



TO: Members of the State Board of Education

FROM: Karen B. Salmon, Ph.D.

DATE: October 24, 2017

SUBJECT: Partnership for Assessment of Readiness for College and Careers (PARCC)
Results 2017; Supplemental Analyses

PURPOSE:

This report contains supplemental analyses of the 2017 Partnership for Assessment of Readiness for College and Careers (PARCC) Results. The following analyses were requested by the State Board at the previous meeting (September 19, 2017).

Analyses Included:

- Pages 2-9: Black/white and other achievement gaps for all subjects
- Pages 10-13: Trends in proficiency rates and achievement gaps, 2015 to 2017
- Pages 14-17: Proficiency rates for FARMs and non-FARMs students, by other selected student groups

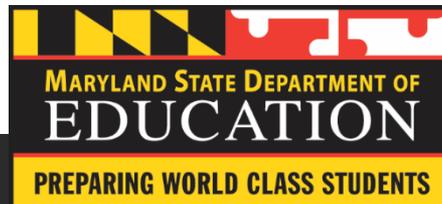
Analyses not Included:

- Proficiency rates for FARMs students, by actual income or by whether the student is free-*or* reduced-meal eligible: MSDE does not collect this information.
- Description of Student Growth Percentiles, state-level and by student group: This information is embargoed by PARCC, with an anticipated release in mid-December or later.
- Description of how achievement has changed between 2015 and 2017, at the student level (how did 2015's third grade students perform in 2016 and 2017?): This will be part of a forthcoming cohort analysis.
- Analysis/profiles of the high-FARMs, high-proficiency "Section 2" schools: MSDE is currently contacting schools to better understand the context for these schools' high achievement.

ACTION:

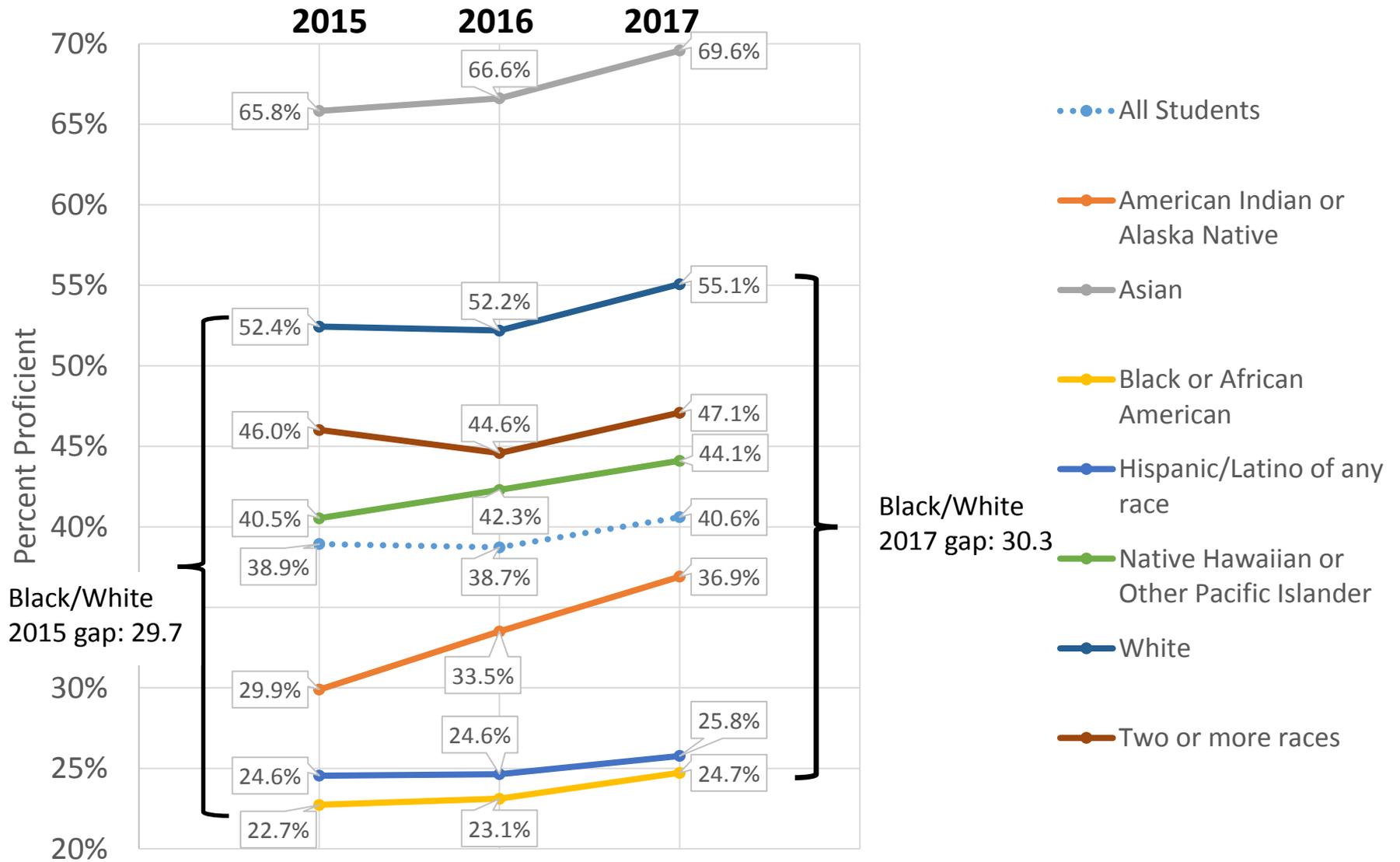
No action is requested. This is for information and discussion.

