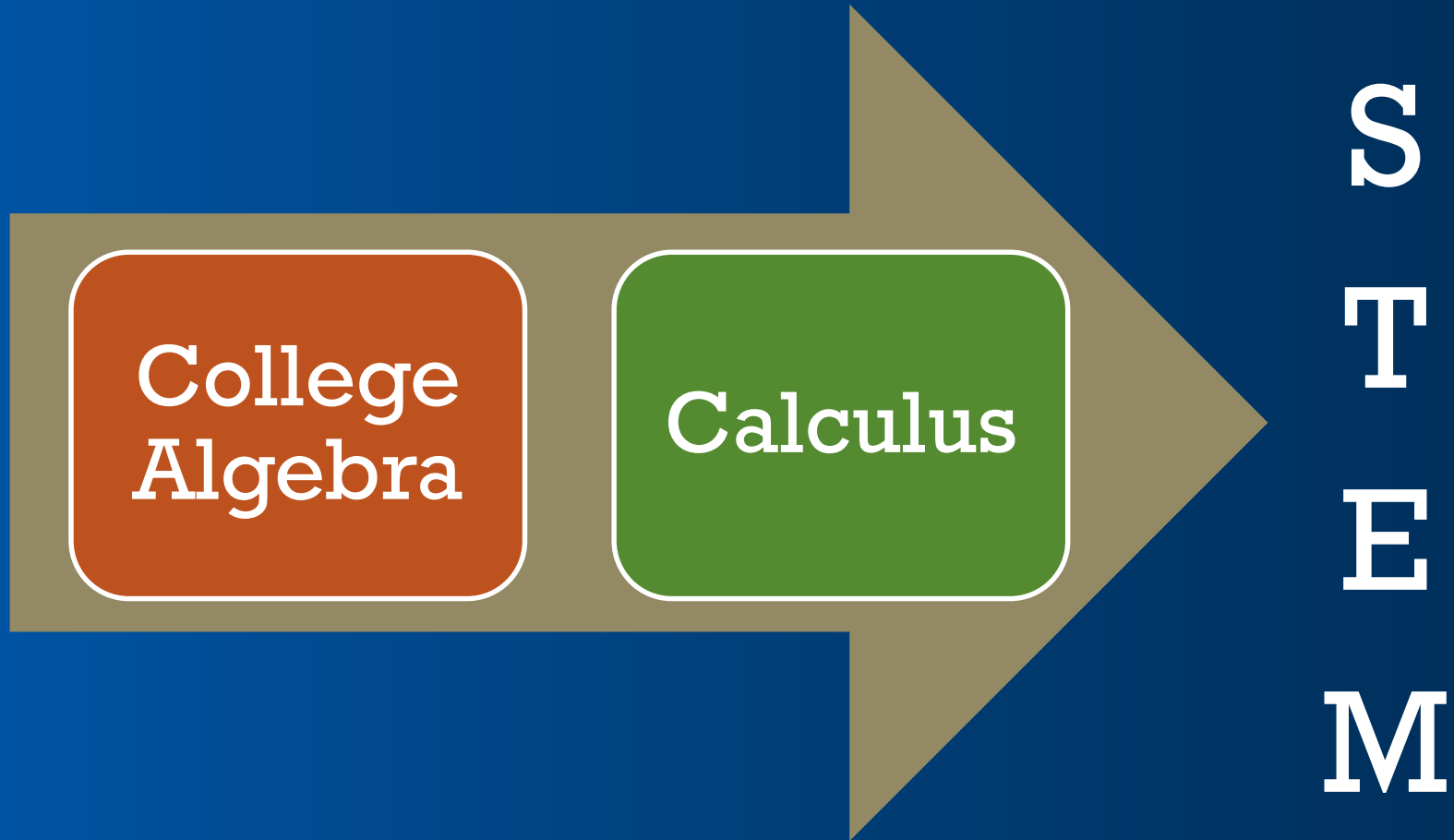
**Math Pathways Aligned to Programs of Study**

