



Session II: Supporting Students' Learning Renewal and Academic Success: Rethinking Developmental Education



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A Brief Overview

- **Learning Renewal** – Strategies to address the disparate impact of the pandemic on students who have had fewer opportunities to learn and severe challenges to their wellbeing despite the heroic efforts of educators across the P-20 system
- **Developmental Education** – Courses, typically not for credit, that are “designed to develop the reading, writing, or math skills of students who are deemed – usually through standardized tests – underprepared for college-level courses.”
- **Developmental Education Reform** – Efforts to improve student outcomes, including time to and cost of degree, by changing:
 - How student learning is assessed for placement
 - The types of supports for student academic success
 - Pathways for different groups of majors (e.g. STEM and non-STEM)
 - Other wraparound supports and institutional practices

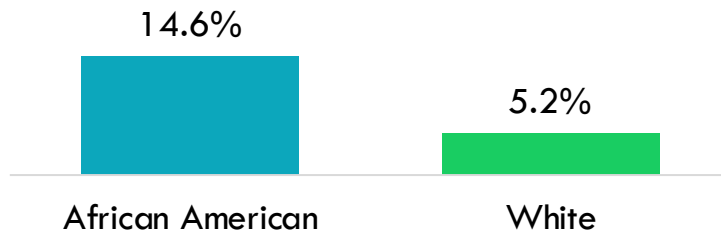


Differences in Rates of Developmental Education Placement



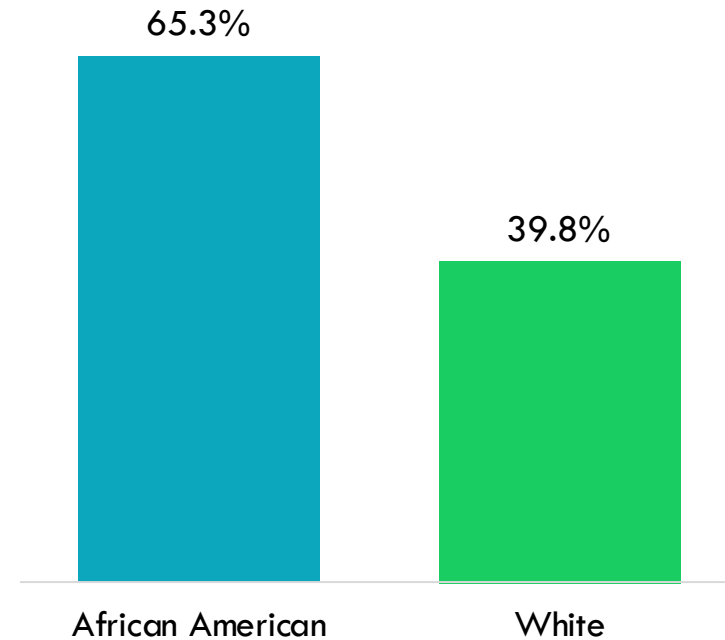
African-American first-year students placed in developmental education at higher rates

% Placed in Developmental Ed: All Public Universities



Data source: IBHE IHEIS 2018 Fall Enrollment Collection

% Placed in Developmental Ed: Community Colleges

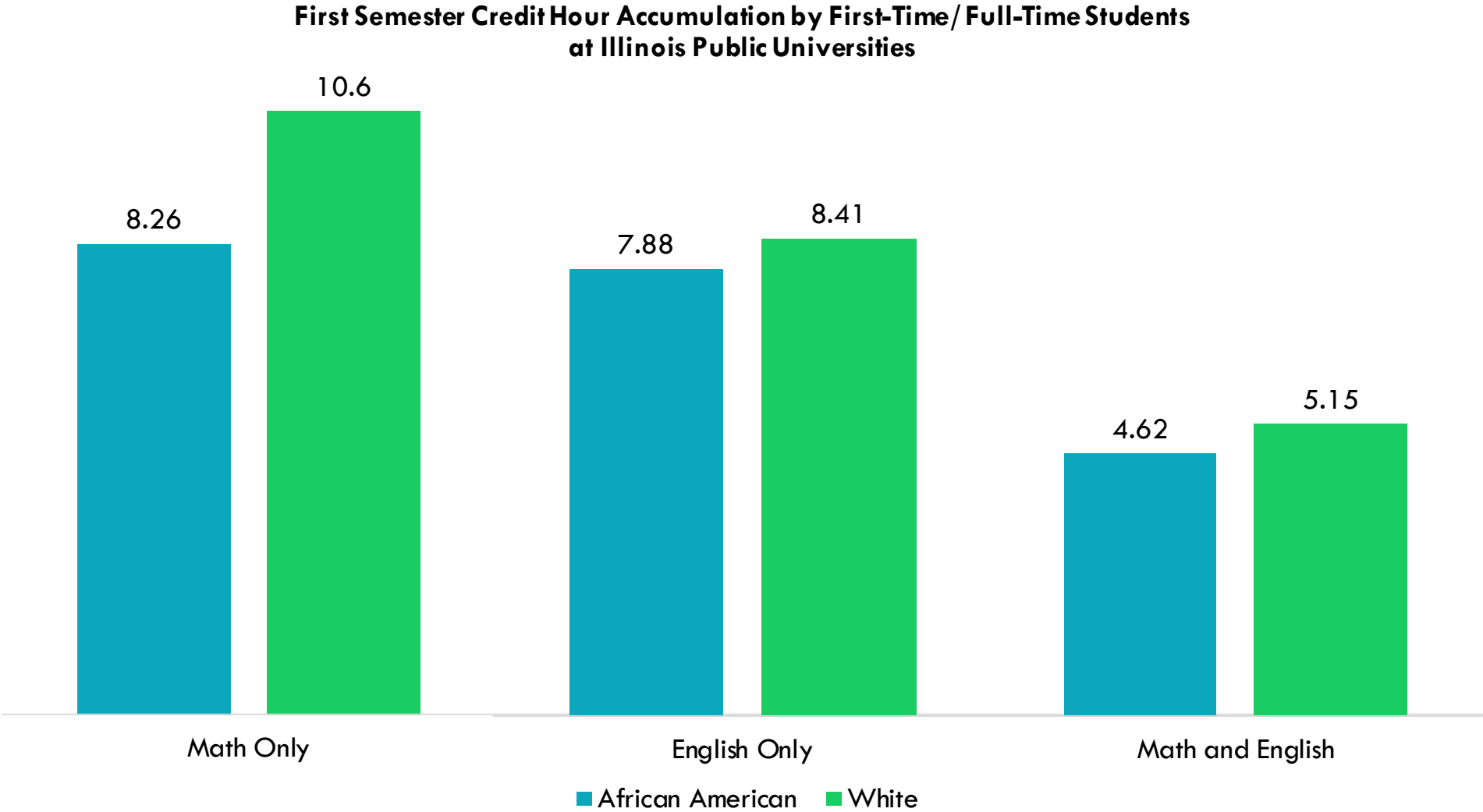


Data source: ICCB Centralized Data System, Fall Semester 2016 -2017



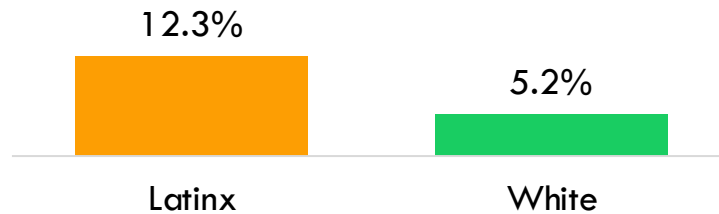
Source: [IBHE Equity Presentation \(August 2020\)](#)

