



End of Year District Data Presentation

Presented to School Committee
By Vy Vu, District Data Specialist

June 24, 2015



Agenda

- Revisiting District Next Steps
- District Data Dashboards
 - Overall look at the demographic profile of Milton Public Schools
 - Enrollment, SPED, ELL, Low Income, Race, French Immersion
 - Staff demographics: Race, Gender
 - Topics of interest:
 - College matriculation
 - Athletics
- Standardized Assessments
 - 2014 MCAS
 - 2013-2014 PSAT, SAT & AP
- Internal Assessments
 - Examples and highlights from Elementary, Middle, and High
- Next Steps



Revisiting District Next Steps

Next Steps

(as outlined in April Internal Assessments presentation to the School Committee)

- Work with all disciplines to streamline data collection for common assessments and determine which measures to capture at the district level
- Evaluate district data systems to determine how to maximize current systems to hold data or whether other tools are needed
- Work with Dr. Angela Burke to train staff on relevant technology tools (Google Drive, Google Classrooms, Chromebooks etc.)
- Work with curriculum coordinators to support data analysis practices at all grade levels
- Develop dashboards that show common data for each school

District Data Dashboards

- ✓ Develop dashboards that show common data for each school



District Data Dashboards

- Why is there a need for dashboards?
 - A lot of systems, a lot of data, but no way to easily and systematically look at what data we have
 - Dashboards provide a uniform look so school leaders can learn to “read” data in the same way
 - Eliminate the inefficiency of reproducing the same reports or graphs every time there is updated data
 - Time and energy can be used to analyze the data and figure out action plans to address issues that arise through the data
- All demographic data for the district dashboards are drawn from the Admin Plus student information system, along with FamilyID and the MA DESE website.



District Data Dashboards: Enrollment



Milton Public Schools: Demographics

Grade Level Enrollment by Year: District

Grade Level	2011-12	2012-13	2013-14	2014-15
PK	3% (103)	3% (107)	3% (112)	3% (115)
0K	8% (307)	8% (324)	8% (319)	9% (351)
01	9% (339)	8% (330)	9% (341)	8% (344)
02	9% (348)	8% (337)	8% (322)	9% (347)
03	8% (329)	9% (350)	8% (330)	8% (326)
04	7% (290)	8% (329)	9% (340)	8% (330)
05	8% (310)	8% (303)	8% (331)	8% (344)
06	8% (330)	8% (327)	8% (310)	8% (326)
07	7% (263)	8% (315)	7% (295)	7% (291)
08	7% (273)	7% (270)	8% (313)	7% (286)
09	6% (239)	6% (245)	6% (252)	7% (264)
10	6% (235)	6% (238)	6% (247)	6% (246)
11	7% (275)	6% (234)	6% (233)	6% (237)
12	7% (264)	7% (290)	6% (243)	6% (242)
Grand ..	100% (3,905)	100% (3,999)	100% (3,988)	100% (4,049)

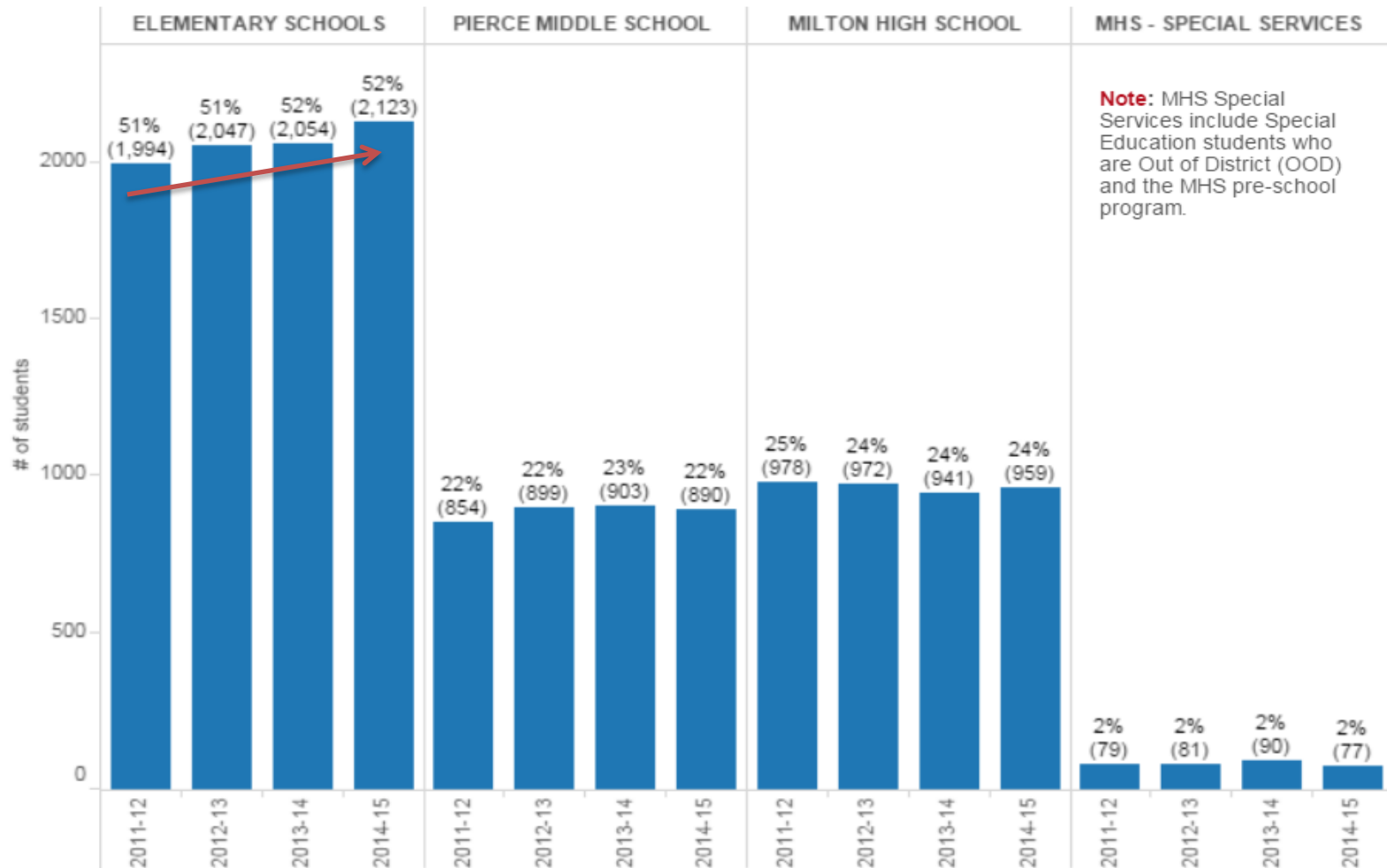


District Data Dashboards: Enrollment



Milton Public Schools: Demographics

Total Enrollment by Year



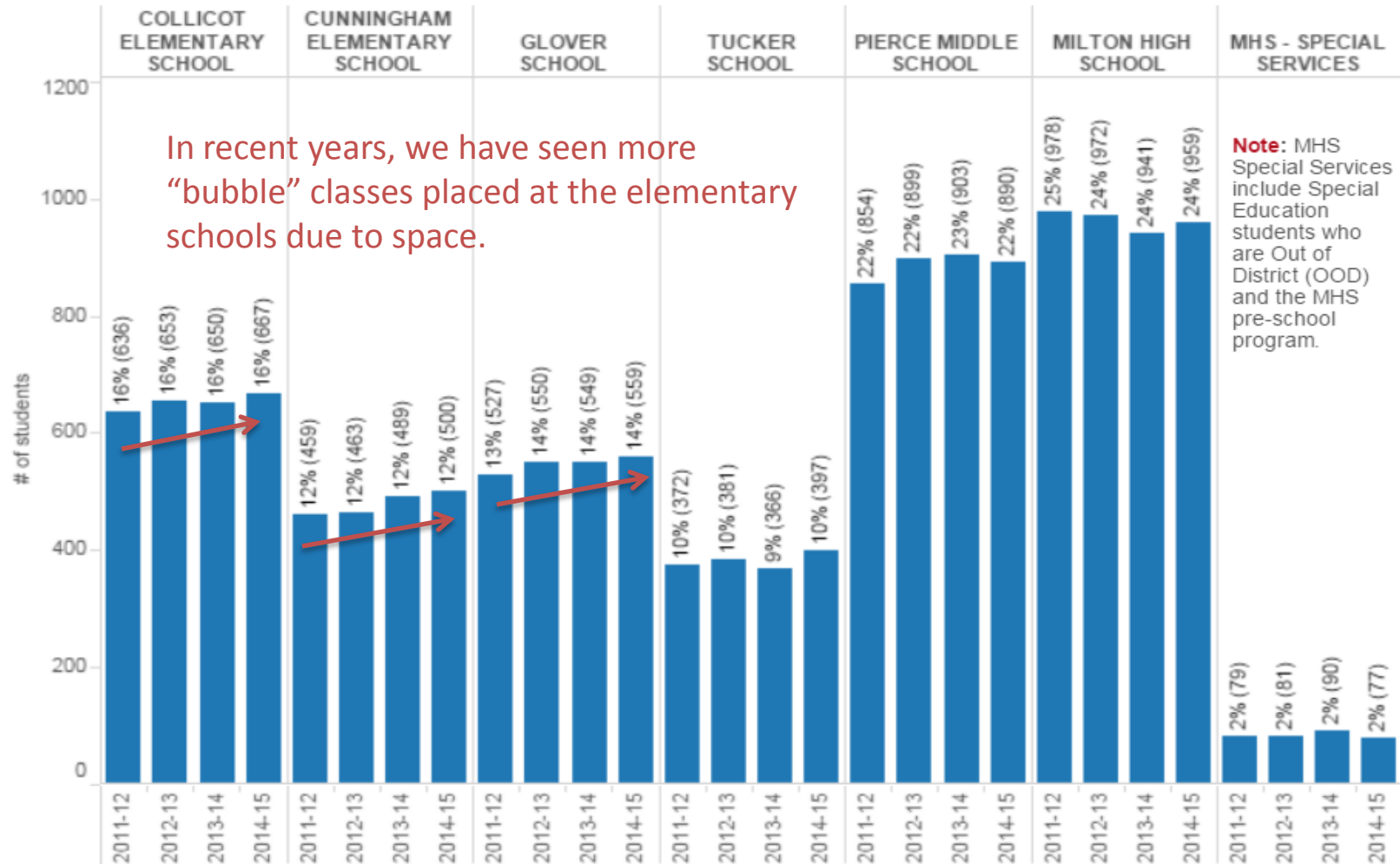


District Data Dashboards: Enrollment



Milton Public Schools: Demographics

Total Enrollment by Year: by School

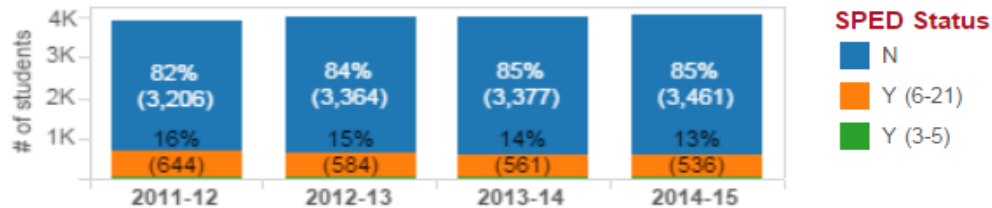




District Data Dashboards: SPED

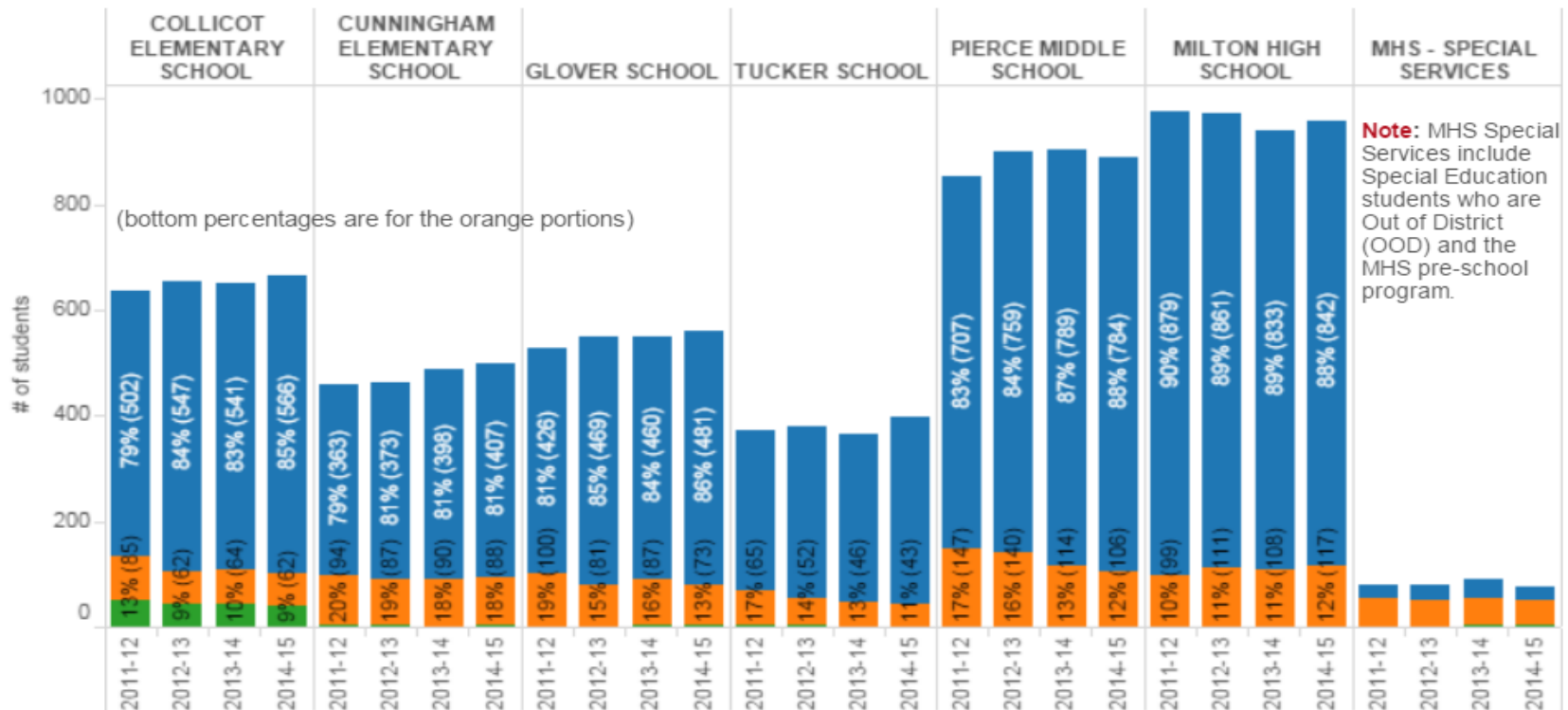
Milton Public Schools: Demographics

SPED Enrollment by Year: District



Note: SPED status here refers only to students with IEPs. This information is culled from the March SIMS report to the state.