Partnership for Assessment of Readiness for College and Careers (PARCC) Results 2017: Supplemental Report

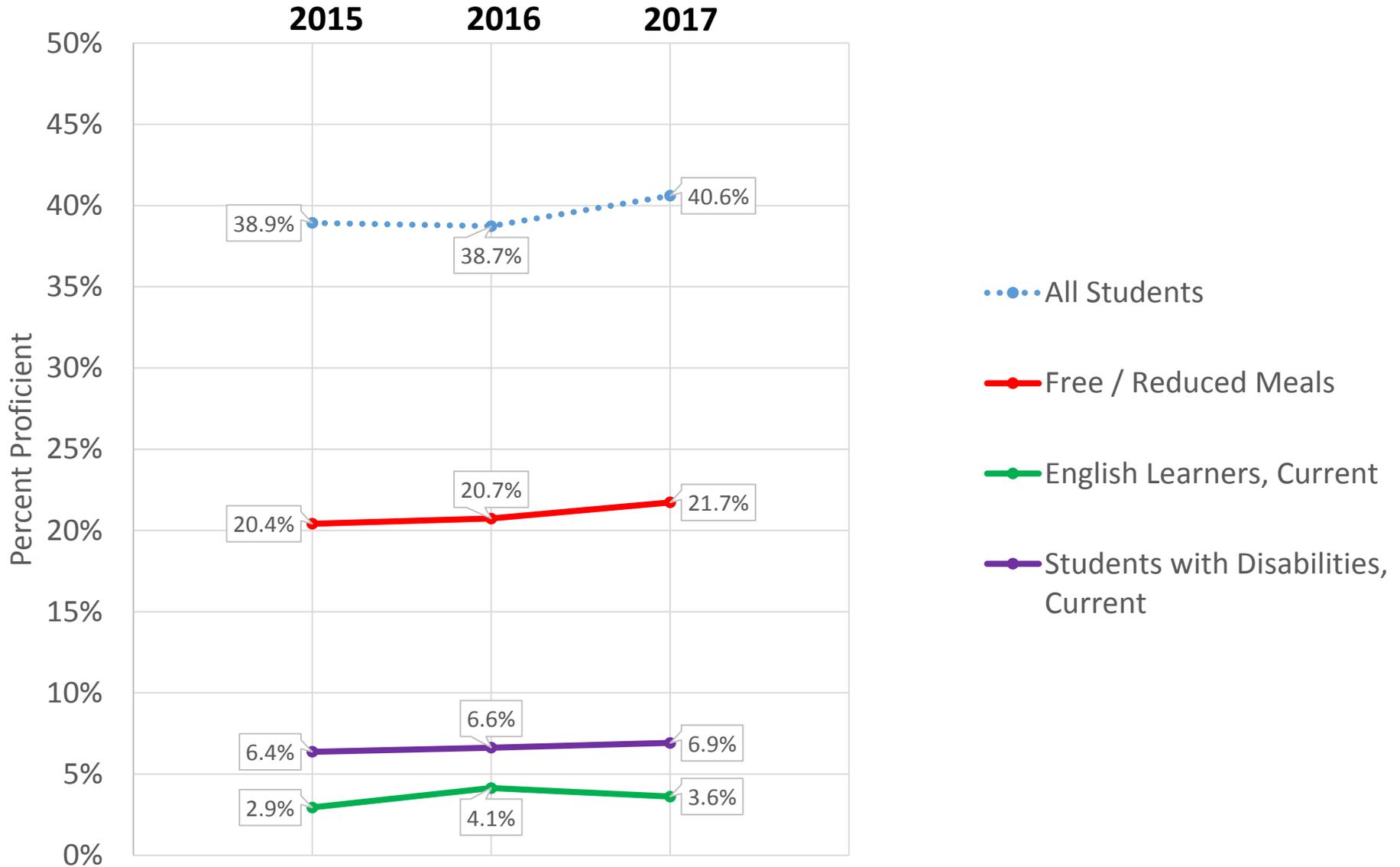


STATE BOARD MEETING
October 24, 2017