And when placed in developmental ed, African-Americans accumulate fewer credit hours



Latinx first-year students placed in developmental education at higher rates

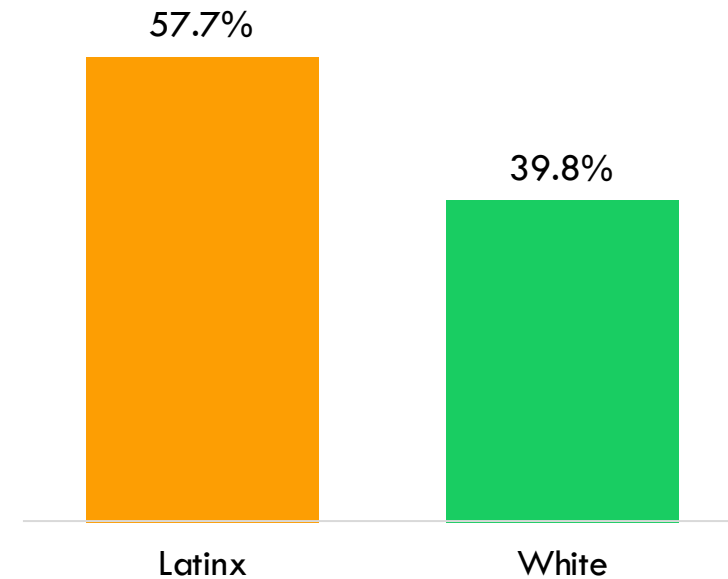
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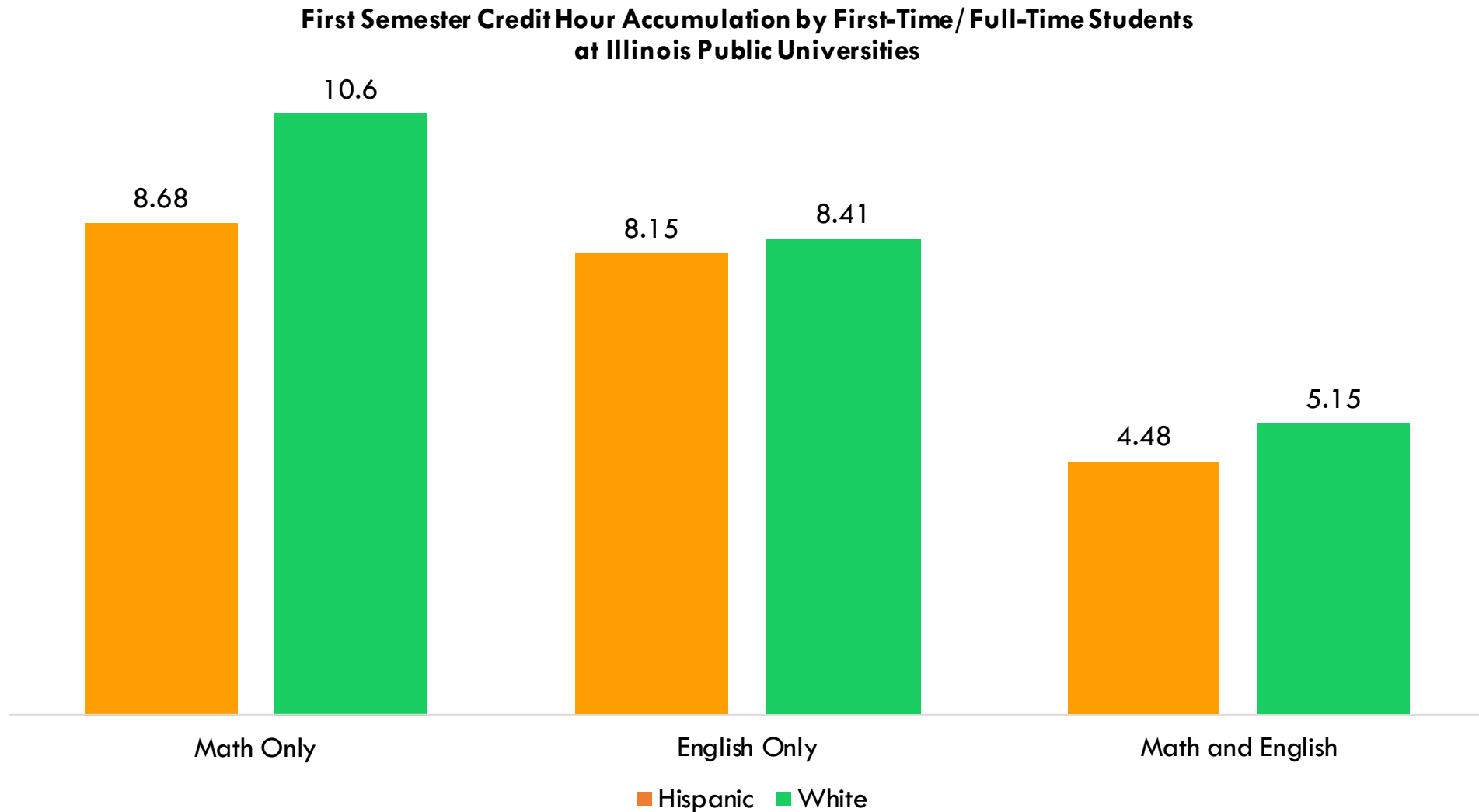
% Placed in Developmental Ed: Community Colleges