SPED Enrollment by Year: by School



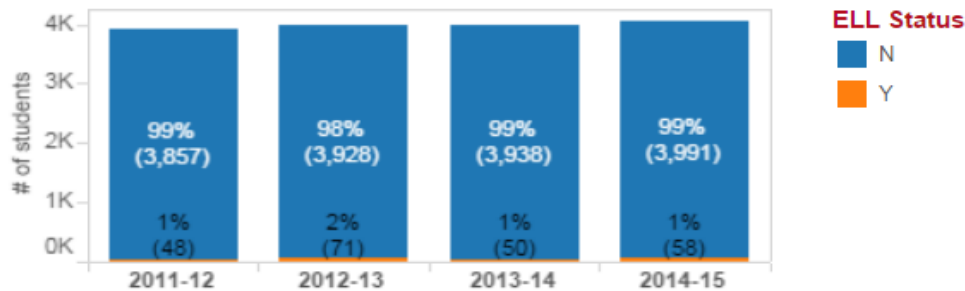


District Data Dashboards: English Language Learners

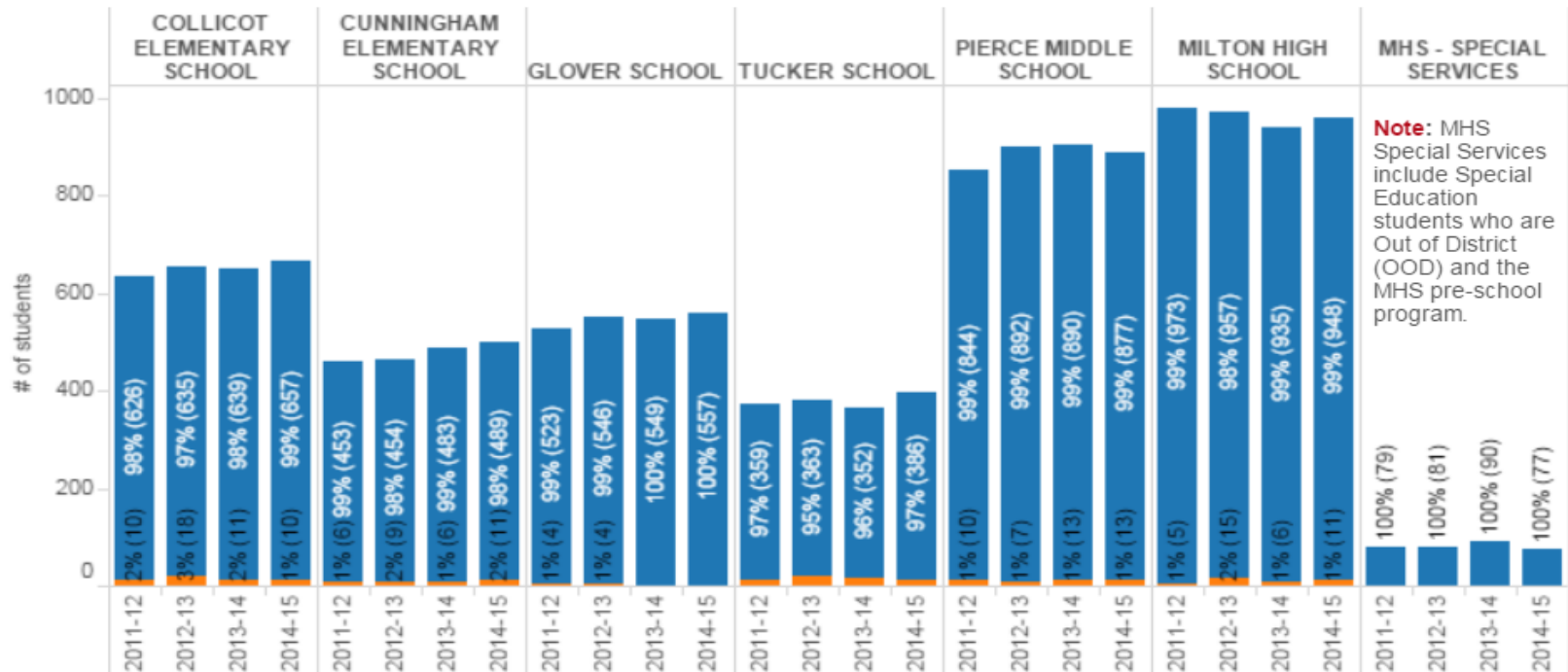


Milton Public Schools: Demographics

English Language Learner: District



English Language Learner: by School





Low Income

■ N
■ Y

Year	Low Income (Y)	Low Income (%)	Not Low Income (N)	Not Low Income (%)
2011-12	590	15%	3,315	85%
2012-13	595	15%	3,404	85%
2013-14	561	14%	3,427	86%
2014-15	520	13%	3,529	87%

Note: Data for low income status was pulled from the March SIMS report to the state. DESE is in process to change the low income designation to another measure called “economically disadvantaged.” In subsequent years, we will not be able to compare “low income” data to “economically disadvantaged” because they are not equivalent.

	COLLICOT ELEMENTARY SCHOOL	CUNNINGHAM ELEMENTARY SCHOOL	GLOVER SCHOOL	TUCKER SCHOOL	PIERCE MIDDLE SCHOOL	MILTON HIGH SCHOOL	MHS - SPECIAL SERVICES
# of students							<p>Note: MHS Special Services include Special Education students who are Out of District (OOD) and the MHS pre-school program.</p>

Note: MHS Special Services include Special Education students who are Out of District (OOD) and the MHS pre-school program.

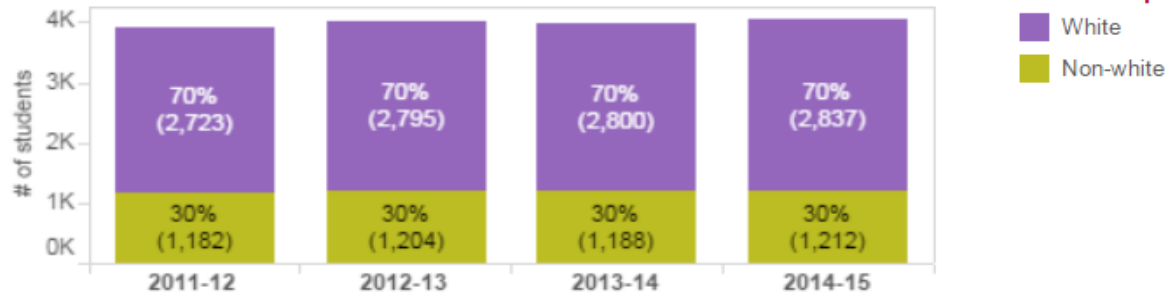


District Data Dashboards: Race

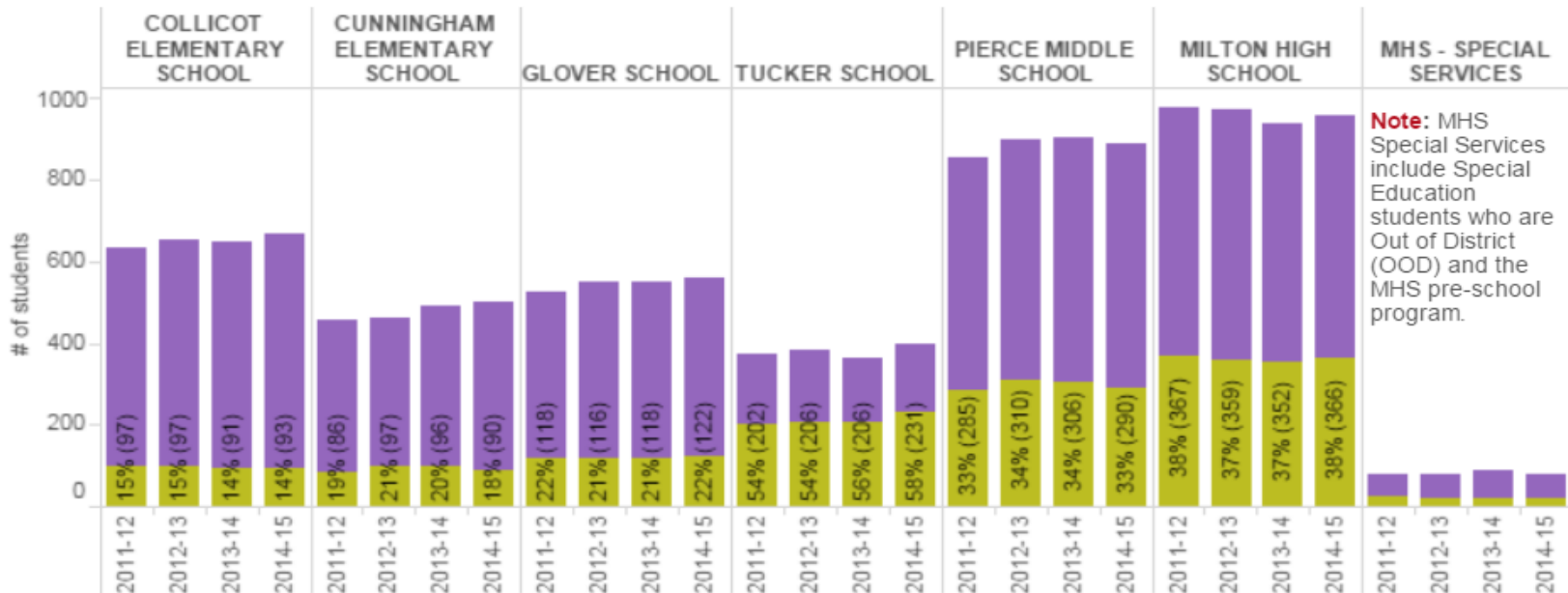


Milton Public Schools: Demographics

Race - District



Race - by school by year

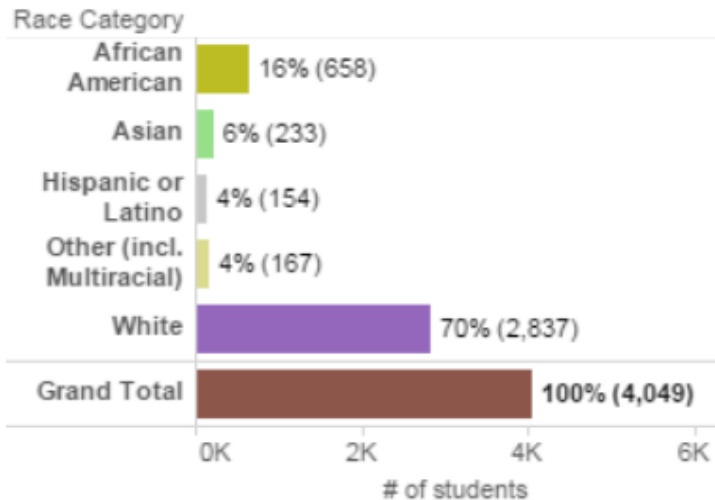




District Data Dashboards: Race

Milton Public Schools: Demographics

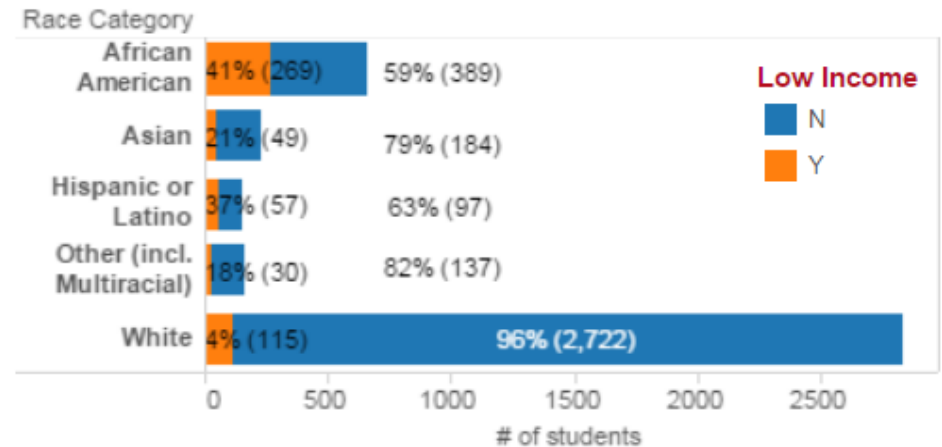
Race - District



Race & Low Income - District

Select School Year

2014-15



Race - by School

Race Category	COLLICOT ELEMENTARY SCHOOL	CUNNINGHAM ELEMENTARY SCHOOL	GLOVER SCHOOL	TUCKER SCHOOL	PIERCE MIDDLE SCHOOL	MILTON HIGH SCHOOL	MHS - SPECIAL SERVICES
African American	4% (24)	7% (35)	9% (48)	38% (152)	17% (151)	25% (235)	17% (13)
Asian	6% (42)	6% (31)	4% (25)	5% (20)	6% (56)	6% (56)	4% (3)
Hispanic or Latino	2% (11)	2% (11)	4% (24)	8% (32)	4% (38)	4% (37)	1% (1)
Other (incl. Multiracial)	2% (16)	3% (13)	4% (25)	7% (27)	5% (45)	4% (38)	4% (3)
White	86% (574)	82% (410)	78% (437)	42% (166)	67% (600)	62% (593)	74% (57)

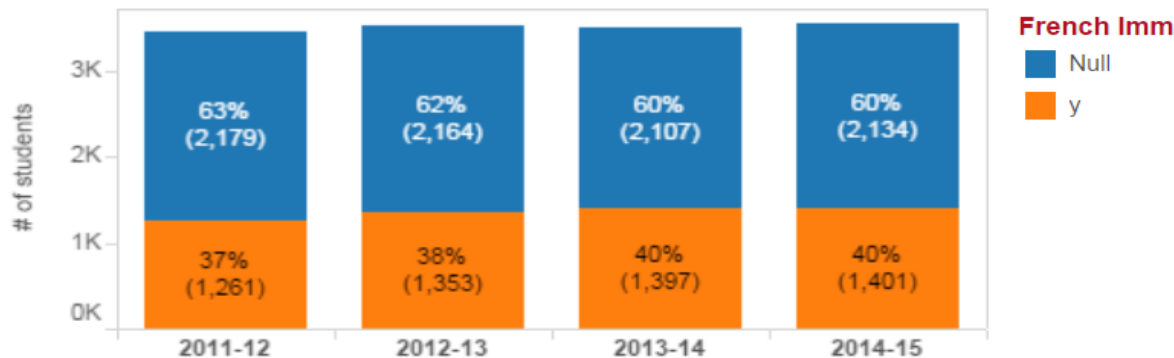


District Data Dashboards: French Immersion

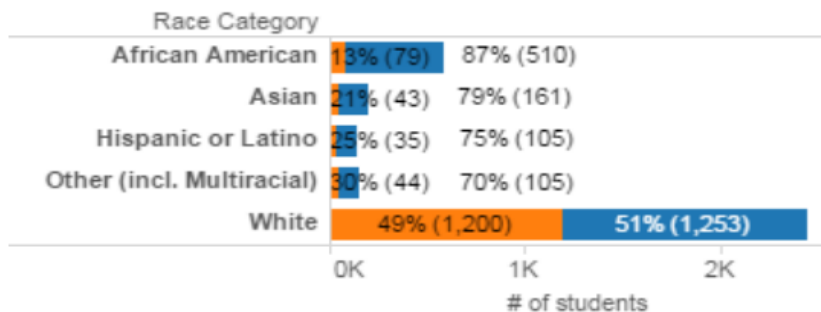
Milton Public Schools: Demographics

Note: For graphs looking at the French Immersion program, pre-K and Kindergarten students were not counted.

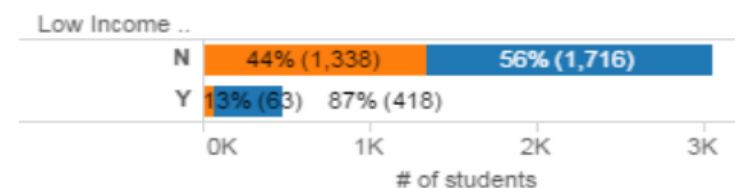
French Immersion Program Enrollment by Year: District



Race & French Immersion: District



Low Income & French Immersion: District



201 out of 1,401 students in French Immersion (or 14%) are minority students. Minority students composed of about 30% of students in the district.

63 out of 1,401 students in French Immersion (or 4%) are low income. The percentage of low income students in the district is 13%.