Proficiency Rates by Student Group, ELA 3-8

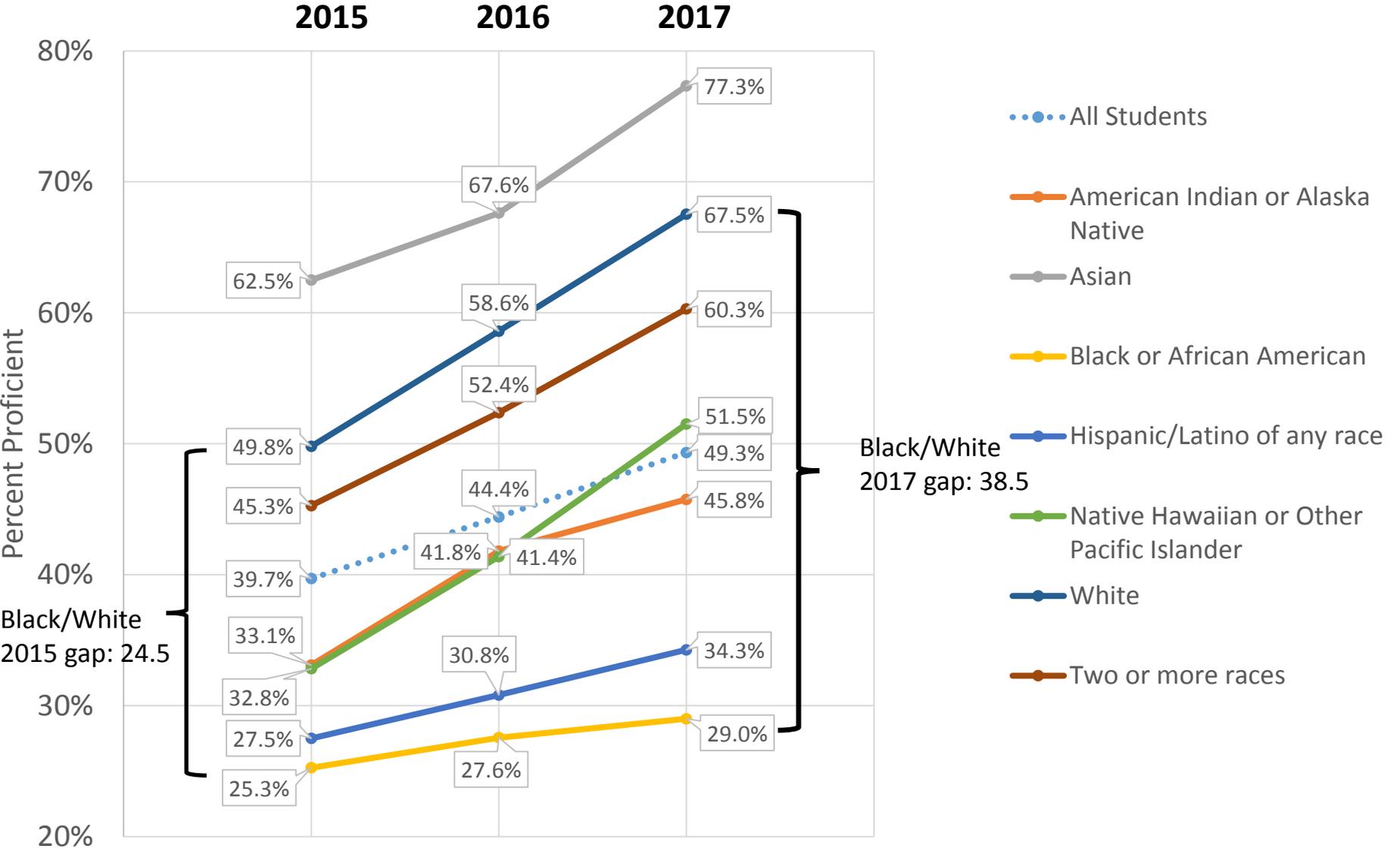


Proficiency Rates by Student Group, ELA 3-8

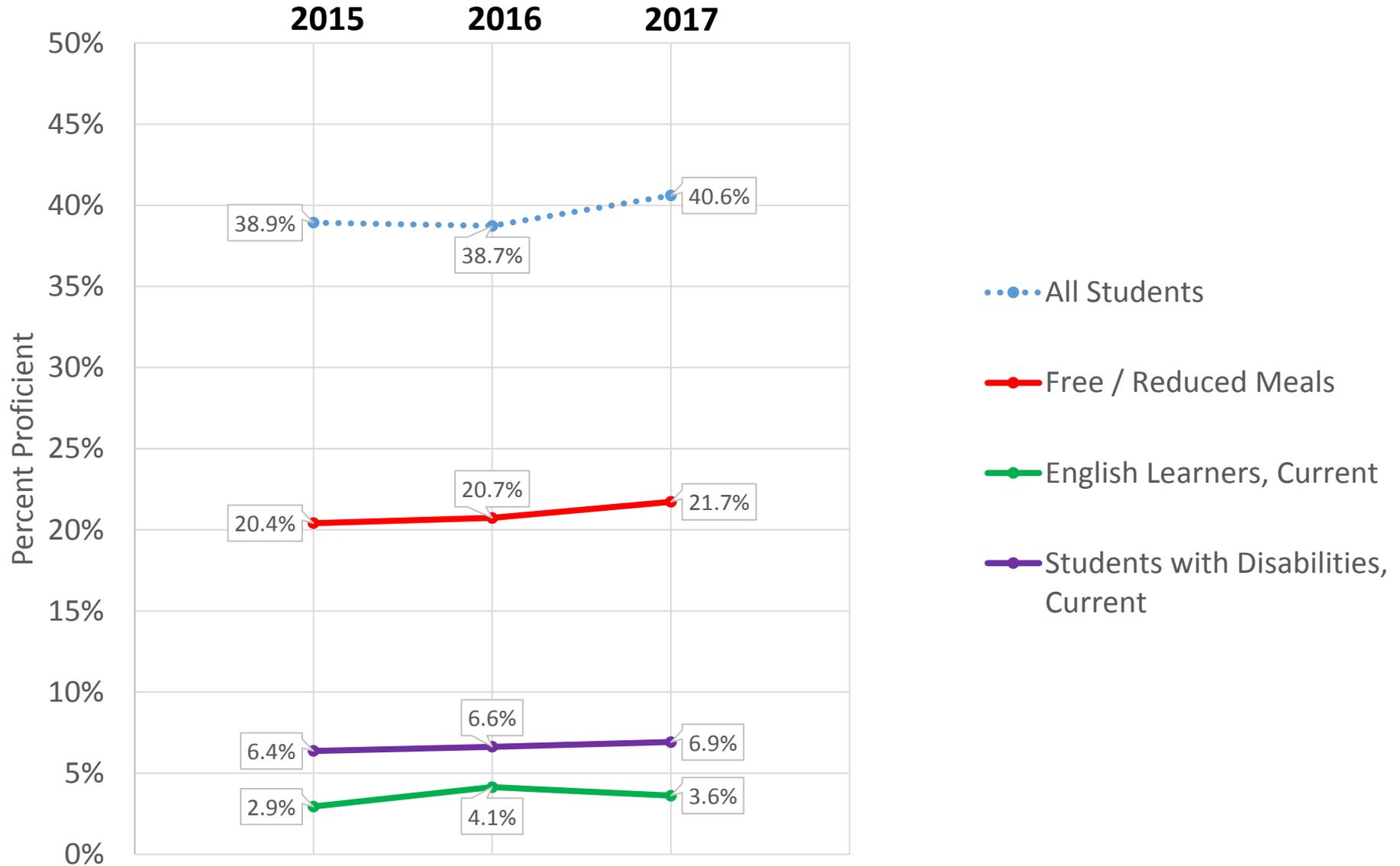