**Purpose, Not Placement**

# Math Pathways

# College Algebra's Only Purpose: Preparation for Calculus

---





# Math Is Aligned with Meta-Majors

**Health Sciences**  
**Social Sciences**  
**Liberal Arts**  
**Education**  
**Business**

**Quantitative Reasoning/  
Statistics**

**Degree**

**4-Year Transfer**

**Certificate**

**License**

**STEM**

**College Algebra/  
Precalculus**

**Degree**

**4-Year Transfer**

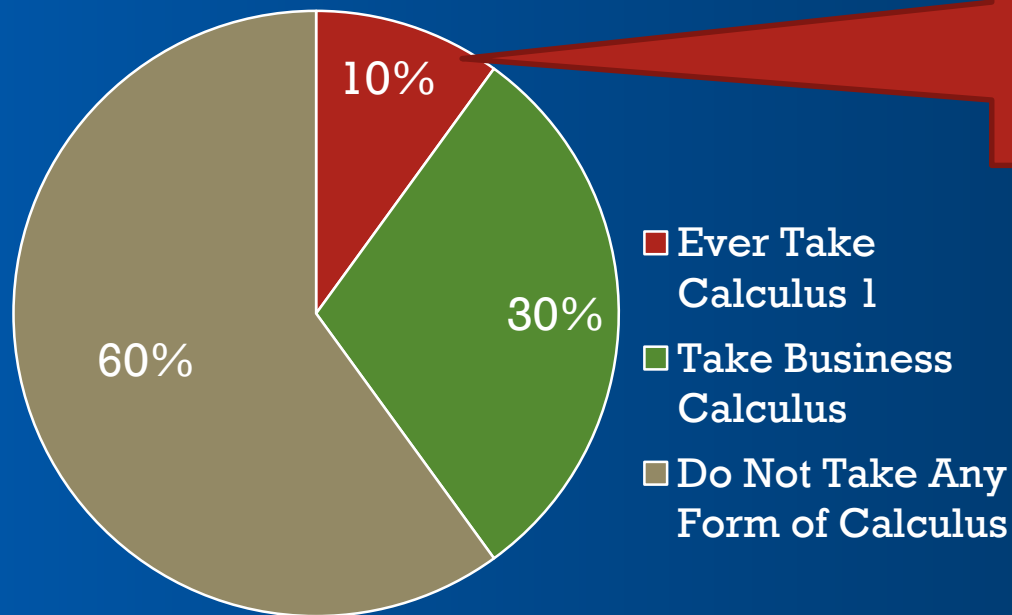
