

# Delaware Pathways

**A MEMBER OF THE  
PATHWAYS TO PROSPERITY NETWORK**



**Delaware**  
Department of Education

# CAUSE AND EFFECT: COLLEGE REMEDIATION IN DELAWARE 2017



- College enrollment increased to 61% for class of 2015
- Remediation rate remains flat-41%
- 2017 report takes a deeper dive into our 4 key recommendations to understand potential cause and effect

## Wanted: Factory Workers, Degree Required



449



Siemens Energy struggled to find qualified workers when it opened a gas turbine production plant in Charlotte, N.C.

SIEMENS ENERGY INC.

By JEFFREY J. SELINGO  
JANUARY 30, 2017

“Fixing tractors and grain harvesters now requires advanced math and comprehension skills and the ability to solve problems on the fly. ‘The toolbox is now a computer.’”

## Establishing a Common Language

### College or Post-Secondary Education:

- Certificates
- Trade School programs
- Associates Degrees
- Bachelor’s Degrees
- Graduate and Professional Programs

## Graduating College and Career Ready?

- All students graduate from high school ready for college-level math courses.
- All students graduate from high school ready for college-level English courses.
- Provide targeted interventions prior to 11<sup>th</sup> grade for students not meeting college-ready benchmarks.
- Design an accessible and equitable K-12 system that ensures all students can succeed in college-level courses upon graduation.



Center for American Progress

# **The Cost of Catching Up**


Laura Jimenez  
Director, Standards and Accountability  
Center for American Progress



[americanprogress.org](http://americanprogress.org)

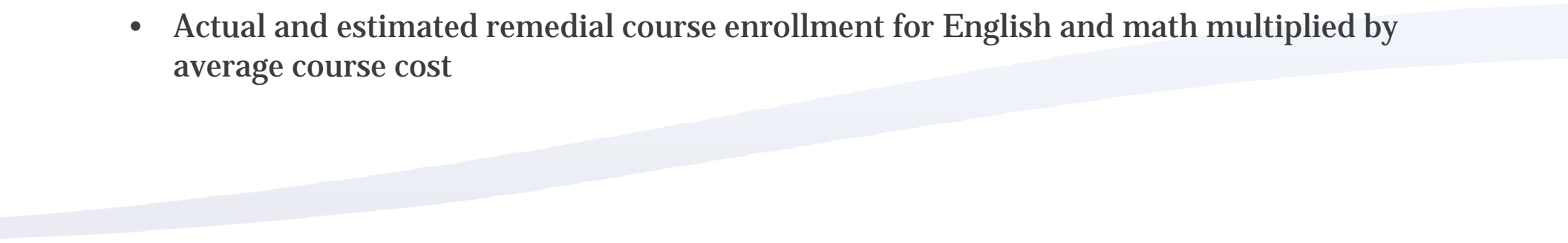
## What is the Center for American Progress?

**The Center for American Progress (CAP) has three main objectives:**

- ✓ To generate new progressive ideas and policy proposals that meet the needs of Americans;
  - ✓ To develop a long-term vision for a progressive America;
  - ✓ To respond effectively and rapidly to conservative proposals with empirical evidence and clear progressive messages for the American public, elected officials, and opinion elites
- 

## **Research question and study methods**

What is the financial impact to first-time college students who are not prepared to enroll in credit-bearing coursework?

- 2013-2014 full-time & part-time first-time US resident students in public 2- and 4-year colleges.
  - Actual enrollment data for 30 states, estimated enrollment data for remaining states
  - Actual and estimated remedial course enrollment for English and math multiplied by average course cost
- 



# Center for American Progress

## Report findings: Remediation rates range from 22%-56%

State	Remediation rate	State	Remediation rate
FL	56%	NH	40%
MA	54%	LA	39%
MD	50%	TX	39%
HI	50%	VA	39%
AR	48%	IA	37%
DC	48%	MI	36%
NM	48%	WV	36%
CA	47%	MT	36%
OH	46%	PA	36%
OK	46%	RI	35%
NJ	45%	GA	35%
NV	44%	ID	35%
MS	43%	NE	34%
CT	43%	OR	34%
WY	43%	VT	34%
NC	43%	SD	33%
TN	43%	AK	31%
MO	42%	CO	31%
KY	42%	NY	31%
AL	41%	SC	31%
IN	41%	WA	30%
MN	41%	DE	26%
ME	41%	ND	25%
IL	40%	WI	24%
KS	40%	UT	22%
AZ	40%		

Source: Jimenez and others, "Remedial Education: The Cost of Catching Up" (Washington: Center for American Progress, 2016)

# Center for American Progress

## Report findings: Remediation costs from \$1 million to \$205 million

State	Out-of-pocket costs	State	Out-of-pocket costs
California	\$205,488,000	Arkansas	\$18,244,000
Texas	\$98,749,000	Iowa	\$17,684,000
Florida	\$61,178,000	Kansas	\$16,631,000
Ohio	\$57,426,000	South Carolina	\$15,552,000
New York	\$48,216,000	Washington	\$13,247,000
North Carolina	\$45,530,000	New Mexico	\$13,099,000
Pennsylvania	\$44,528,000	Wisconsin	\$12,526,000
Virginia	\$37,036,000	Nevada	\$11,801,000
Illinois	\$35,827,000	Connecticut	\$10,553,000
Georgia	\$35,274,000	New Hampshire	\$9,509,000
New Jersey	\$32,795,000	Utah	\$8,912,000
Michigan	\$32,493,000	West Virginia	\$7,426,000
Indiana	\$30,719,000	Nebraska	\$6,943,000
Minnesota	\$30,438,000	Idaho	\$6,499,000
Maryland	\$30,107,000	Maine	\$5,973,000
Missouri	\$27,269,000	Montana	\$4,548,000
Oregon	\$27,043,000	South Dakota	\$3,936,000
Arizona	\$26,913,000	Hawaii	\$3,772,000
Alabama	\$26,624,000	Vermont	\$3,534,000
Colorado	\$24,642,000	North Dakota	\$3,523,000
Oklahoma	\$22,192,000	Rhode Island	\$3,102,000
Mississippi	\$21,454,000	Delaware	\$2,760,000
Kentucky	\$20,985,000	Wyoming	\$2,432,000
Massachusetts	\$20,743,000	Alaska	\$1,179,000
Louisiana	\$19,693,000	District of Columbia*	\$1,131,000
Tennessee	\$19,605,000	<b>Grand total</b>	<b>\$1,287,483,000</b>

