

Reforming Remedial Education

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50% of all undergraduates & 70% of community college students take at least one remedial course

The remediation placement exam has become a key gate-keeper to college-level study

High degrees of statewide and institutional variation in what is considered remedial

46% of students complete their developmental sequence in reading; 33% in math

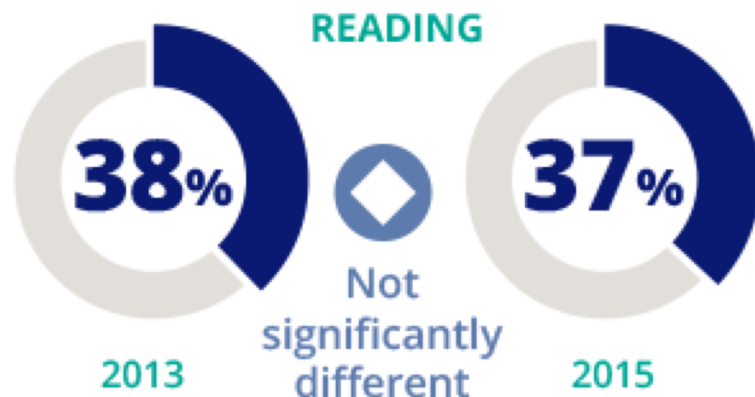
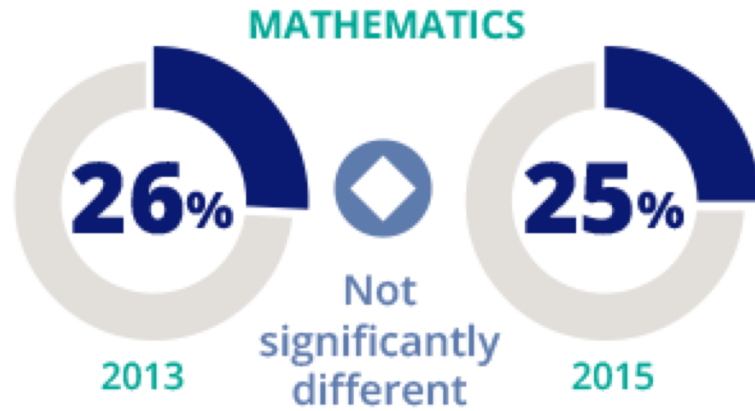


Deficiency in college readiness is a national problem with broad stakeholders

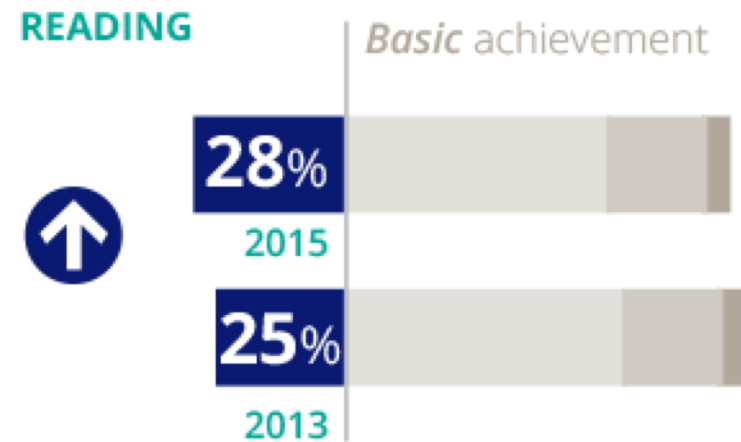
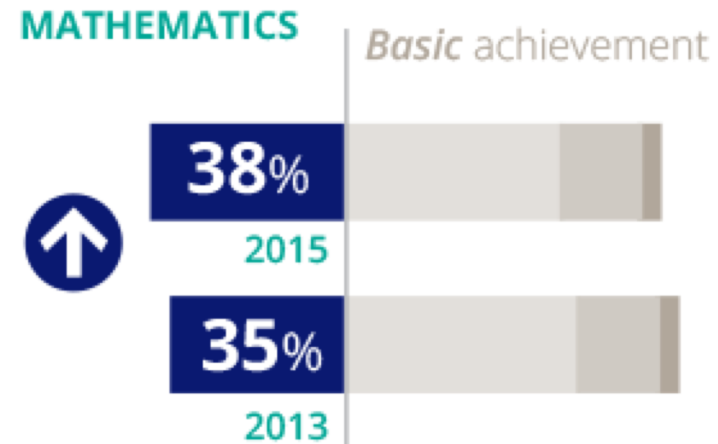
Primary and secondary education systems are largely operating in isolation from postsecondary education