**Certificate**

**License**



# What is the “right” math course?

## Students Who Take College Algebra

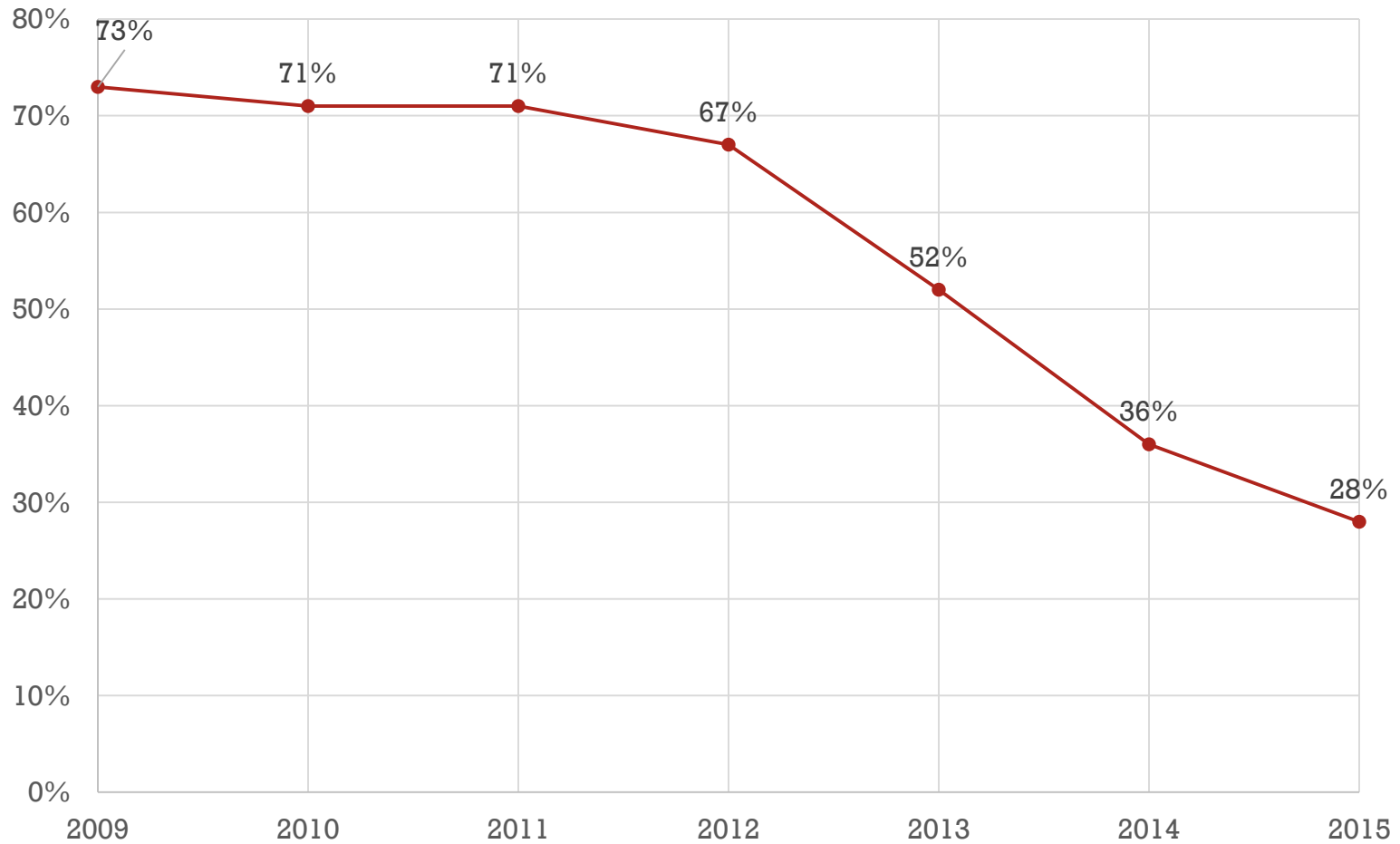


Virtually no students who pass college algebra ever start Calculus III, which is a key course for STEM majors.

Dunbar, S. 2005. *Enrollment flow to and from courses below calculus*. In *A Fresh State for Collegiate mathematics: Rethinking the Courses below calculus*, N.B. Hastings et al. (Eds.). Washington DC: MAA Notes, Mathematical Association of America.