Source: Jimenez and others, "Remedial Education: The Cost of Catching Up" (Washington: Center for American Progress, 2016)

## Delaware's College Success Report

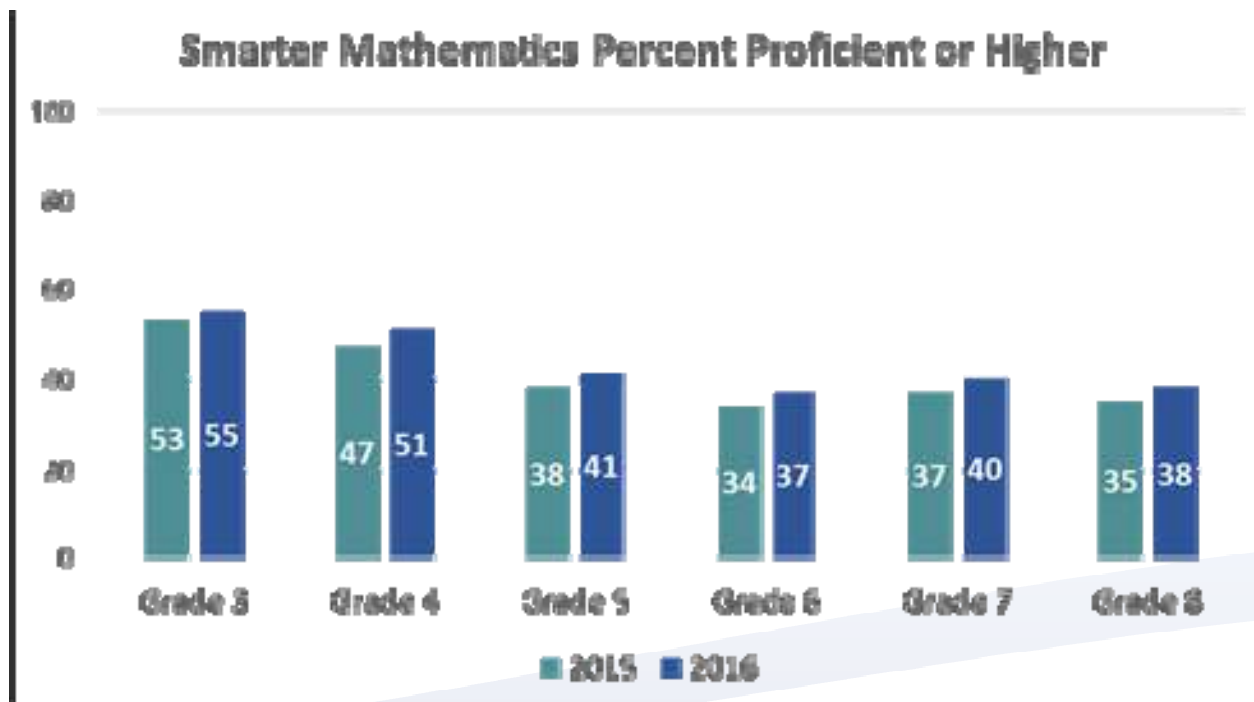


Actual remediation  
rate: ~40%

This is **much higher**  
than 26% estimated  
rate used in our  
analysis

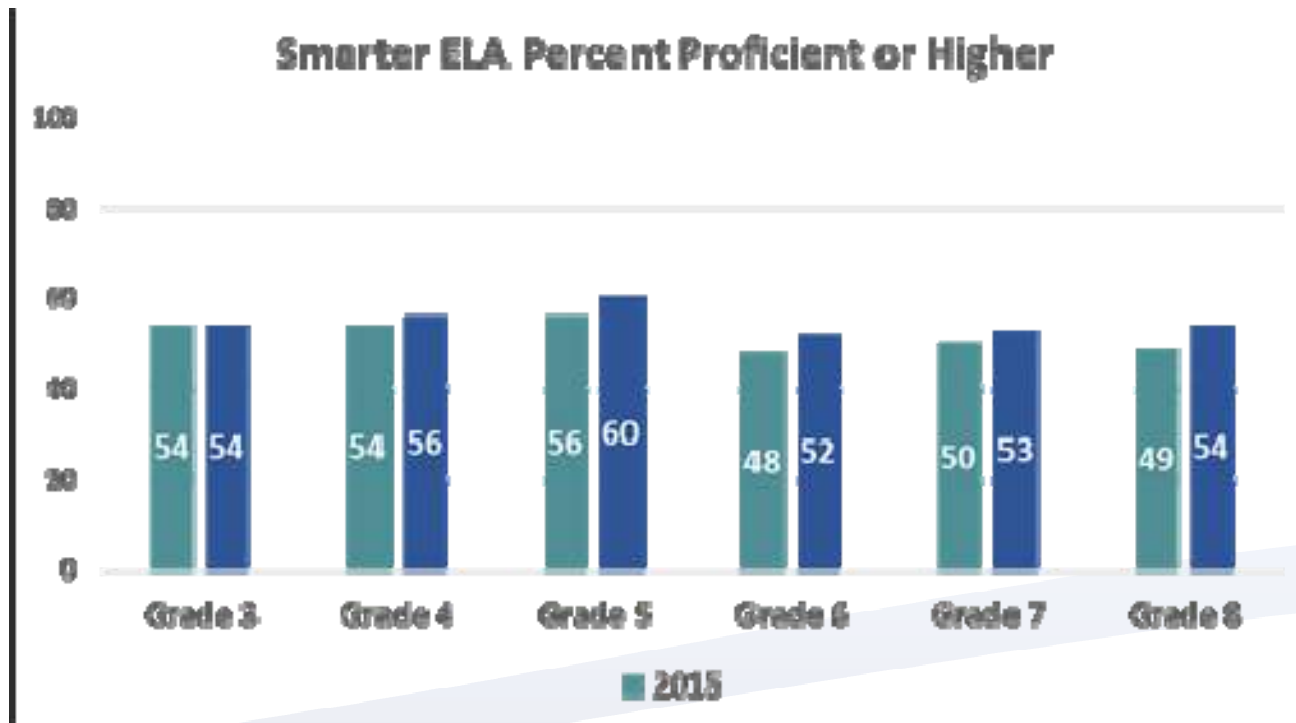
Next closest state in  
actual rate and cost:  
**Connecticut at**  
**~\$10.5 million**

