

Hanover High School

Standardized Assessment Results

School Committee Meeting, December 4, 2019

1. MCAS

- a. STE Results, Class of 2021 - Hanover, State
- b. Overview of Next Generation MCAS 2.0
- c. Math and ELA Results, Class of 2021 - Hanover, State

2. AP

- a. Overview of AP and Enrollment
- b. Results by Subject - Hanover, State, Global

3. SAT

- a. Overview of SAT
- b. Results, 2018-2019 School Year - Hanover, State, Global, DART+

Data Sources

SAT and MCAS data obtained from DESE

<http://profiles.doe.mass.edu/>

<https://www.census.gov/>

AP data obtained from CollegeBoard

<https://scores.collegeboard.org/>

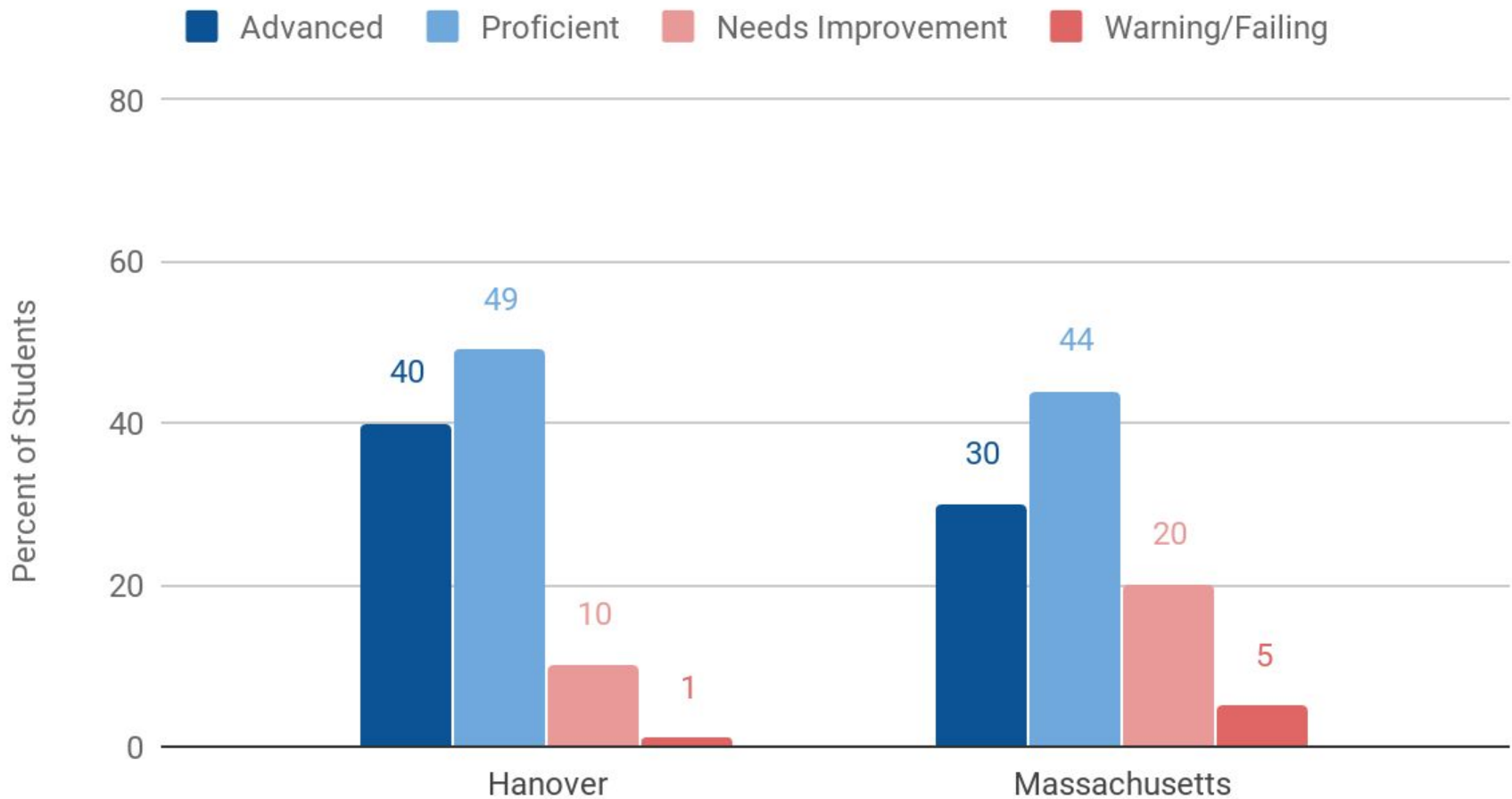
1a.