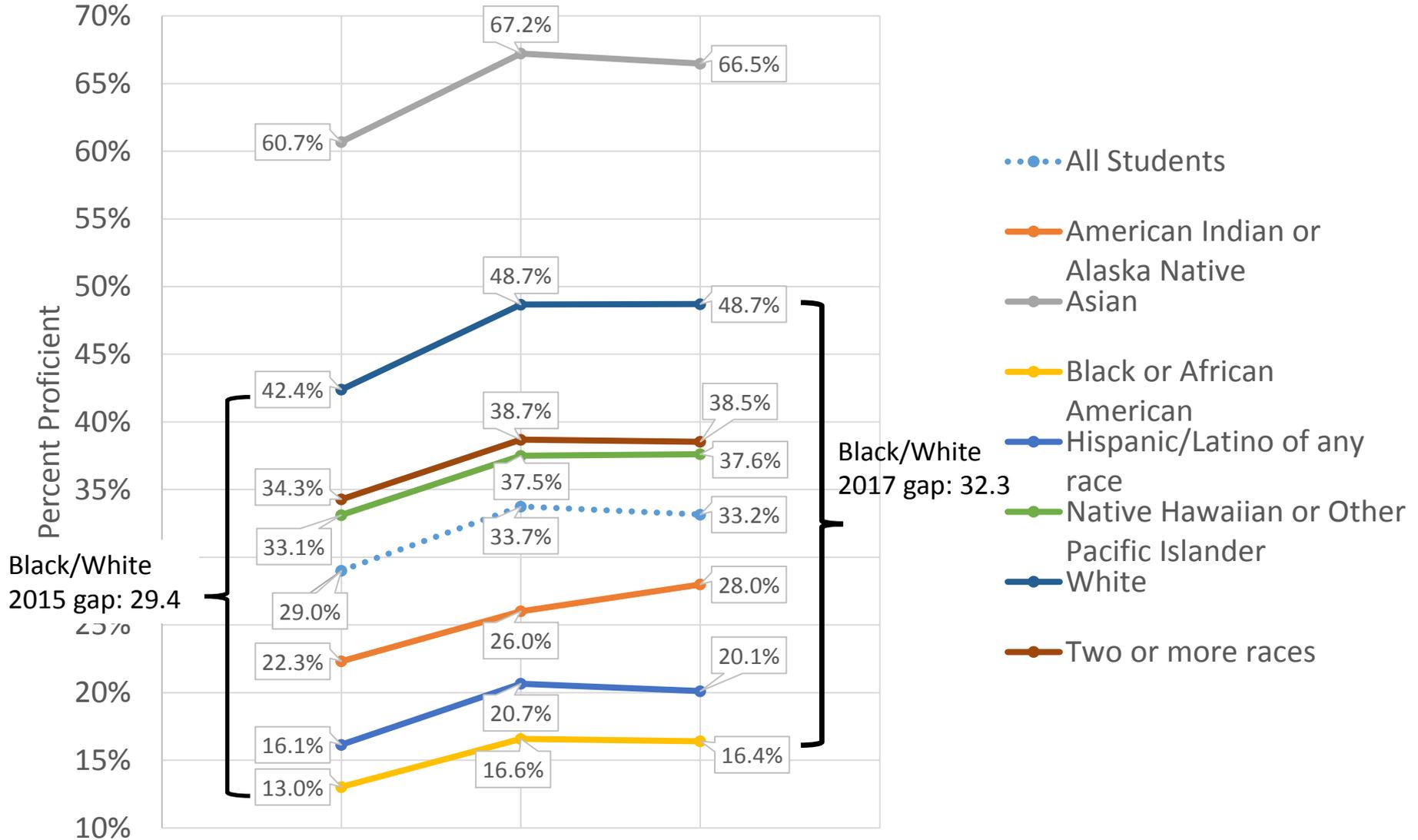
Proficiency Rates by Student Group, ELA 10



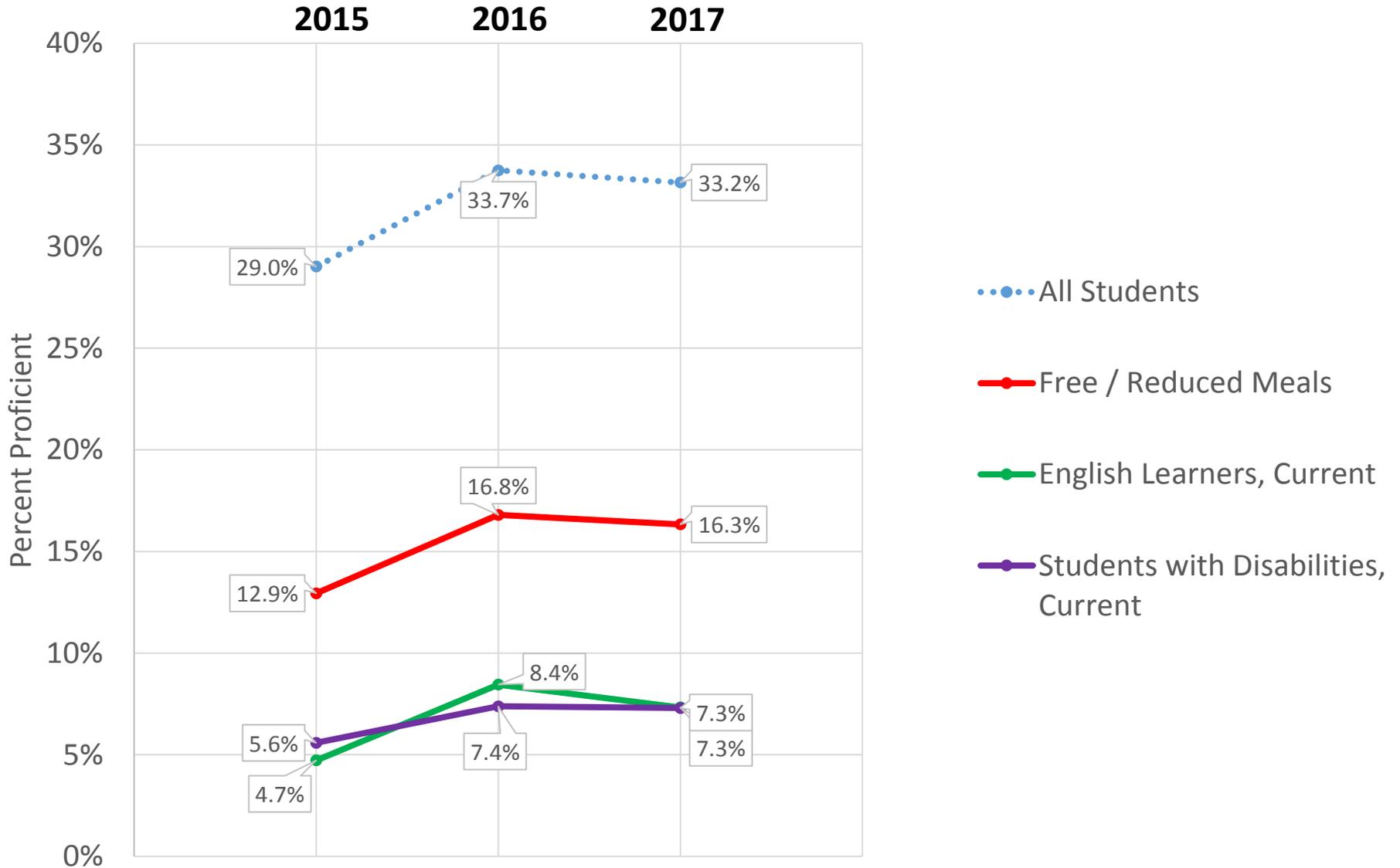
Proficiency Rates by Student Group, ELA 3-8



