Reimagining Developmental Education

CAPR \ 2019

Multiple Measures Assessment and Placement: What We Know

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#CAPR2019

Agenda

- Why use multiple measures for placement
- Selection of a multiple measures system
- What others are doing

Definition of Multiple Measures Assessment

....a system that combines two or more measures to place students into appropriate courses and/or supports

(Barnett and Reddy, 2017)

Percent of Colleges Using Measures Other than Standardized Tests for Assessment
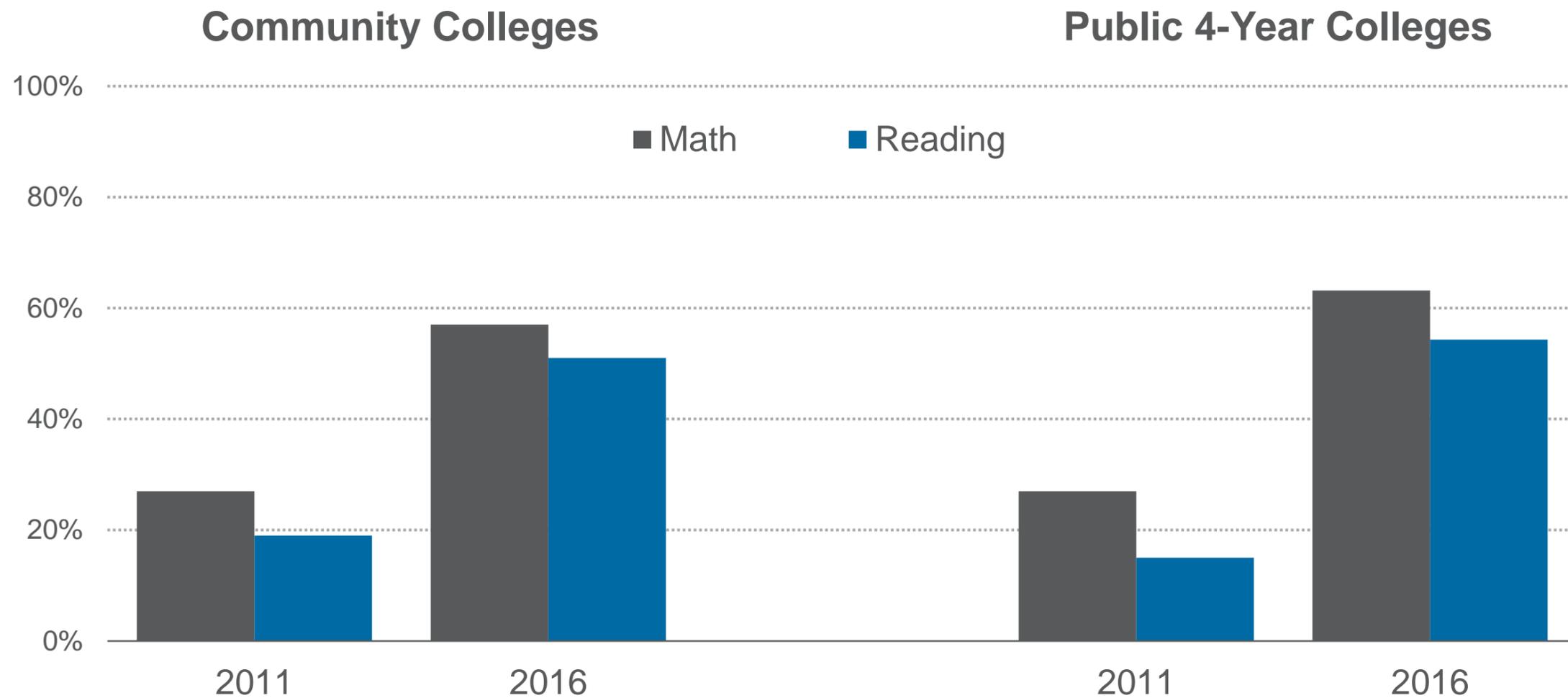
Community Colleges
Public 4-Year Colleges

■ Math ■ Reading

100%
80%
60%
40%
20%
0%

2011 2016 2011 2016

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Processes Used to Determine College Readiness in Community Colleges

Chart legend: ■ Math ■ Reading and Writing

Category	Reading and Writing
Standardized Tests	98.4%
High School Performance	36.7%
Planned Course of Study	21.6%
Other Indicators of Motivation or Commitment	15.5%
College Readiness Not Assessed	0.0% / 0.0%

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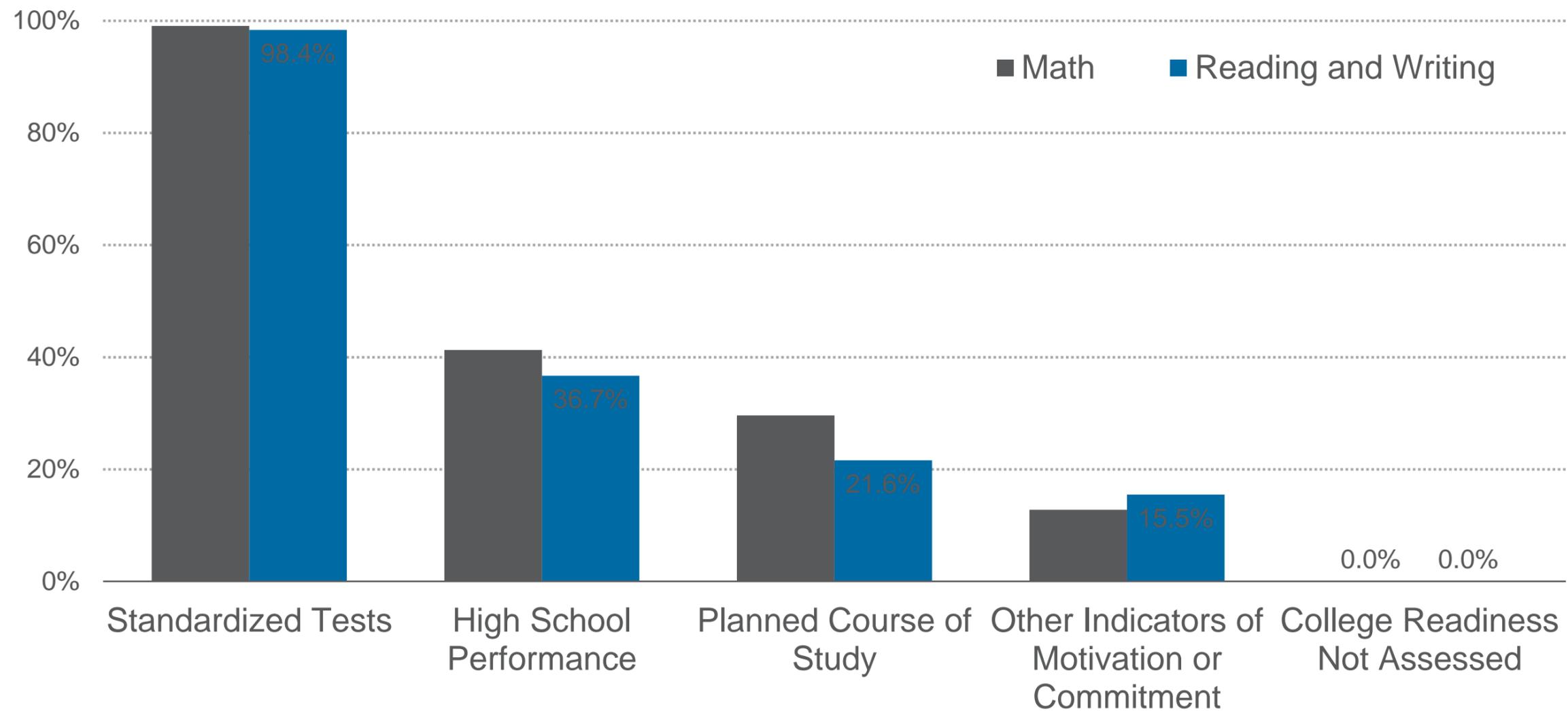
# Why Use Multiple Measures Assessment