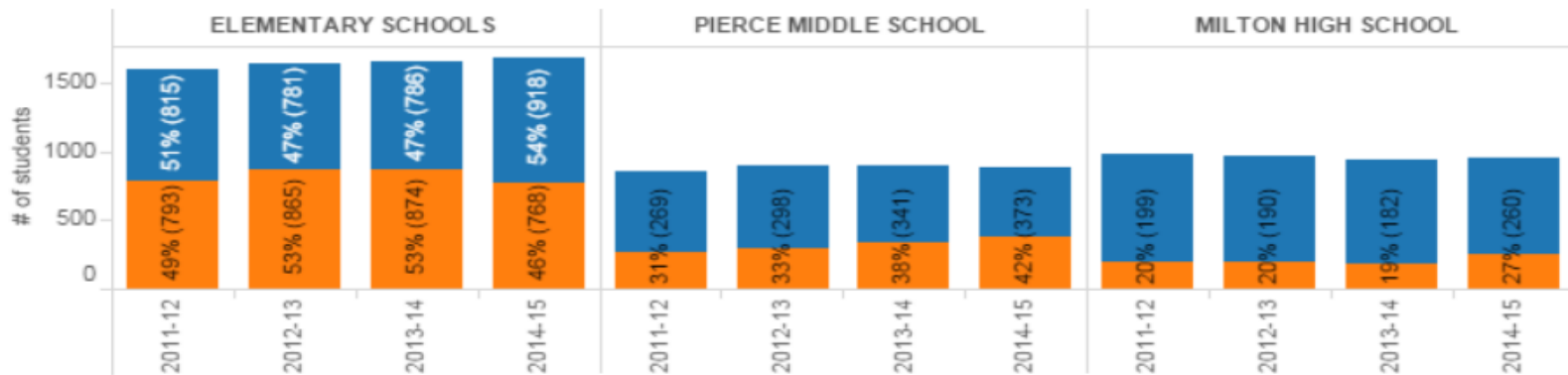


District Data Dashboards: French Immersion

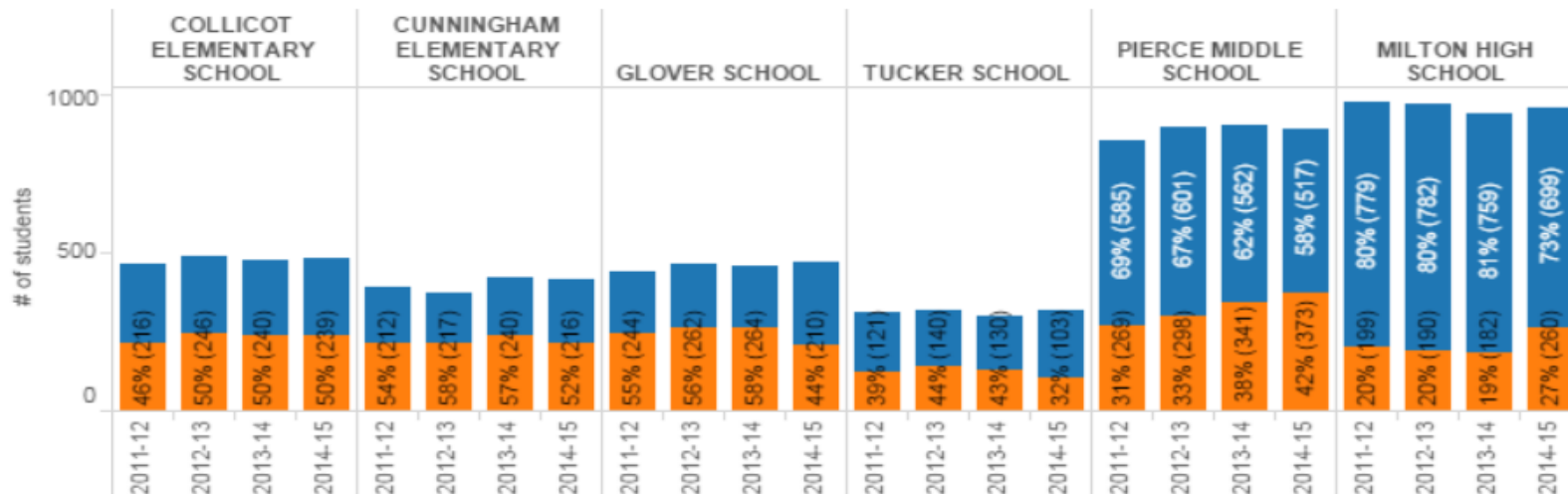
Milton Public Schools: Demographics

Note: For graphs looking at the French Immersion program, pre-K and Kindergarten students were not counted.

French Immersion Program Enrollment: Elementary, Middle, High



French Immersion Program Enrollment by Year: by School



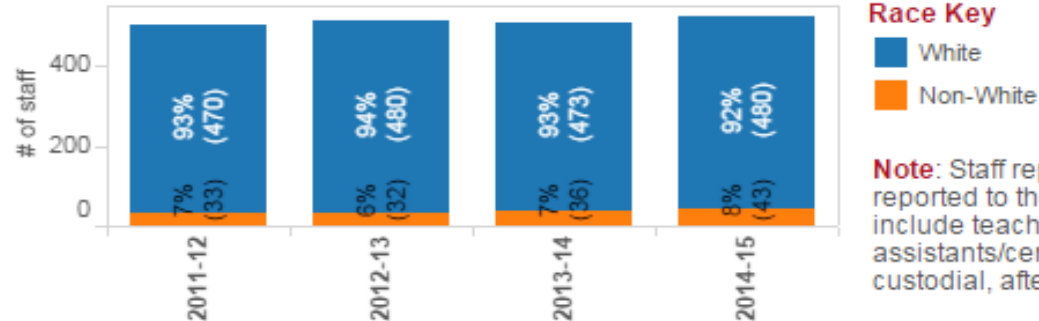


District Data Dashboards: Staff, Race



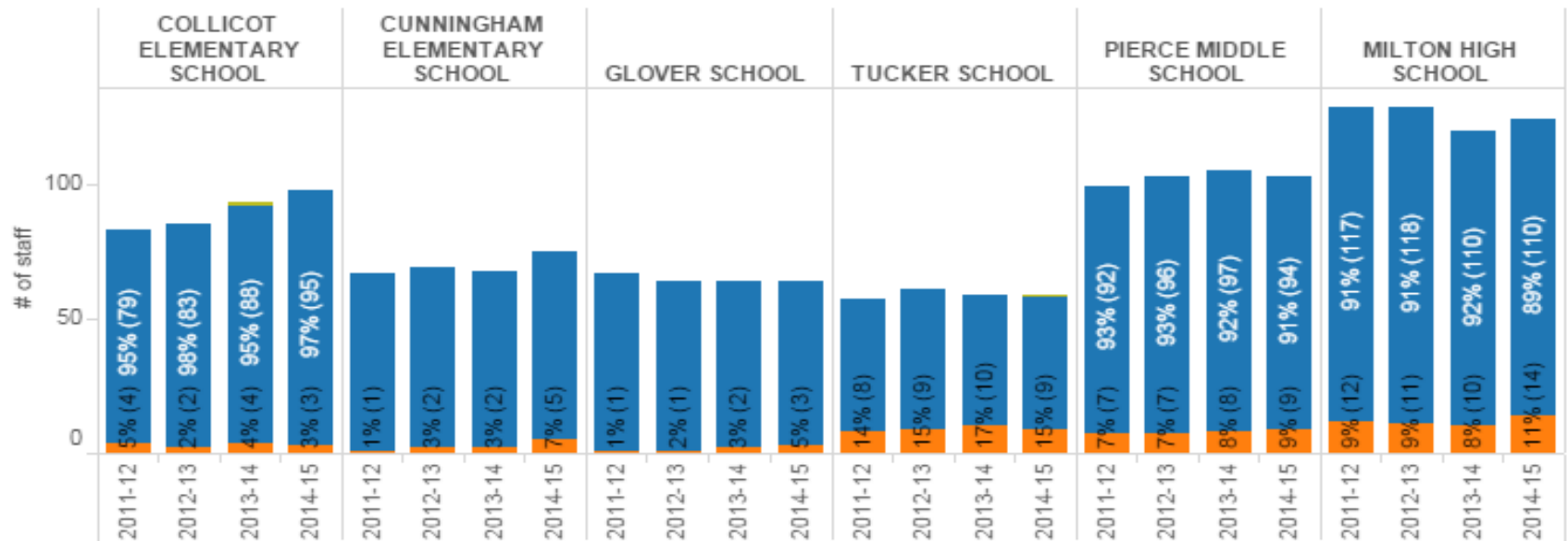
Milton Public Schools: Staff Demographics

Race of Staff - District



Note: Staff reported here are those who are also required to be reported to the state on the mandatory EPIMS report. These staff include teachers, aides, administrators, and administrative assistants/central office staff. These numbers do not include custodial, after school, food services or athletics staff.

Race of Staff - by School



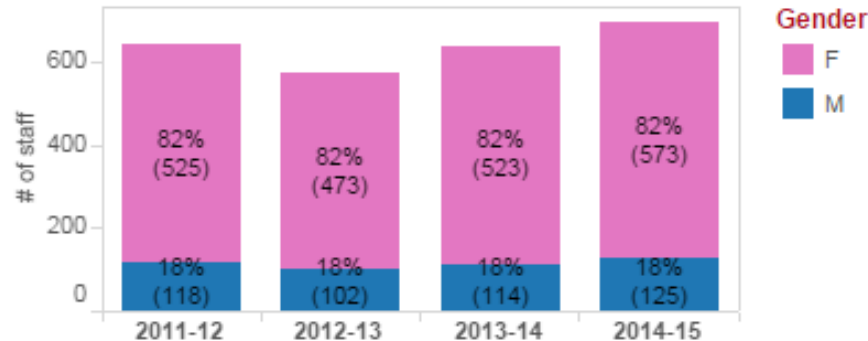


District Data Dashboards: Staff, Gender

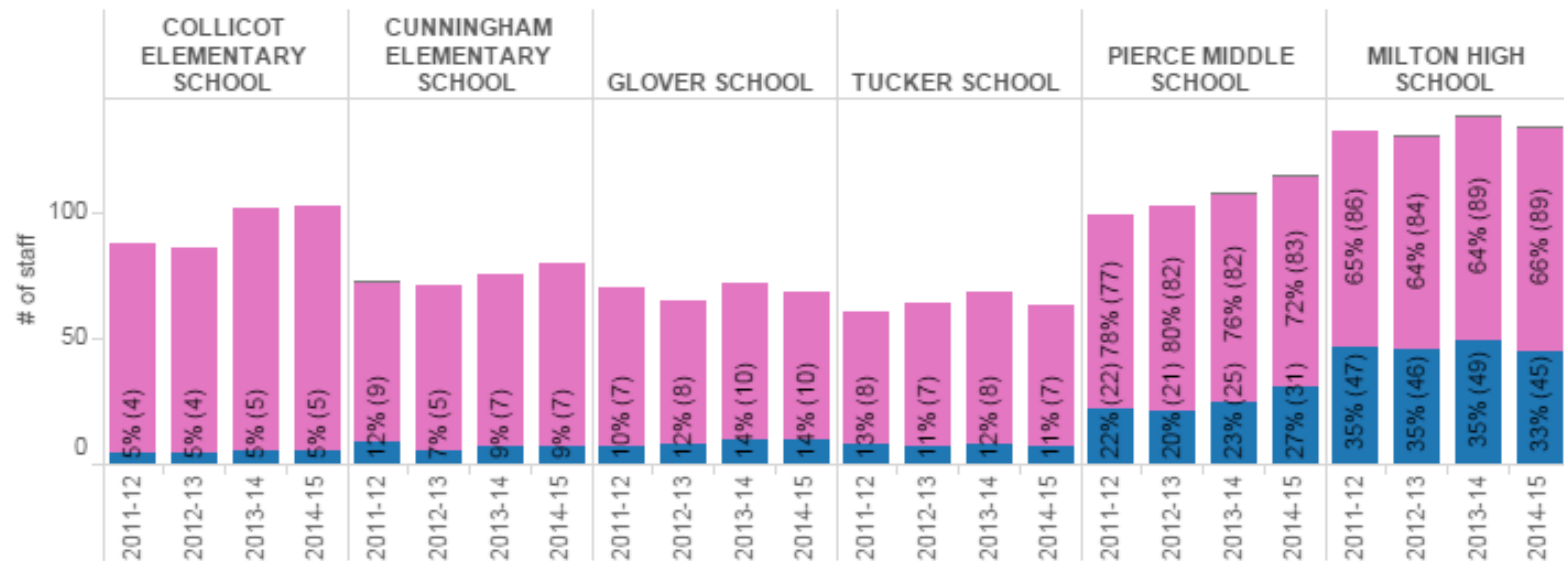


Milton Public Schools: Staff Demographics

Gender - District



Gender - by School





Graduation Rate

Cohort 2014 Graduation Rates

4-Year Graduation Rate (2014)

4-Year Graduation Rate (2014)							
Student Group	# in Cohort	% Graduated	% Still in School	% Non-Grad Completers	% GED	% Dropped Out	% Permanently Excluded
All Students	233	94.0	4.7	0.0	0.0	1.3	0.0
Male	134	92.5	6.0	0.0	0.0	1.5	0.0
Female	99	96.0	3.0	0.0	0.0	1.0	0.0
ELL	4	-	-	-	-	-	-
Students w/disabilities	29	65.5	31.0	0.0	0.0	3.4	0.0
Low income	52	94.2	5.8	0.0	0.0	0.0	0.0
High needs	77	87.0	11.7	0.0	0.0	1.3	0.0
Afr. Amer./Black	55	78.2	16.4	0.0	0.0	5.5	0.0
Asian	14	100.0	0.0	0.0	0.0	0.0	0.0
Hispanic/Latino	10	100.0	0.0	0.0	0.0	0.0	0.0
Amer. Ind. or Alaska Nat.	-	-	-	-	-	-	-
White	150	98.7	1.3	0.0	0.0	0.0	0.0
Nat. Haw. or Pacif. Isl.	-	-	-	-	-	-	-
Multi-race, Non-Hisp./Lat.	4	-	-	-	-	-	-

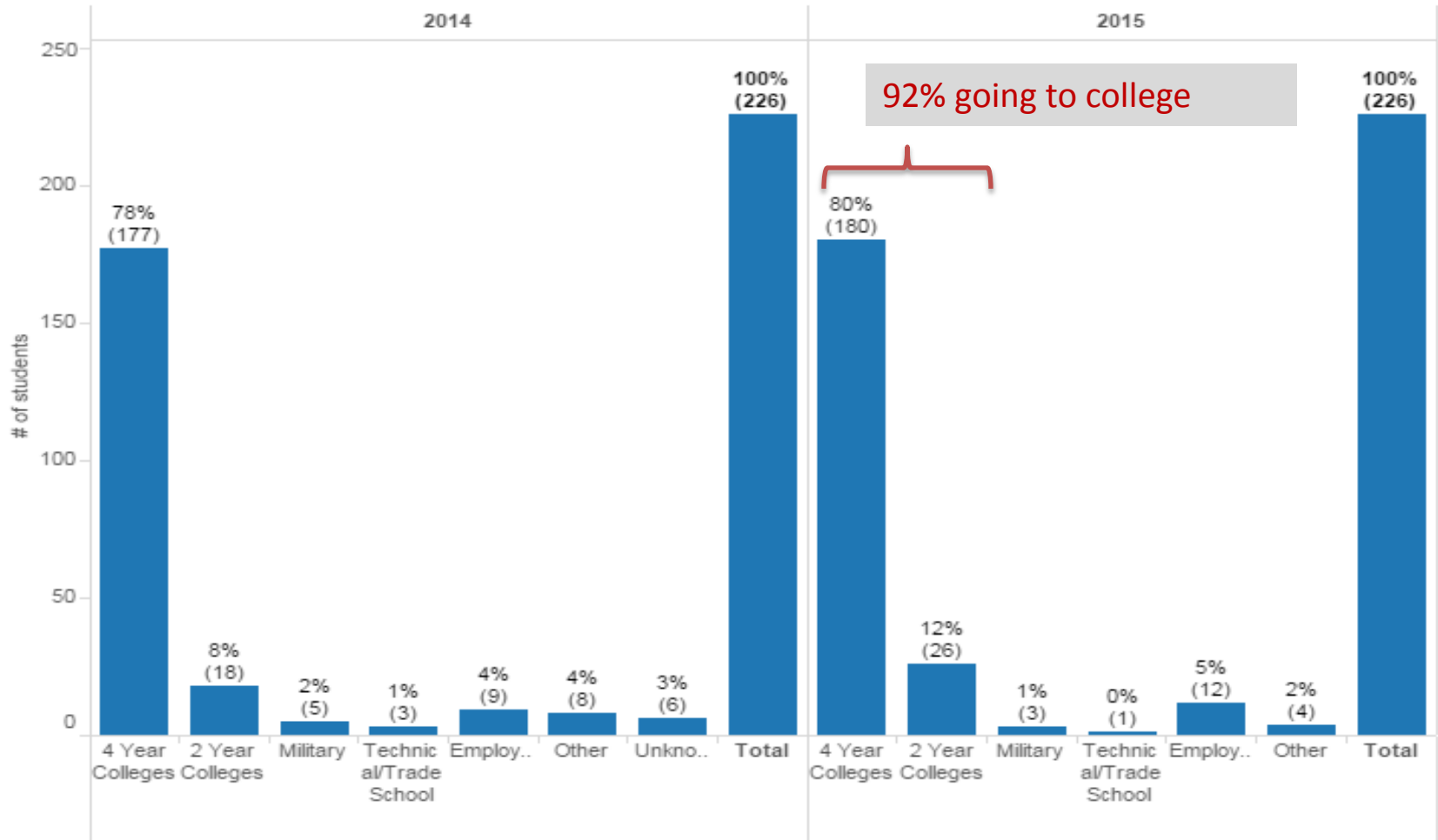
Note: Data obtained from the Massachusetts Department of Elementary and Secondary Education,
http://profiles.doe.mass.edu/grad/grad_report.aspx?orgcode=01890000&orgtypecode=5&



District Data Dashboards: College Matriculation

Milton Public Schools: College Matriculation

Summary of placement type



Note: College data as of 6/17/2015. Data may change as students hear back from waitlists as well.