MCAS - Results for the Class of 2021

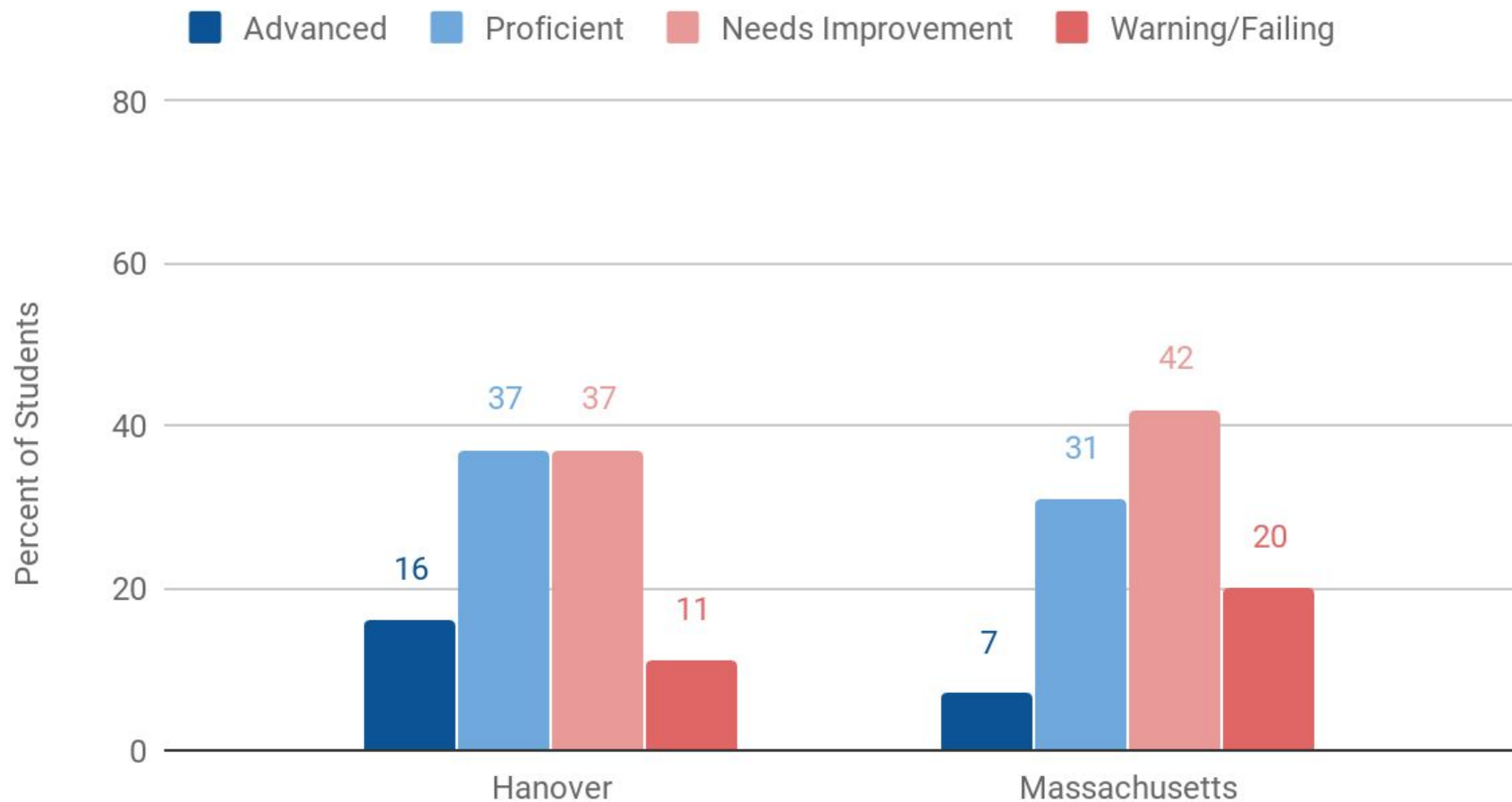
Science Technology & Engineering (STE)