## Math/reading scores trending up



Source: Delaware Department of Education, "2016 state test results show progress across the board in English language arts, mathematics" (2017), available at <http://www.doe.k12.de.us/site/default.aspx?PageType=3&DomainID=4&ModuleInstanceID=20&ViewID=047E6BE3-6D87-4130-8424-D8E4E9ED6C2A&RenderLoc=0&FlexDataID=17945&PageID=1>

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## Math/reading scores trending up

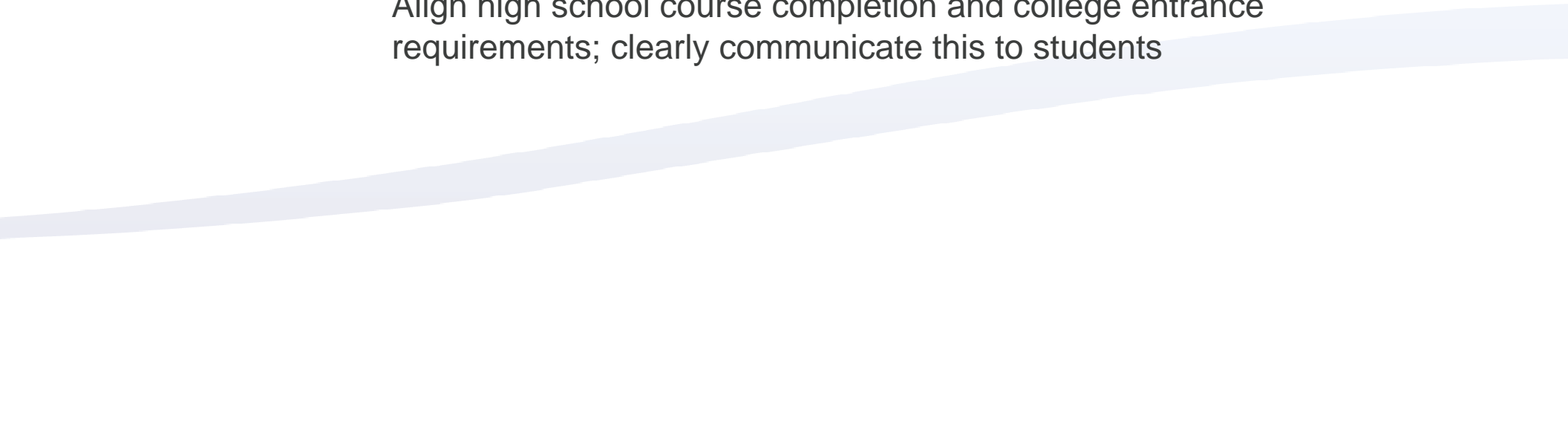
ELA results for 2016 compared to 2015, by subgroups

	GE 3	GE 4	GE 5	GE 6	GE 7	GE 8
<b>ALL STUDENTS</b>	•	2	4	4	3	5
<b>STUDENT WITH DISABILITIES</b>	•	1	5	1	2	1
<b>ENGLISH LANGUAGE LEARNERS</b>	5	2	5	2	-3	1
<b>GOVT EMPLOY</b>	•	2	5	4	3	7
<b>WHITE</b>	•	•	5	6	2	7
<b>HISPANIC</b>	•	3	5	2	2	6
<b>AFRICAN AMERICAN</b>	•	3	5	1	3	5
<b>ASIAN AMERICAN</b>	-1	1	1	2	2	1
<b>MULTIRACIAL</b>	-2	-1	3	•	13	-2
<b>STUDENT CAP GROUP</b>	•	2	6	3	3	5


■ Increased Proficiency   
 ■ Maintained Proficiency   
 ■ Decreased Proficiency

Source: Delaware Department of Education, "2016 state test results show progress across the board in English language arts, mathematics" (2017), available at <http://www.doe.k12.de.us/site/default.aspx?PageType=3&DomainID=4&ModuleInstanceID=20&ViewID=047E6BE3-6D87-4130-8424-D8E4E9ED6C2A&RenderLoc=0&FlexDataID=17945&PageID=1>

## **Recommendations**

- Stick with Common Core State Standards and Smarter Balanced tests
  - Continue to strengthen the link between K-12 and higher education systems
    - DE already uses Smarter Balanced tests to determine remediation need
    - Align high school course completion and college entrance requirements; clearly communicate this to students
- 

## **Areas for additional study**

- Math and English course rigor, consistency
  - Course benchmarks for college readiness
  - Transition rates to more rigorous courses
  - Rigor of total high school curriculum and diploma requirements
  - Profile of students who pass out of remediation on 1<sup>st</sup> try
- 





# Center for American Progress

Thank you!  
Questions?