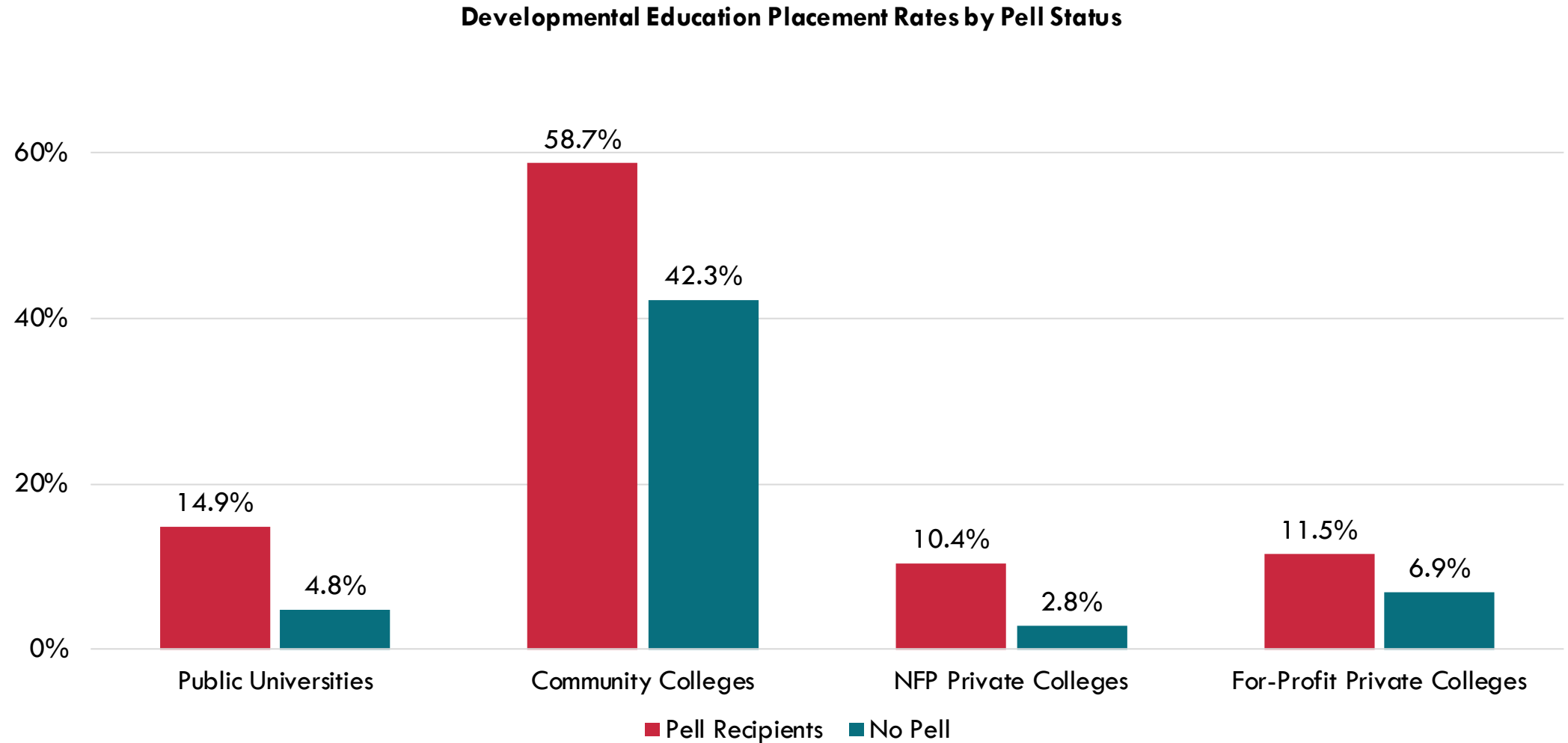
Data source: ICCB Centralized Data System, Fall Semester 2016 -2017



And when placed developmental ed, Latinx accumulate fewer credit hours than White peers



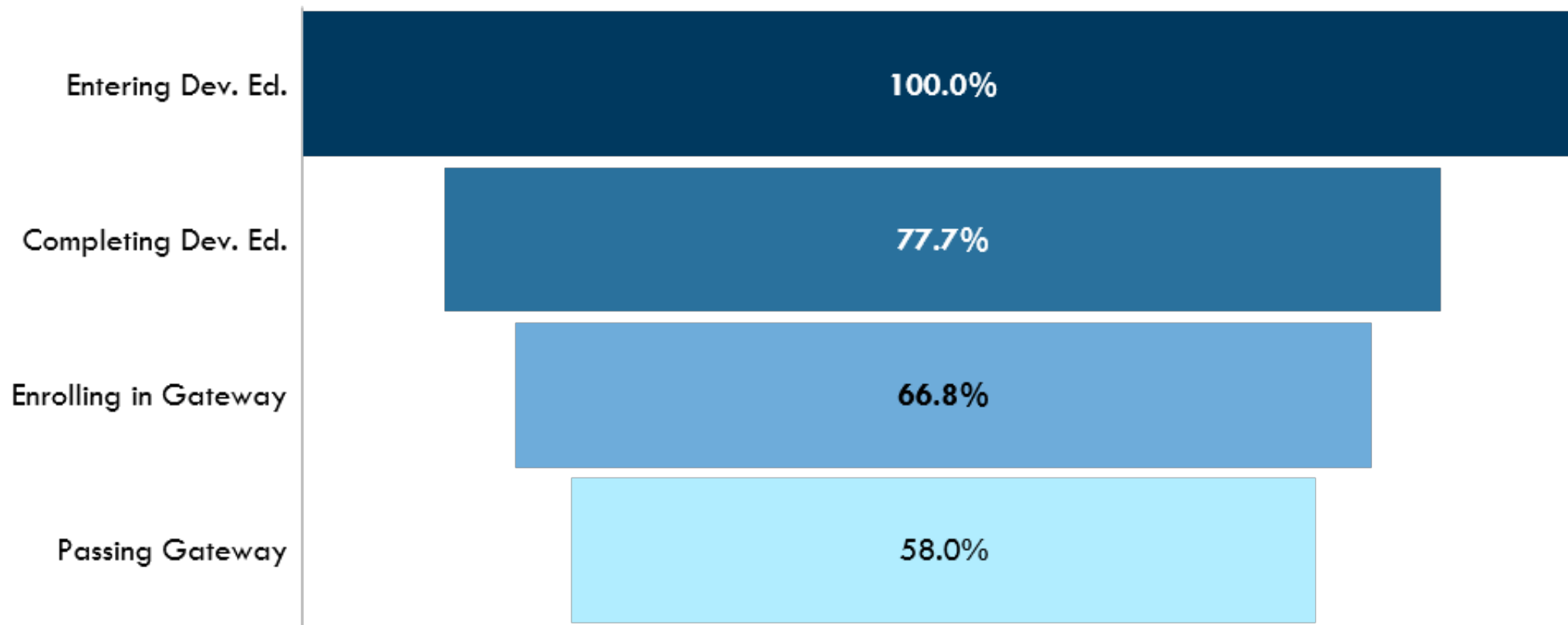
Once enrolled, low-income students are significantly more likely to be placed in development education.