Students needing 1+ developmental education course (NCES, 2013)
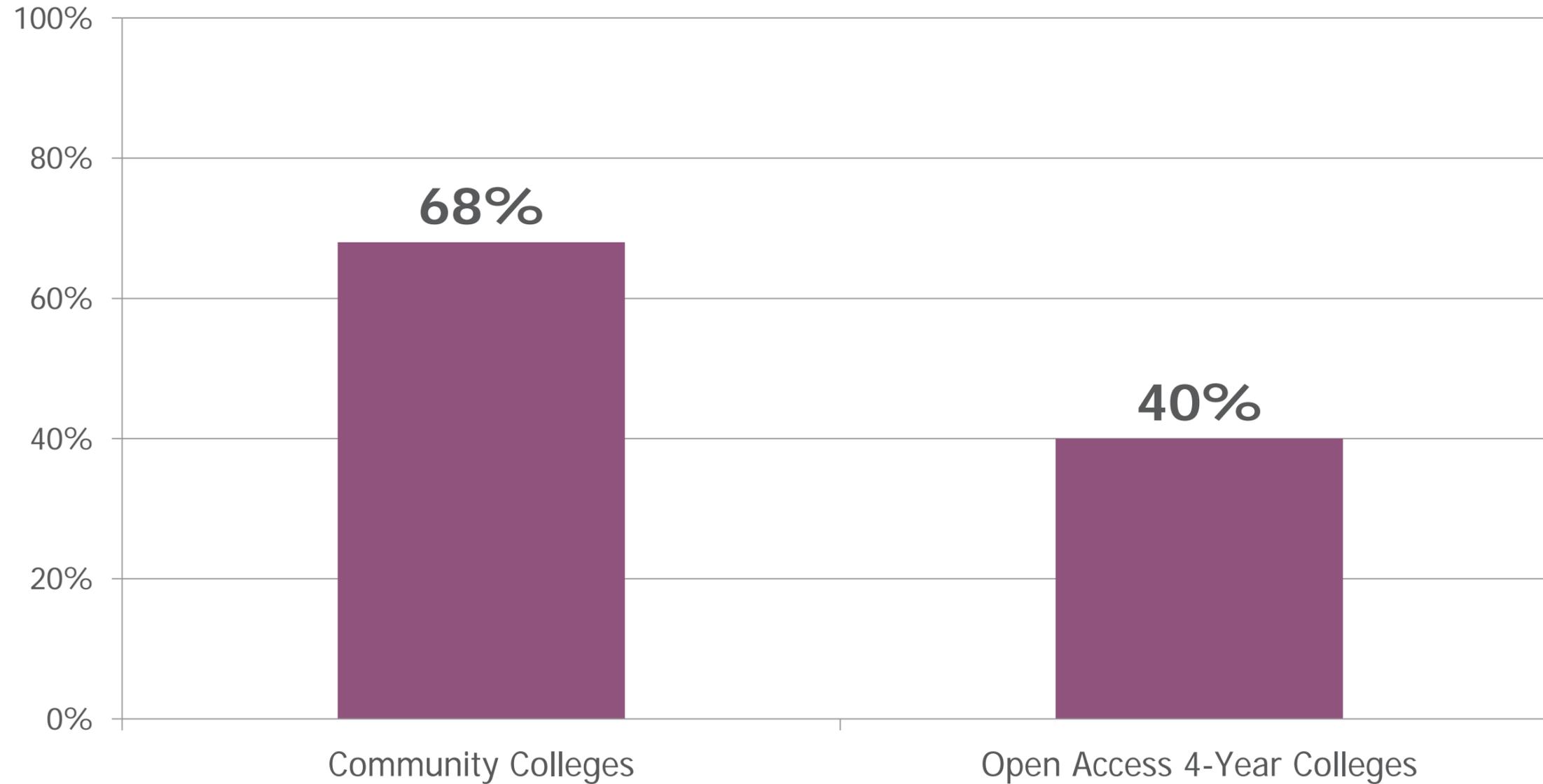
Community college 8-year graduation rates
(Attewell, Lavin, Domina, and Levey, 2006)

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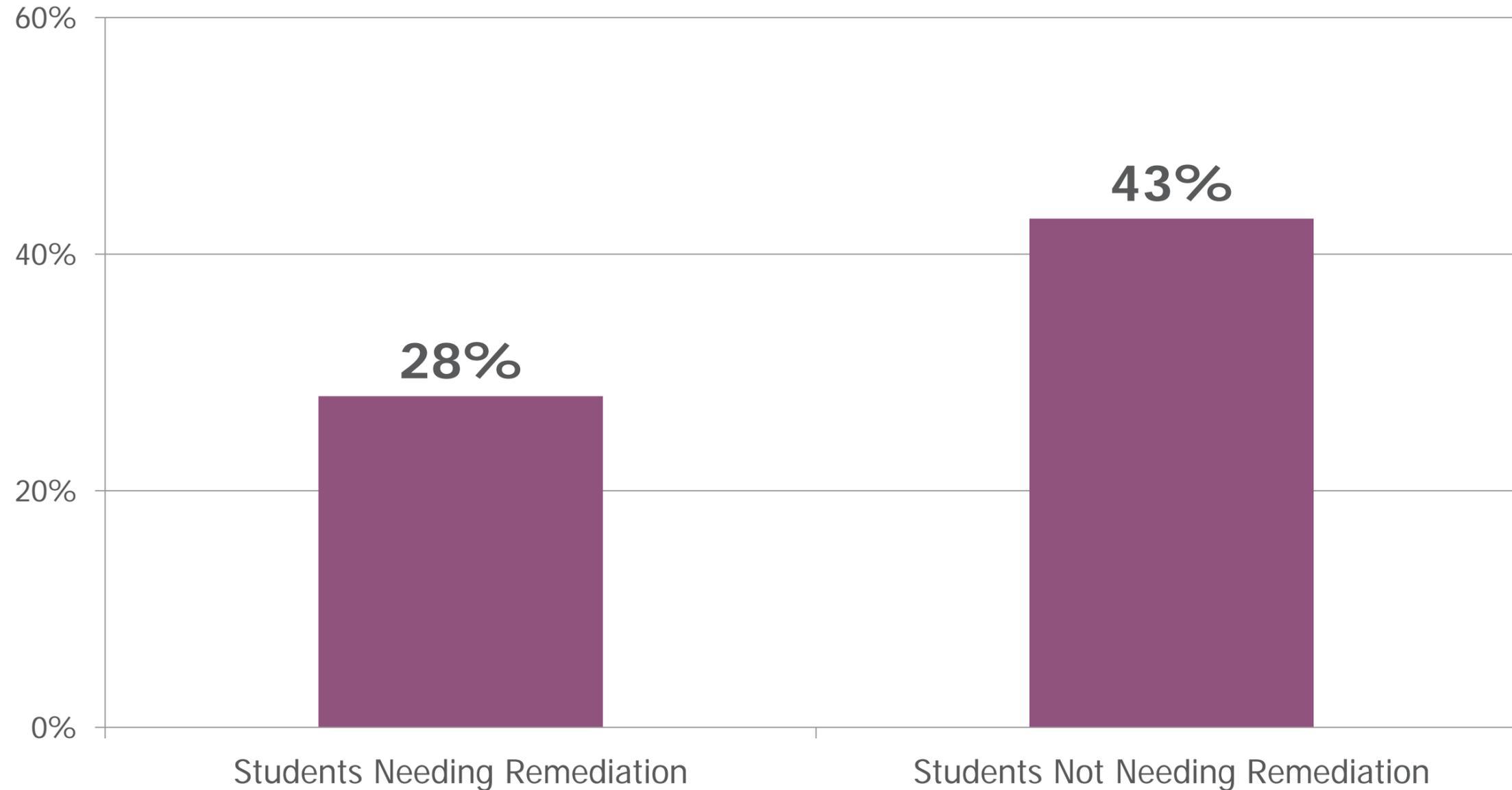
Students would be better off going through developmental education.