2015 NAEP Math and Reading- 12th Graders

Percentage at or above *Proficient* achievement level



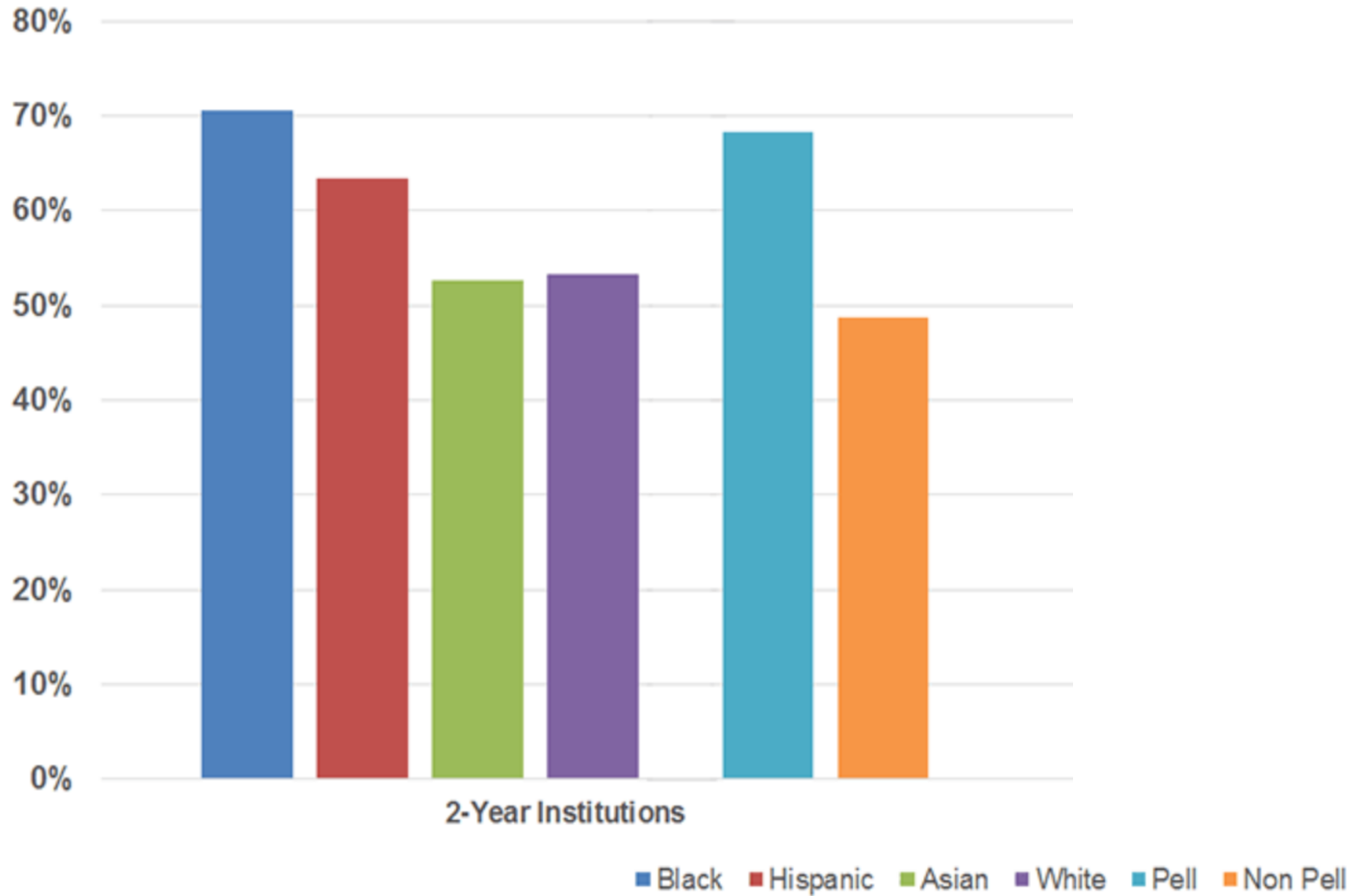
Percentage below *Basic* achievement level



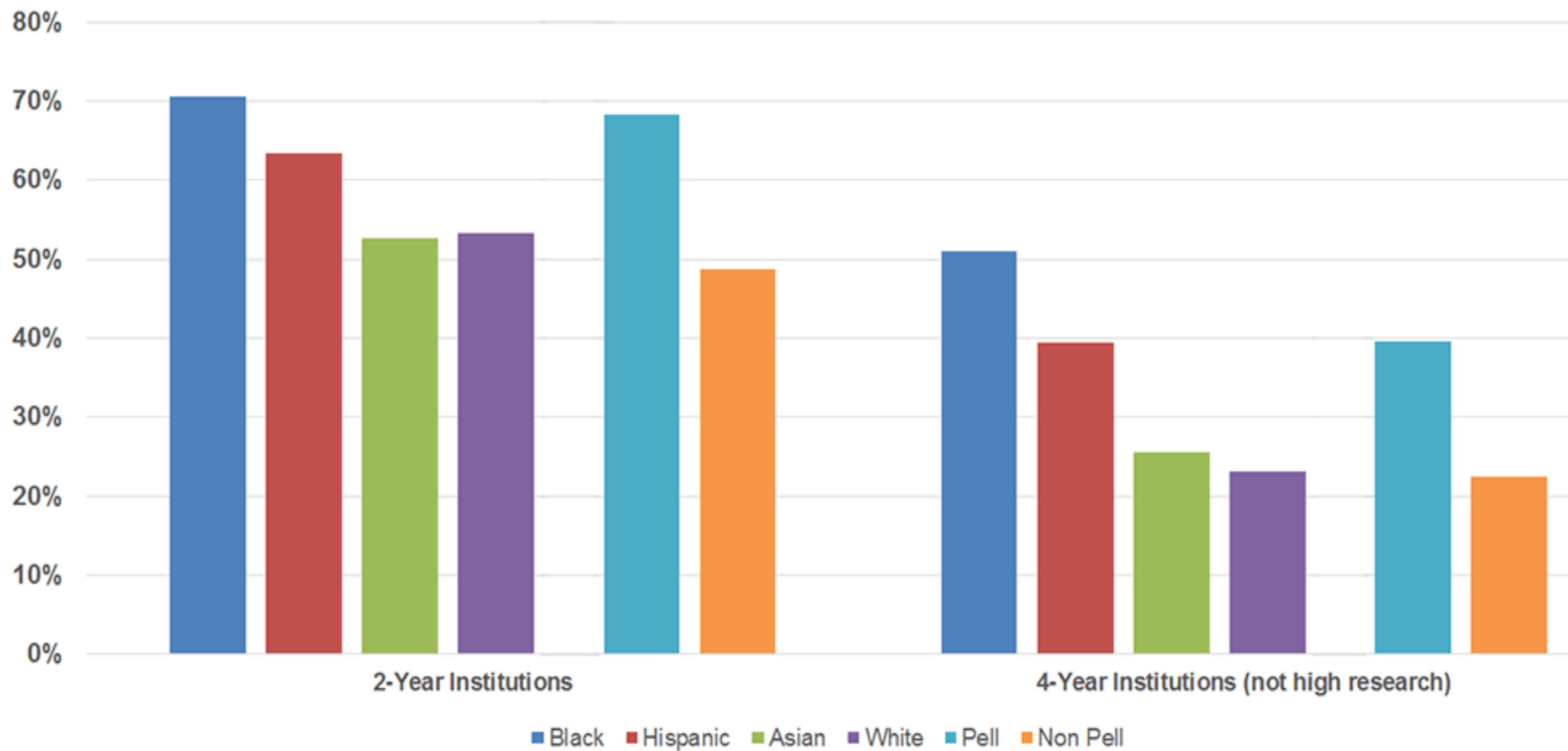
Percentage of students in remedial classes by family income