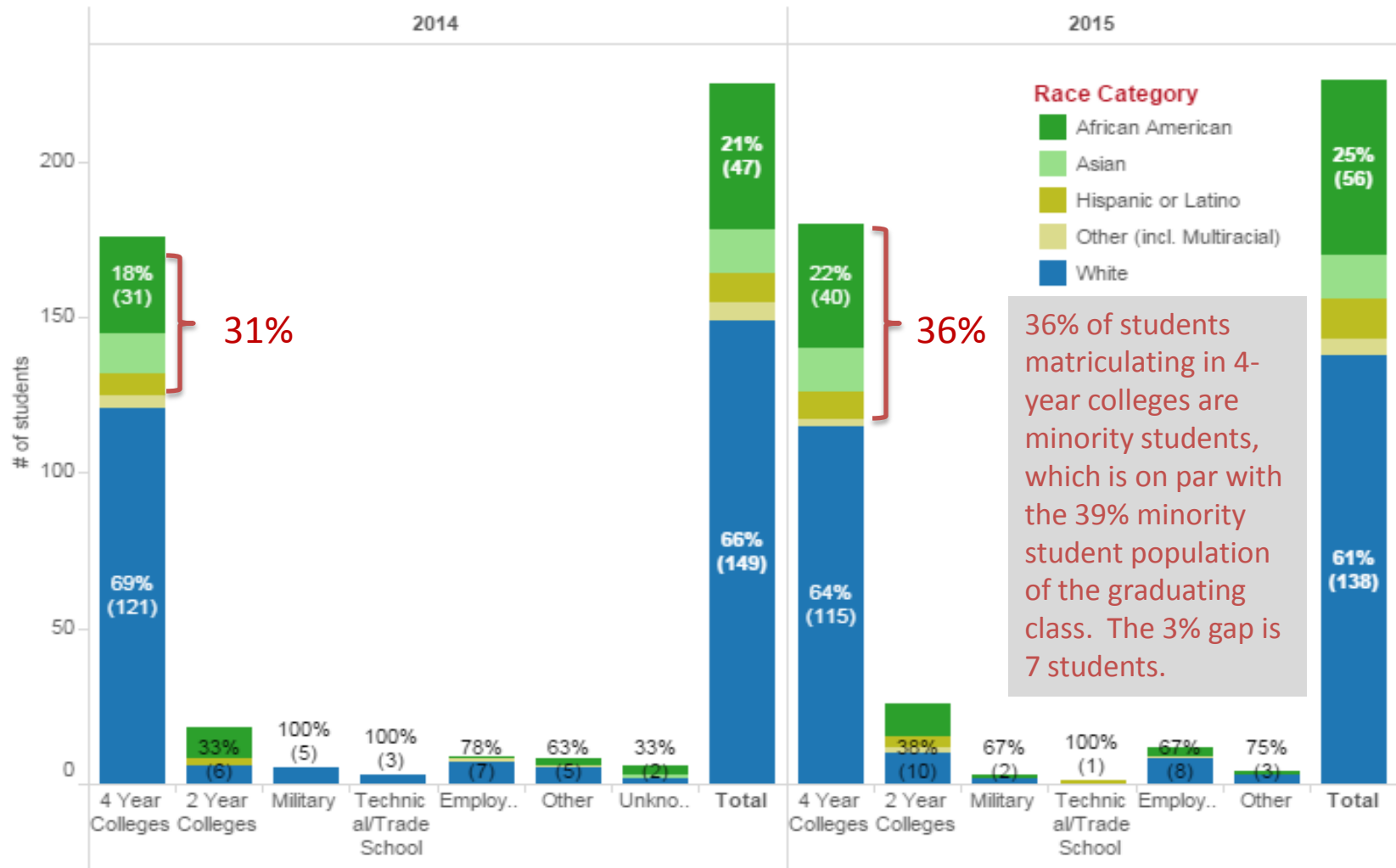


District Data Dashboards: College Matriculation



Milton Public Schools: College Matriculation

by Race



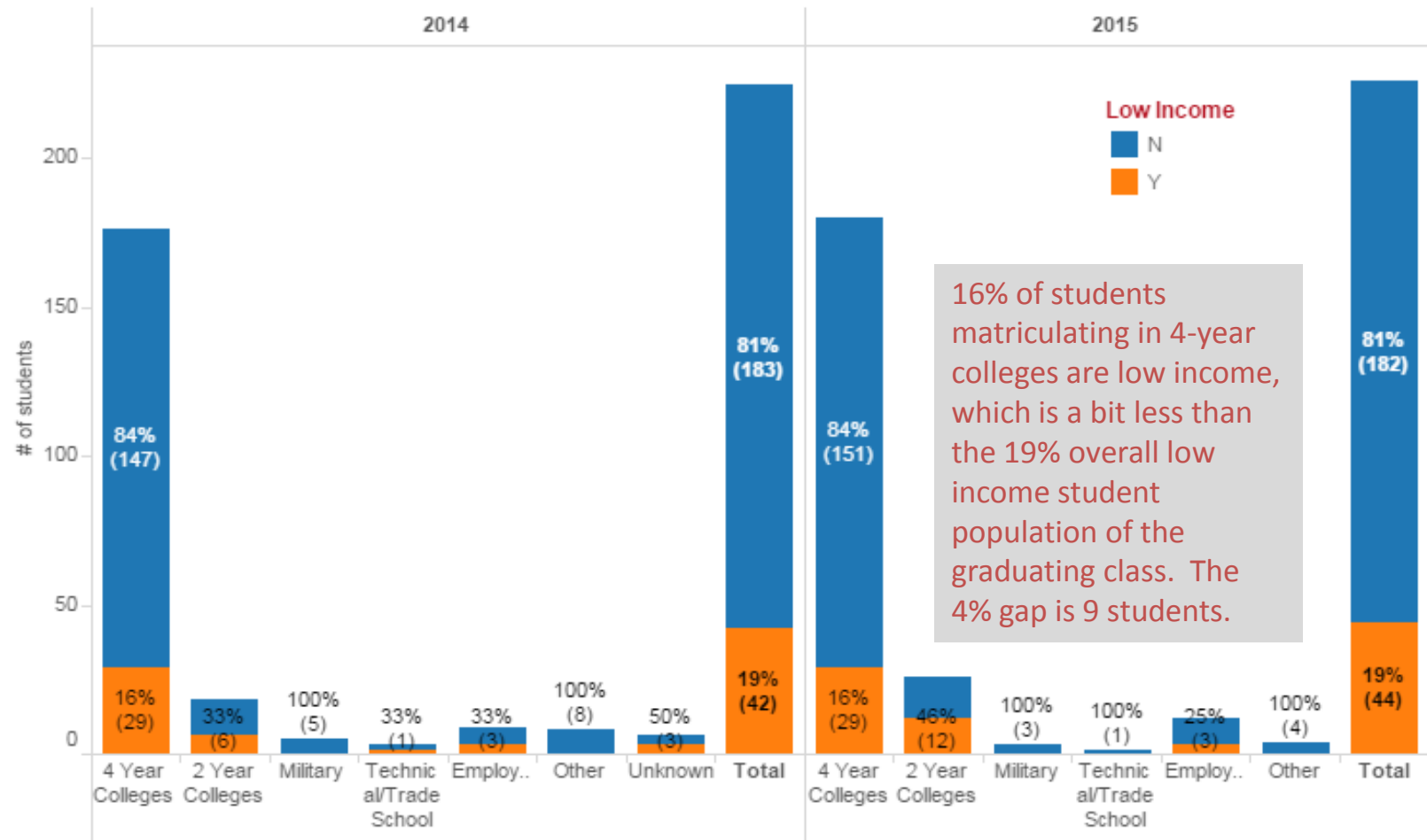


District Data Dashboards: College Matriculation



Milton Public Schools: College Matriculation

by Low Income



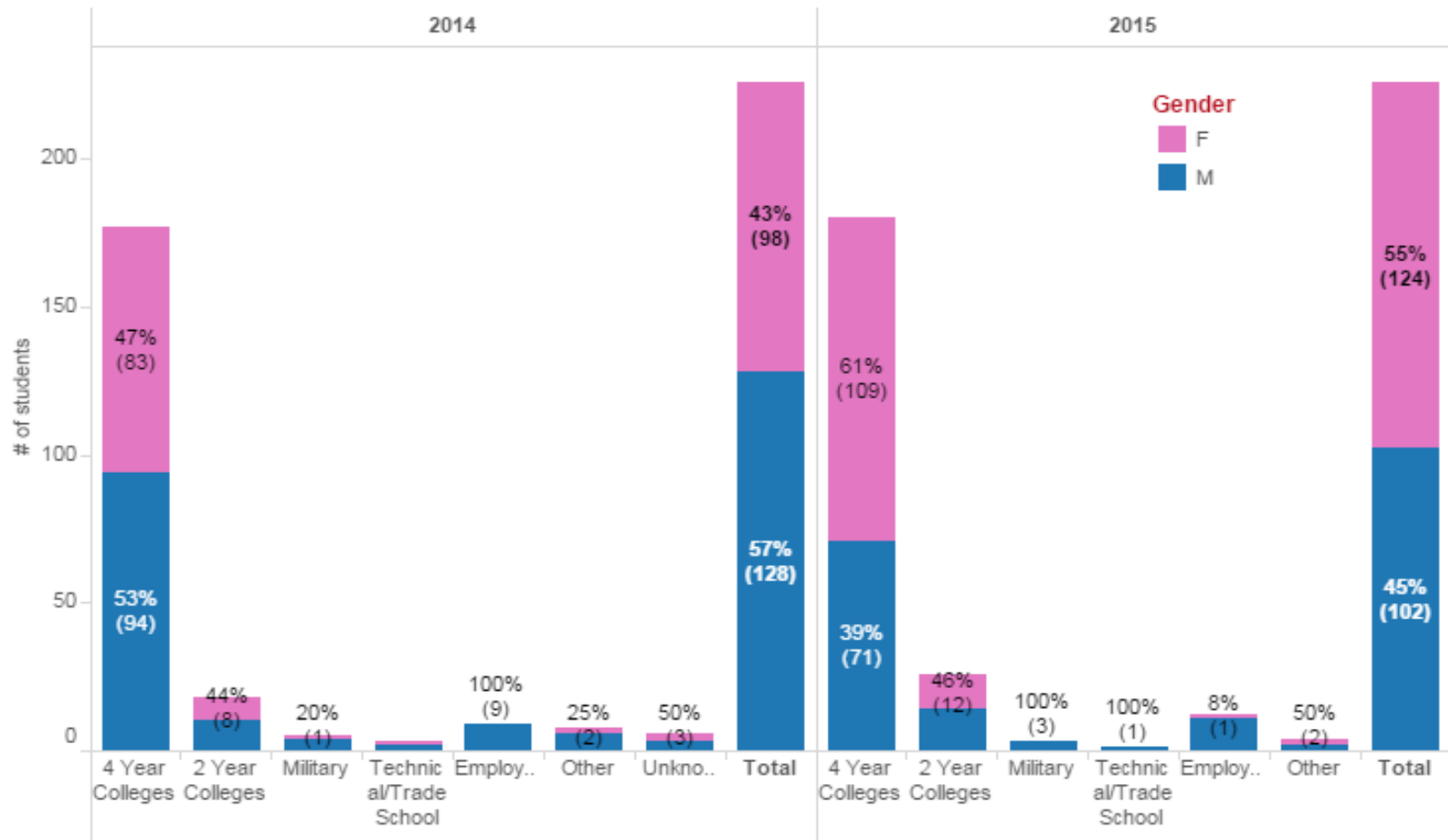


District Data Dashboards: College Matriculation



Milton Public Schools: College Matriculation

by Gender



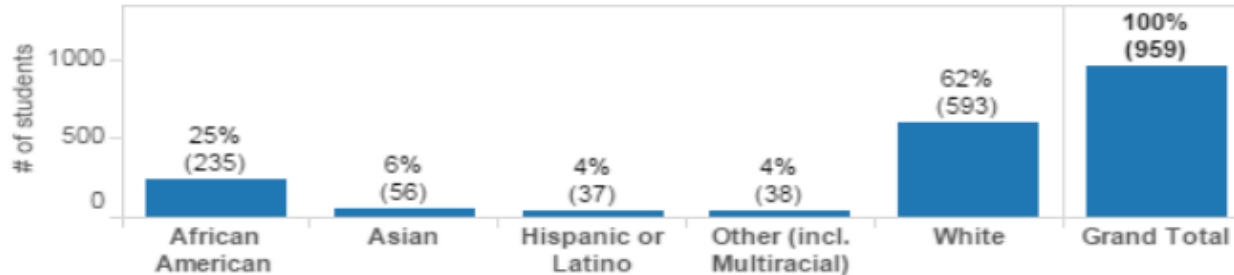


District Data Dashboards: Athletics

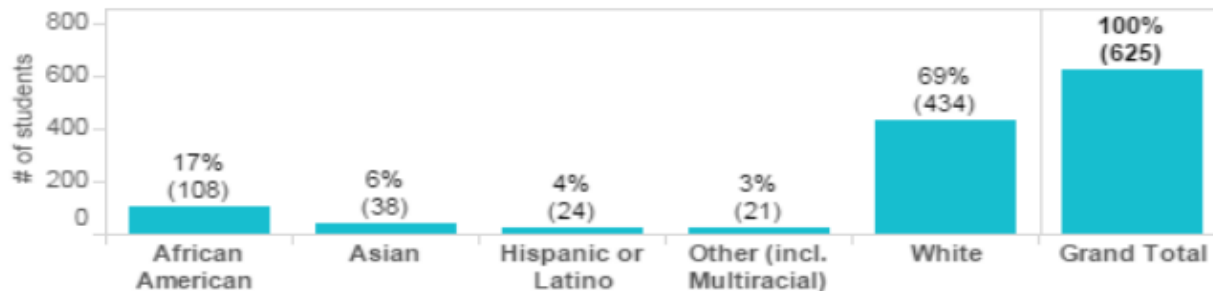


Milton Public Schools: Athletics

SY14-15 Milton High School - Breakdown by Race



SY14-15 Sports Participation by Race (distinct students)



Athletes as Proportion of MHS

	African American	Asian	Hispanic/ Latino	Other (incl. Multiracial)	White	Total
Non-athletes	127	18	13	17	159	334
Athletes	108	38	24	21	434	625
MHS Total	235	56	37	38	593	959
Athletes as proportion of MHS Total	0.46	0.68	0.65	0.55	0.73	0.65

Overall, 65% of MHS students play sports. African American students have the lowest percentage of sports participation at 46%.



District Data Dashboards: Athletics



Milton Public Schools: Athletics

Race Participation by Sport

Season	Sport	African American	Asian	Hispanic or Latino	Other (incl. Multiracial)	White	Grand Total
Fall	Cheerleading (Co-Ed)	48% (11)		4% (1)		48% (11)	100% (23)
	Crew (Boys)	3% (1)	3% (1)			95% (35)	100% (37)
	Crew (Girls)		7% (2)		4% (1)	89% (24)	100% (27)
	Cross-Country (Boys)	8% (1)				92% (12)	100% (13)
	Cross-Country (Girls)	26% (5)				74% (14)	100% (19)
	Field Hockey		4% (2)		2% (1)	94% (49)	100% (52)
	Football	35% (33)		2% (2)	8% (7)	55% (51)	100% (93)
	Golf					100% (11)	100% (11)
	Soccer (Boys)	18% (11)	7% (4)	7% (4)	8% (5)	61% (37)	100% (61)
	Soccer (Girls)	15% (8)	6% (3)	6% (3)	2% (1)	72% (38)	100% (53)
	Volleyball (Girls)	21% (11)	6% (3)		8% (4)	65% (34)	100% (52)
Grand Total		18% (81)	3% (15)	2% (10)	4% (19)	72% (316)	100% (441)

Year

2014-15 ▼

Season

Fall ▼

Note: Highlighted sports have 30% or more diversity.