- All Students
- Special Needs Students
- Economically Disadvantaged Students
- High Needs Students
 - Special Needs, Economically Disadvantaged, English Language Learner

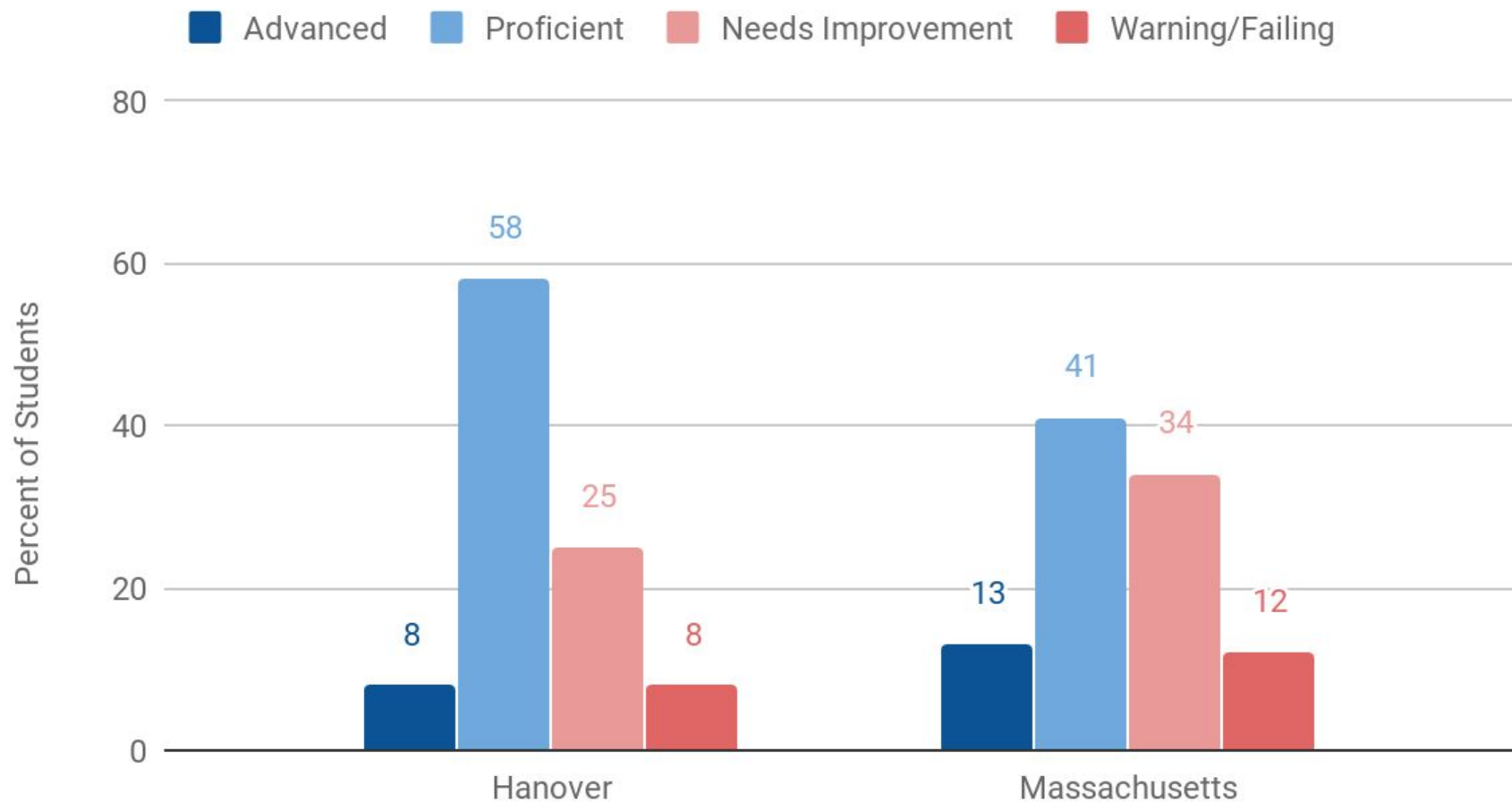
STE, Class of 2021 - All Students [202]