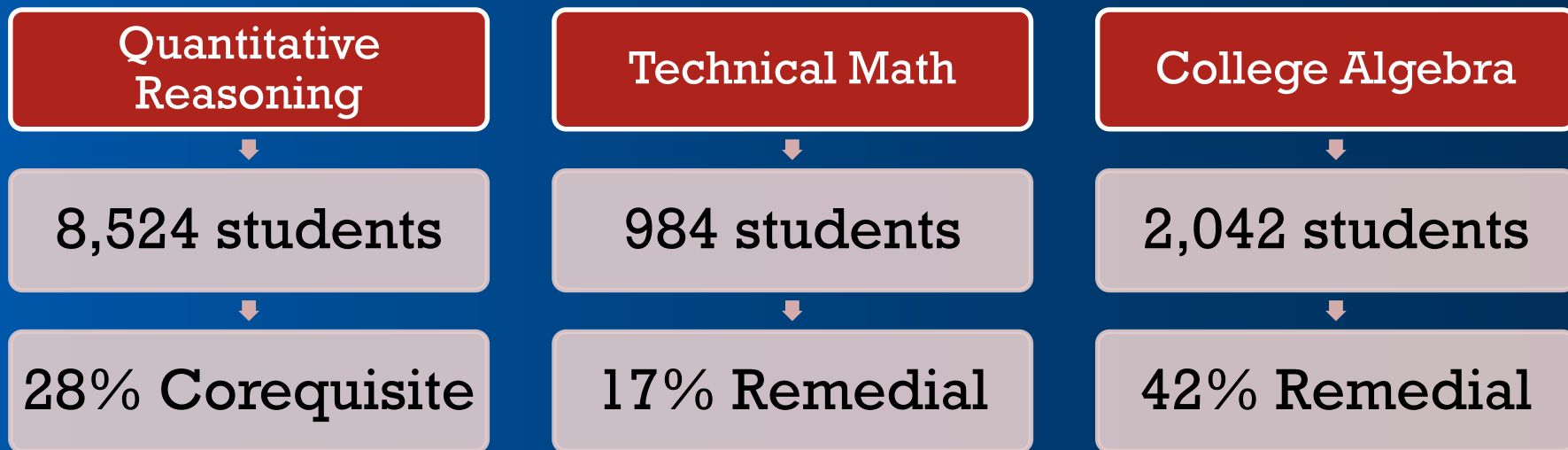
**Math Pathways**  
**+**  
**Corequisite**  
**=**  
**Gateway Math Success**