District Data Dashboards: Athletics



Milton Public Schools: Athletics

Race Participation by Sport

Season	Sport	African American	Asian	Hispanic or Latino	Other (incl. Multiracial)	White	Grand Total
Winter	Basketball (Boys)	41% (29)	3% (2)	3% (2)	4% (3)	49% (35)	100% (71)
	Basketball (Girls)	13% (6)	2% (1)		7% (3)	78% (35)	100% (45)
	Cheerleading (Co-Ed)	44% (14)		3% (1)		53% (17)	100% (32)
	Ice Hockey (Boys)		2% (1)	2% (1)		95% (41)	100% (43)
	Ice Hockey (Girls)					100% (21)	100% (21)
	Indoor Track (Boys)	30% (14)	9% (4)		6% (3)	55% (26)	100% (47)
	Indoor Track (Girls)	23% (13)	11% (6)	5% (3)	2% (1)	60% (34)	100% (57)
	Skiing (Co-Ed)	5% (1)	5% (1)		5% (1)	85% (17)	100% (20)
	Wrestling	10% (3)		6% (2)	10% (3)	74% (23)	100% (31)
Grand Total		22% (80)	4% (15)	2% (9)	4% (14)	68% (249)	100% (367)

Year

2014-15 ▼

Season

Winter ▼

Note: Highlighted sports have 30% or more diversity.



District Data Dashboards: Athletics



Milton Public Schools: Athletics

Race Participation by Sport

Season	Sport	African American	Asian	Hispanic or Latino	Other (incl. Multiracial)	White	Grand Total
Spring	Baseball	2% (1)		2% (1)	2% (1)	95% (52)	100% (55)
	Crew (Boys)					100% (33)	100% (33)
	Crew (Girls)	3% (1)	6% (2)	6% (2)	6% (2)	78% (25)	100% (32)
	Lacrosse (Boys)	19% (9)	2% (1)	4% (2)	2% (1)	72% (34)	100% (47)
	Lacrosse (Girls)		2% (1)		4% (2)	93% (43)	100% (46)
	Outdoor Track (Boys)	38% (14)	5% (2)	8% (3)	3% (1)	46% (17)	100% (37)
	Outdoor Track (Girls)	33% (17)	12% (6)	4% (2)		51% (26)	100% (51)
	Rugby	20% (11)	2% (1)	4% (2)	5% (3)	69% (38)	100% (55)
	Softball	7% (3)		5% (2)		89% (39)	100% (44)
	Tennis (Boys)	27% (4)	47% (7)			27% (4)	100% (15)
	Tennis (Girls)	20% (5)	32% (8)	16% (4)		32% (8)	100% (25)
Grand Total		15% (65)	6% (28)	4% (18)	2% (10)	73% (319)	100% (440)

Year

2014-15 ▼

Season

Spring ▼

Note: Highlighted sports have 30% or more diversity.

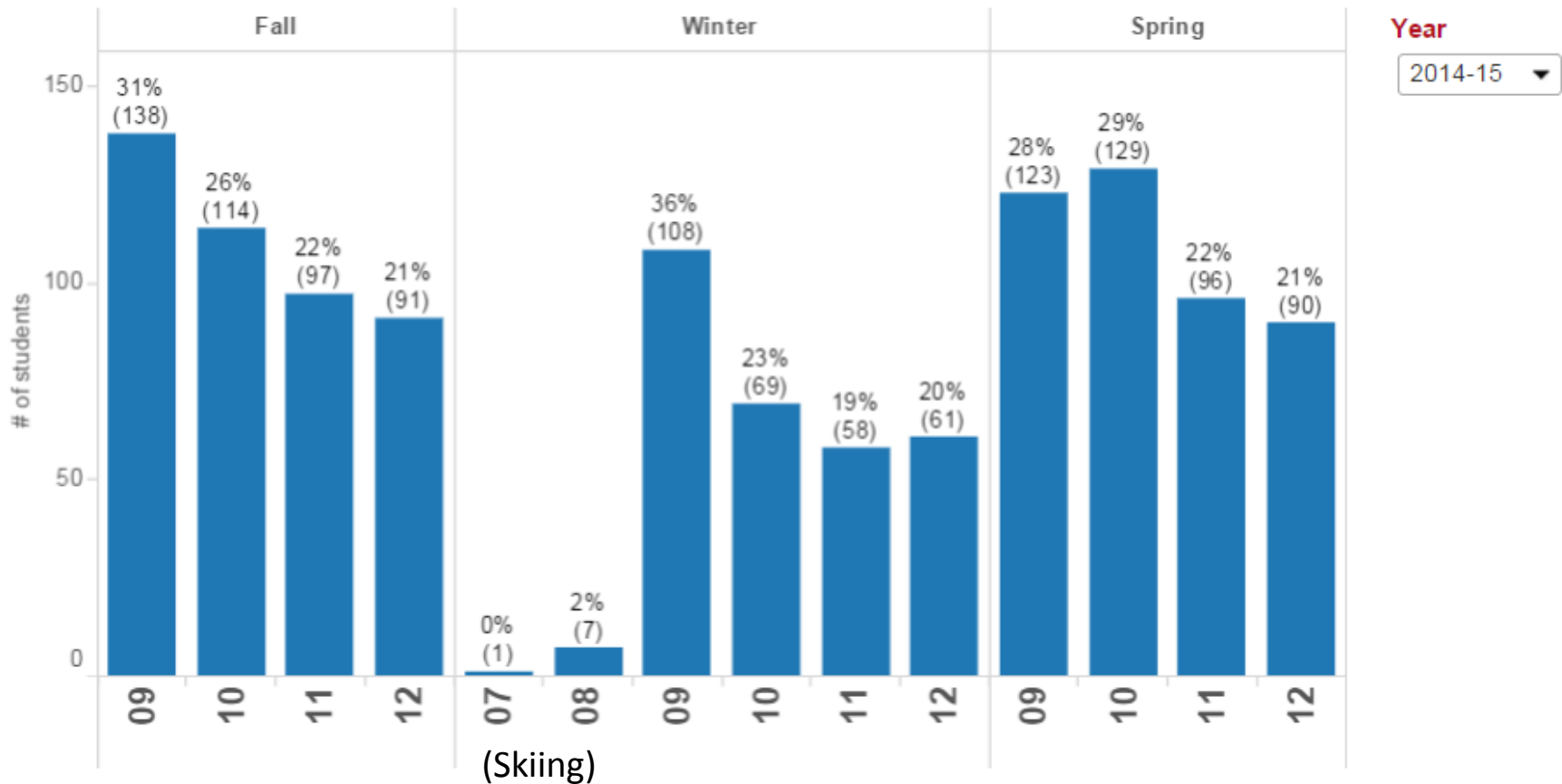


District Data Dashboards: Athletics



Milton Public Schools: Athletics

Sports Participation by Grade Level

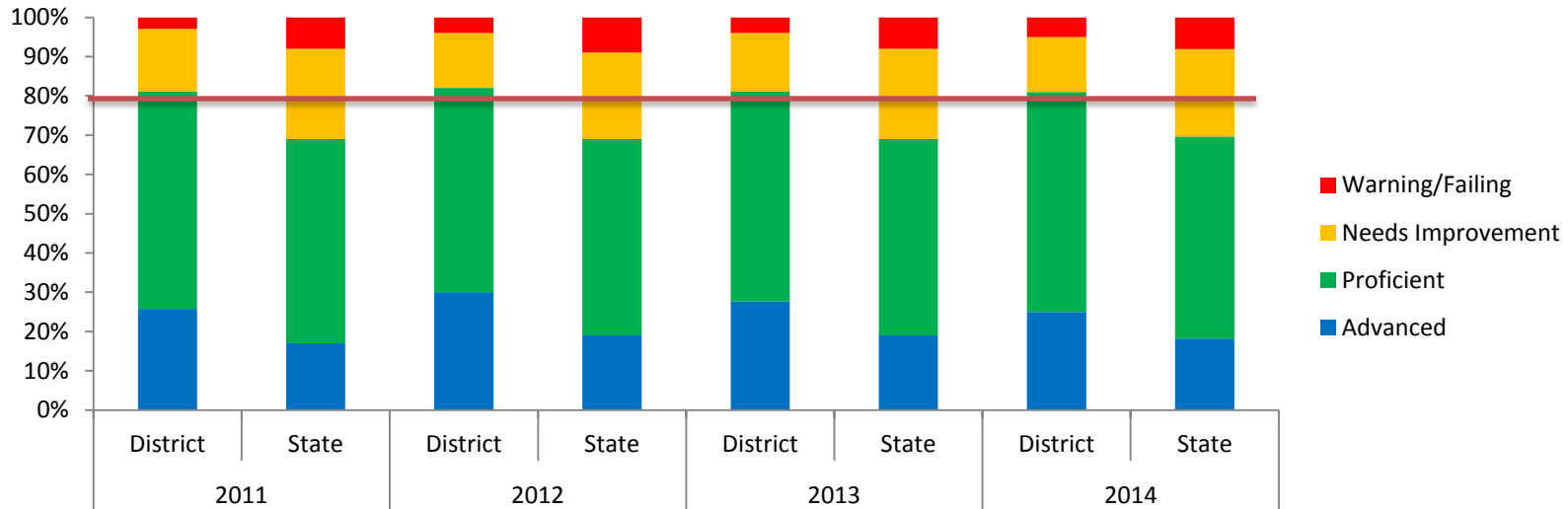


Standardized Assessment Data



ELA MCAS: District Achievement

MPS has consistently outperformed the state on the ELA MCAS with around 80% of students scoring Proficient or Above.

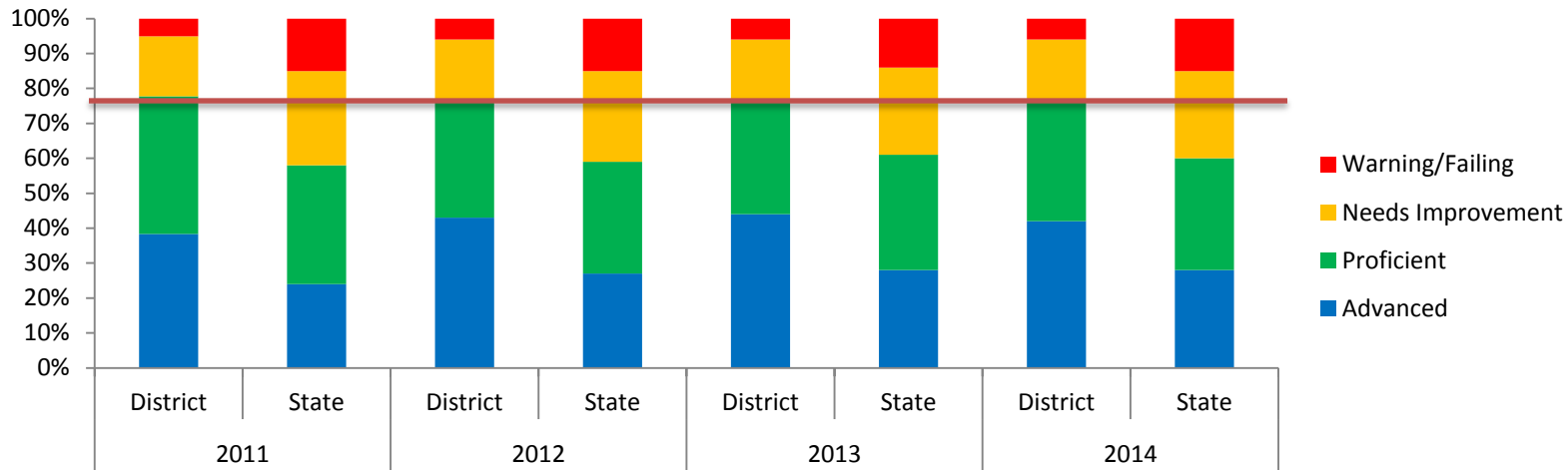


	2011		2012		2013		2014	
	District	State	District	State	District	State	District	State
Advanced	26%	17%	30%	19%	28%	19%	25%	18%
Proficient	56%	52%	52%	50%	54%	50%	56%	51%
Needs Improvement	16%	23%	14%	22%	15%	23%	14%	22%
Warning/Failing	3%	8%	4%	9%	4%	8%	5%	8%
N Students	2,059	497,258	2,012	497,549	2,112	496,175	2,137	488,744
CPI	93.5	87.2	93.3	86.7	93.3	86.8	92.6	86.7
Median SGP	61	50	61	50	56	51	51	50



Math MCAS: District Achievement

MPS has also consistently outperformed the state on the Math MCAS with just shy of 80% of students scoring Proficient or Above.

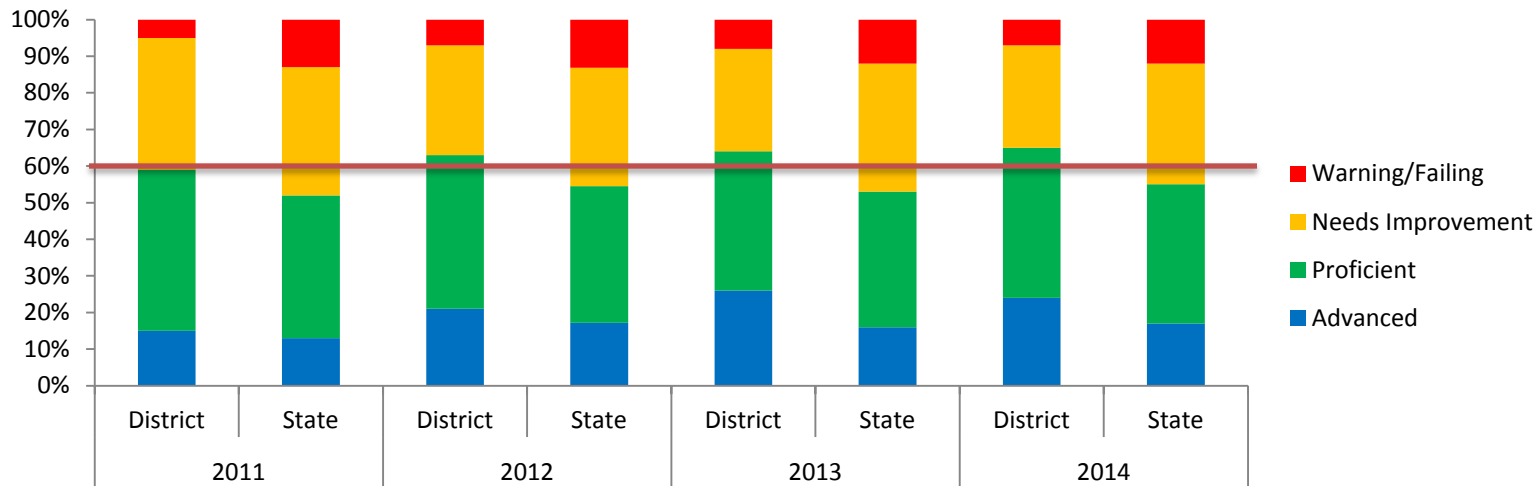


	2011		2012		2013		2014	
	District	State	District	State	District	State	District	State
Advanced	38%	24%	43%	27%	44%	28%	42%	28%
Proficient	39%	34%	33%	32%	33%	33%	34%	32%
Needs Improvement	17%	27%	18%	26%	17%	25%	18%	25%
Warning/Failing	5%	15%	6%	15%	6%	14%	6%	15%
N Students	2,059	497,712	2,016	497,984	2,112	497,090	2,137	490,288
CPI	90.6	79.9	90.5	79.9	90.5	80.8	89.8	80.3
Median SGP	65	50	59	50	55	51	48	50