Proficiency Rates by Student Group, Math 3-8

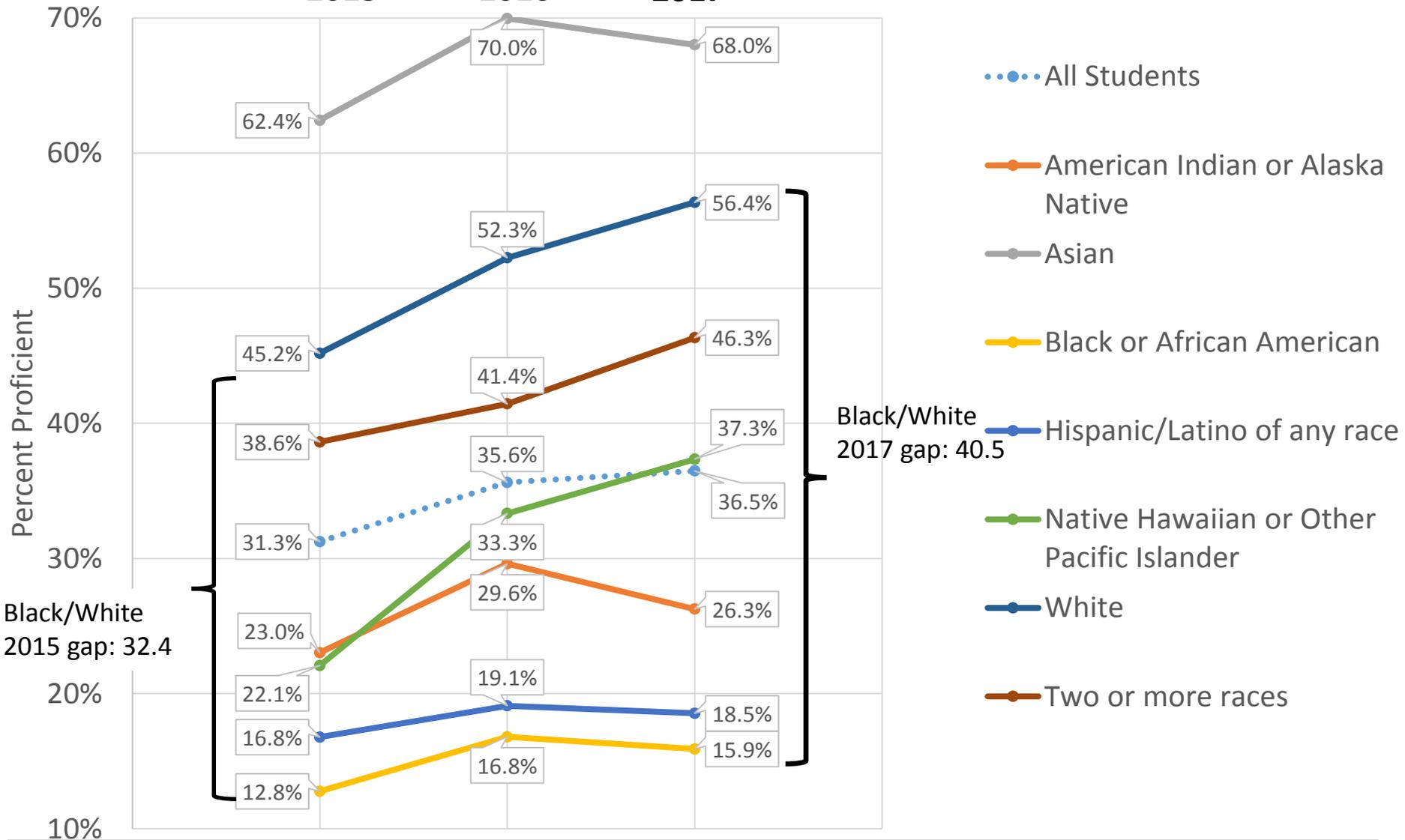


Proficiency Rates by Student Group, Math 3-8

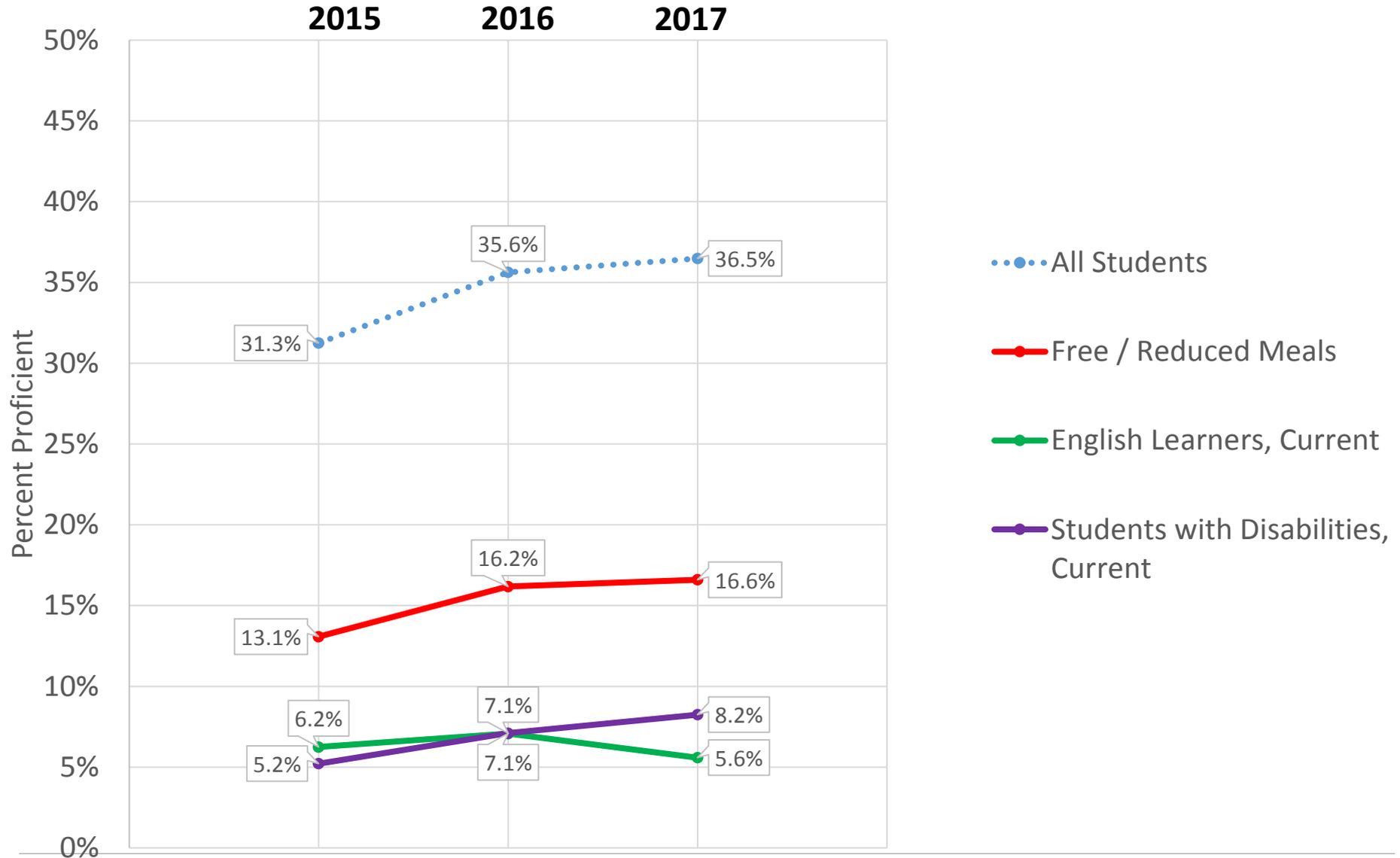


Proficiency Rates by Student Group, Algebra I

2015 2016 2017



Proficiency Rates by Student Group, Algebra I





Proficiency Rate and Change, and Gap in Proficiency Rate and Change (in Percentage Points), Comparing Group to “Non”-Group, ELA 3-8

	Proficiency Rate			Change in Proficiency Rate*			Gap in Proficiency Rate*			Change in Gap**						
	2015	2016	2017	2015 to 2016	2016 to 2017	2015 to 2017	2015	2016	2017	2015 to 2016		2016 to 2017		2015 to 2017		
All Students	38.9%	38.7%	40.6%	-0.2	1.9	1.7										
American Indian or Alaska Native	29.9%	33.5%	36.9%	3.6	3.4	7.0	-9.1	-5.2	-3.7	Narrowed by	3.8	Narrowed by	1.5	Narrowed by	5.4	
Asian	65.8%	66.6%	69.6%	0.8	3.0	3.8	28.7	29.9	31.0	Widened by	1.1	Widened by	1.1	Widened by	2.3	
Black or African American	22.7%	23.1%	24.7%	0.4	1.6	2.0	-24.5	-23.6	-24.0	Narrowed by	0.9	Widened by	0.4	Narrowed by	0.5	
Hispanic/Latino of any race	24.6%	24.6%	25.8%	0.1	1.1	1.2	-16.7	-16.6	-17.7	Narrowed by	0.1	Widened by	1.1	Widened by	1.0	