Developmental education student outcomes
(Results from 8 studies, CCRC analysis 2015)
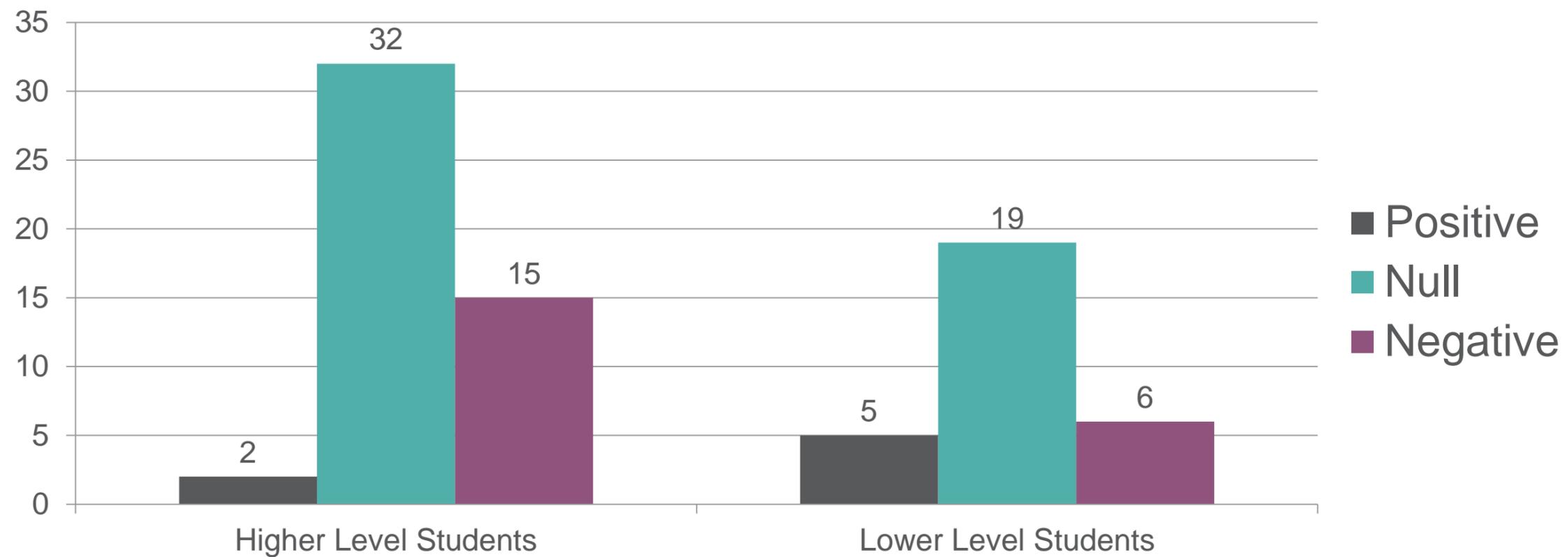
Under-placement and Over-placement

|		Placement According to Exam	
		Developmental	**College Level**
Student Ability	**Developmental**	✔	***Over-placed*** *(English – 5%)* *(Math – 6%)*
	College Level	***Under-placed*** *(English – 29%)* *(Math – 18%)*	✔

Multiple Measures Assessment

Multiple Measures Assessment and Placement

- Existing placement tests are not good predictors of success in college courses.

- More information improves most predictions, ESPECIALLY THE HIGH SCHOOL GPA.

- Different measures better best place specific student groups.