Science MCAS: District Achievement

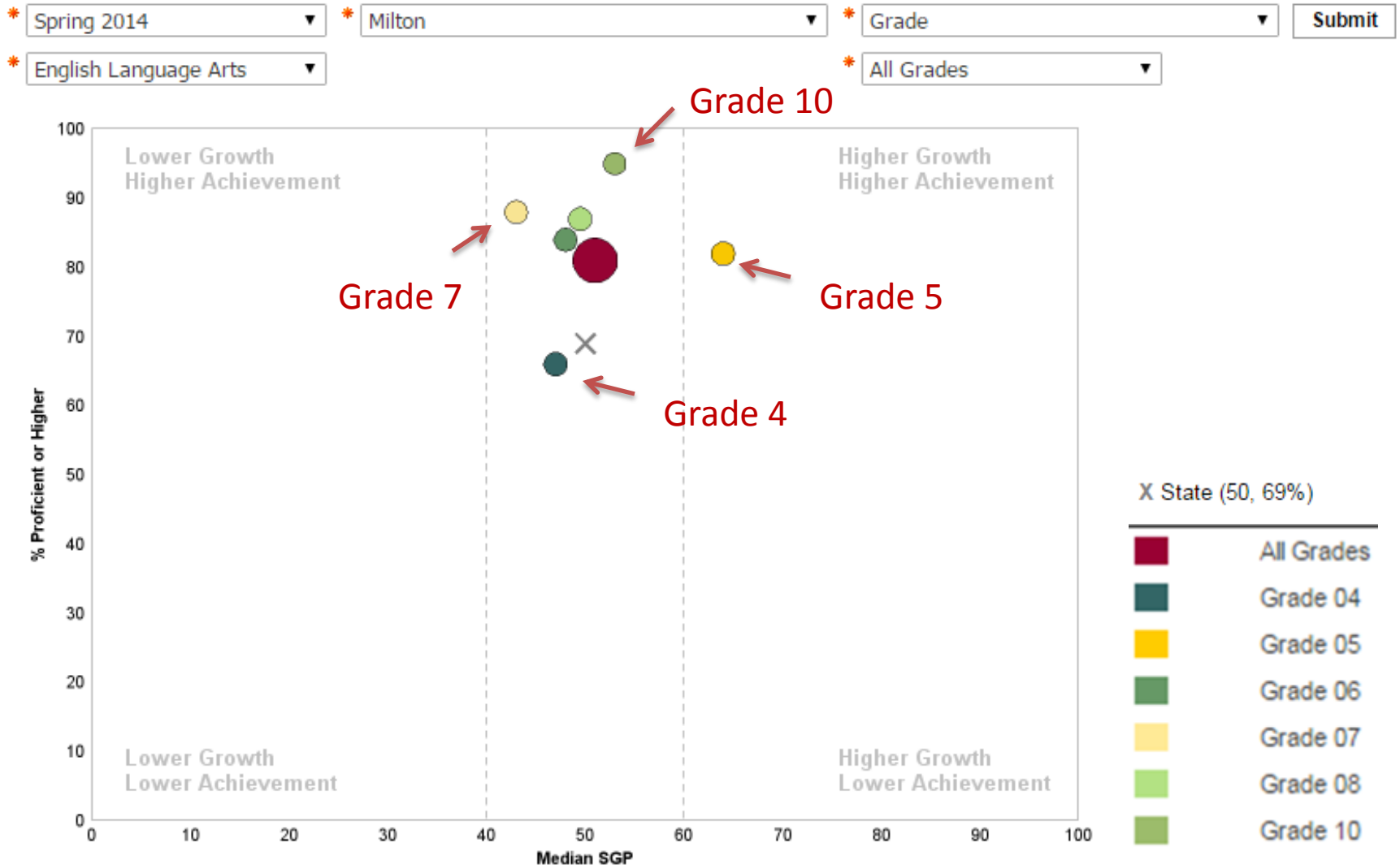
In Science, MPS also outperformed the state consistently, and the percentage of students scoring Proficient or Above is increasing every year from 59% in 2011 to 65% in 2014.



	2011		2012		2013		2014	
	District	State	District	State	District	State	District	State
Advanced	15%	13%	21%	17%	26%	16%	24%	17%
Proficient	44%	39%	42%	37%	38%	37%	41%	38%
Needs Improvement	36%	35%	30%	32%	28%	35%	28%	33%
Warning/Failing	5%	13%	7%	13%	8%	12%	7%	12%
N Students	855	211,422	788	211,464	790	209,573	846	211,440
CPI	83.6	77.6	85.3	78.6	84.4	79	86.4	79.6










2014 ELA MCAS: District Growth





2014 ELA MCAS: District Growth

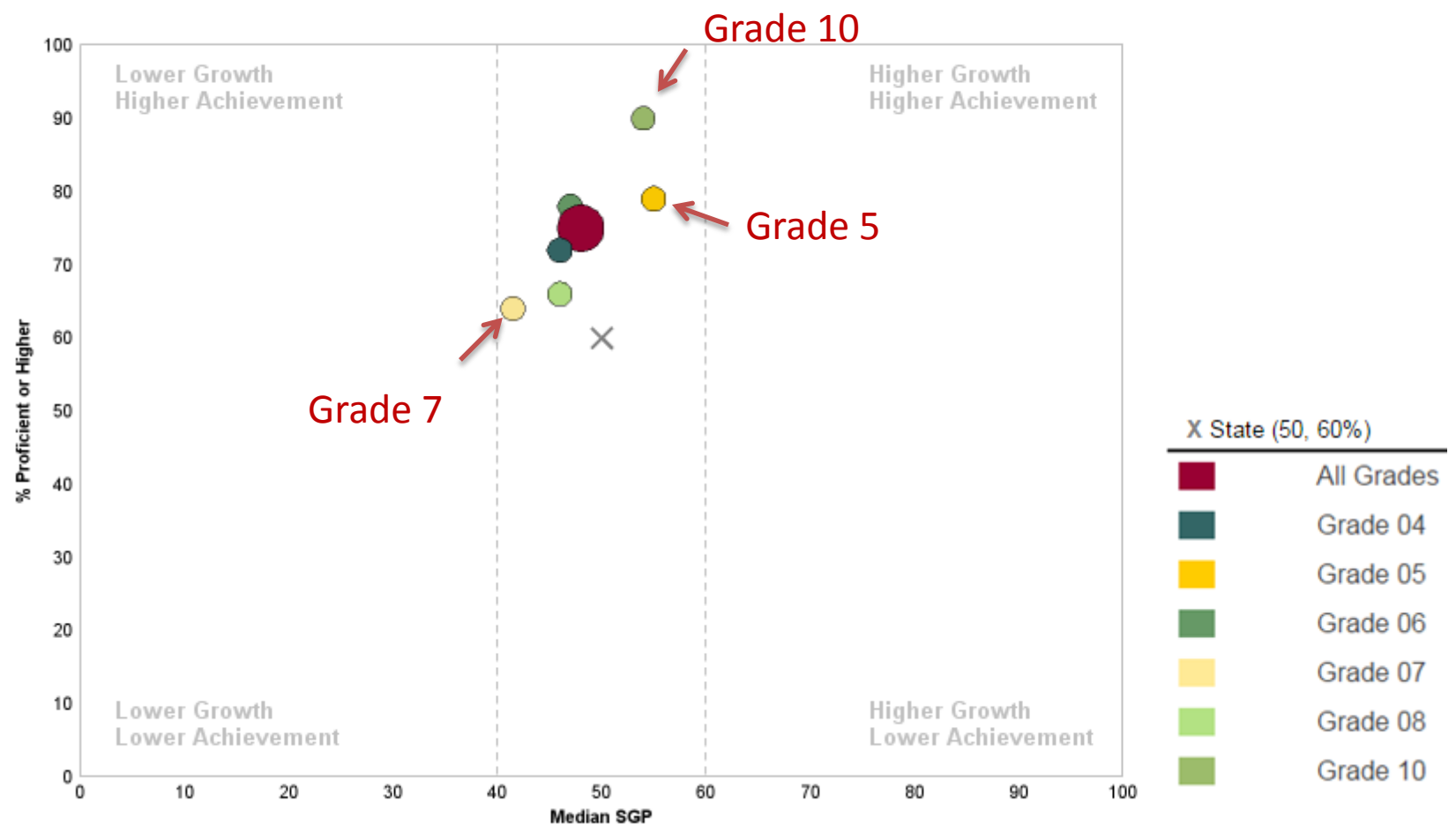
		Median SGP	N Students (SGP)	% Proficient or Higher	N Students (Ach. Level)
	All Grades	51	1,699	81	2,137
	Grade 04	47	325	66	340
	Grade 05	64	319	82	328
	Grade 06	48	279	84	306
	Grade 07	43	283	88	293
	Grade 08	49.5	292	87	307
	Grade 10	53	201	95	235

Median student growth percentile (SGP) is not calculated if the number of students with SGP is less than 20.










2014 Math MCAS: District Growth

* Spring 2014 * Milton * Grade * Submit
* Mathematics * All Grades





2014 Math MCAS: District Growth

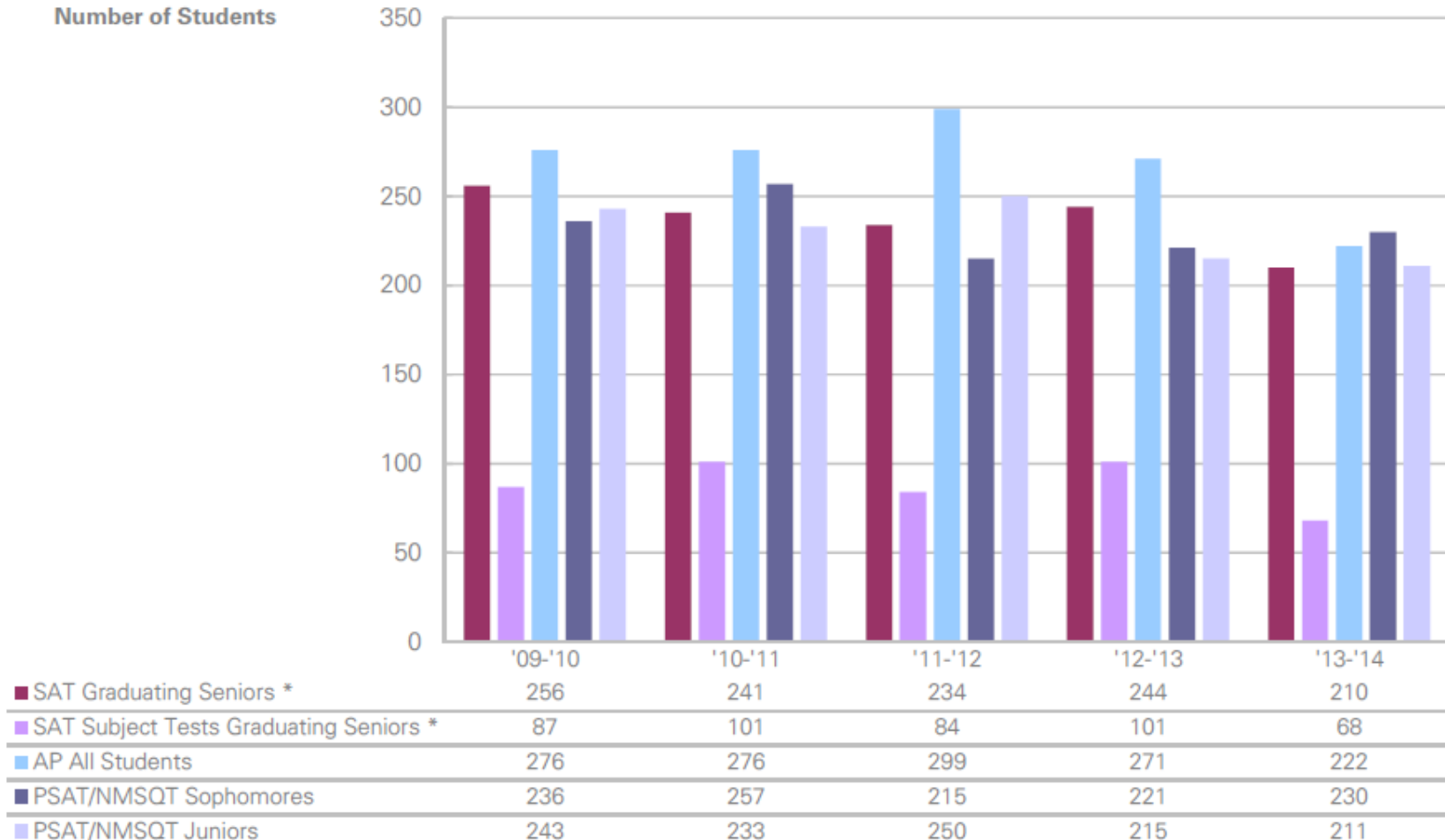
		Median SGP	N Students (SGP)	% Proficient or Higher	N Students (Ach. Level)
	All Grades	48	1,704	75	2,137
	Grade 04	46	324	72	339
	Grade 05	55	319	79	326
	Grade 06	47	281	78	308
	Grade 07	41.5	284	64	294
	Grade 08	46	294	66	307
	Grade 10	54	202	90	235

Median student growth percentile (SGP) is not calculated if the number of students with SGP is less than 20.



2013-14 PSAT, SAT & AP: Number of Test Takers

OVERVIEW: Number of Students Taking SAT, SAT Subject Tests, AP and PSAT/NMSQT.