# Ivy Tech Remedial/Math Placement Post-Math Pathways



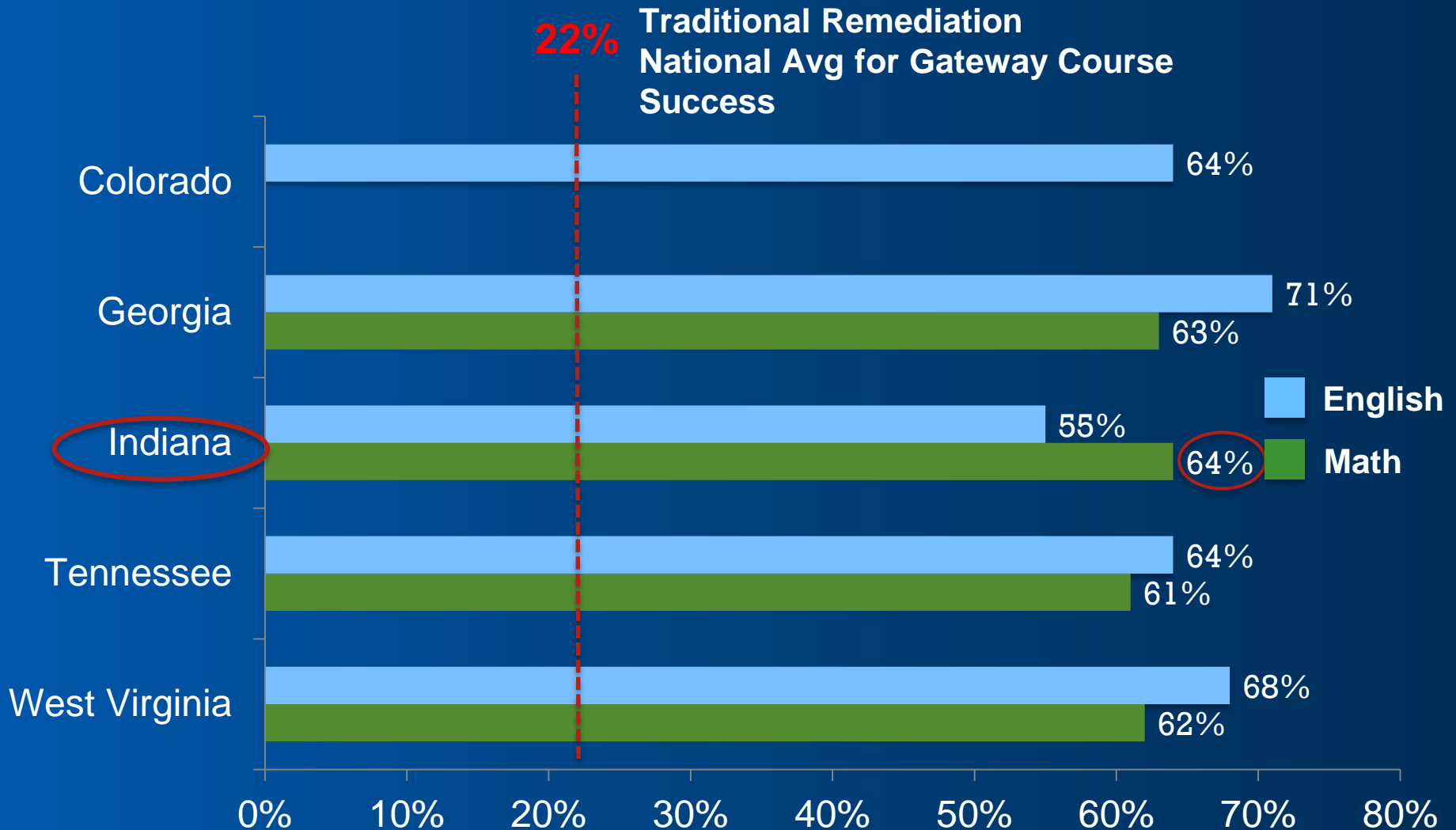
# Ivy Tech Math Placement

## New Entering Students



8% Placed in Stand Alone Remediation

# One Semester Scaled Results



# What About College Algebra?

# One Semester Scale Results – College Algebra Coastal Georgia

Subject	Int. Algebra/ Gateway Sequence (2 years)	Corequisite Results (One Semester)
College Algebra	36%	56%
Quantitative Reasoning		67%

# Subsequent Math Success – College Algebra Corequisites University of Nevada-Reno

Subject	College-Level Placement	Corequisite College Algebra/Int. Algebra
Business Calculus	74%	88%
Pre-Calculus	83%	84%