One College: English

GPA only	Test only	GPA and test	Full model
3.8%	1.0%	4.8%	7.5%

One College: Math

GPA only	Test only	GPA and test	Full model
9.9%	2.7%	12.0%	14.5%
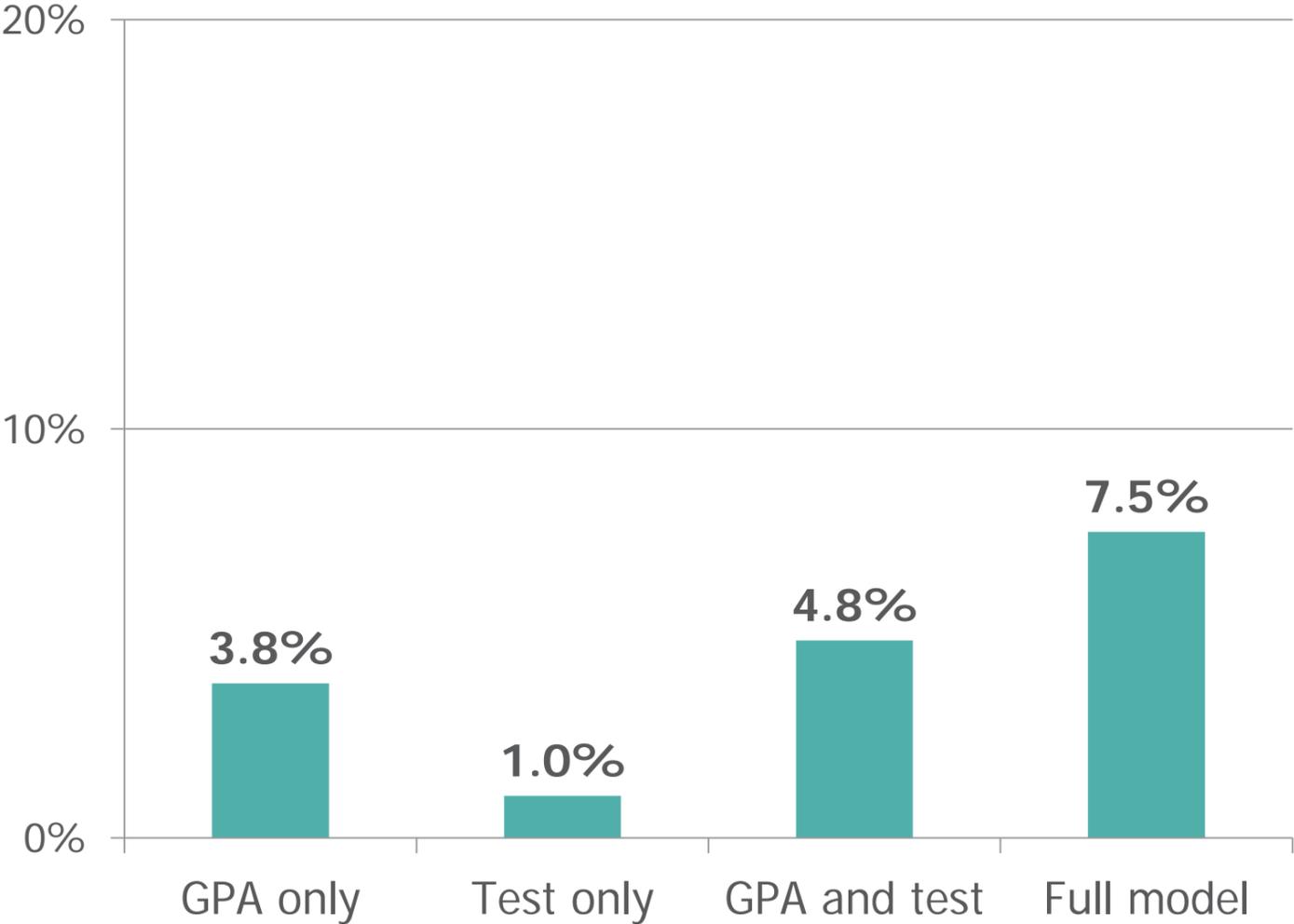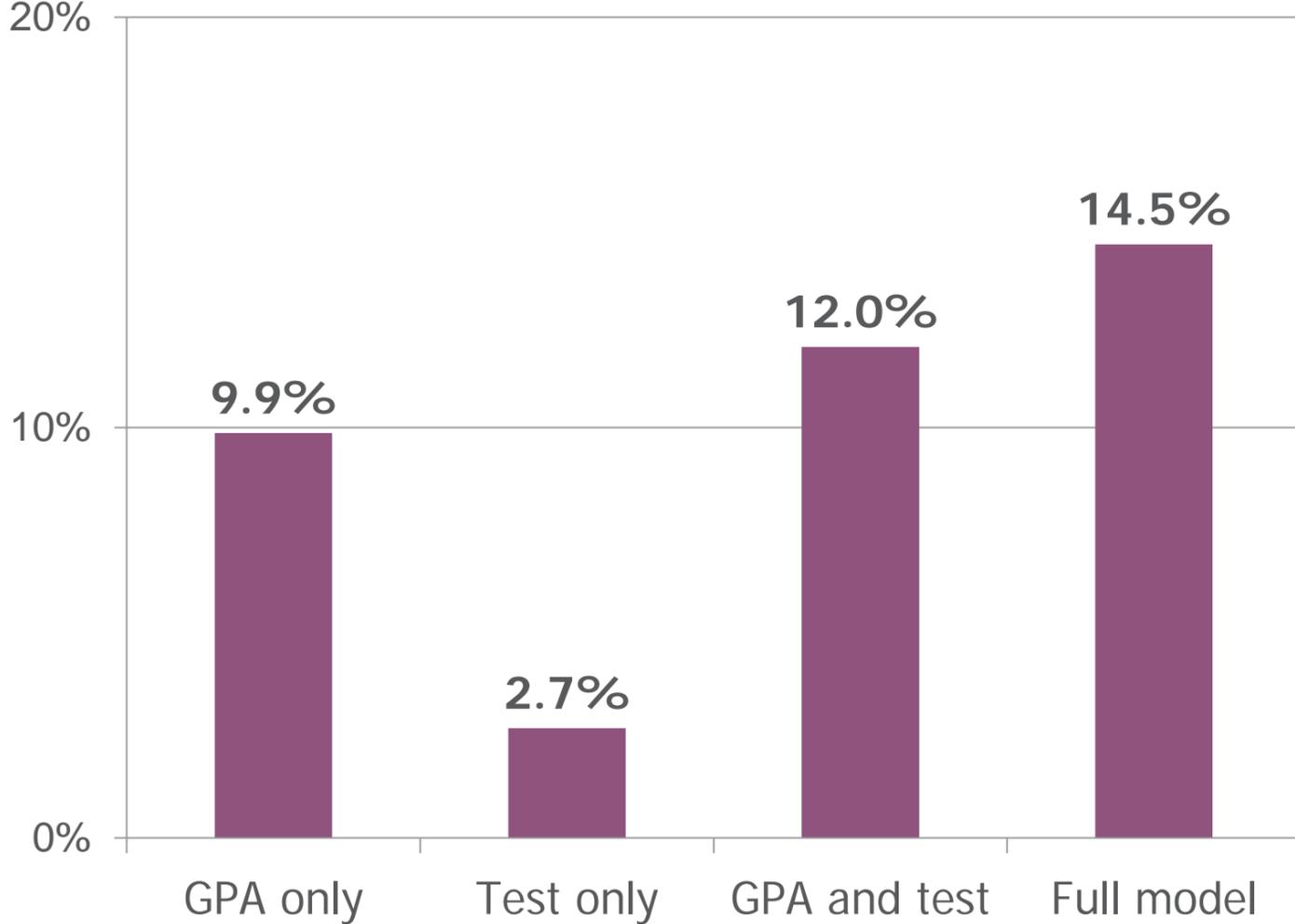
Multiple Measures Options

MEASURES	SYSTEMS OR APPROACHES	PLACEMENTS
Administered by college: 1. Traditional or alternative placement tests 2. Non-cognitive assessments 3. *Computer skills or career inventory* 4. *Writing assessments* 5. *Questionnaire items* Obtained from elsewhere: 1. High school GPA 2. Other HS transcript information 3. Standardized test results (e.g., ACT, SAT, AP)	• Waiver system • Decision rules or bands • Placement formula (algorithm) • Directed self-placement	• Placement into traditional courses • Placement into alternative coursework • Placement into support services

Algorithm Example

College Level Placement

Yes

High

Student Applies

Exemptions?