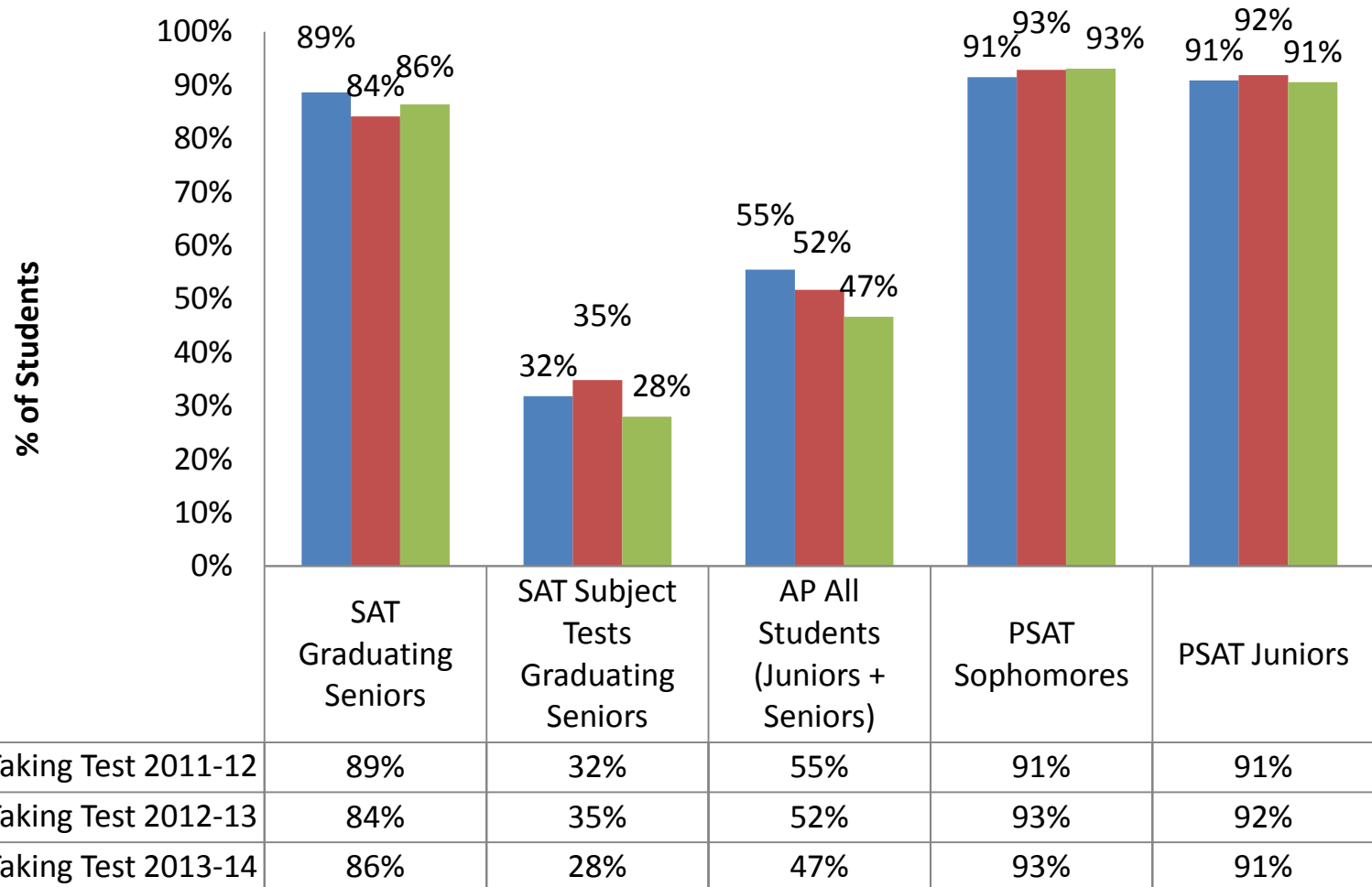


Note: Slide taken from CollegeBoard's "School Integrated Summary" 2013-2014



2013-14 PSAT, SAT & AP: Test Takers as Percent of Class

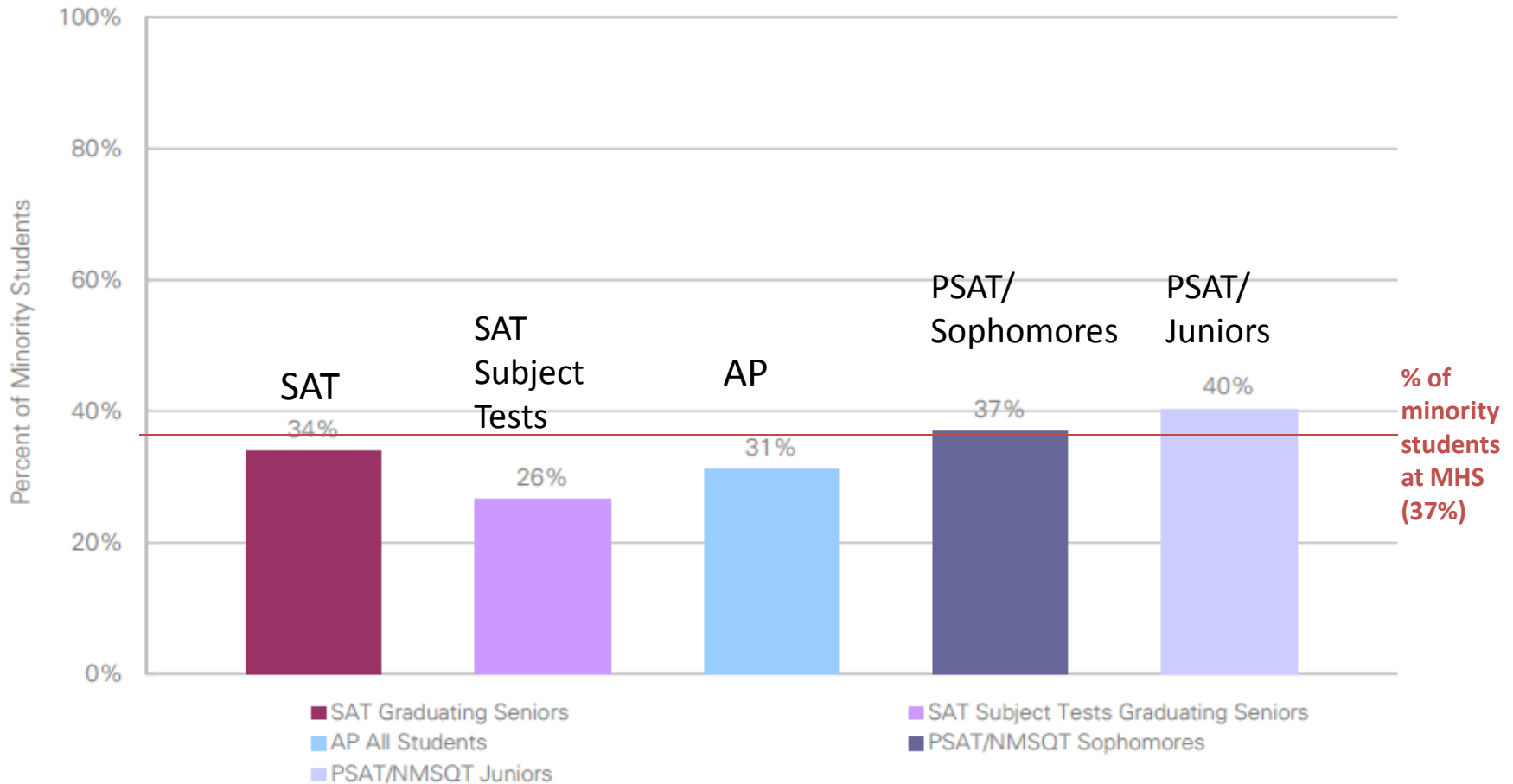
Class Participation in the SAT, SAT Subject Tests, AP and PSAT





2013-14 PSAT, SAT & AP: Minority Test Takers

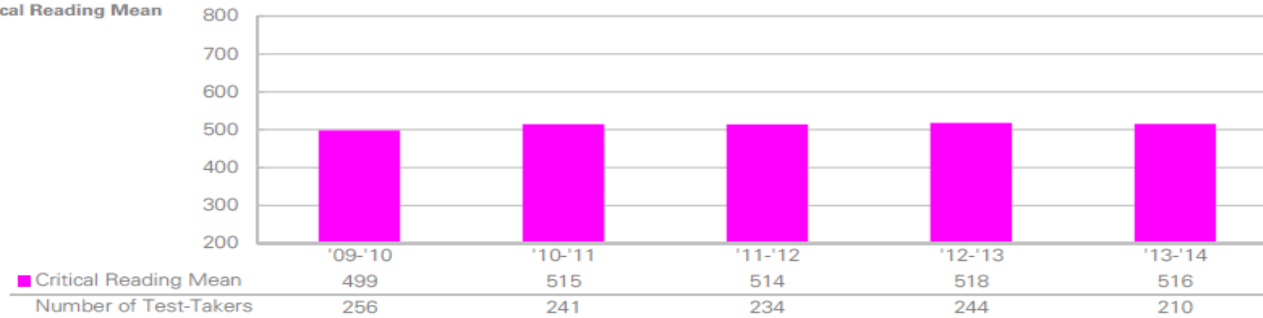
OVERVIEW: Percent of Test-Takers Self-Reported as Minority Students



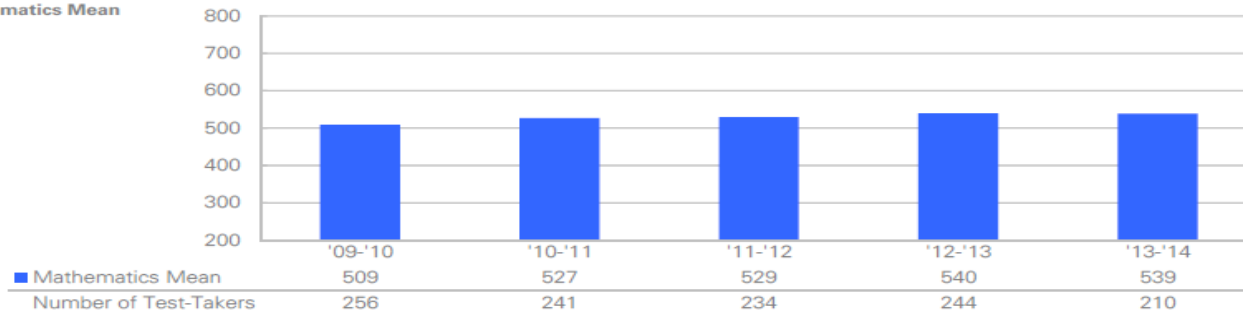


2013-14 SAT: Average Scores

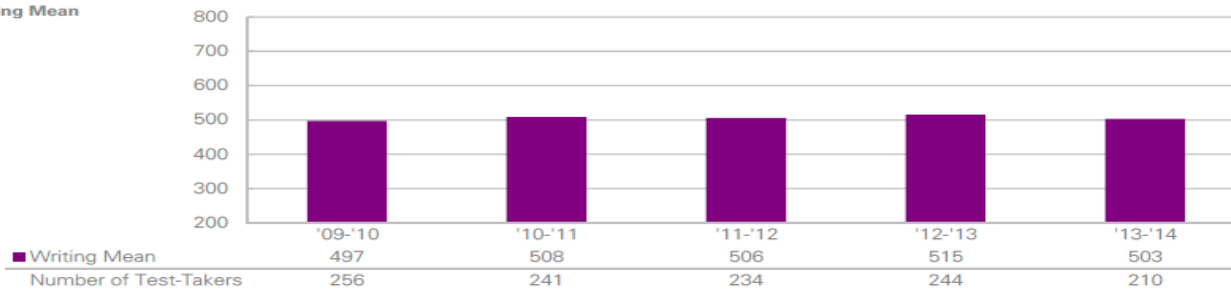
Critical Reading Mean



Mathematics Mean



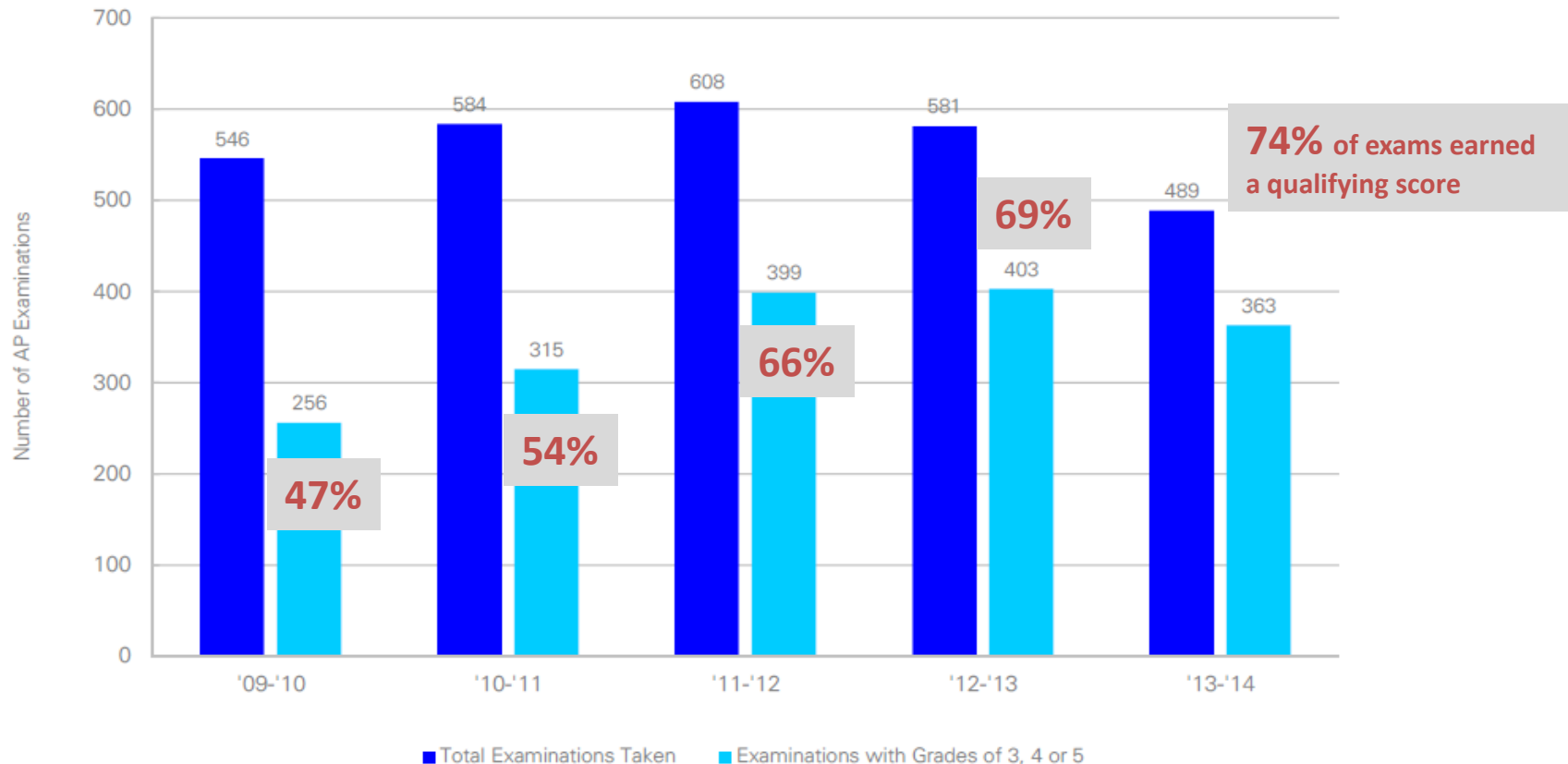
Writing Mean





2013-14 AP: Qualifying Scores

AP: Number of Examinations and Number of Examinations with Grades of 3, 4 or 5



Even with our open enrollment for AP classes, students are earning more and more qualifying scores on the AP year after year!

Internal Assessment Data

- ✓ Work with all disciplines to streamline data collection for common assessments and determine which measures to capture at the district level



Internal Assessments: Elementary

	ELA	FLA	Math	Science
G1	• Fountas & Pinnell BAS (F&P)	• Decoding/comprehension and GB+ at end of year	• Pre-tests, midyears, and finals • End of unit common assessments	• End of unit common assessments (in development to reflect new FOSS curriculum)
G2	• F&P	• GB+		
G3	• Scholastic Reading Inventory (SRI), F&P	• Pretests • Piloting post-tests		
G4	• SRI, F&P			
G5	• SRI, F&P			



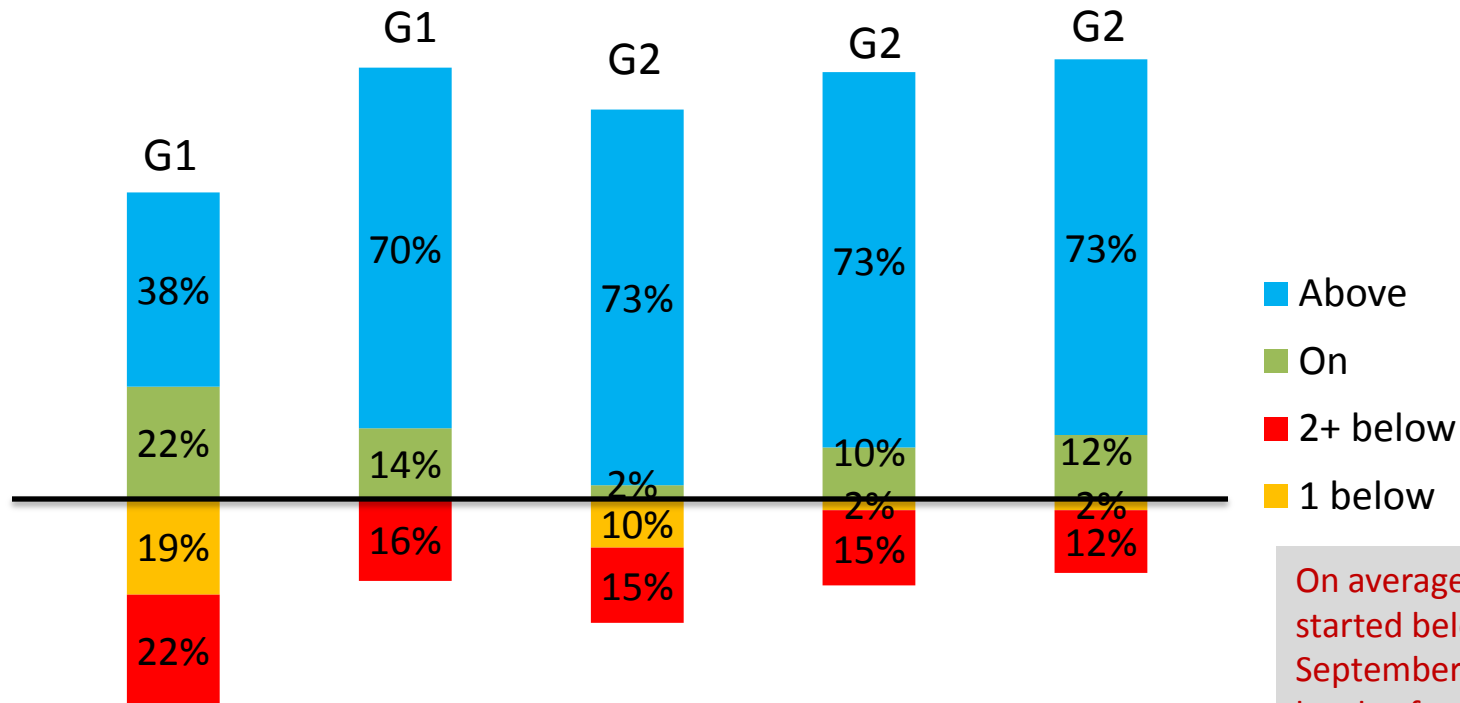
Internal Assessments: G2 F&P

- The Fountas & Pinnell BAS (**F&P**) is a comprehensive reading assessment system that links assessment to instruction along the Continuum of Literacy Learning. It is designed to:
 - Determine students' independent and instructional reading levels.
 - Determine reading placement levels and group students for reading instruction.
 - Select texts that will be productive for students' instruction.
 - Assess the outcomes of teaching.
 - Identify students who need intervention.
 - Document student progress across a school year and across grade levels.
- It is administered 2-4 times a year as needed to drive classroom instruction.
- This particular cohort of second graders (41 students) consists of one self contained classroom and 1 co-taught classroom. There are 7 IEP students, 5 of whom are in the co-taught.
- It is important to note that all students demonstrated growth but may not have changed categories.
- 23 out of 41 students (or 56%) at the end of second grade were reading at levels one full grade above 2nd grade reading level benchmark.



Internal Assessments: G2 F&P

The following chart shows the progression of F&P results for a current grade 2 cohort at one of our elementary schools.