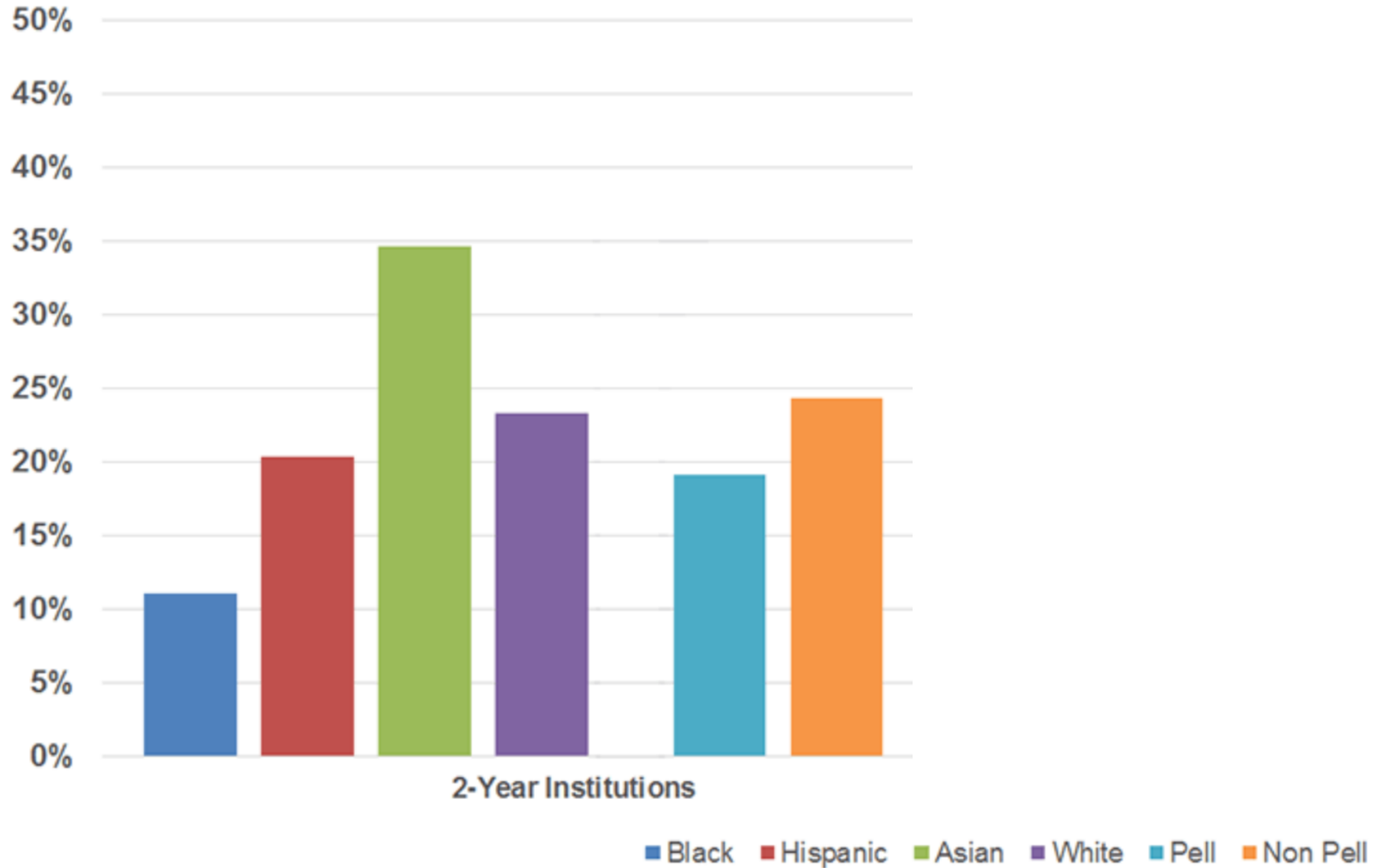
Remedial education enrollment by race, income