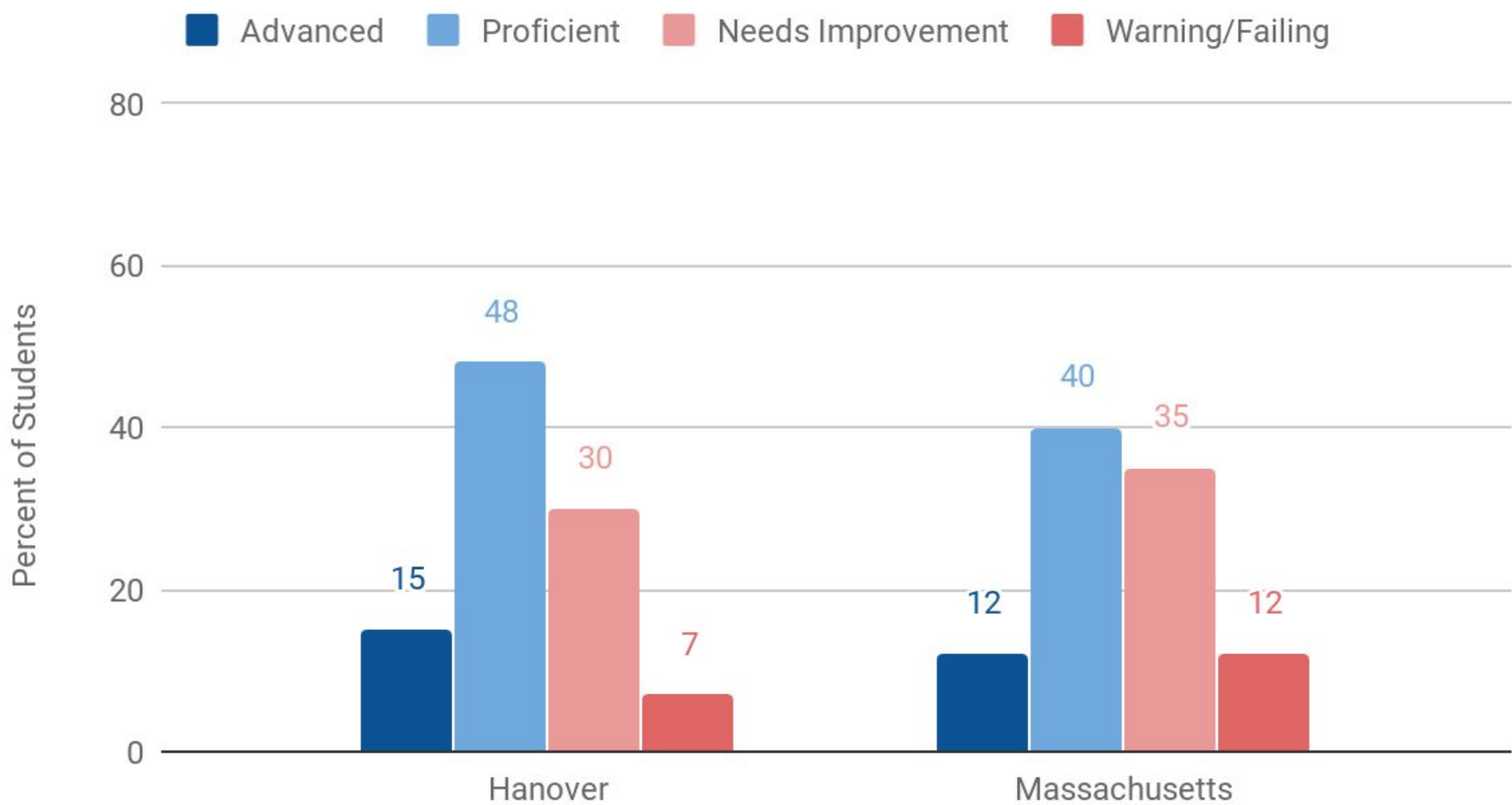
STE, Class of 2021 - Special Education Students [19]



STE, Class of 2021 - Economically Disadvantaged [12]



STE, Class of 2021 - High Needs Students [27]



1b.

Legacy vs MCAS 2.0

The students in the classes of 2021 and 2022 must earn a next-generation MCAS scaled score that is equivalent to a legacy MCAS scaled score of at least 220 on the grade 10 ELA and Mathematics tests.

1b.