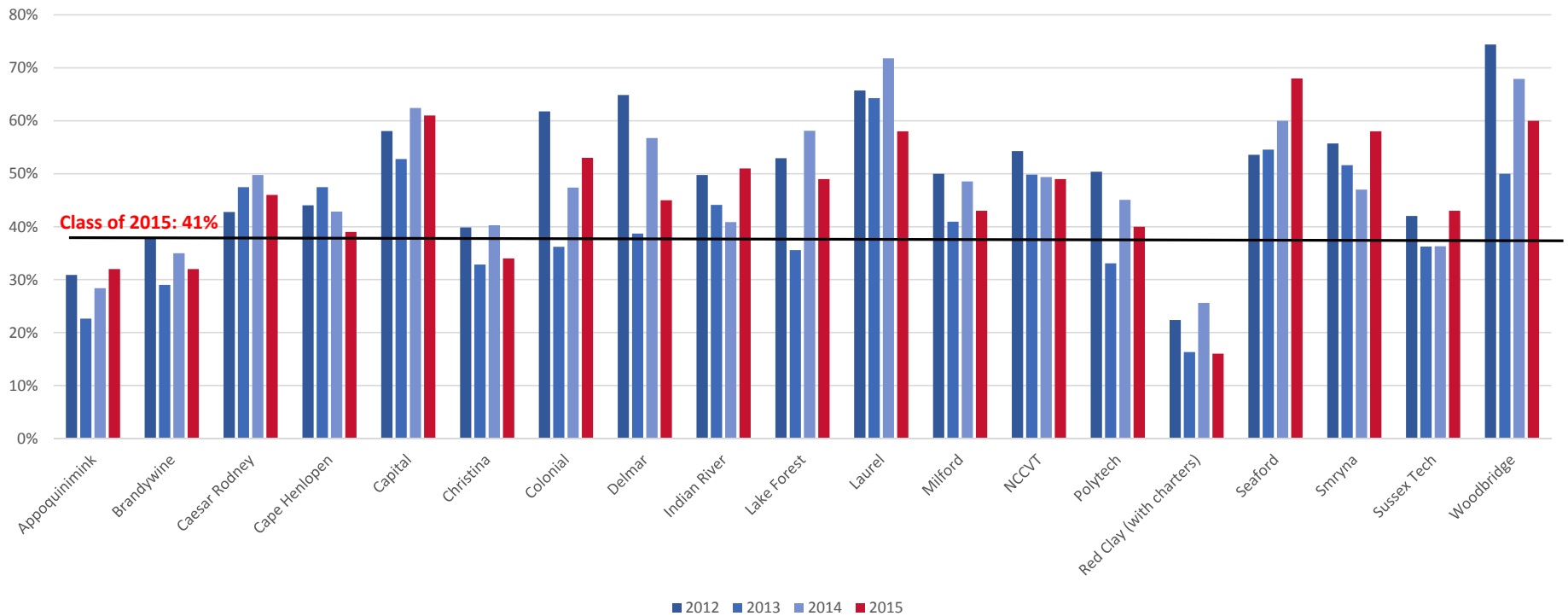
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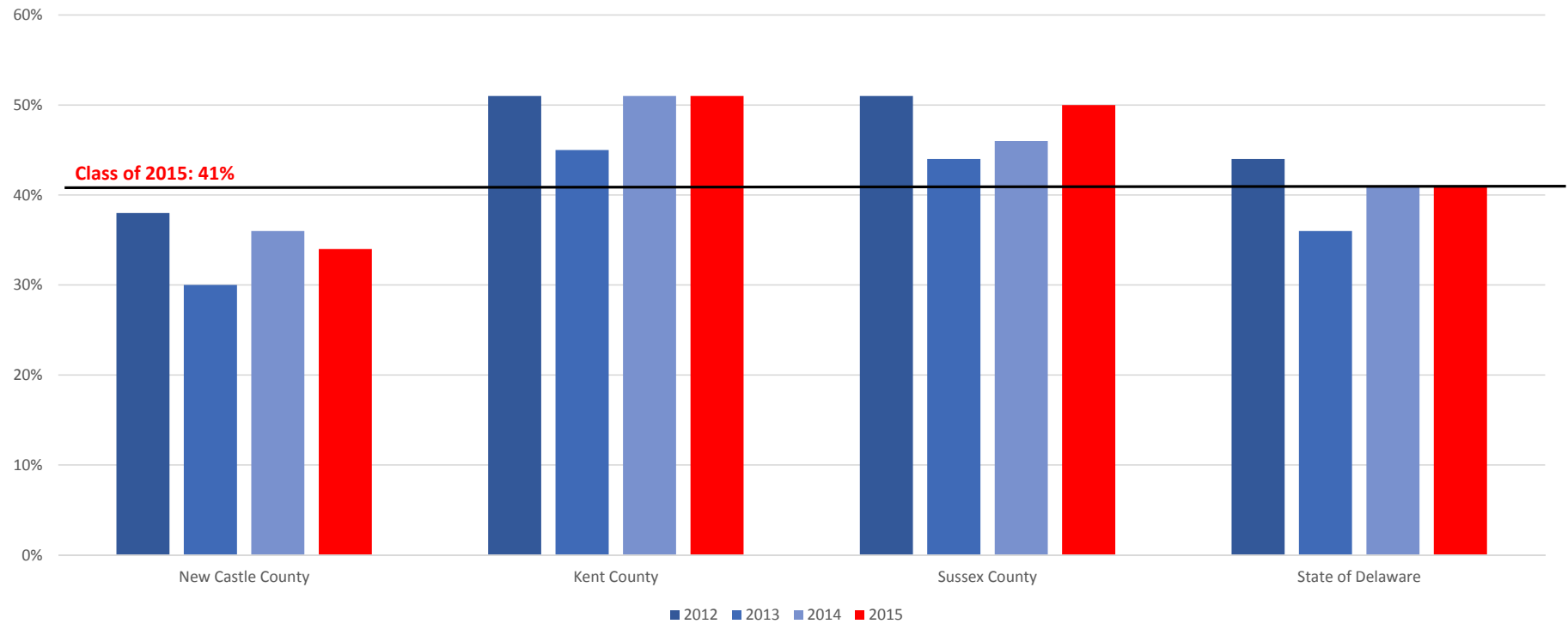
# Delaware's College Success Report