No

HS Record, Accuplacer, Non-Cog data fed into Algorithm

Resulting Probability of Success

Low

Remedial Level Placement
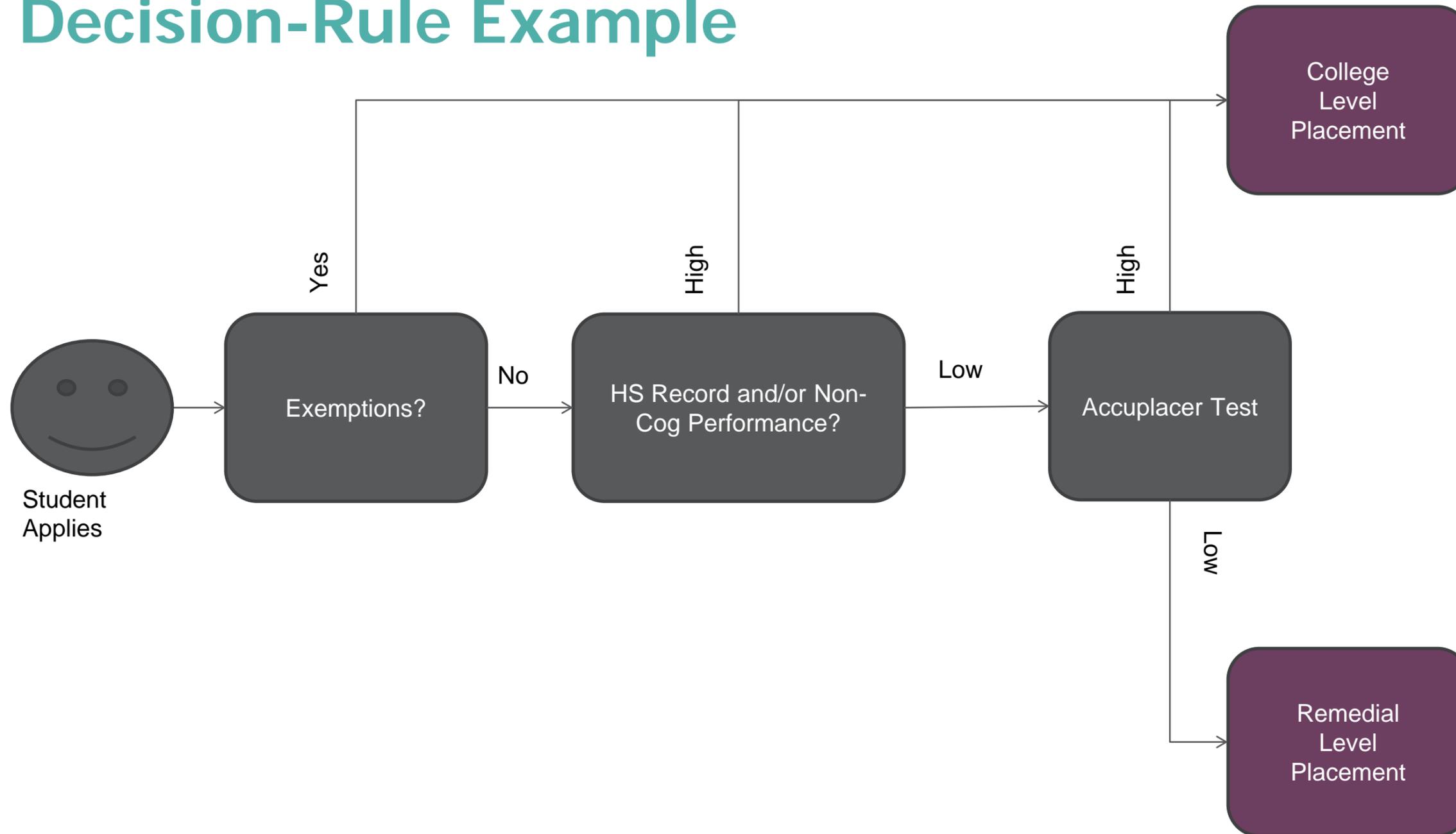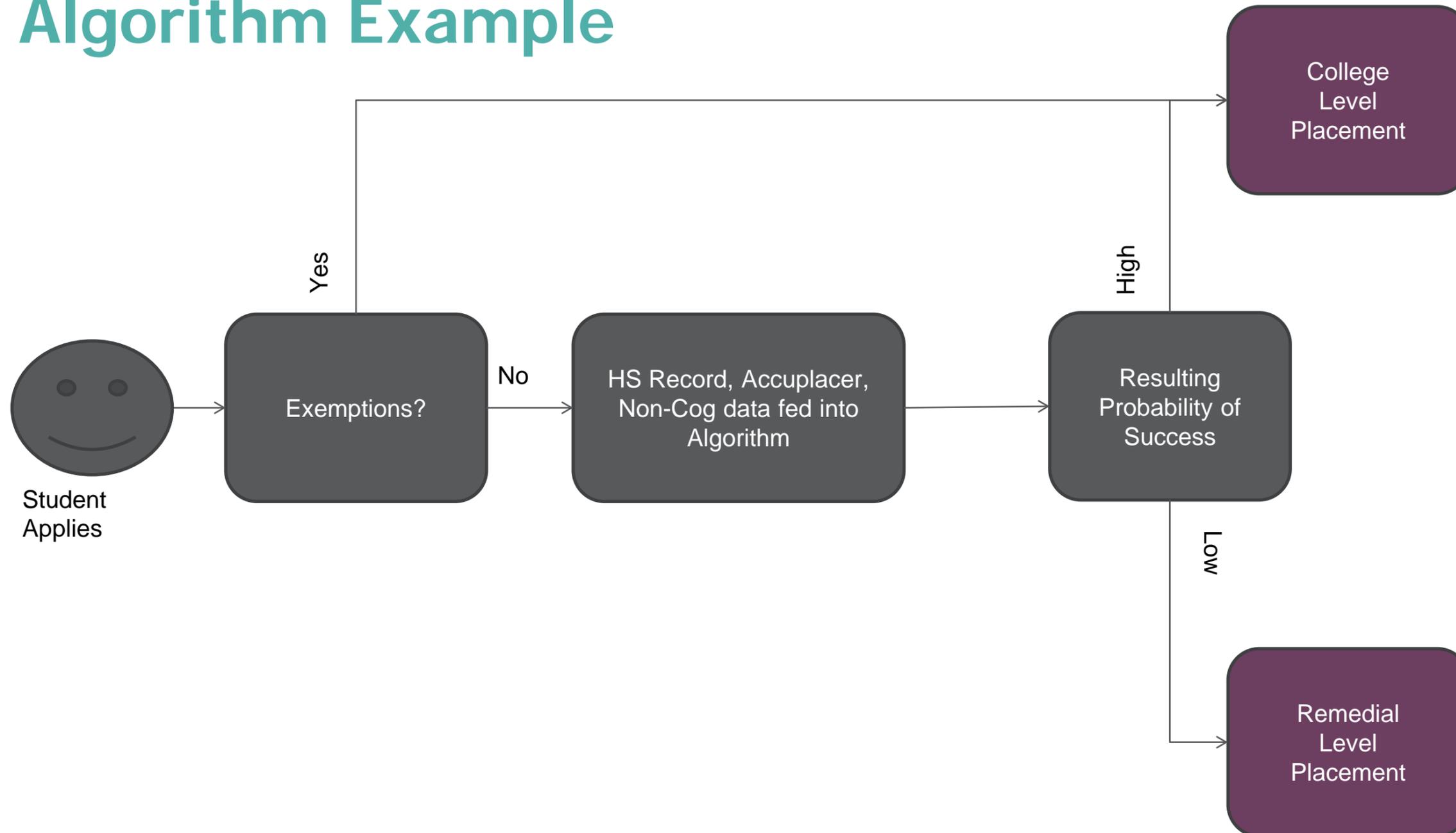
Concerns about the HS GPA
(with thanks to John Hetts and Brad Bostian)

- How are we going to get the HS GPA?
- *Our* test is different/better/more awesome.
- High school GPA is only predictive for recent graduates.
- Different high schools grade differently.