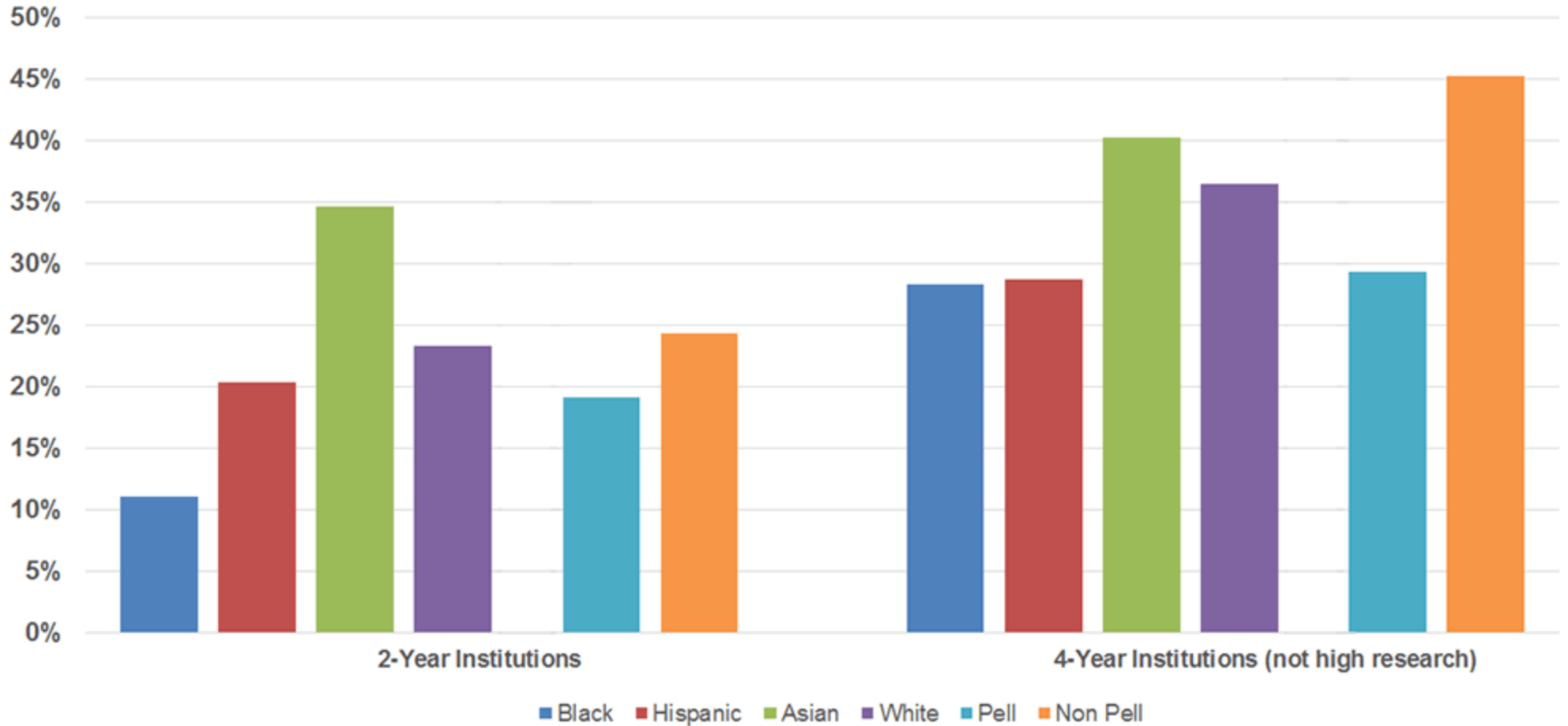
Remedial education enrollment by race, income



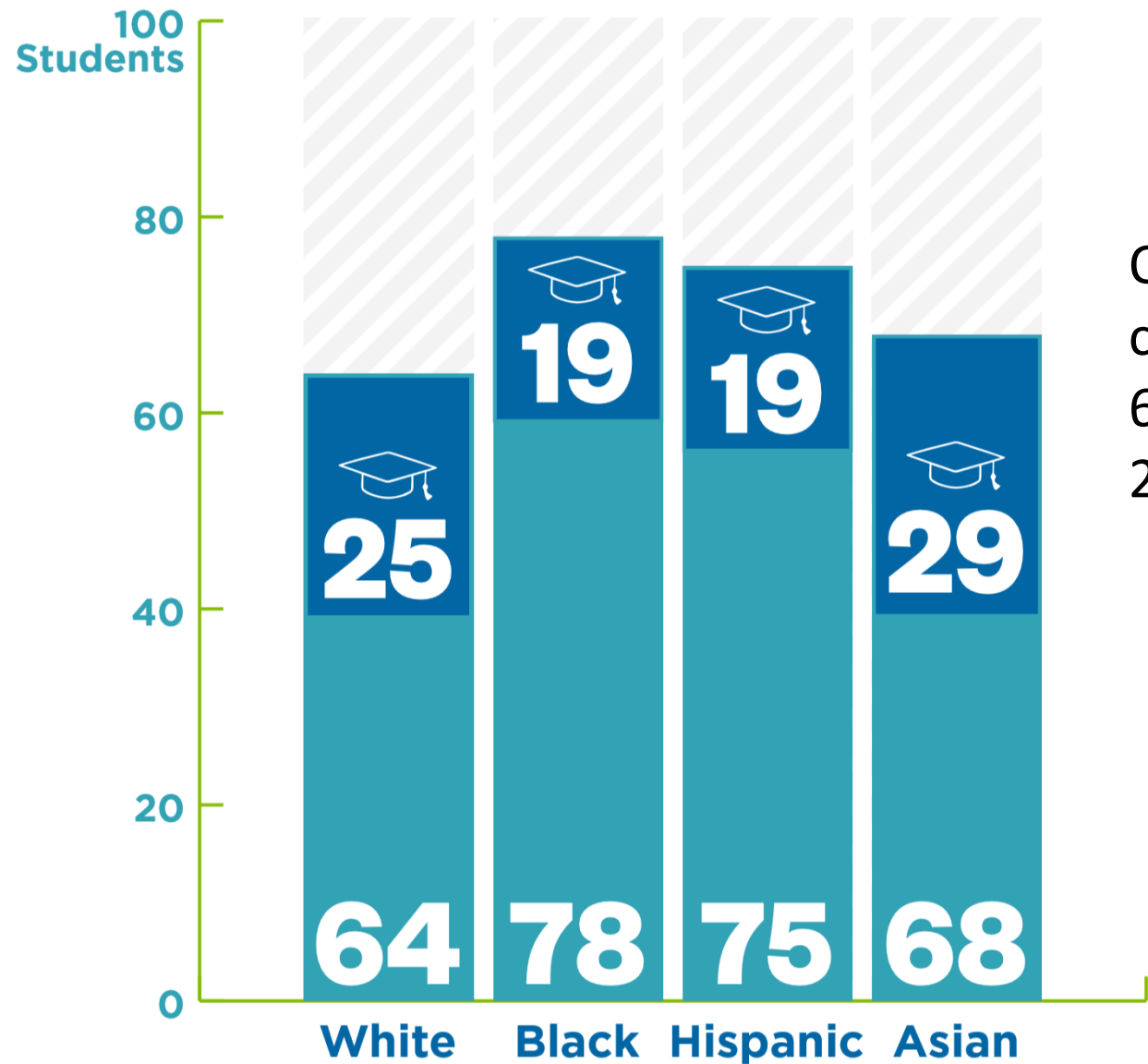
Percentage of students who start in remedial classes and go on to pass the associated college-level courses