Legacy vs Next Gen (MCAS 2.0)

	Legacy PASSING but requires an Educational Proficiency Plan (EPP)	Legacy PASSING and met the MCAS graduation requirement	Next Gen PASSING but requires an Educational Proficiency Plan (EPP)	Next Gen PASSING and met the MCAS graduation requirement
ELA	220–238	240+	455–471	472+
Mathematics	220–238	240+	469–485	486+

Legacy vs Next Gen (MCAS 2.0)

Advanced (260-280)

Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.

Proficient (240-258)

Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.

Needs Improvement (220-238)

Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.

Failing (200-218)

Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.

Exceeding Expectations (530-560)

A student who performed at this level exceeded grade-level expectations by demonstrating mastery of the subject matter.

Meeting Expectations (500-529)

A student who performed at this level met grade-level expectations and is academically on track to succeed in the current grade in this subject.

Partially Meeting Expectations (470-499)

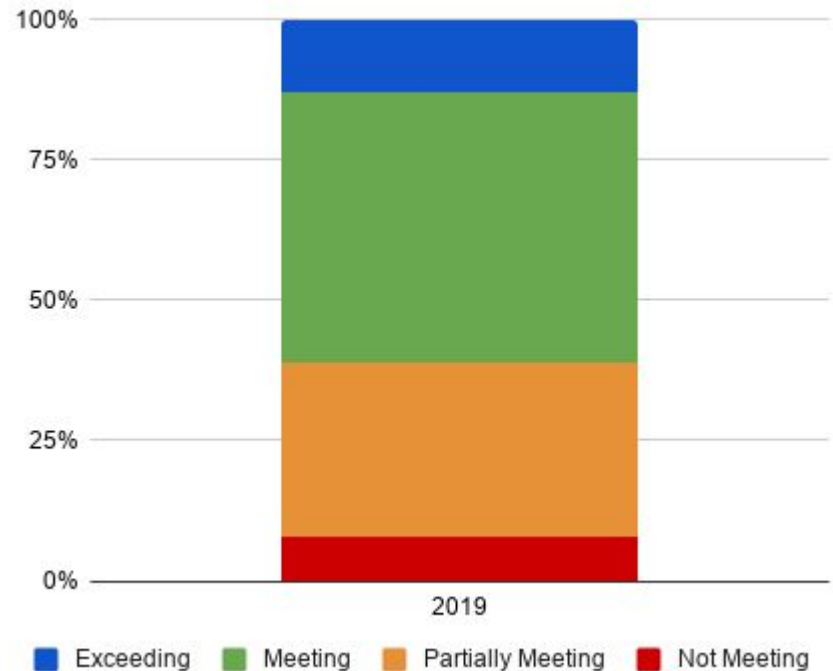
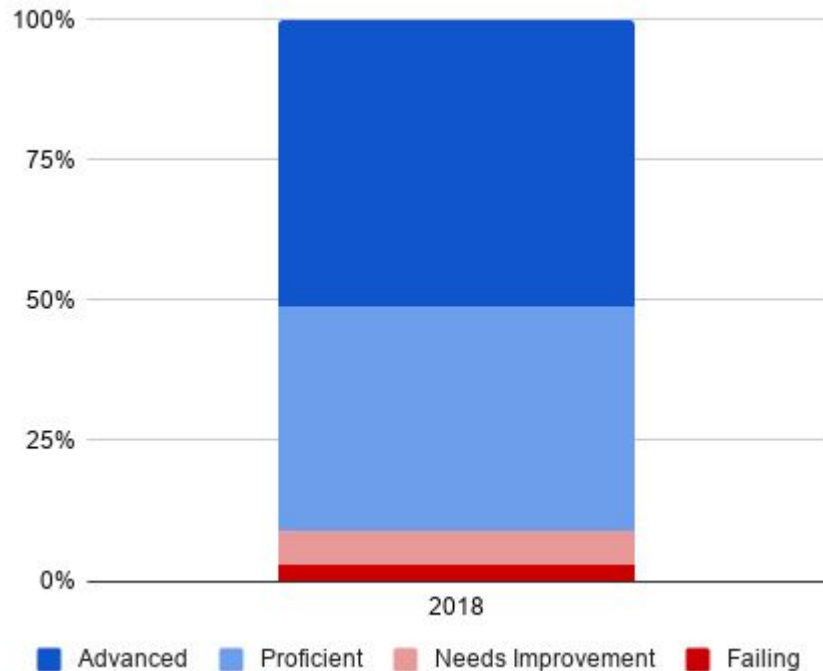
A student who performed at this level partially met grade-level expectations in this subject.