Sources of HS transcript data

- The students bring a transcript.
- The high school sends.
- Obtained from state data files.
- Self report.

Note: Consider using the 11th grade GPA.

Self-report research

- UC admissions uses self-report but verifies after admission. In 2008, at 9 campuses, 60,000 students. No campus had >5 discrepancies b/w reported grades and student transcripts (Hetts, 2016)

- College Board: Shawn & Mattern, 2009: "Students are quite accurate in reporting their HSGPA", r = .73.

- ACT research often uses self-reported GPA and generally find it to highly correlate with students actual GPA: ACT, 2013: r = .84.

None of the tests are that good for placement

North Carolina English

North Carolina Math

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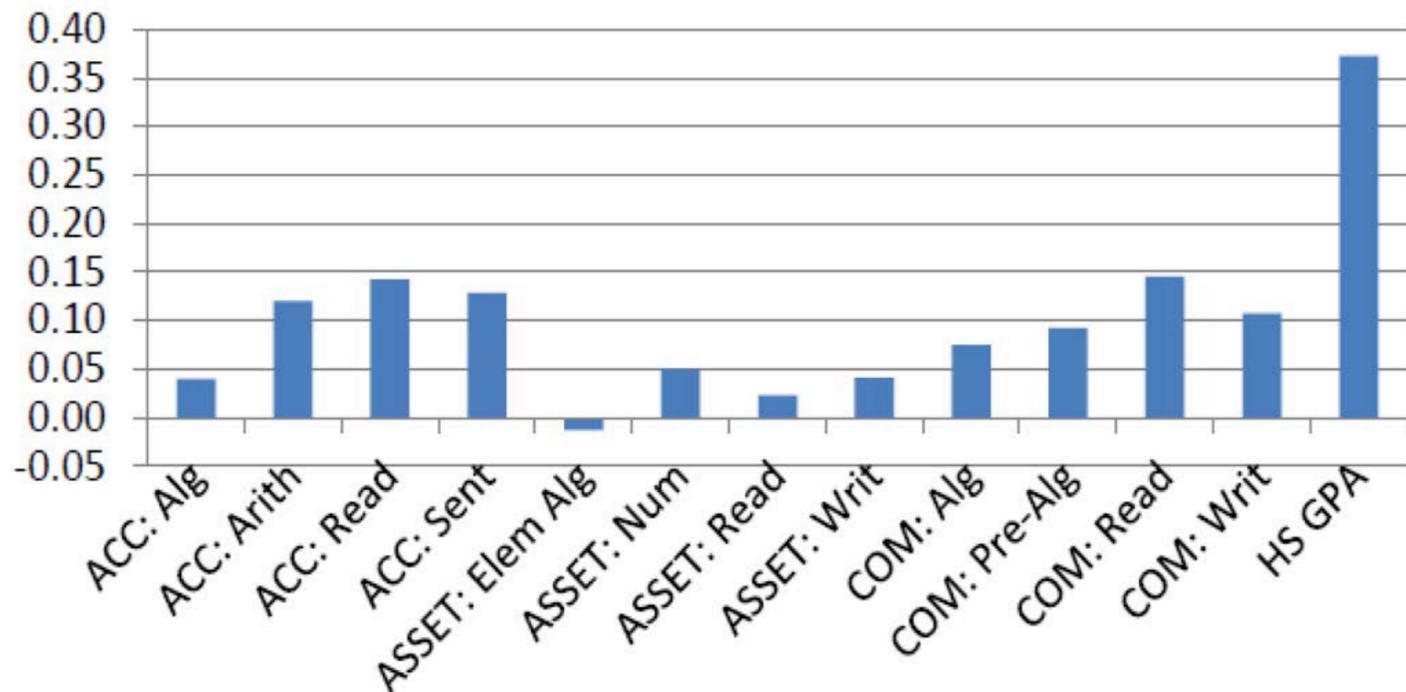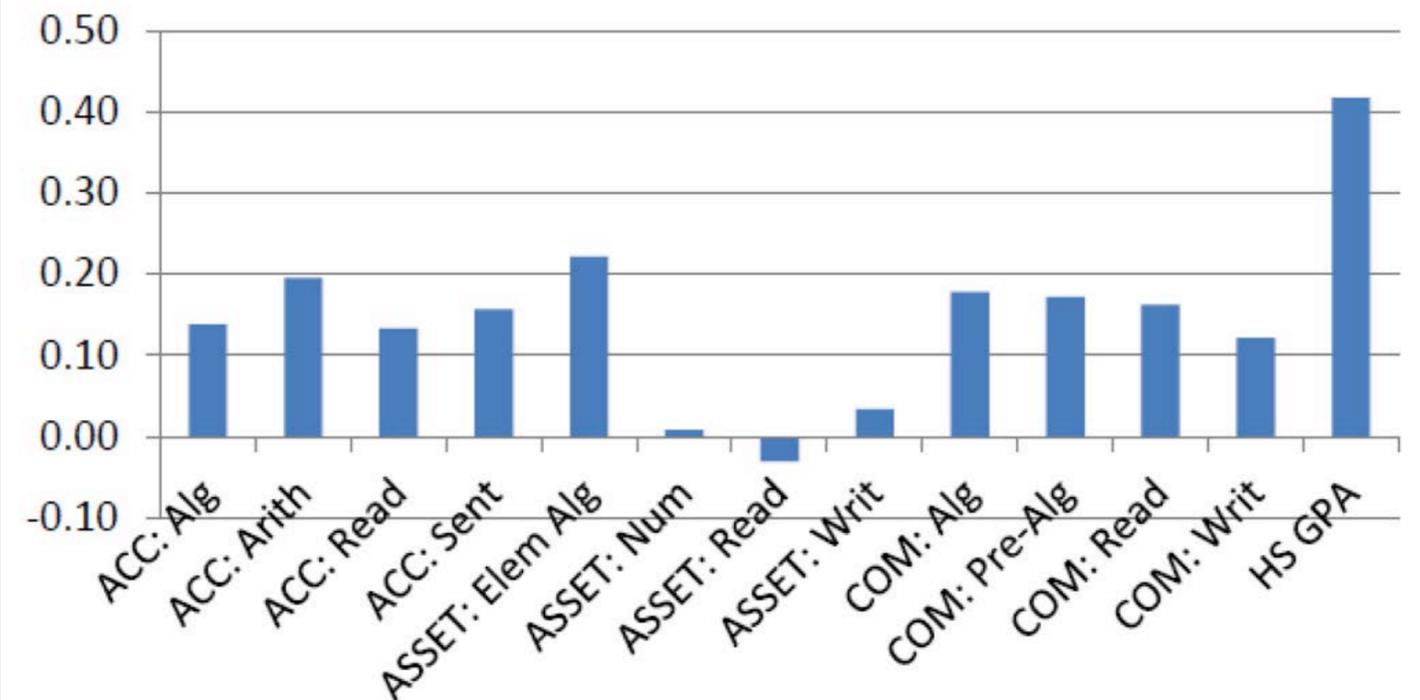
HS GPA is a better predictor than test results for long time (from Hetts, 2016)