Percentage of students who start in remedial classes and go on to pass the associated college-level courses



First-Time Students in Developmental Education Who Earn a Credential in Six Years



Of 100 white students who enroll in community college,
64 take developmental courses
25 of the dev ed students graduate

Source: U.S. Department of Education, 2016;
BPS 2009 via QuickStats.

Education Commission of the States Survey, 2018

<https://www.ecs.org/developmental-education-policies-state-profiles/>

- 31 states: System-wide assessment and placement policy
- 21 states: Uniform cut score policy
- 16 states or systems: Allow for the use of multiple measures in placement decisions
- 20 states: Statutory reporting requirements
- 20 states or systems: Authorized the use of “innovative developmental education instructional methods and interventions”

Recent Trends/ Innovations

- Intervene before students get to college
- Focus on the assessment/ placement process
- Accelerate students' progress through courses
- Develop contextualized instructional models
- Offer supplemental supports

Prerequisite sequence



Prevalence of developmental math
instructional methods in public two-
year colleges
-CCRC, 2018

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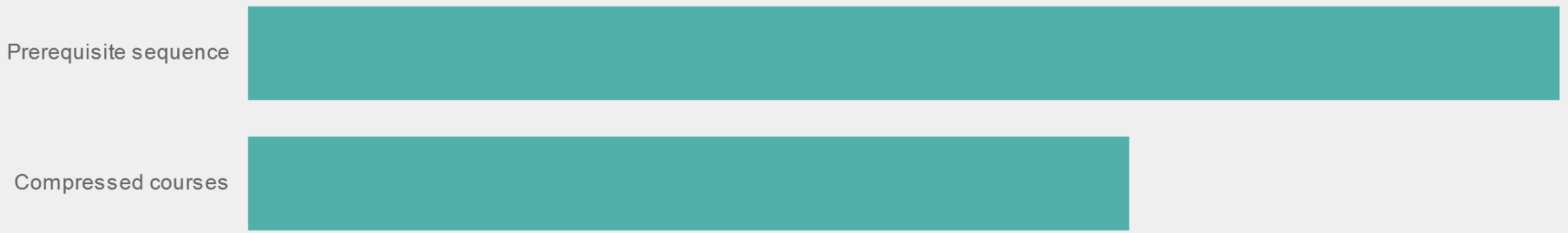
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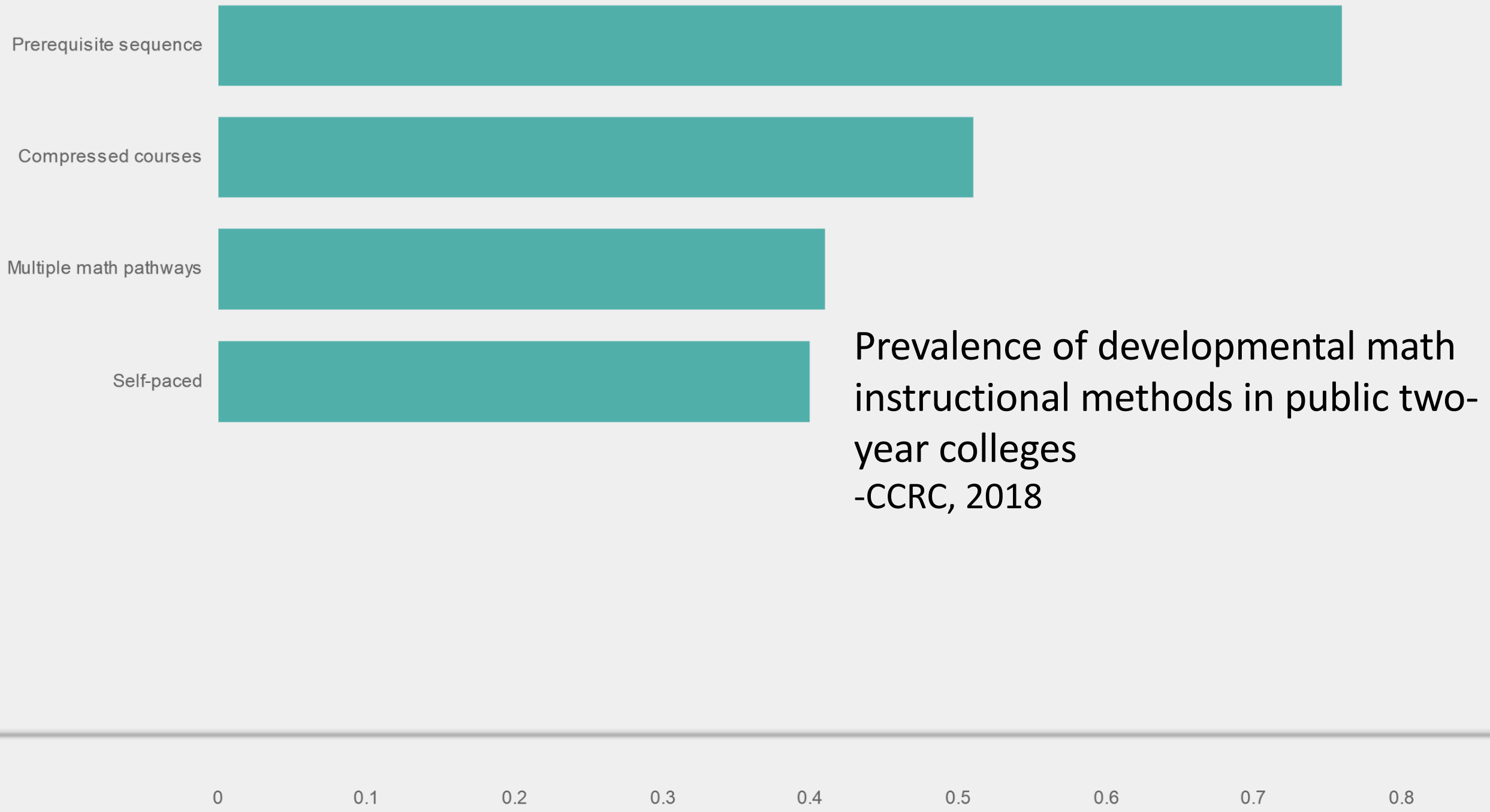
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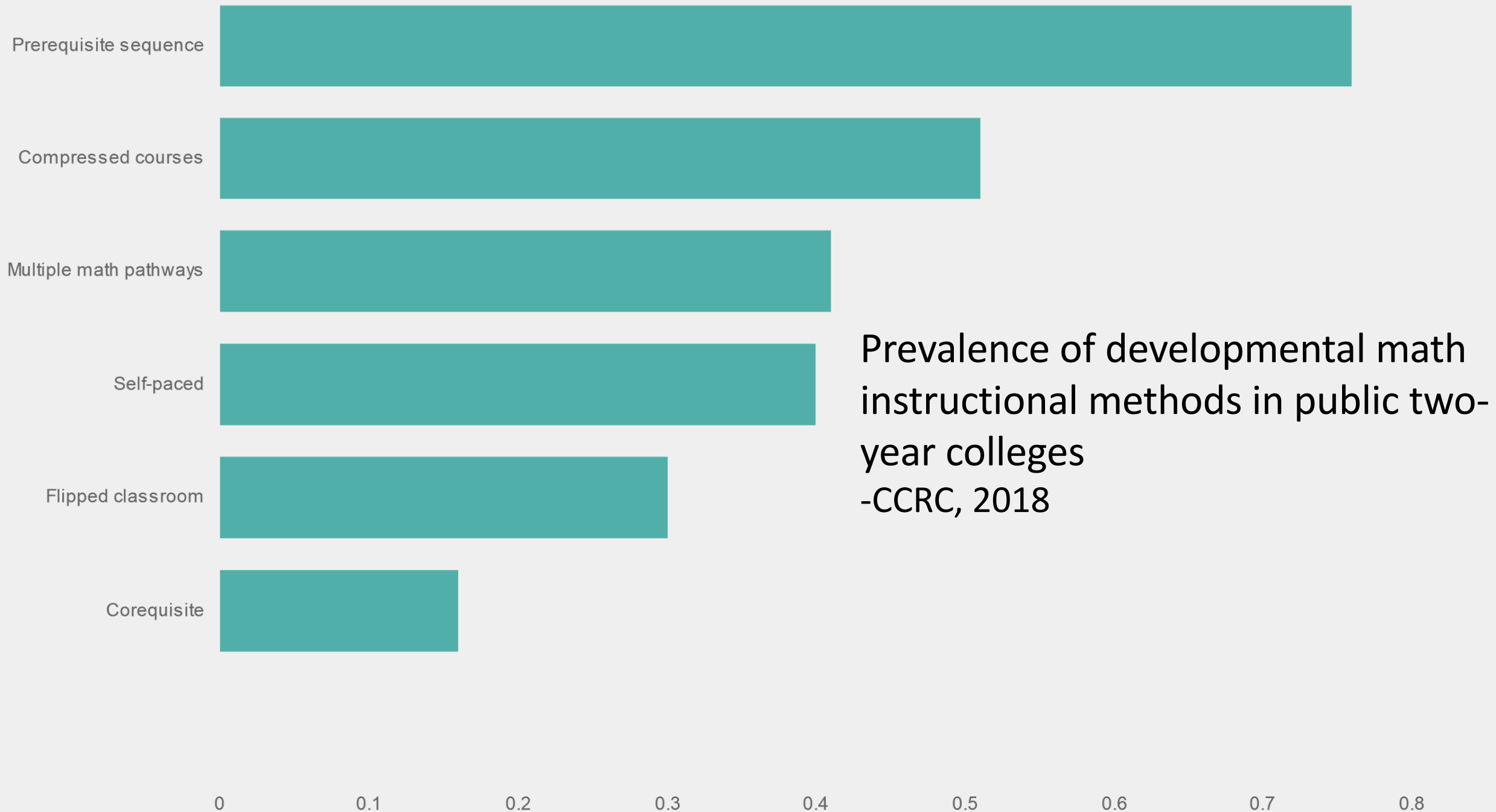
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Prevalence of developmental math instructional methods in public two-year colleges
-CCRC, 2018

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Determining the Effects of Remediation

- Students who take a remedial course in the first year after high school are 74% more likely to drop out of college than non-remedial students. Also take 11 months longer to complete a degree (Education Reform Now, 2016. Data from NPSAS: 2011-12)

Problems:

- Remedial students differ systematically from other students in ways that might affect outcomes