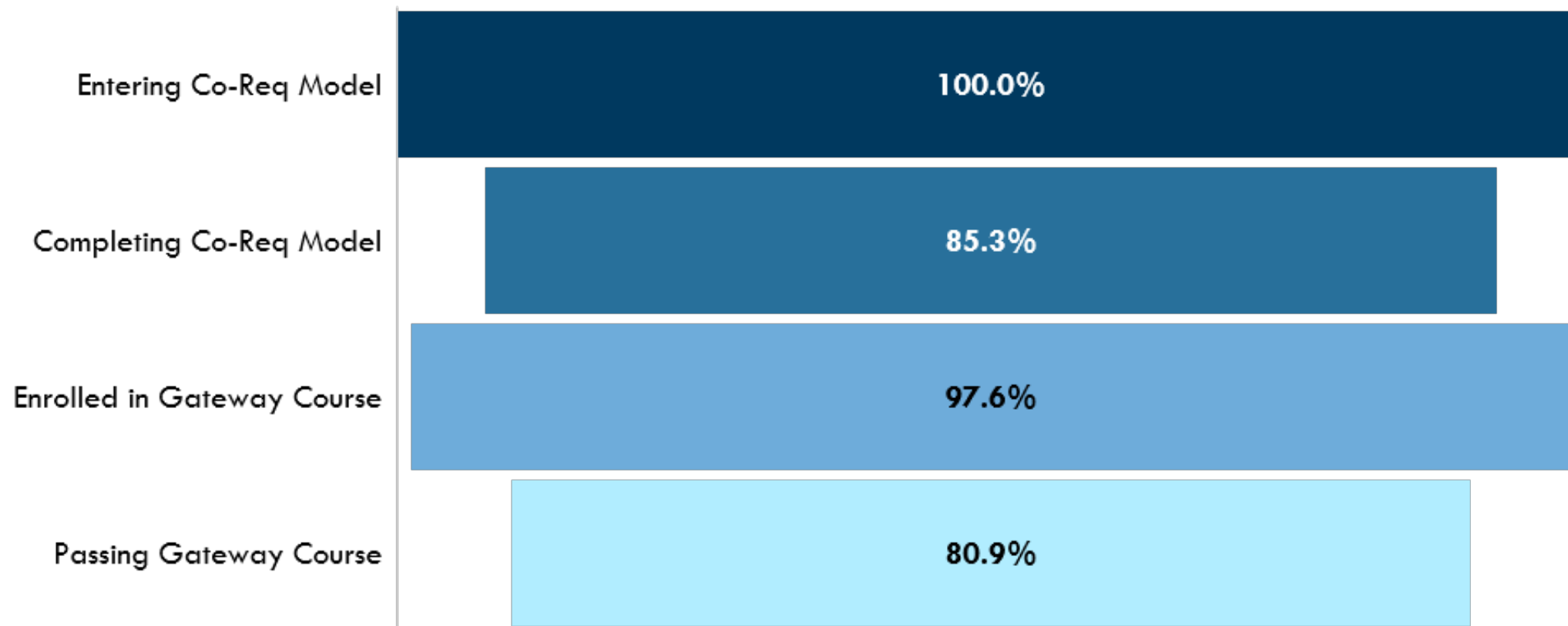
Differences in Outcomes in Gateway Courses by Subject and Developmental Education Model



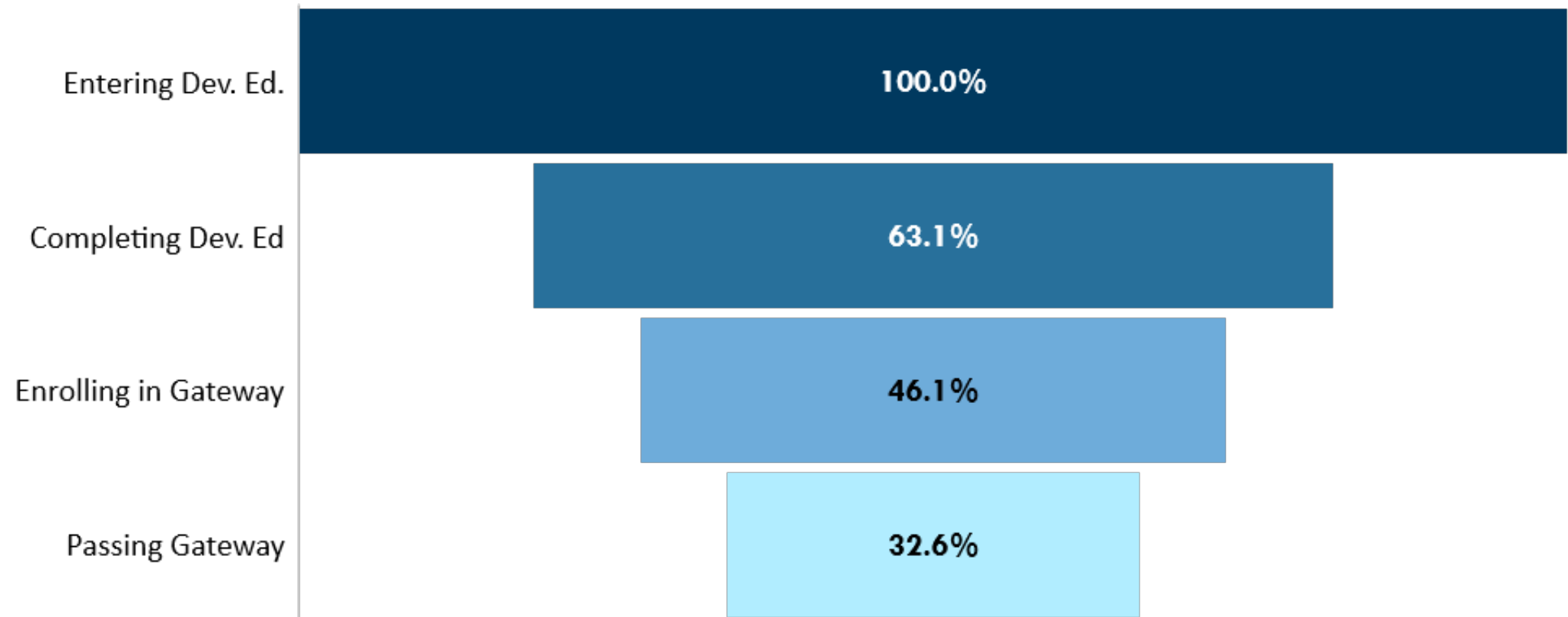
Flow from Entry into Traditional English/Language Arts Dev. Ed. to Passing a Gateway Course at Illinois Public Universities (N=745)