Native Hawaiian or Other Pacific Islander	40.5%	42.3%	44.1%	1.8	1.8	3.6	1.6	3.6	3.5	Widened by	2.0	Widened by	0.1	Widened by	1.9	
White	52.4%	52.2%	55.1%	-0.2	2.9	2.6	22.8	22.3	23.5	Narrowed by	0.5	Widened by	1.2	Widened by	0.7	
Two or more races	46.0%	44.6%	47.1%	-1.4	2.5	1.1	7.4	6.1	6.8	Narrowed by	1.3	Widened by	0.7	Narrowed by	0.6	
Students with Disabilities	6.4%	6.6%	6.9%	0.3	0.3	0.5	-36.6	-36.0	-37.8	Narrowed by	0.7	Widened by	1.8	Widened by	1.2	
English Learners	2.9%	4.1%	3.6%	1.2	-0.5	0.7	-37.7	-36.5	-39.3	Narrowed by	1.2	Widened by	2.8	Widened by	1.6	
Free / Reduced Meals	20.4%	20.7%	21.7%	0.3	1.0	1.7	-34.2	-32.1	-32.8	Narrowed by	2.0	Widened by	0.7	Narrowed by	1.4	

* Significance changes ($p < 0.05$) are indicated by bold type. Green text indicates a significant positive change and/or a significant positive achievement gap. Red text indicates a significant negative change and/or a significant negative achievement gap.

** Description of trend; does not imply statistical significance. Change in gap has different weights depending on the size of the student group.

Proficiency Rate and Change, and Gap in Proficiency Rate and Change (in Percentage Points), Comparing Group to “Non”-Group, ELA 10