Most Rigorous Studies → Identify ways to compare students with similar observable and unobservable characteristics

Recommendations- WWC

1. Use multiple measures to place students, including HS GPA
2. Require or incentivize enhanced advising
3. Offer performance-based monetary incentives to students, augmented by other specialized support (i.e., supplemental instruction)
4. Shorten the time students spend in developmental education
5. Teach students how to be self-regulated learners
6. Implement comprehensive, integrated, long-lasting support programs (e.g. CUNY ASAP)

Important Considerations

- Different student samples (Traditional students, Adult Basic Ed, ESL, lowest scoring students, etc.) and institutions (only CCs vs. 2yrs and 4yrs)
- How the courses are organized (large lecture vs. small sections) and who teaches them (faculty, adjuncts)
- Institutional Context
- Different locations of the placement cutoff (Where should it be? What is college ready?)

Tennessee SAILS Program

(Seamless Alignment and Integrated Learning Support)



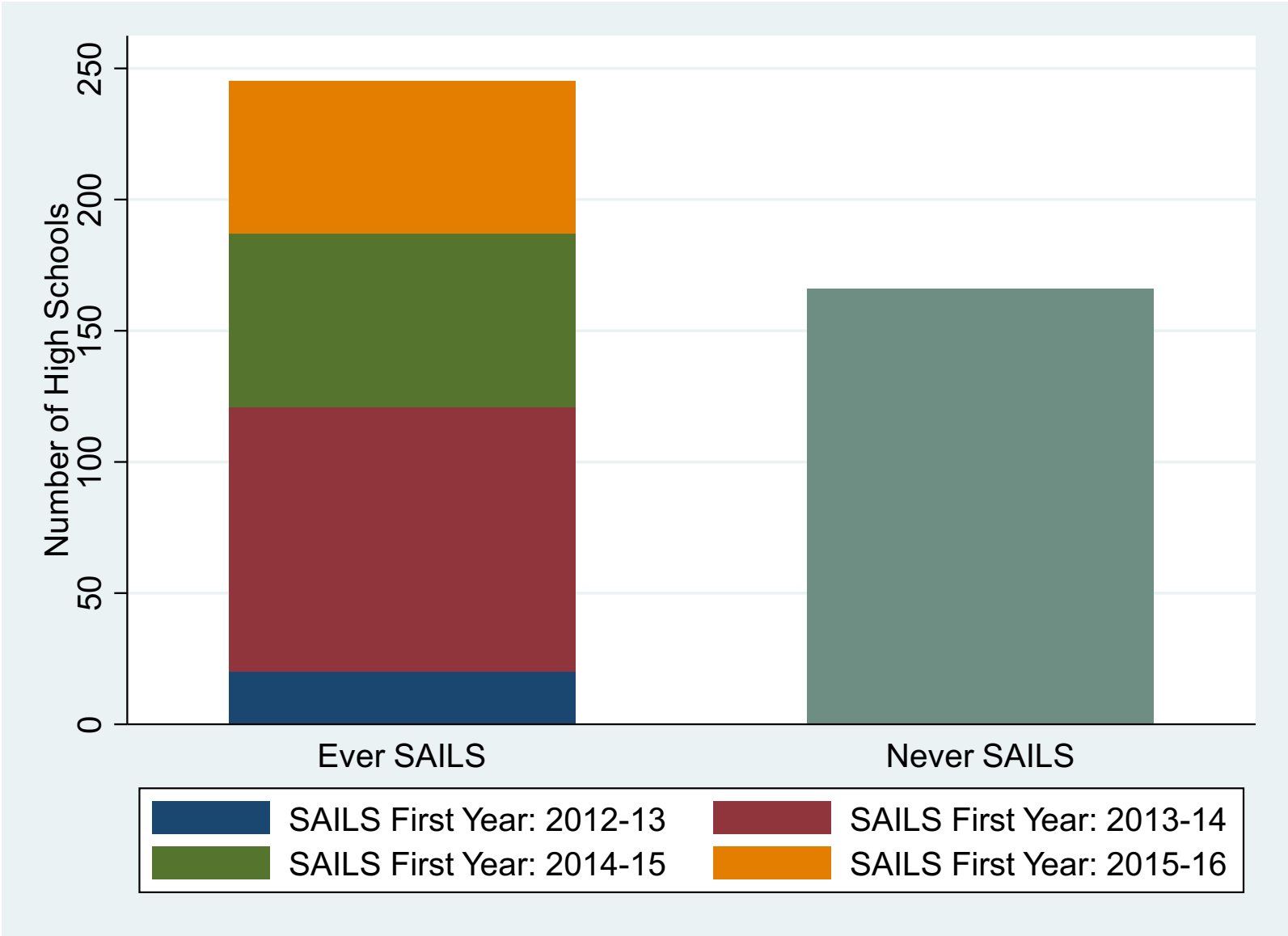
Tennessee SAILS program

- Modular, self-paced online learning
 - Problem sets, instructional videos and other multimedia tools to be used at school and home
 - Teachers available in class to provide individual assistance and monitor student progress
 - 5 modules
- Team of field coordinators train high school instructors, ensure consistent implementation, and monitor student progress.