# SUCCESS AT SCALE

---

**Academic Support as a Corequisite**

**Math Pathways Aligned to Programs of Study**

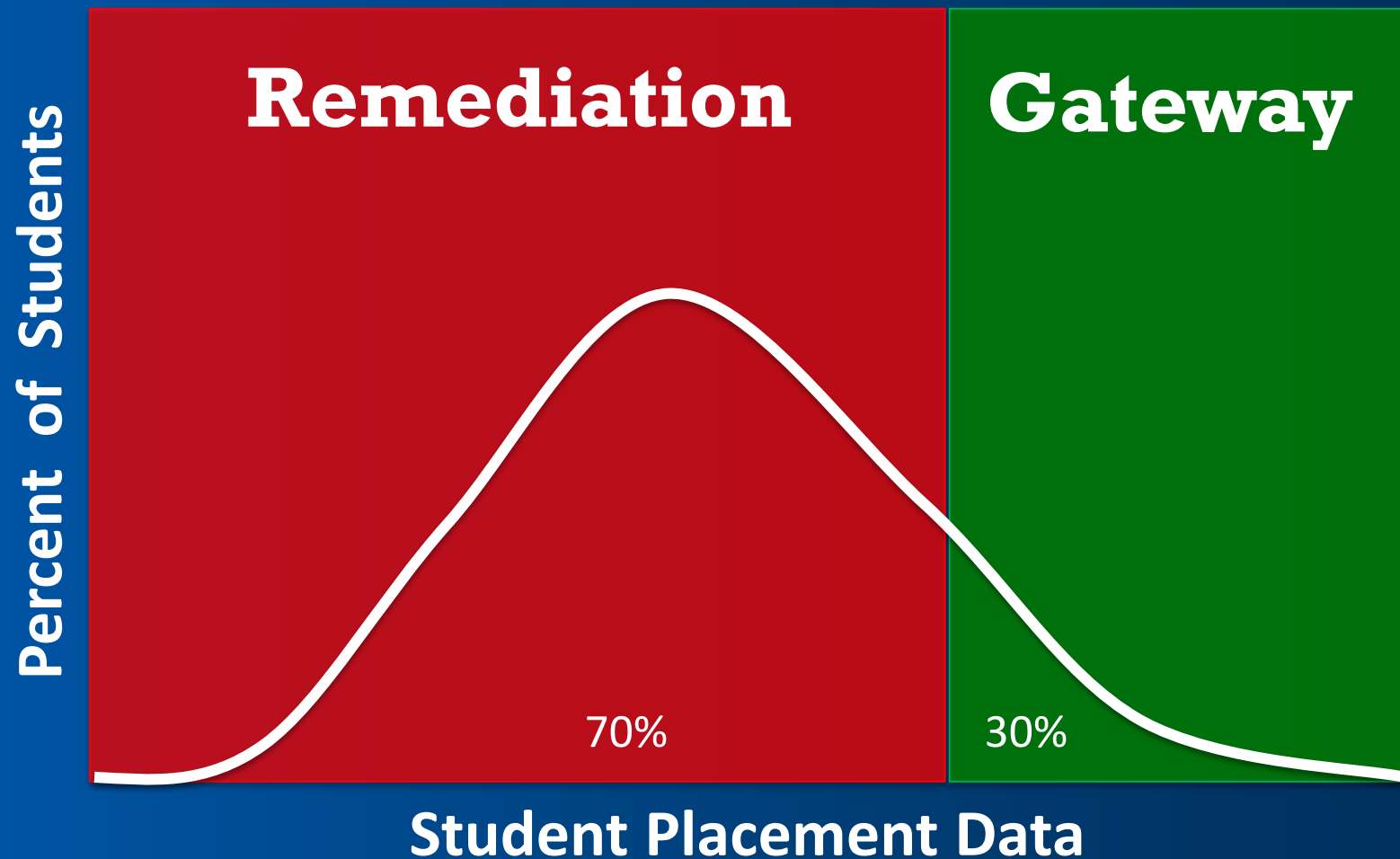
**Purpose, Not Placement**

**Purpose,  
Not Placement**

50% of Students  
Placed In Remediation  
Could Pass a Gateway Course