	Proficiency Rate			Change in Proficiency Rate*			Gap in Proficiency Rate*			Change in Gap**						
	2015	2016	2017	2015 to 2016	2016 to 2017	2015 to 2017	2015	2016	2017	2015 to 2016		2016 to 2017		2015 to 2017		
All Students	39.7%	44.4%	49.3%	4.7	4.9	9.6										
American Indian or Alaska Native	33.1%	41.8%	45.8%	8.7	4.0	12.7	-6.6	-2.6	-3.6	Narrowed by	4.0	Widened by	1.0	Narrowed by	3.0	
Asian	62.5%	67.6%	77.3%	5.1	9.7	14.8	24.4	24.9	30.0	Widened by	0.5	Widened by	5.1	Widened by	5.6	
Black or African American	25.3%	27.6%	29.0%	2.3	1.4	3.7	-21.7	-25.8	-31.4	Widened by	4.0	Widened by	5.6	Widened by	9.7	
Hispanic/Latino of any race	27.5%	30.8%	34.3%	3.3	3.4	6.8	-13.7	-15.8	-17.7	Widened by	2.0	Widened by	1.9	Widened by	4.0	
Native Hawaiian or Other Pacific Islander	32.8%	41.4%	51.5%	8.6	10.1	18.7	-6.9	-3.0	2.2	Narrowed by	3.9	Changed by	5.2	Changed by	9.1	
White	49.8%	58.6%	67.5%	8.8	8.9	17.7	18.3	24.1	29.9	Widened by	5.8	Widened by	5.8	Widened by	11.6	
Two or more races	45.3%	52.4%	60.3%	7.1	7.9	15.0	5.8	8.2	11.4	Widened by	2.5	Widened by	3.2	Widened by	5.6	
Students with Disabilities	6.8%	7.4%	9.7%	0.5	2.3	2.9	-36.3	-41.0	-44.0	Widened by	4.7	Widened by	3.0	Widened by	7.7	
English Learners	2.0%	3.6%	2.7%	1.7	-1.0	0.7	-38.5	-42.8	-49.4	Widened by	4.4	Widened by	6.5	Widened by	10.9	
Free / Reduced Meals	22.7%	25.4%	27.6%	2.7	2.2	4.9	-26.5	-30.0	-34.0	Widened by	3.4	Widened by	4.0	Widened by	7.5	

* Significance changes ($p < 0.05$) are indicated by bold type. Green text indicates a significant positive change and/or a significant positive achievement gap. Red text indicates a significant negative change and/or a significant negative achievement gap.

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Proficiency Rate and Change, and Gap in Proficiency Rate and Change (in Percentage Points), Comparing Group to “Non”-Group, Math 3-8

	Proficiency Rate			Change in Proficiency Rate*			Gap in Proficiency Rate*			Change in Gap**						
	2015	2016	2017	2015 to 2016	2016 to 2017	2015 to 2017	2015	2016	2017	2015 to 2016		2016 to 2017		2015 to 2017		
All Students	29.0%	33.7%	33.2%	4.7	-0.6	4.1										
American Indian or Alaska Native	22.3%	26.0%	28.0%	3.7	2.0	5.7	-6.7	-7.8	-5.2	Widened by	1.0	Narrowed by	2.6	Narrowed by	1.5	
Asian	60.7%	67.2%	66.5%	6.5	-0.8	5.8	33.7	35.7	35.4	Widened by	2.0	Narrowed by	0.3	Widened by	1.7	
Black or African American	13.0%	16.6%	16.4%	3.6	-0.2	3.4	-24.5	-26.3	-25.7	Widened by	1.9	Narrowed by	0.6	Widened by	1.2	
Hispanic/Latino of any race	16.1%	20.7%	20.1%	4.5	-0.6	4.0	-15.1	-15.5	-15.7	Widened by	0.4	Widened by	0.1	Widened by	0.6	
Native Hawaiian or Other Pacific Islander	33.1%	37.5%	37.6%	4.4	0.1	4.5	4.1	3.8	4.5	Narrowed by	0.4	Widened by	0.7	Widened by	0.4	
White	42.4%	48.7%	48.7%	6.3	0.0	6.3	22.2	24.4	24.9	Widened by	2.2	Widened by	0.5	Widened by	2.7	
Two or more races	34.3%	38.7%	38.5%	4.4	-0.2	4.2	5.5	5.1	5.6	Narrowed by	0.4	Widened by	0.5	Widened by	0.1	
Students with Disabilities	5.6%	7.4%	7.3%	1.8	-0.1	1.7	-26.5	-29.8	-29.3	Widened by	3.2	Narrowed by	0.5	Widened by	2.7	
English Learners	4.7%	8.4%	7.3%	3.7	-1.1	2.6	-25.7	-26.9	-27.7	Widened by	1.1	Widened by	0.8	Widened by	1.9	
Free / Reduced Meals	12.9%	16.8%	16.3%	3.9	-0.5	3.4	-30.7	-31.2	-30.2	Widened by	0.5	Narrowed by	1.0	Narrowed by	0.5	

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Proficiency Rate and Change, and Gap in Proficiency Rate and Change (in Percentage Points), Comparing Group to “Non”-Group, Algebra I

	Proficiency Rate			Change in Proficiency Rate*			Gap in Proficiency Rate*			Change in Gap**					
	2015	2016	2017	2015 to 2016	2016 to 2017	2015 to 2017	2015	2016	2017	2015 to 2016		2016 to 2017		2015 to 2017	
All Students	31.3%	35.6%	36.5%	4.4	0.9	5.2									
American Indian or Alaska Native	23.0%	29.6%	26.3%	6.6	-3.4	3.2	-8.2	-6.0	-10.3	Narrowed by	2.2	Widened by	4.2	Widened by	2.0
Asian	62.4%	70.0%	68.0%	7.5	-1.9	5.6	33.4	36.8	33.8	Widened by	3.4	Narrowed by	3.0	Widened by	0.4
Black or African American	12.8%	16.8%	15.9%	4.0	-0.9	3.1	-27.9	-28.7	-31.3	Widened by	0.9	Widened by	2.5	Widened by	3.4
Hispanic/Latino of any race	16.8%	19.1%	18.5%	2.3	-0.6	1.8	-16.7	-19.5	-21.6	Widened by	2.8	Widened by	2.0	Widened by	4.8
Native Hawaiian or Other Pacific Islander	22.1%	33.3%	37.3%	11.3	4.0	15.3	-9.2	-2.3	0.9	Narrowed by	6.9	Changed by	3.2	Changed by	10.0
White	45.2%	52.3%	56.4%	7.1	4.1	11.2	24.0	27.4	32.0	Widened by	3.4	Widened by	4.6	Widened by	8.0
Two or more races	38.6%	41.4%	46.3%	2.8	4.9	7.7	7.7	6.0	10.3	Narrowed by	1.6	Widened by	4.2	Widened by	2.6
Students with Disabilities	5.2%	7.1%	8.2%	1.9	1.2	3.0	-29.0	-31.9	-31.4	Widened by	2.9	Narrowed by	0.5	Widened by	2.4
English Learners	6.2%	7.1%	5.6%	0.8	-1.5	-0.7	-26.3	-30.7	-33.5	Widened by	4.3	Widened by	2.8	Widened by	7.1
Free / Reduced Meals	13.1%	16.2%	16.6%	3.1	0.4	3.5	-30.6	-32.5	-32.4	Widened by	1.9	Narrowed by	0.0	Widened by	1.8

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** Description of trend; does not imply statistical significance. Change in gap has different weights depending on the size of the student group.