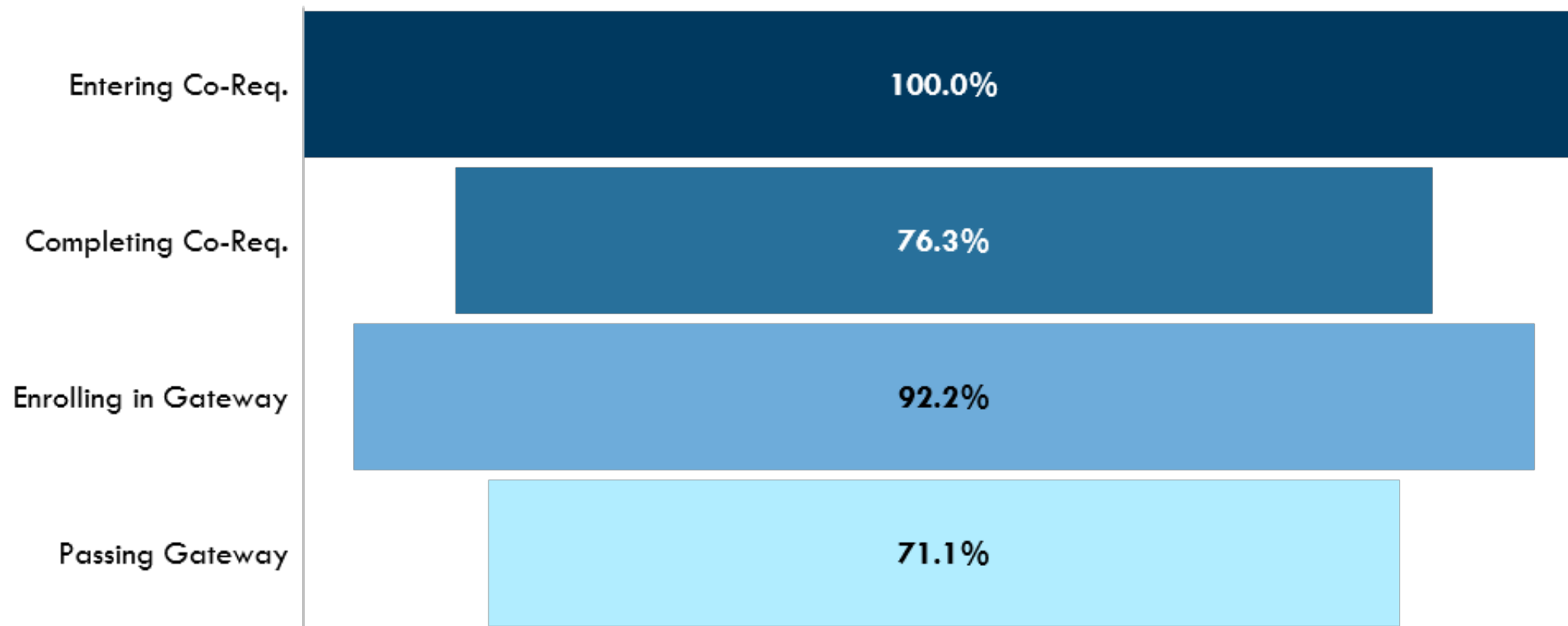
Flow from Co-Requisite English Language Arts to Gateway Course Completion



Flow from Entry into Traditional Mathematics Dev. Ed. to Passing a Gateway Course at Illinois Public Universities (N=1,968)



Flow from Entry into Co-Requisite Mathematics to Passing a Gateway Course at Illinois Public Universities (N=270)



Illinois Efforts to Support Learning Renewal and Rethink Developmental Education

- High School to College and Career Transitions
 - Transitional Math and English Courses – 12th grade courses to help students stay on track; passing grade allows for immediate placement into credit-bearing courses at community colleges
 - Math Pathways – math sequences for specific career fields
 - Competency-Based Education Pilot in School Districts – focus on needed learning and personalized progression, not “seat-time”
 - Policies: Illinois Postsecondary Workforce Readiness Act (Public Act 9-674)
- Governor’s Emergency Education Relief (GEER) Funds - resources to support higher education student enrollment, retention, and completion, with a focus on those who have been most impacted by the pandemic including students historically underrepresented and underserved
- Illinois P-20 Council Learning Renewal Resource Guide



Illinois Efforts to Support Learning Renewal and Rethink Developmental Education, continued

- **Scaling Developmental Education Reform**

- Placement – multiple measures and approaches for placement to acknowledge and build on what students know
- Bridge Programs – supports for students to develop key skills through summer or other short-term programs
- More Models of Developmental Education – co-requisite, studio, and other models that place students in credit-bearing courses with additional supports
- Additional wraparound supports
- Policies: Illinois Senate Joint Resolution 41; Illinois Public Act 101-0654



Supporting Students' Learning Renewal and Academic Success: Rethinking Developmental Education



Dr. Colleen Sexton

*Interim Provost and Vice President
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Governors State University



Supporting Students' Learning Renewal and Academic Success: Rethinking Developmental Education

Presentation to the Illinois Board
of Higher Education (IBHE)
Board of Trustees Leadership
Conference

Governors State University
Colleen M. Sexton, Ph.D.
Associate Provost/ Associate VP Academic Affairs
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October 13, 2021

What did we choose to address?

**First Year
Experience
Like No Other**

Committed to...

Learning Communities
Connections
Support

Students enrolled...
Full-time
Day-time
Credit Bearing Courses
Size limits

Full-time Faculty
teaching
Freshman Classes

Two-years planning our Transformation and Continuous Assessment of Data

How did GSU identify this as an issue?