## Remediation Rate by School District: Class of 2012-2015

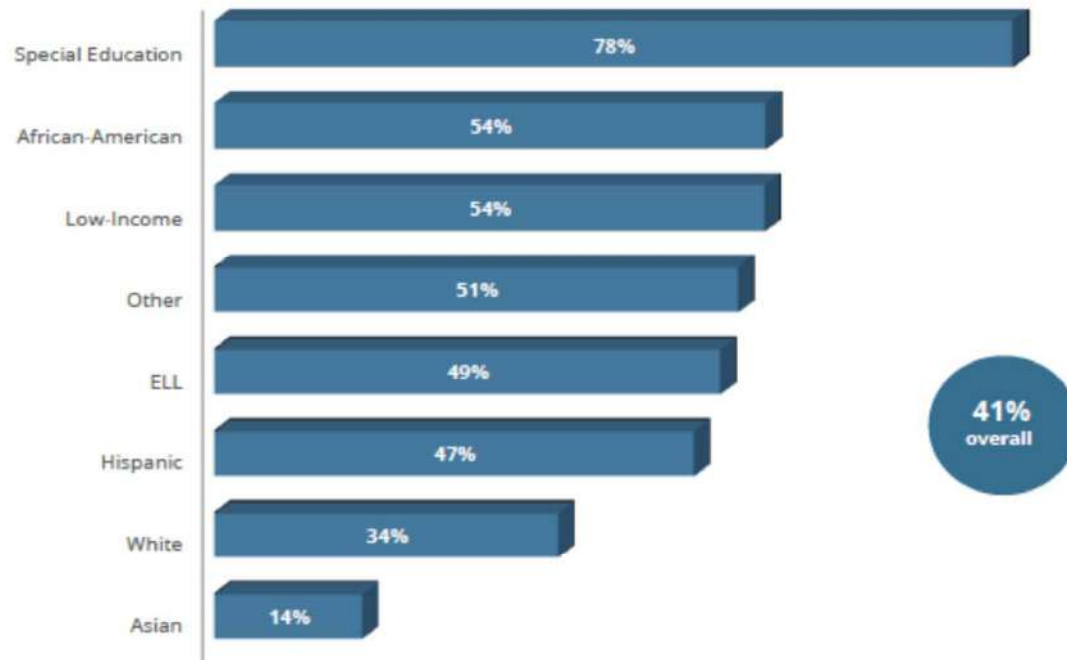


## Remediation Rates by County: Class of 2012-2015



# Remediation by Subgroup: Class of 2015

*Percentage of students requiring remediation  
by subgroup (Class of 2015)*



# Key Focus Areas for 2017

- **Rigorous Coursework and Quality of Instruction**
  - Diving deeper to understand difference in delivery of standards and student expectations across course levels-College Prep, Honors, AP, Dual Enrollment.
- **Equitable Access**
  - Do student/parent perceptions of readiness align with the definition of readiness for schools and colleges?
- **Systems of Intervention**
  - Are current systems of intervention-Response to Intervention, Credit Recovery, etc. effective?
  - What systems are in place to identify students ready for advanced courses?

# Rigorous Coursework and Quality of Instruction



# Understanding the State's Context

## Math:

- The typical mathematical course trajectory for students is:

### **Algebra-Geometry-Algebra 2**

- All students are required to take a 4<sup>th</sup> math credit in their senior year.
- Courses may be offered at different levels such as college prep, honors, advanced placement and dual enrollment.

## English (ELA):

- Students are required to take 4 credits of English. Typically students take one credit a year throughout high school.
- Courses may be offered at different levels such as college prep, honors, advanced placement and dual enrollment.

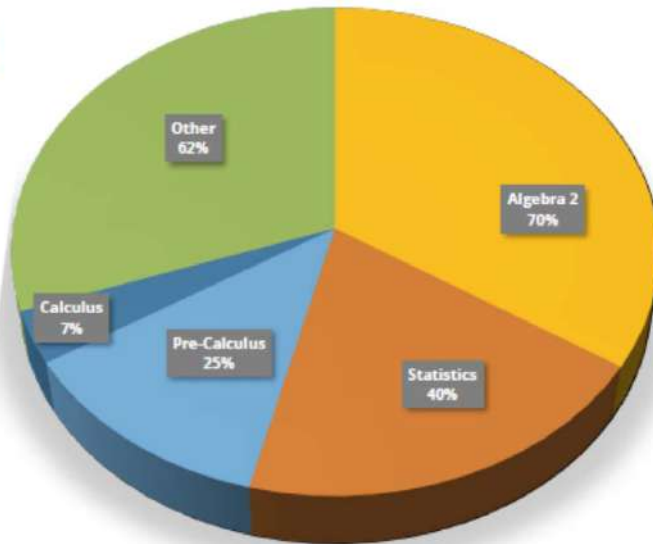


# Remediation Rates Connected to 12<sup>th</sup> Grade Courses

## Math

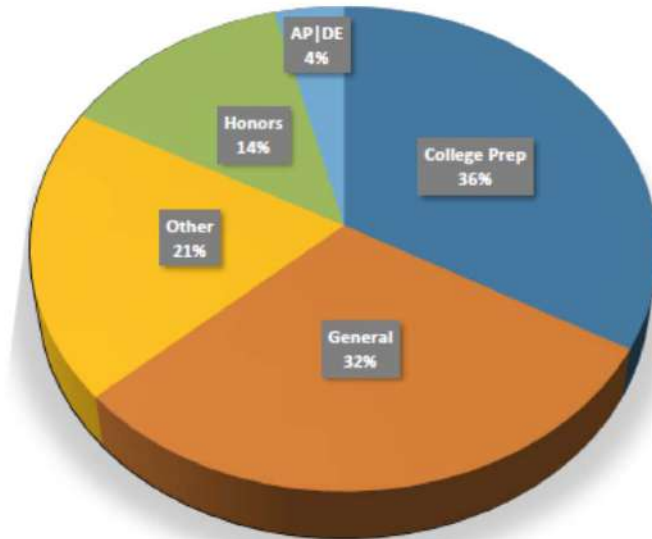
Percentage of students requiring remediation  
by math course (Class of 2015)

3,495  
students  
overall



## English

Percentage of students requiring remediation  
by English course (Class of 2015)



What's the difference between courses with high remediation rates vs. low remediation rates?