Research partners

- Vanderbilt/Harvard Center for Education Policy Research
- Tennessee Department of Education
- Tennessee Higher Education Commission
- Tennessee Board of Regents
- SAILS program
- ACT
- The Bill & Melinda Gates Foundation

SAILS program Rollout



SAILS effects under pre-requisite policy (2013–14 seniors)

- No effects on HS completion or college enrollment
- For SAILS-eligible students who enrolled in TN CC:

Outcome	Significant Effects	Comparison Mean
Took remedial math by year 1	-28 pp	66%
Took college-level math by year 1	+14 pp	45%
Passed college-level math by year 1	+6 pp	30%
College credits earned by year 2	+2.2 credits	25.0

Not significant: return for year 2, earned credential by year 2

SAILS effects under pre-requisite policy (2013–14 seniors)

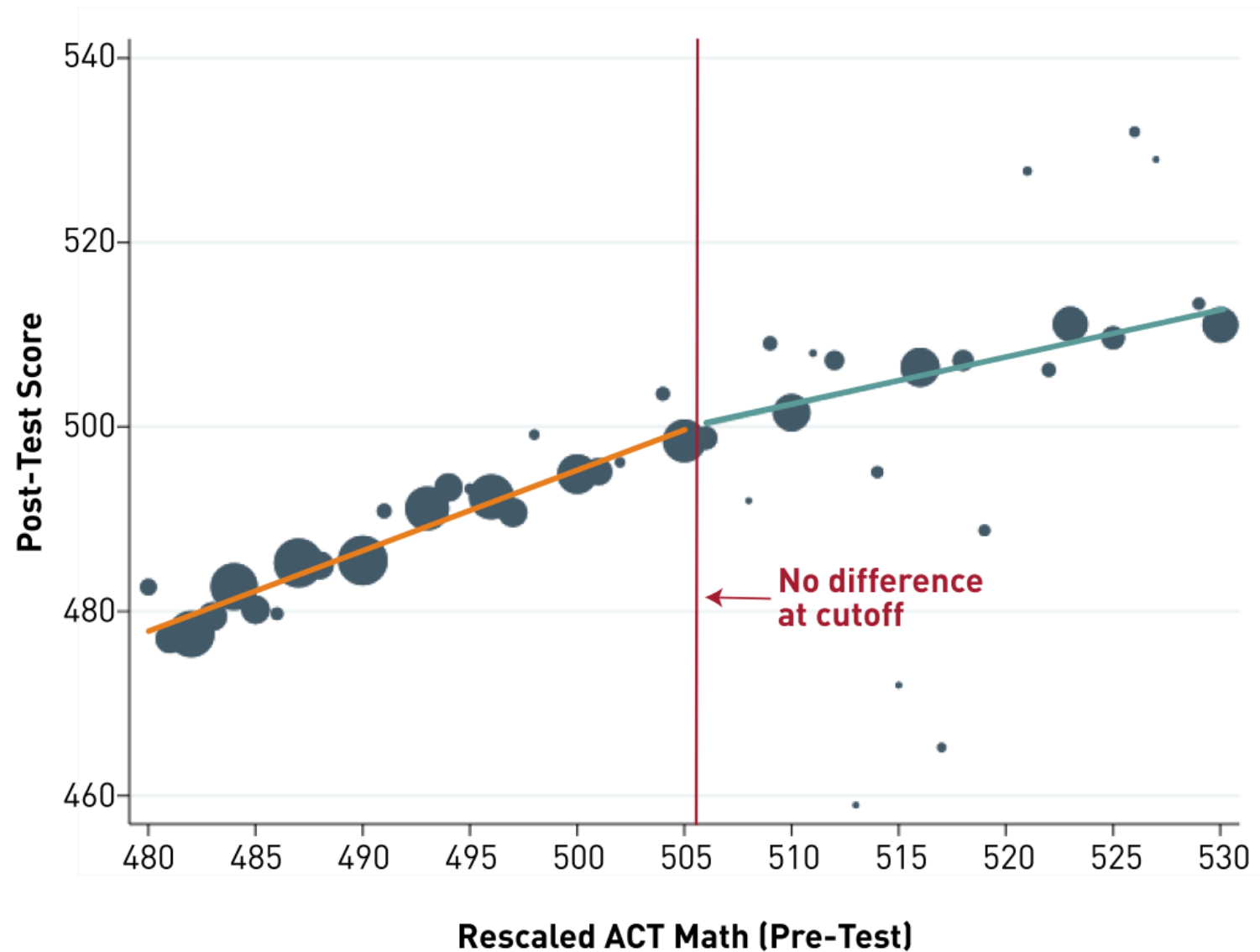
- Important subgroup differences
 - **ACT score:** strongest improvements for lowest-scoring students (ACT math ≤ 16)
 - **Gender:** Improvements driven largely by women
 - For example: Effect was +3.5 credits for women, +0.7 credits for men by year 2
 - **Race:** Improvements in credits identified for white students but not black students; otherwise significant effects in same direction for black and white students

ACT post-test and student survey

- Administered in 2015–16 to approximately 16,000 students at 119 schools
 - Responses from 69% of students (~11,000)
- Post-test: 50-minute, 35-question abbreviated version of ACT math test
 - Received detailed scores from 333 to 680 (rather than 1–36)
- Student survey: 15-question survey after post-test

SAILS effects on student achievement

Figure 5. Score on Posttest by Pretest Score



Summary

- SAILS shifted the locus of remediation back to high school for roughly a quarter of “remedial” students
- Students report positive experiences in the course
- However, limited evidence of student learning
- Of the additional students who were able to take college-level math after SAILS, about half passed.

Caveats: Recent HS grads, CC students only, limited timeframe, math achievement only estimated around the cutoff

“Leaders in Tennessee are to be applauded not only for adopting a new approach to remediation, but also for taking the risk to assess its impact. American higher education has avoided taking a hard look at the benefits of remediation for far too long. If we cannot find a model that actually helps students, we should not just reduce the number of students referred to remediation or shift to co-requisite courses — we should eliminate remediation entirely.”

—Chronicle of Higher Education, Dec. 16, 2018

Additional Resources

- Community College Research Center (CCRC)
 - Center for the Analysis of Postsecondary Readiness (CAPR)
- Education Commission of the States (ECS)
- Complete College America
- American Association of Community Colleges (AACCC)

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