MMAP (in preparation): correlations b/w predictor and success (C or better) in transfer-level course by # of semesters since HS
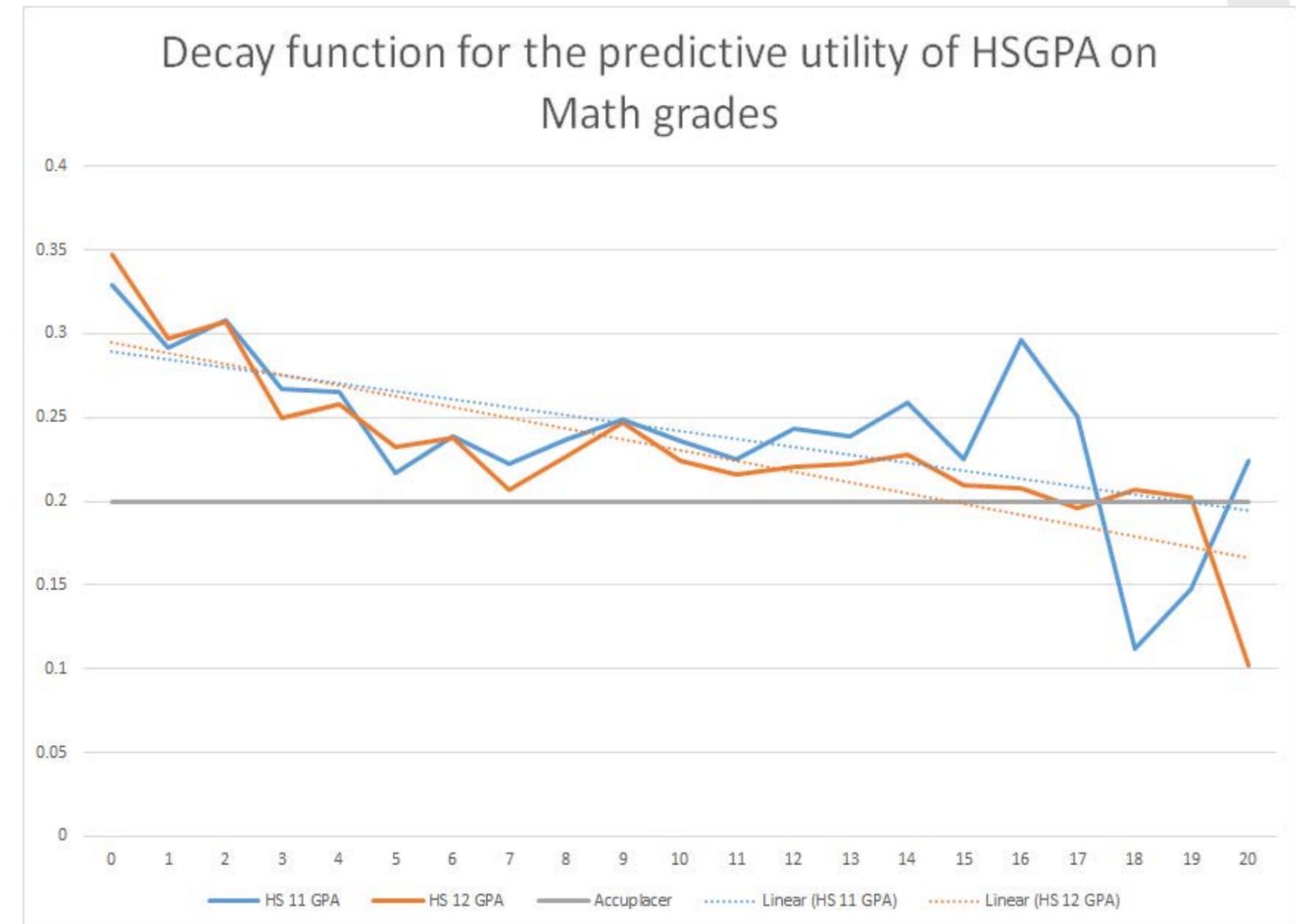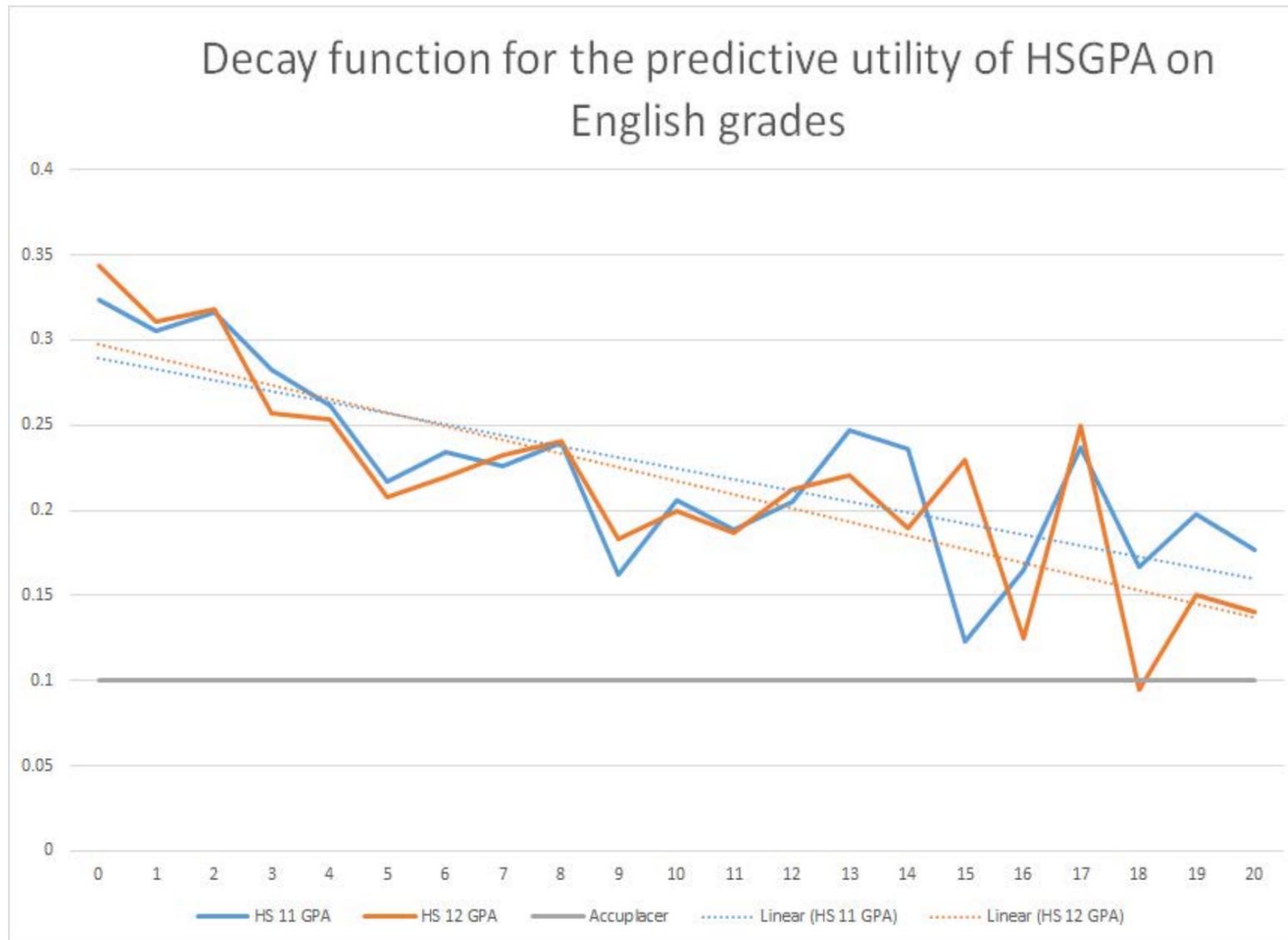
For the most part, college grades stay parallel with feeder high school grades (Bostian, 2016)