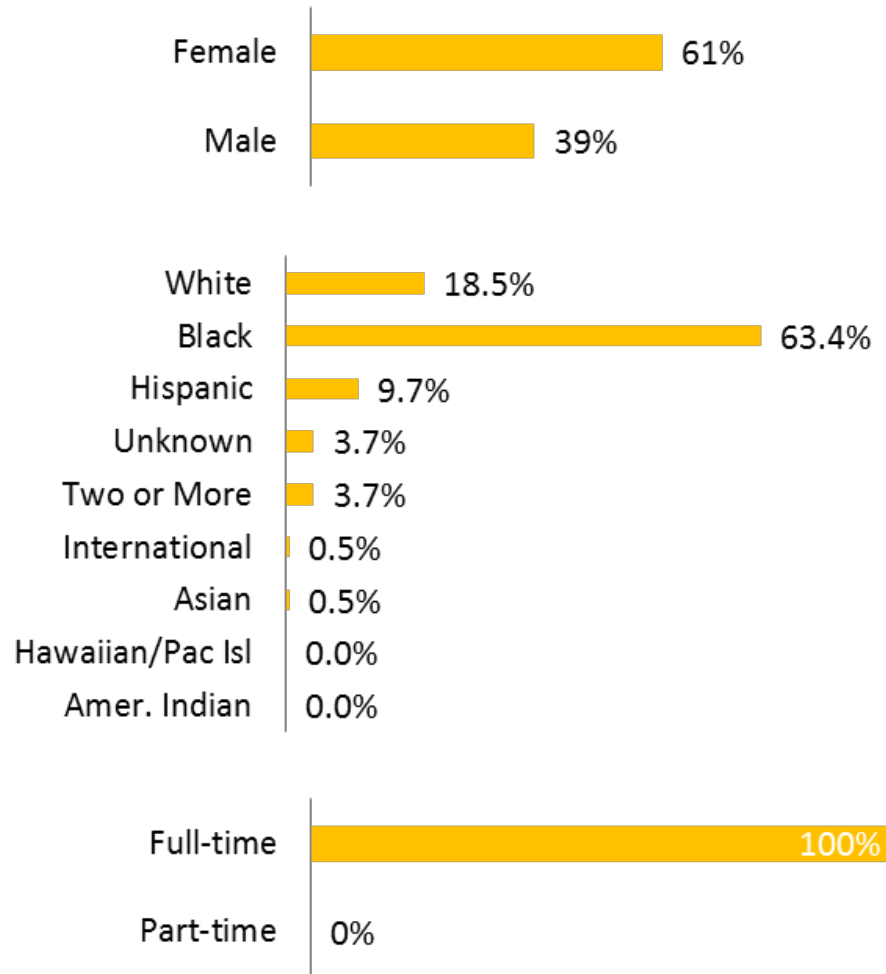
General Education Task Force

- Cooperative effort of faculty and administrators created by the Faculty Senate
- Reviewed national research, attended conferences and based the program on best-practices
- Incorporated best practices based on research (LEAP, CCA)
- Today – **General Education Council** led by Director and Asst. Director – both Faculty

Lower Division Steering Committee

- Cross-functional and cross-divisional
- Includes academic, student affairs, admissions, housing and marketing leadership
- Includes faculty and general education leaders
- Charged to propose creation and revision of policy
- Innovative strategies about tightly integrated curricular and co-curricular activities and support

Fall 2016, New First-Year Students



Why does equity matter?



ILEA Equity Plan developed for campus through use of ICAT survey, analysis, and charrettes to gather institutional challenges and suggestions for improvement around equity – Guided vision for use of Smart Start

 Average Age of Direct-entry First Year Students = 19.2 years old

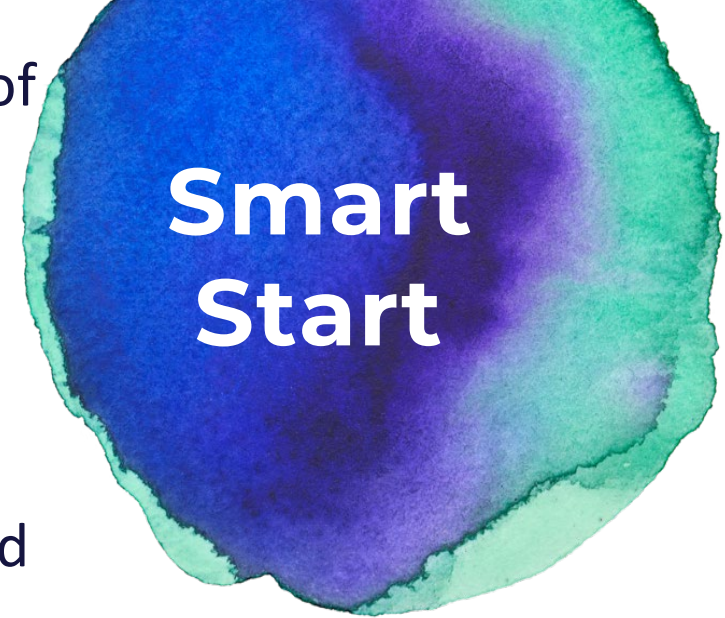
 Average age of Transfer students = 27.2 years old

What Strategies were Developed?

Guided Pathways

Smart Start	Peer Mentors	Early Warnings
Two weeks before semester starts, build abilities in Math and/or English Supplemental support throughout the term	Offered through Center for Junior Year and Academic Resource Center	GSU Star Midterm Grades Save My Semester

- Admitted students' options prior to the start of Smart Start:
 - Given access to online mathematics placement instrument (ALEKS) to engage in improving mathematical conceptual knowledge and skills
 - Invited to participate in campus events and activities
- Used instead of remediation courses
- All students invited to participate
- Required for those who did not meet minimum admissions guidelines
- Began two weeks before classes
- Designed to build confidence and address common issues found in mathematics and writing courses
- Sustained through supplemental instruction sections throughout the semester



Meta-major Approach

What have been the results so far?