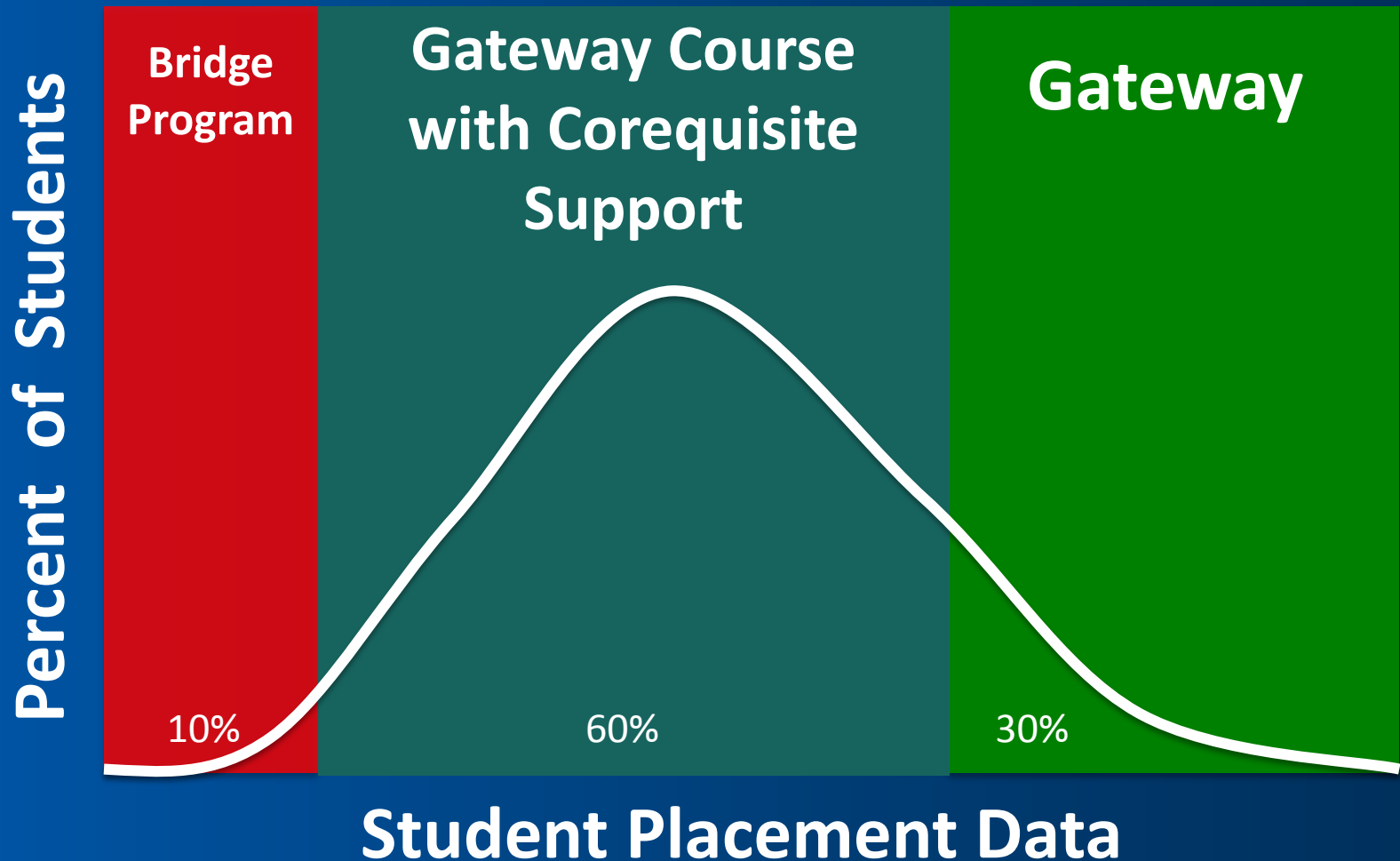
# End Use of Traditional Placement

---



# With Corequisite, Most in College-Level

---



**It is time to end  
placement as we  
know it.**

# Guiding Objective

---

Students complete gateway courses and enter programs of study in their first academic year