# Equitable Access



# Understanding the Path to Success

- **Student A:**

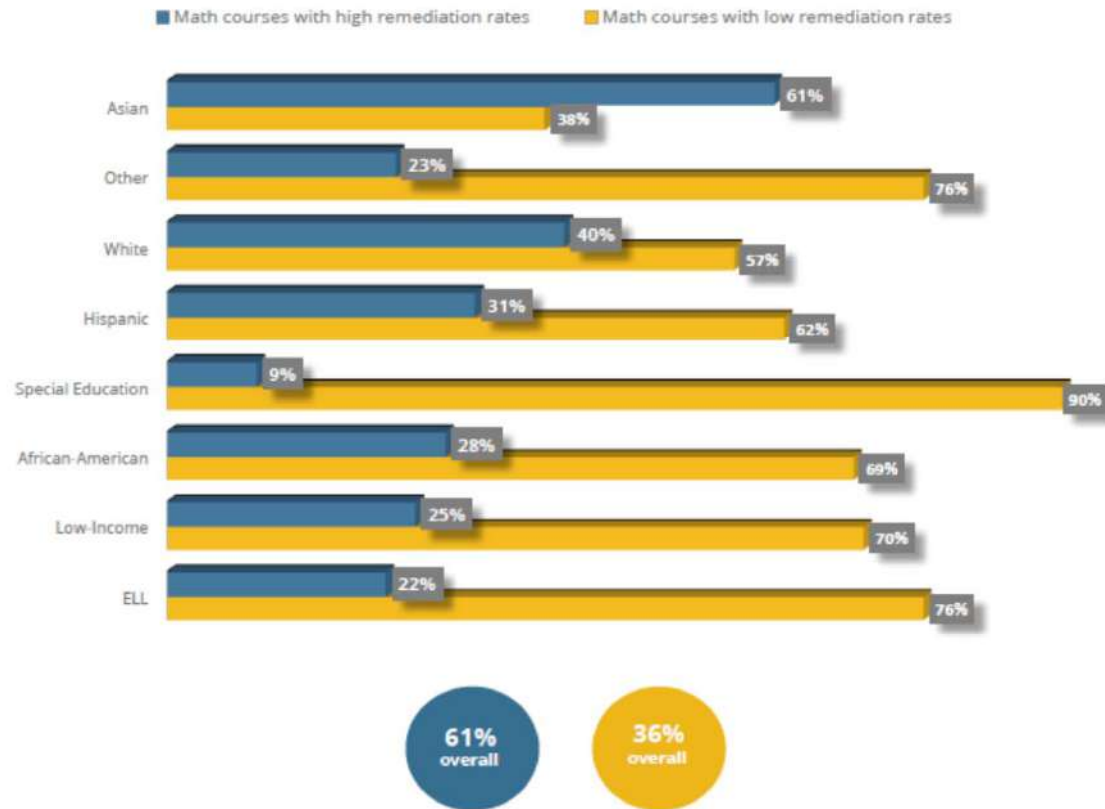
- Maintains a B average in Honors and Advanced Placement courses in English and receives a 480 on the ELA portion of the SAT. Upon enrolling in college, student A places into credit-bearing English courses.

- **Student B:**

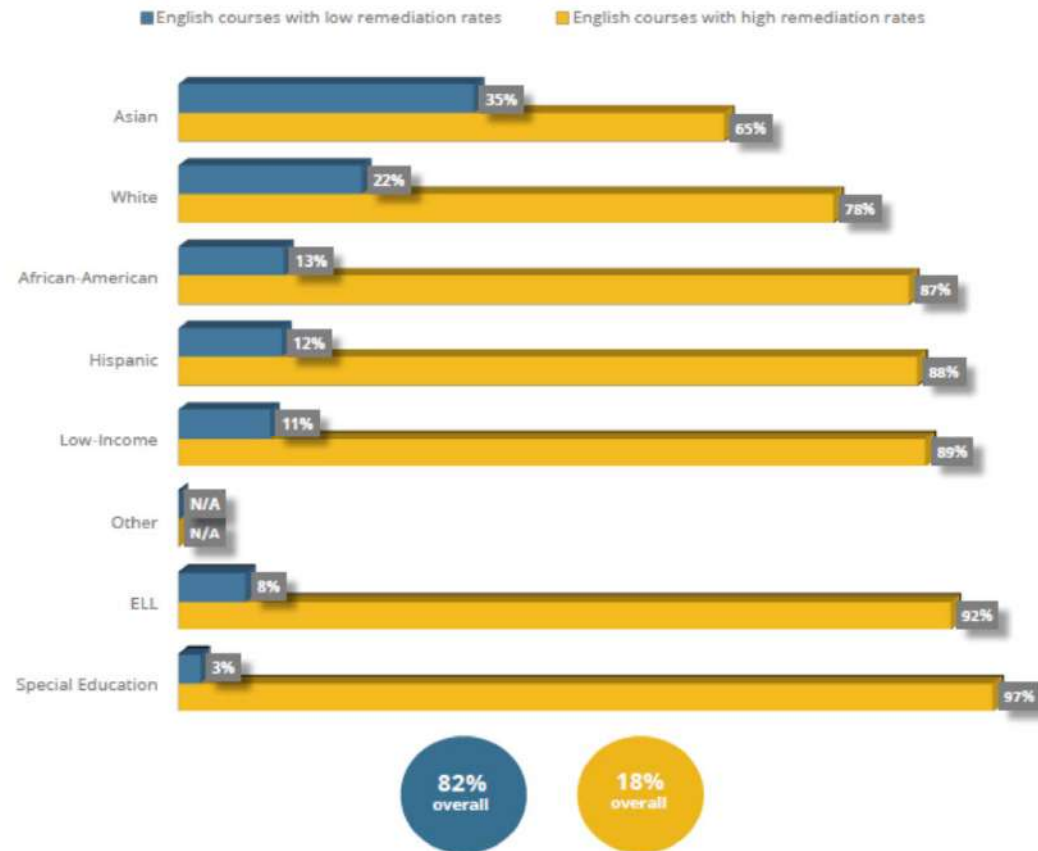
- Maintains a B average in English College Prep courses and receives a 400 on the ELA portion of the SAT. Upon enrolling in college, student B places into remedial English courses.