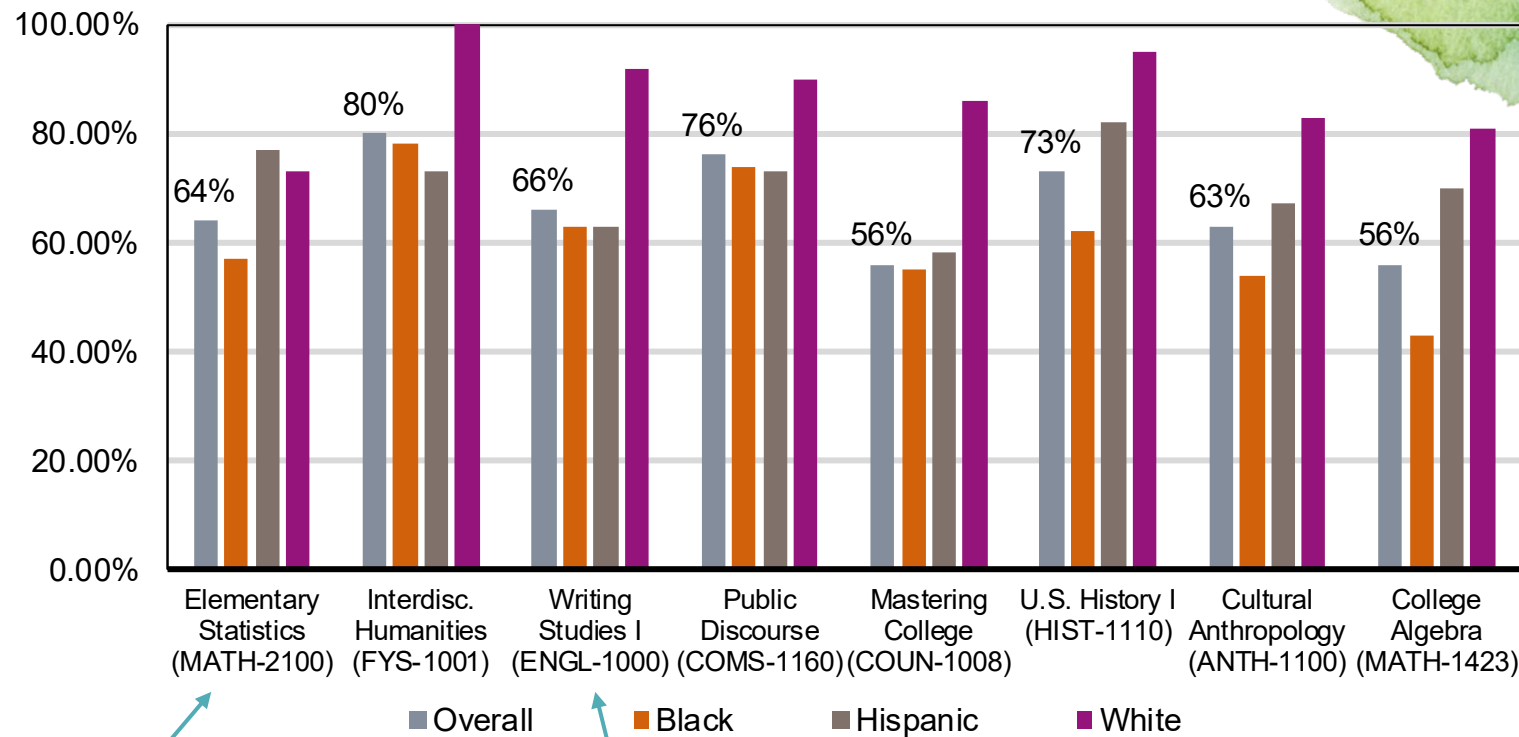
Moved from themed cohorts To Focus Areas

- Civic Engagement
 - Global Citizenship
 - Sustainability
 - Education
 - Business
 - Arts and Entertainment
 - Humanities
 - Social & Behavioral Sciences
 - STEM
 - Discovery
- Students in Smart Start English and those in Smart Start Math – first semester GPAs consistently ranged between 2.5 – 2.7; number of credit hours earned first semester 12
 - Students enrolled in both Smart Start Math and English – first semester GPAs 1.8 – 2.0; number of credit hours earned first semester 10-11

What are our Next Steps?

Equity in Top Enrolling Courses

Top Enrolling First-year Fall 2018 Classes
Ranked by Size (Desc) with the % who earned A/B/C



Spring 2021 – Piloted Mathematics co-requisite model

- Provides support for students in Elementary Statistics.
- This 2-hours per week math laboratory blends an emporium model of individualized, self-guided algebra review (supported by the instructor) with activity-based instruction to help students apply algebraic and statistical skills to solve “real world” problems, and discussions to help students develop self-efficacy, good study habits, and positive habits of the mind. Problem-based activities should emphasize reading and writing of mathematics.
- Placement in course based on ALEKS Placement Assessment score. Students with an ALEKS score of 46 or higher are exempt from co-requisite course.
- Formal review of performance data ongoing.

Fall 2021 – Piloting Writing Studies I & II co-requisite model

- To increase retention, the first-year writing program proposed moving to an accelerated learning program model where students in need of remediation will take a 3 credit hour Writing I or Writing II course paired with an additional 1 credit hour component, taught by the same faculty member, designed to provide intensive support for students and their writing.
- ENGL-1090 Academic Writing Workshop - Focuses on building students' commitment to writing processes associated with drafting, circulating, and revising writing.

Fall 2021 – Piloted Writing Studies I & II co-requisite model

Students are exempt from the co-requisite Writing Workshop course if they meet any of the following conditions:

- GPA of 3.40 on a 4.0 scale or acceptance into GSU's honor's program at the honor's program director's discretion.
- Demonstrated achievement in high school English classes by receiving an A in all four years.
- A grade of A in a college-level writing course or writing-intensive course.
- A portfolio of prior work that demonstrates evidence of proficiency.

Formal review of performance data begins end of FA21.



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**Northern Illinois
University**

Rethinking Developmental Education

October 13, 2021

Development Education at NIU



- Prior to Fall 2021
 - Courses did not earn college credit towards a degree
 - Mathematics
 - MATH 108, MATH 109
 - English
 - ENGL 102
 - Literacy Skills
 - LTRE 100



Guiding Principles



- Use a collaborate and data-informed approach
- Use multiple measures to assess readiness and placement
- Ensure equitable access to college level courses
- Implement comprehensive and integrated support programs for students
- Offer instructional support for faculty
- Assess and improve

Process for reform



Collaborative, inclusive, student-centric

- Process led by Vice Provost for Academic Affairs
- Included Associate Deans, Chairs and Faculty from relevant departments
- Placement and approach vetted widely



Mathematics



- Implemented ALEKS placement exam
 - Provides tutorials for skill review
 - Allows benchmarking for placement
- ILEA grant to support supplemental instruction and tutoring
- Continual refinement of placement cutoffs
- Exploring math pathways based on expected major

Literacy



- Eliminated LTRE 102
- No placement exam or standardized test score
- Created context-specific learning courses
 - Humanities, natural sciences, social sciences, general studies
 - All courses bear college credit
- Open to all students
 - Students with HSGPA < 3.0 strongly urged to enroll

English



- Eliminated ENGL 102
- Requires no placement exam or standardized test score for placement
- Course placement based on high school GPA
 - All courses bear college credit
 - Students can take exam to place in a different course

Concurrent initiatives



- Partnership with ACUE (Association of College and University Educators) for faculty development
- Accreditation quality improvement project
- Expanded use of technology to connect students to support services (advising, tutoring, writing center and more)
- Attention to non-academic needs of students

Thank you!