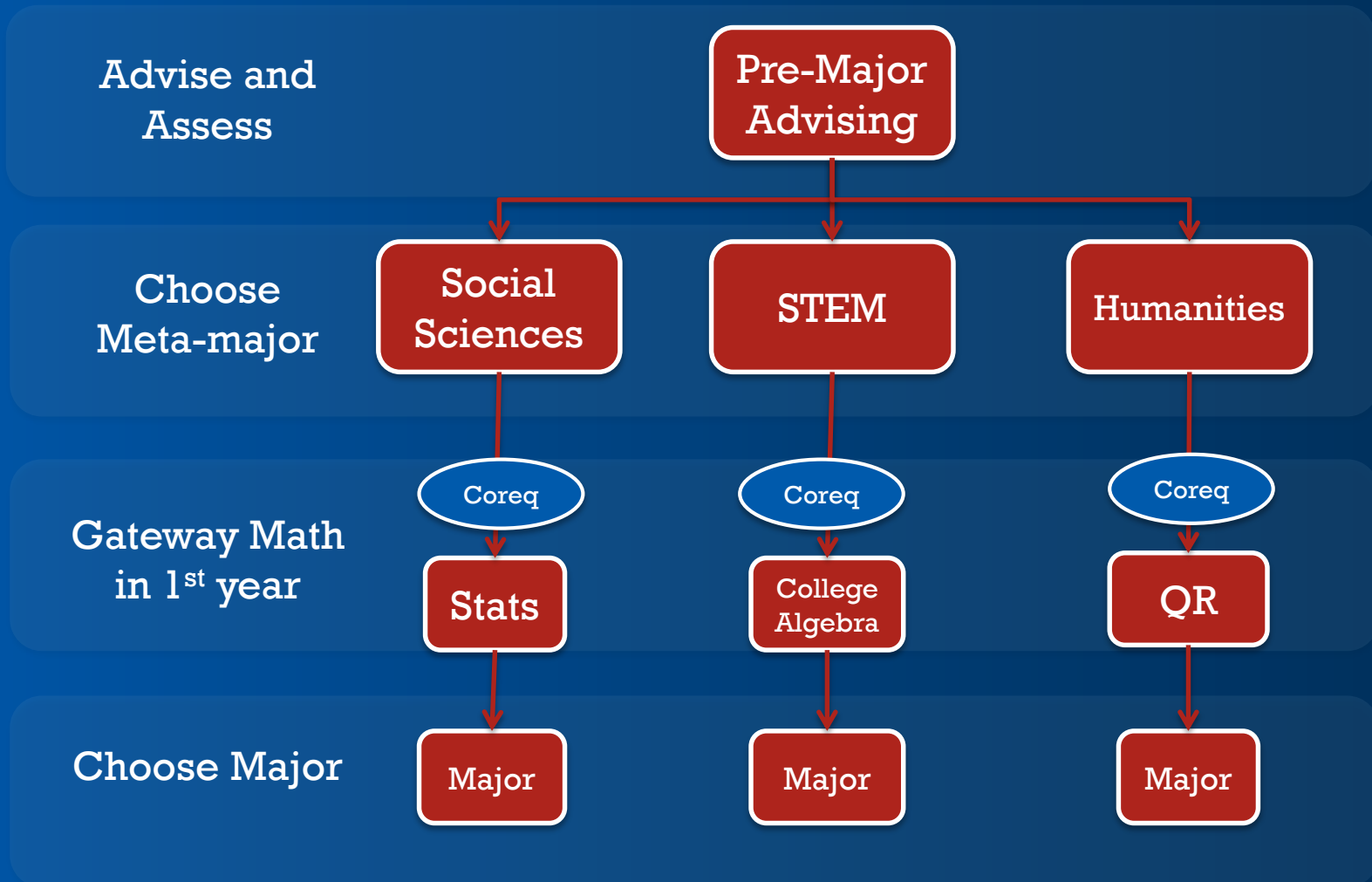
# Determining Student Purpose

---

- Identify Career and Academic Goals
- Holistic College Readiness Inventory – Academic AND College Success Skills
- Determine a Broad Area of Study or Meta-Major
- Enroll in the Right Gateway Courses
- Corequisite for All!
- College Success Interventions for Those Who Need It.



# A Model Pathway





“The corequisite model is transformational in moving thousands of students and their families towards a better life, and for us wanting to make a lasting difference, it is my legacy.”

**Rob Jeffs**  
**Faculty, Ivy Tech Community College**

# Scaling Corequisite

## *Spanning the Divide*

---

**Bruce Vandal**

Senior Vice President | Complete College America  
bvandal@completecollege.org  
@BruceatCCA

**COMPLETE COLLEGE** AMERICA