**What's the difference between these two students?**

## 12<sup>th</sup> Grade Math Course Enrollment by Subgroup



## 12<sup>th</sup> Grade English Course Enrollment by Subgroup



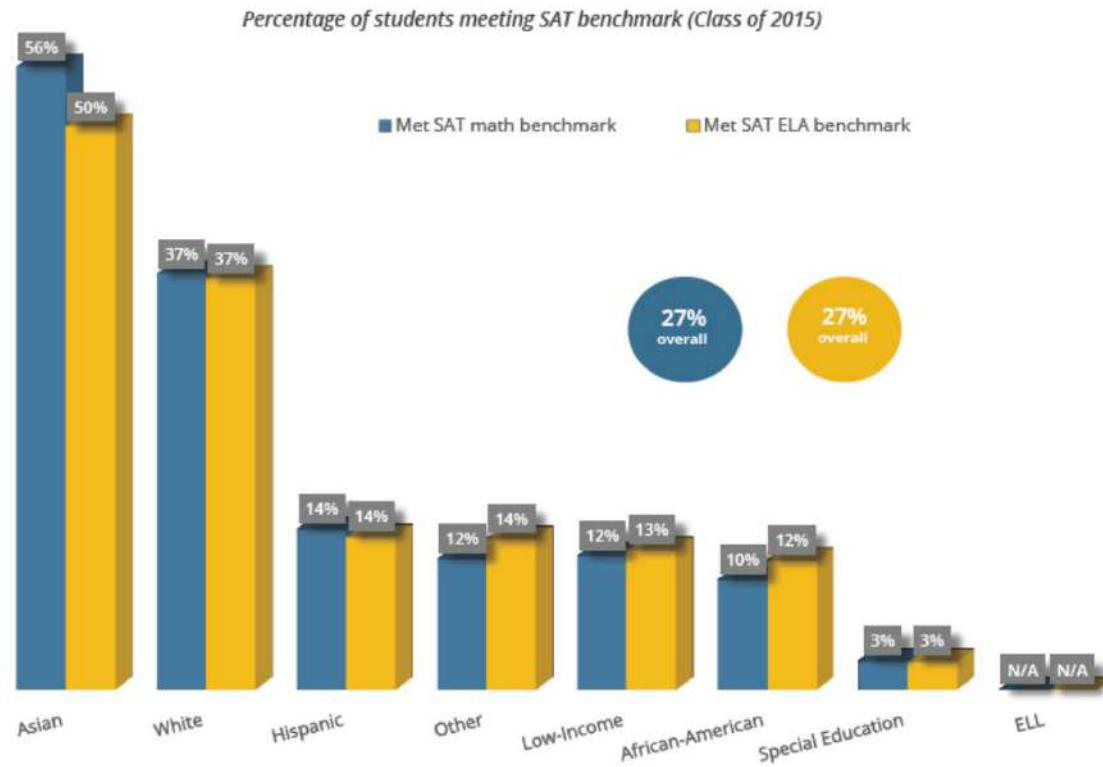
# Systems of Intervention



# Targeted Student Supports

- Smarter ELA, Smarter Math, PSAT and SAT provide guidance to students, parents and schools about a student's path to college-readiness.
- Data presents opportunity for conversation:
  - How are students identified for more advanced courses?
  - How are students identified for interventions?
  - Are interventions effective?