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Dr. Meera Komarraju

*Provost and Vice Chancellor
for Academic Affairs*

Southern Illinois University Carbondale

Illinois Board of Higher Education 2021 Trustee Leadership Conference

**Supporting Students' Learning Renewal and Academic Success:
Rethinking Developmental Education**

Meera Komarraju

Provost and Vice Chancellor for Academic Affairs

Math Developmental Education

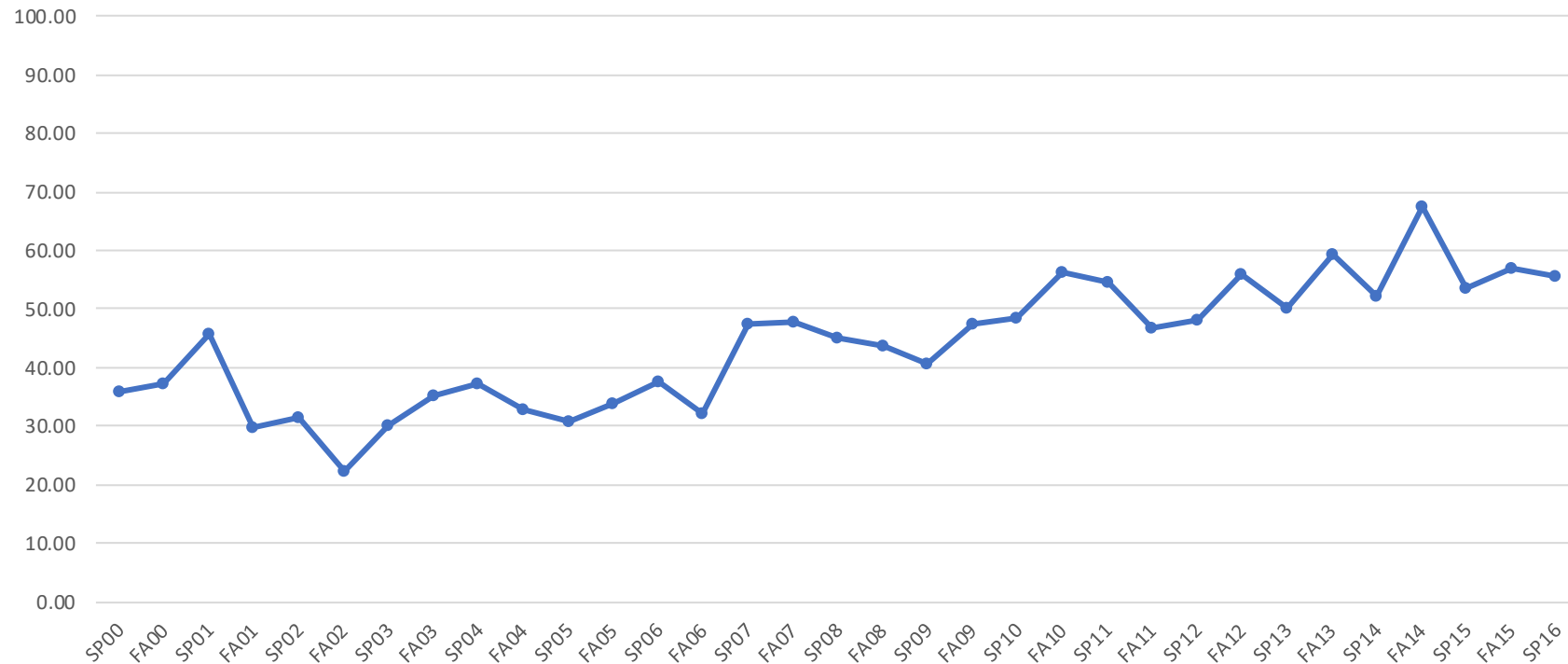
Achieving IBHE's Strategic Plan, *A Thriving Illinois*, and its 3 goals:

- **Equity**: Close the equity gaps for students who have historically been left behind
 - **Sustainability**: Build a stronger financial future for individuals and institutions
 - **Growth**: Increase talent and innovation to drive economic growth
-
- Every college student must take a Math course
 - Typically, at SIU-C, STEM & Business majors take Math 108-109-111-139-140-150 courses
 - Others take Math 101
 - **Equity Implications**: Less prepared students may not successfully pursue STEM and BUSINESS careers and get left behind

Improving Math 108 – College Algebra

Math 108 improved through **continuous improvement**. Initiating rigorous placement (2017) and an Early Warning Intervention Program (EWIP in 2014). Moved away from 3 traditional lectures; added labs; tried various approaches and kept tweaking and improving

MATH 108 SP00-SP16; achieving a “C” or better grade



Prerequisite course

- Intermediate Algebra for College Algebra
- Timing is critical: prior semester is more effective
- An A/B grade greatly increases likelihood of success
- “C” grade almost as unhelpful as D, F, W grades
- Completing material in HS is linked to greater success

Placement Test in College

- Students take a Placement Test and placed in College Algebra [Math 108] or Calculus 1 [Math 150]
- Placement Test, three levels and three trials each; completed online, unproctored. An additional in-class placement test is given the first day of class
- What happens to students who are not placed in College Algebra?
- Placed in College Algebra Enhanced [Math106]
- If students don't place into Math 106 (they can complete a free online prep program (13 shorter tests; 10 hours) and then placed in Math 106

Co-Requisite Modeling – Math 106

Fall 2015

Math 108

(College Algebra)

- Higher placement score
- Traditional lecture-based
- 2 lecture + 2 labs
- Same common final

Math 106 (counts as Math 108)

(College Algebra Enhanced)

- Lower placement score
- More worksheets
- 3 lecture + 2 labs
- [all lectures 30 mins+ 20 mins activity]
- Same common final

Co-Remediation - Math 106 - is successful!

- Fall 2017:
- Math 108 Math 106
- College Algebra College Algebra Enhanced
- 61.8% (ABC grades) 54.5% (ABC grades)
- Math 106 students performed almost as well as Math 108 students
- (Even though they started with lower placement scores)

What is the “magic” in Co-Remediation?

1. Rigorous implementation of Placement Test [online and in-class]
2. Early Warning Intervention Program feedback (week 4 and 8) (Fall 2014); Orange & yellow categories do well and red tend to struggle
3. Pedagogy:
 1. Meeting an extra 50-minutes
 2. Completing worksheets in-class in addition to homework
 3. Getting the “correct” worksheet answer immediately along with the explanation; learning is reinforced
 4. Asking questions one-on-one while completing the worksheets
 5. Working in small groups with “similar others” on the worksheets and feeling comfortable to think through, ask questions, and discuss potential solutions to math problems
 6. Cannot “hide”

Next Steps? Extending College Algebra Success to Calculus

Inspired by the success of Math 106, initiated a co-remediation for calculus I (Math 151) in spring 2017. This also has been successful so far!

Math 150 (current)

- Higher placement score
- traditional lecture-based
- 4 lectures
- Same common final

Math 151 (enhanced)

- Lower placement score
- More worksheets
- 4 lectures + 1 lab
- Same common final

Thanks to
Wesley Calvert, Thara Lowndes
Patrick Soulz, Mary Wright,
Greg Budzban, Bhaskar Bhattacharya
School of Mathematical & Statistical Sciences

Q&A