	Sept 2013	Feb 2014	Sept 2014	Jan 2015	June 2015
Above	38% (14)	70% (26)	73% (30)	73% (30)	73% (30)
On	22% (8)	14% (5)	2% (1)	10% (4)	12% (5)
1 below	19% (7)	0% (0)	10% (4)	2% (1)	2% (1)
2+ below	22% (8)	16% (6)	15% (6)	15% (6)	12% (5)

On average, students who started below level in September '14 made 4.1 levels of growth; students who were on or above in September made 2.4 levels of growth.

Generally, 3 levels of growth is equivalent to one year of growth.



Internal Assessments: Middle School

	ELA	History/ Geography	Math	Science
G6	<ul style="list-style-type: none">• SRI, F&P• Piloting Academic Merit	<ul style="list-style-type: none">• Piloting Document-Based Questions (DBQ)	<ul style="list-style-type: none">• End of unit common assessments• Piloting a measure which is a performance-based task	<ul style="list-style-type: none">• Pre-test and post-test in Earth, Physical and Life sciences• Piloting Claims, Evidence, Reasoning tasks
G7				
G8				



Internal Assessments: G6 SRI (ELA)

- **Scholastic Reading Inventory (SRI) is an objective assessment of a student's reading comprehension level.** Skills assessed in the SRI include:
 - Identifying details in a passage
 - Identifying cause/effect relationships
 - Sequence of events
 - Inferences: Drawing Conclusions and Making Generalizations
 - Making Comparisons—compare/contrast
- **What is the purpose of our Fall Scholastic Reading Inventory (SRI) testing?**
 - Establish lexile level and independent reading level (“just right” reading books)
 - Determine placement in reading intervention programs
 - Understand strengths/weaknesses of our students in reading
- **What is the purpose of Spring SRI testing?**
 - Assess reading programs
 - Assess student progress
 - Determine placement for next grade level or summer school



Internal Assessments: G6 SRI (ELA)

Performance
Data

317 students
tested

Percentile Rank	Lexile Range	Proficiency Level	September Results	May Results
BELOW GRADE LEVEL				
1-8%	BELOW 500L	AT RISK	1% (4)	0% (1)
9-21%	500L-650L	BASIC 1	5% (17)	2% (5)
22-38%	650L-800L	BASIC 2	9% (27)	3% (11)
ON GRADE LEVEL				
39-49%	800L-875L	LOW PROFICIENT	8% (25)	4% (14)
50-61%	875L-950L	PROFICIENT	14% (43)	10% (31)
62-77%	950L-1050L	HIGH PROFICIENT	18% (57)	22% (70)
ABOVE LEVEL				
AT 78% & ABOVE	ABOVE 1050L	ADVANCED	45% (144)	58% (185)

The % of students below grade level decreased by 10%, from 15% in September to only 5% in May.

The % of students in low proficiency decreased by 8%, from 22% in September to 14% in May.

The % of students in high proficient and advanced increased by 13%, from 45% in September to 58% in May.



Internal Assessments: G6 SRI (ELA)

- **How do we use our September SRI assessment results?**
 - Identified students in need of reading assistance and shared testing data with content area teachers and special educators (if on IEPs)
 - Identified students with low lexile levels – who do not receive Special Education services – to work with our Reading Specialist to improve reading skills and academic success
- Our Reading Specialist worked with 28 students this year
 - **ALL** 28 students improved; although at different rates
 - Higher need students were scheduled for daily support
 - Students with moderate needs were scheduled for every other day reading support
- Content area teachers used lexile levels too
 - Worked with students in their Independent Reading programs
 - Selected grouping for Lit circles
 - Modified lessons, assignments and assessment to meet diverse student needs
 - Scaffolded learning to promote student growth

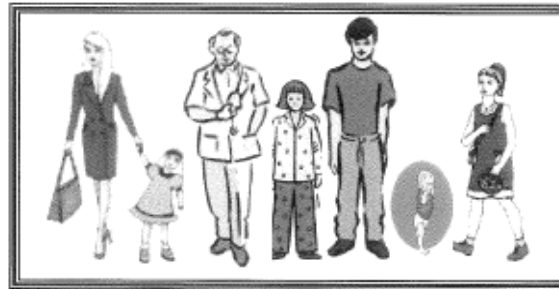


Internal Assessments: G8 Math

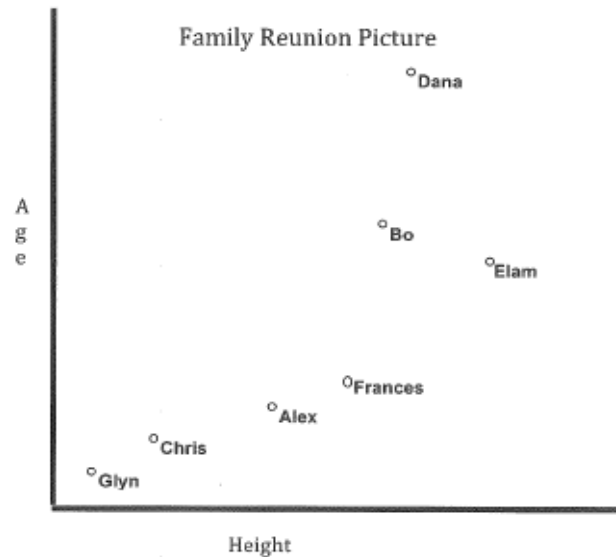
Performance-based math task

Family Reunion Picture Assessment Task

Frances went to her family reunion. They took a picture of the family.



Frances drew a graph of the family members comparing their ages to their heights.





Internal Assessments: G8 Math

Growth Parameters

Grade 8 Math

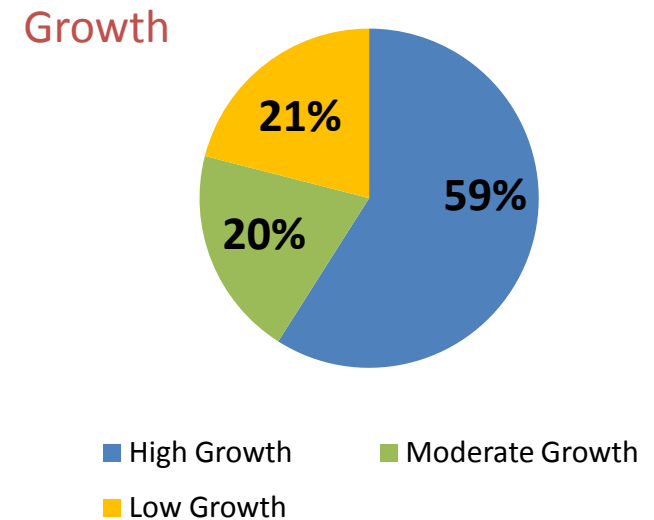
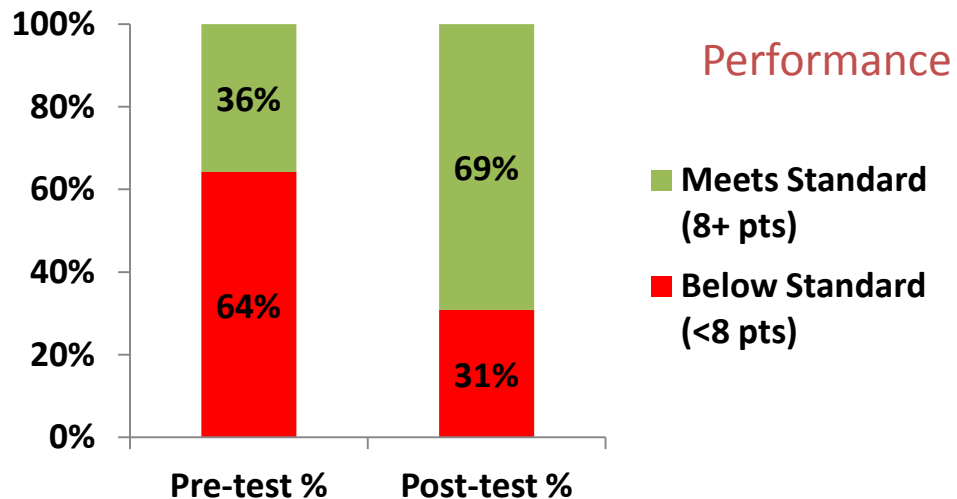
DDM Pre-Test Score	DDM Post-Test Score Difference Range for Moderate Growth
0	+2-3 points
1	
2	
3	
4	
5	
6	
7	
8 (Meets)	+1-2 points
9	
10	
11	
12	
13	+1 or same number of points
14	-1 or same number of points
15	
16	-1

NOTE: Any student score difference lower than the range is Low Growth and higher than the range is High Growth



Internal Assessments: G8 Math

The following results are based on a sample set of 81 students with complete pre- and post-test scores on the performance assessment.



Level	# of students	Pre-test %
Below Standard (<8 pts)	52	64%
Meets Standard (8+ pts)	29	36%

	# of students	Post-test %
Below Standard (<8 pts)	25	31%
Meets Standard (8+ pts)	56	69%



Internal Assessments: G8 Math

DDM Pre-Assessment Analysis Grade 8

Approximate percent of students who “**met the standard**” overall ~ **33%**

- For **Family Reunion** based on a sample of students
 - Students who “met the standard” ~ 55% of above level and 13% of on level
 - Above level average ~ 3.7
 - Many students could match all family members by correctly interpreting the scatter plot
 - Most students struggled to account for the age changes
 - On level average ~2.7
 - Almost all students could match some family members by interpreting the scatter plot
 - Many students could use algebraic reasoning to find solutions
 - Many students struggled to write a simple expression
- For **Consumer Sense Task** based on a sample of students
 - Students who “met the standard” ~ 42% of above level and 3% of on level
 - Above level average ~ 4.0
 - Most students could calculate the costs when number of minutes were given
 - Some students could write correct equations
 - Many students struggled to figure out when the two plans would cost the same
 - On level average ~2.1
 - Some students could calculate costs when number of minutes were given
 - Students struggled to write equations and make comparisons



Internal Assessments: High School

	Humanities	Math	Science
G9	<ul style="list-style-type: none">• Pre-test and post test (essay writing prompt)• Common midyear and final• Piloting AcademicMerit	<ul style="list-style-type: none">• Common unit assessments in Courses 1 and 2• Collaborative Critical Thinking tasks• Common midyear and final	<ul style="list-style-type: none">• Common unit assessments in Biology, Chemistry and Physics• Common midyear and final
G10			
G11			
G12			



Internal Assessments: Math Course 2, CP

- Milton High School students are expected to be at least proficient in all seven 21st Century Learning Expectations by the time they graduate. These expectations have been reviewed and approved by NEASC. Each expectation is measured using a school-wide rubric.
 - **Learning Expectation #1: Effectively apply critical thinking skills to solve problems.**
- The Mathematics Department implemented Collaborative Critical Thinking tasks this year in order to promote and measure the critical thinking skills of students.
- Each teacher implemented at least one task per term in Course 1, Course 2, and Course 3. For each task, students were given 20 minutes to begin the problem in small groups so that they could collaboratively discuss strategies. Students were then asked to complete the task individually. Students were graded on the tasks using the school-wide rubric.
- Each task is aligned to a different content standard. **Therefore scores are not intended to be compared to each other. Instead, the goal is for students to score at least proficient on each task.**
- 128 students in Course 2CP completed a Collaborative Critical Thinking Task each term this year



Internal Assessments: Math Course 2CP

Learning Expectation #1: Effectively apply critical thinking skills to solve problems.

Criteria	Advanced	Proficient	Developing	Deficient	Score
Identification	<ul style="list-style-type: none">Student demonstrates a deep understanding of the concepts and facts specific to the given problem.	<ul style="list-style-type: none">Student demonstrates a clear understanding of the concepts and facts specific to the given problem, with few errors.	<ul style="list-style-type: none">Student demonstrates a fair understanding of the concepts and facts specific to the given problem with several errors.	<ul style="list-style-type: none">Student demonstrates a minimal understanding of the concepts and facts specific to the given problem.	
Strategy	<ul style="list-style-type: none">Student demonstrates the ability to develop multiple effective strategies to solve the given problem.	<ul style="list-style-type: none">Student demonstrates the ability to develop an effective strategy to solve the given problem.	<ul style="list-style-type: none">Student demonstrates the ability to develop a strategy to solve the given problem with some misconceptions or errors.	<ul style="list-style-type: none">Student attempts to develop a strategy to solve the given problem with major misconceptions and errors.	
Implementation	<ul style="list-style-type: none">Student's implementation of his/her strategy contains no errors in the final product.	<ul style="list-style-type: none">Student's implementation of his/her strategy contains minor errors in the final product.	<ul style="list-style-type: none">Student's implementation of his/her strategy contains misconceptions and errors in the final product.	<ul style="list-style-type: none">Student's implementation of his/her strategy contains major misconceptions and errors in the final product.	
Evaluation	<ul style="list-style-type: none">Student consistently analyzes his/her work in detail to determine whether the solution is accurate and effective to the given problem.	<ul style="list-style-type: none">Student often analyzes his/her work in detail to determine whether the solution is accurate and effective to the given problem.	<ul style="list-style-type: none">Student sometimes analyzes his/her work in detail to determine whether the solution is accurate and effective to the given problem.	<ul style="list-style-type: none">Student rarely analyzes his/her work in detail to determine whether the solution is accurate and effective to the given problem.	
				Total Score:	
				Final Grade:	



Internal Assessments: Math Course 2CP

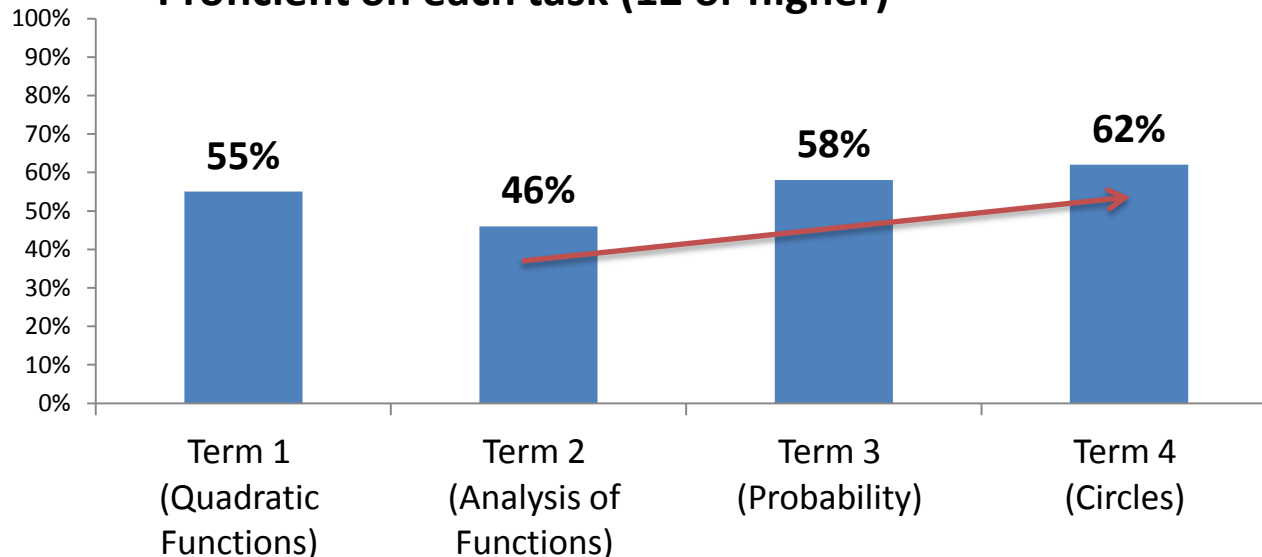
Scoring Key

- 16 – Advanced
- 12 – Proficient
- 8 – Developing
- 4 – Deficient

Averages for Course 2CP

- Term 1 (Quadratic Functions) – 11.0
- Term 2 (Analysis of Functions) – 10.6
- Term 3 (Probability) – 11.4
- Term 4 (Circles) – 11.5

Percentage of Students Scoring at least Proficient on each task (12 or higher)



Although average scores are not comparable from term to term due to the difference in content, we still see the percentage of students achieving proficiency in applying critical thinking skills increasing with each successive task.



District Next Steps

- Continue to develop and maintain the district data dashboards
- Clean up data in the current systems and revisit data procedures to ensure accurate data collection in our systems
- Continue to refine and build out all the systems around internal assessments for SY 2015-16
- Work with curriculum coordinators and school leaders to support data analysis practices
- Support the transition to new systems