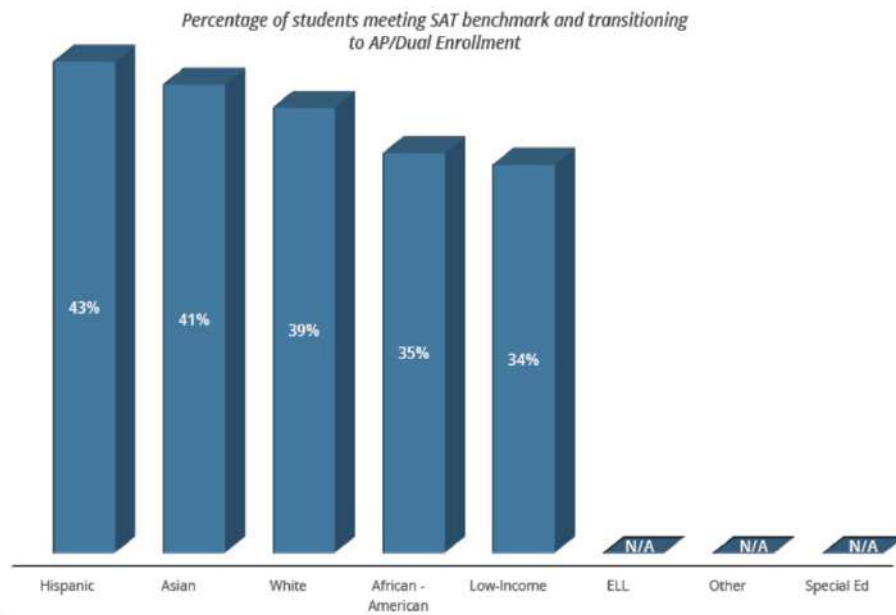
# SAT Performance by Subgroup



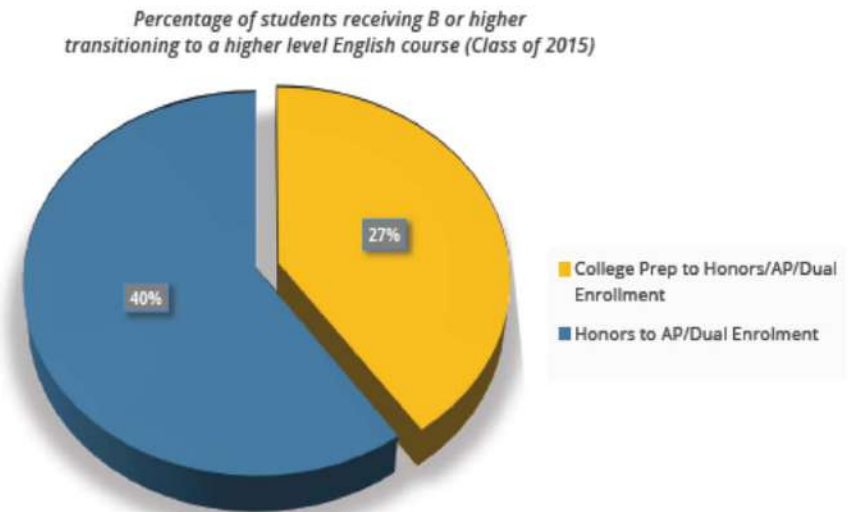


# Access: SAT vs. Course Grades

## Transition based on SAT

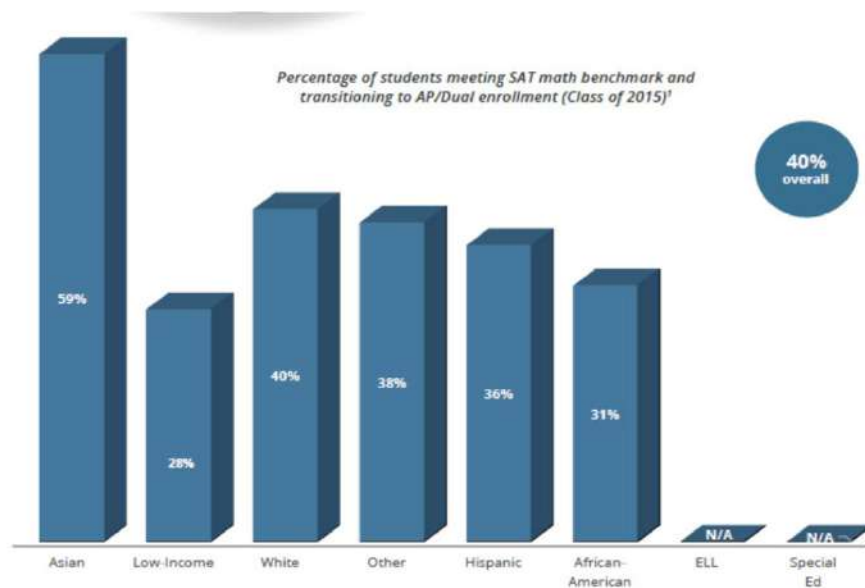


## Transition based on “B” or higher

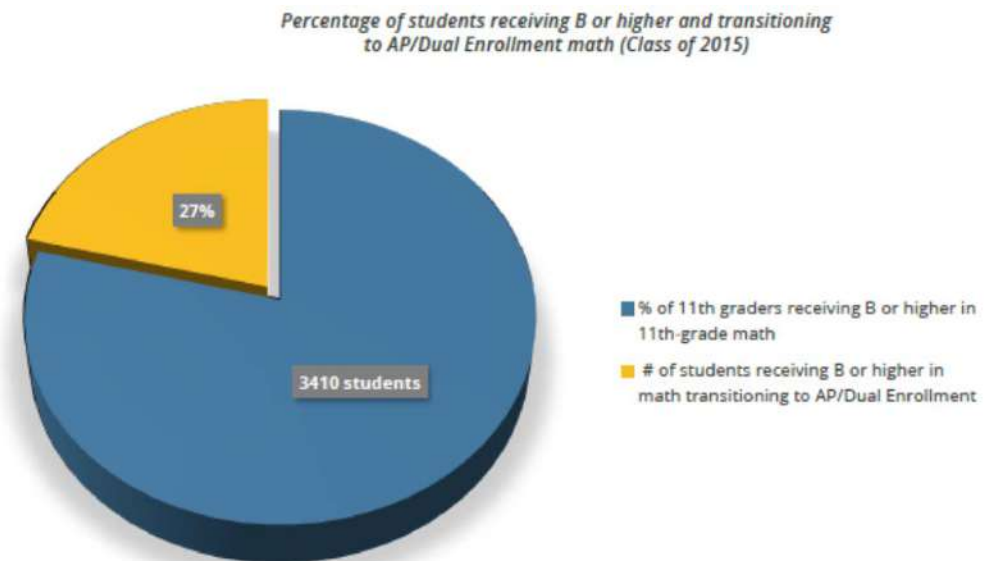


# Access: SAT vs. Course Grades

## Transition Based on SAT



## Transition Based on “B” or Higher



## Questions to Consider?

### **Educators/Polymakers**

- Evaluate the differences between course levels-College Prep, Honors, AP, Dual Enrollment.
- What interventions are the most effective? How and when do students access those interventions?
- What systems identify students ready for advanced courses?

### **Parent/Community**

- Talk to teachers and counselors to understand your student's grades and test scores.
- Where does your student need to stretch academically and where do they need additional supports?
- Look for afterschool and summer programs to provide enrichment and academic supports.
- Ask questions!