Statewide Proficiency Rate for FARMS Students by Race and Other Service Groups, ELA 3-8

	N (2017)	Percent Proficient		
		2015	2016	2017
Black or African American FARMS	78,069	16.7%	16.9%	17.8%
Black or African American non-FARMS	54,631	35.4%	33.6%	34.6%
DIFFERENCE*		-18.7	-16.7	-16.8
White FARMS	31,628	27.7%	27.8%	29.2%
White non-FARMS	120,074	59.6%	58.9%	61.9%
DIFFERENCE*		-31.9	-31.1	-32.7
Hispanic/Latino of any race FARMS	43,804	17.6%	18.3%	19.2%
Hispanic/Latino of any race non-FARMS	19,692	42.9%	39.9%	40.5%
DIFFERENCE*		-25.3	-21.6	-21.3
English learner FARMS	18,043	1.9%	3.3%	2.9%
English learner non-FARMS	4,785	8.5%	7.7%	6.4%
DIFFERENCE*		-6.6	-4.4	-3.5
Students with Disabilities FARMS	23,765	2.7%	2.7%	2.7%
Students with Disabilities non-FARMS	19,210	12.0%	11.9%	12.2%
DIFFERENCE*		-9.3	-9.2	-9.5

* Proficiency rate for FARMS and non-FARMS students are significantly different ($p < 0.05$) for all race and other service groups. Numbers may not add precisely due to rounding.

Statewide Proficiency Rate for FARMS Students by Race and Other Service Groups, ELA 10

	N (2017)	Percent Proficient		
		2015	2016	2017
Black or African American FARMS	11,404	19.3%	20.0%	21.4%
Black or African American non-FARMS	11,066	33.0%	36.2%	36.8%
DIFFERENCE*		-13.7	-16.1	-15.5
White FARMS	4,201	28.1%	34.4%	39.3%
White non-FARMS	20,719	54.3%	63.7%	73.3%
DIFFERENCE*		-26.3	-29.3	-34.0
Hispanic/Latino of any race FARMS	5,587	20.7%	23.7%	25.6%
Hispanic/Latino of any race non-FARMS	3,828	36.7%	40.7%	46.9%
DIFFERENCE*		-16.0	-17.0	-21.4
English learner FARMS	2,484	1.3%	2.7%	1.9%
English learner non-FARMS	979	4.0%	5.6%	4.6%
DIFFERENCE*		-2.7	-2.8	-2.7
Students with Disabilities FARMS	3,009	2.9%	3.3%	3.1%
Students with Disabilities non-FARMS	3,344	10.9%	11.4%	15.7%
DIFFERENCE*		-8.0	-8.1	-12.6

* Proficiency rate for FARMS and non-FARMS students are significantly different ($p < 0.05$) for all race and other service groups. Numbers may not add precisely due to rounding.

Statewide Proficiency Rate for FARMS Students by Race and Other Service Groups, Math 3-8

	N (2017)	Percent Proficient		
		2015	2016	2017
Black or African American FARMS	75,480	9.2%	12.0%	11.6%
Black or African American non-FARMS	50,925	21.4%	24.5%	23.5%
DIFFERENCE*		-12.3	-12.5	-11.9
White FARMS	30,311	19.5%	24.5%	24.1%
White non-FARMS	106,076	49.4%	55.8%	55.7%
DIFFERENCE*		-29.9	-31.3	-31.6
Hispanic/Latino of any race FARMS	42,480	11.3%	15.6%	15.2%
Hispanic/Latino of any race non-FARMS	18,322	29.8%	33.3%	31.4%
DIFFERENCE*		-18.5	-17.7	-16.2
English learner FARMS	18,725	3.1%	6.6%	5.8%
English learner non-FARMS	5,314	12.6%	16.3%	12.7%
DIFFERENCE*		-9.5	-9.7	-6.9
Students with Disabilities FARMS	23,581	2.2%	3.0%	2.9%
Students with Disabilities non-FARMS	18,700	10.8%	13.3%	12.9%
DIFFERENCE*		-8.7	-10.3	-10.0

* Proficiency rate for FARMS and non-FARMS students are significantly different ($p < 0.05$) for all race and other service groups. Numbers may not add precisely due to rounding.

Statewide Proficiency Rate for FARMS Students by Race and Other Service Groups, Algebra I

	N (2017)	Percent Proficient		
		2015	2016	2017
Black or African American FARMS	13,000	8.5%	11.3%	10.9%
Black or African American non-FARMS	11,265	19.5%	24.0%	21.7%
DIFFERENCE*		-11.0	-12.7	-10.8
White FARMS	4,893	20.8%	24.9%	29.1%
White non-FARMS	22,073	51.0%	58.8%	62.4%
DIFFERENCE*		-30.3	-33.8	-33.3
Hispanic/Latino of any race FARMS	7,433	10.6%	13.0%	13.1%
Hispanic/Latino of any race non-FARMS	4,470	27.9%	29.8%	27.5%
DIFFERENCE*		-17.2	-16.8	-14.4
English learner FARMS	3,847	4.0%	4.7%	4.0%
English learner non-FARMS	1,578	13.2%	13.0%	9.4%
DIFFERENCE*		-9.2	-8.3	-5.3
Students with Disabilities FARMS	3,448	1.6%	2.2%	3.0%
Students with Disabilities non-FARMS	3,694	9.6%	12.5%	13.2%
DIFFERENCE*		-8.0	-10.3	-10.2

* Proficiency rate for FARMS and non-FARMS students are significantly different ($p < 0.05$) for all race and other service groups. Numbers may not add precisely due to rounding.