Relationship of High School GPA by School District to College GPA
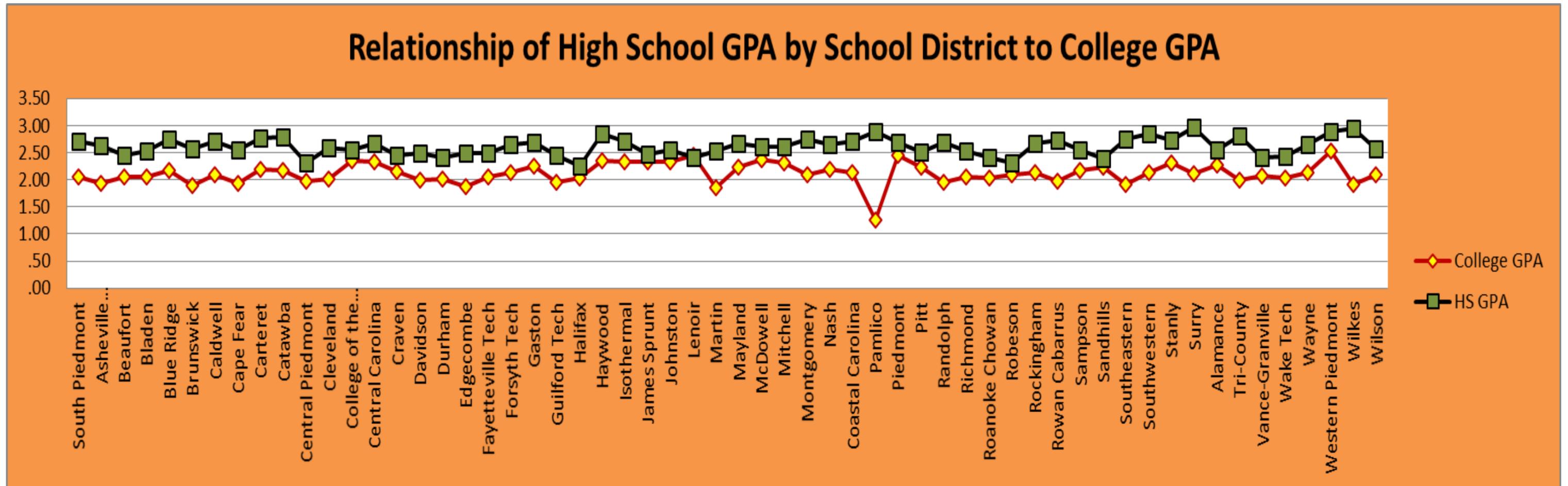
Examples from other states

- MINNESOTA – state mandate, local decision rules, non-cognitive assessments
- NORTH CAROLINA – statewide decision rules, centralized data system
- FLORIDA – no required deved for high school graduates

Minnesota: Anoka Ramsey CC

Anoka-Ramsey Community College

Multiple Measures Pilot Project—English and Math Final

Decision - Rules for Placement

Application	1st step Waivers	2nd step ACCUPLACER Exam	3rd step GPA and/or LASSI Review	Placement

Student Applies to AROC

Possible Waivers (ACT, SAT, College Transcripts, MCAs, etc.)

→ College Level Placement

If scoring at or above current college ready cut scores on ACCUPLACER / NGA Test

→ College Level Placement

If scoring below current college ready cut scores on ACCUPLACER / NGA Test

If GPA is 3.0 or above OR LASSI score in MOT ≥ 50 percentile — College Level Placement or Up one Level

If GPA is below 3.0 AND LASSI score in MOT < 50 percentile — Use existing ACCUPLACER/ NGA cut score for placement

NORTH CAROLINA (from Bostian, 2016)

The North Carolina Community College System has adopted a multiple measure placement *hierarchy*.

The 58 colleges began implementing in 2013.
All colleges required to implement by fall 2016.

CRITERIA
1. Unweighted HS GPA 2.6 + 4 college prep math courses
2. ACT/SAT at national benchmark scores
3. NCDAP placement test

Unweighted GPA = or >2.6 Four High School Math Courses*	Student is college ready for any gateway math course and any course that has a DMA prerequisite. Colleges may require students to take a supplemental math lab as a co-requisite, based on college policies.
Unweighted GPA = or > 2.6 And Four High School Math Courses*	Student is college ready for any English course up to and including English 111 and any course that has a DRE prerequisite. Colleges may require students to take a supplemental English composition lab as a co-requisite, based on college policies.
Unweighted GPA<2.6	College will evaluate subject-area ACT or SAT scores to determine if student is college ready in math and English using the following scores (based on national and state validation studies): English: ACT Reading 22 **OR** ACT English 18 SAT Writing 500 **OR** SAT Critical Reading 500 Math: ACT Math 22 SAT Math 500
Unweighted GPA <2.6 and subject-area score(s) below college ready	Student will take subject-area State Board-approved assessment(s) to determine placement.
Students without a recent transcript GPA or without ACT or SAT scores	Student will take subject-area State Board-approved assessment(s) to determine placement

Approved by the State Board of Community Colleges on March 21, 2014
Revised August 2015

Florida Senate Bill 1720
(Hu, Park, Mokher, and Jones, 2019)

- Implemented in Fall 2014

- Gave "exempt" students the option to bypass placement tests and developmental education (DE) courses.
  - Students who entered ninth grade at a Florida public high school in 2003 or after, and graduated with a standard high school diploma
  - Active duty members of the U.S. Armed Services

- Legislative mandates regarding DE instructional strategies, enhanced advising, and student support services.

Questions?
Comments?

Thank you!

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