Not Meeting Expectations (440-469)

A student who performed at this level did not meet grade-level expectations in this subject.

DESE's Equipercentile Linking Model

Data seen below represents all Massachusetts Grade 10 ELA Students



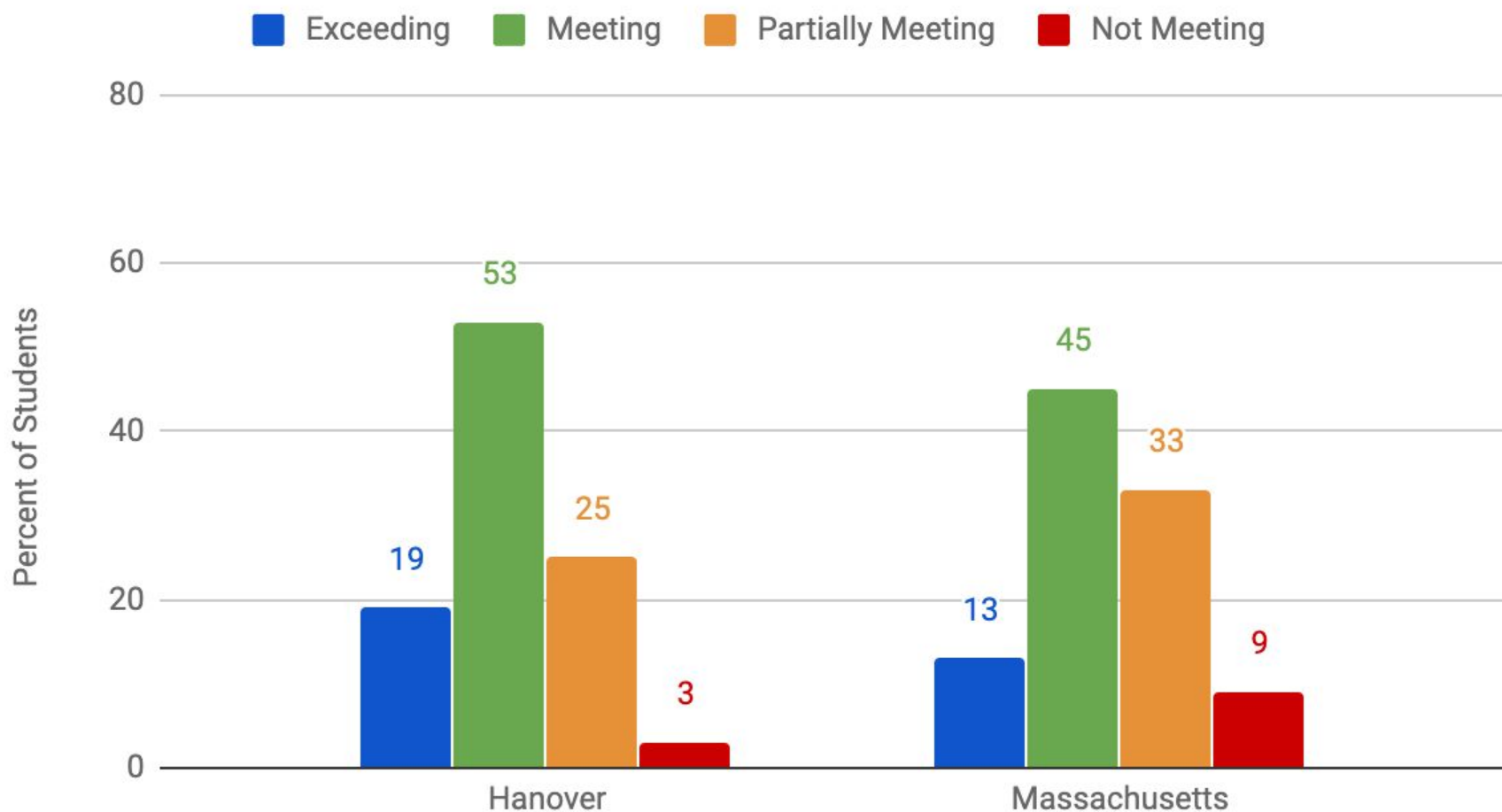
1c.

MCAS - Results for the Class of 2021

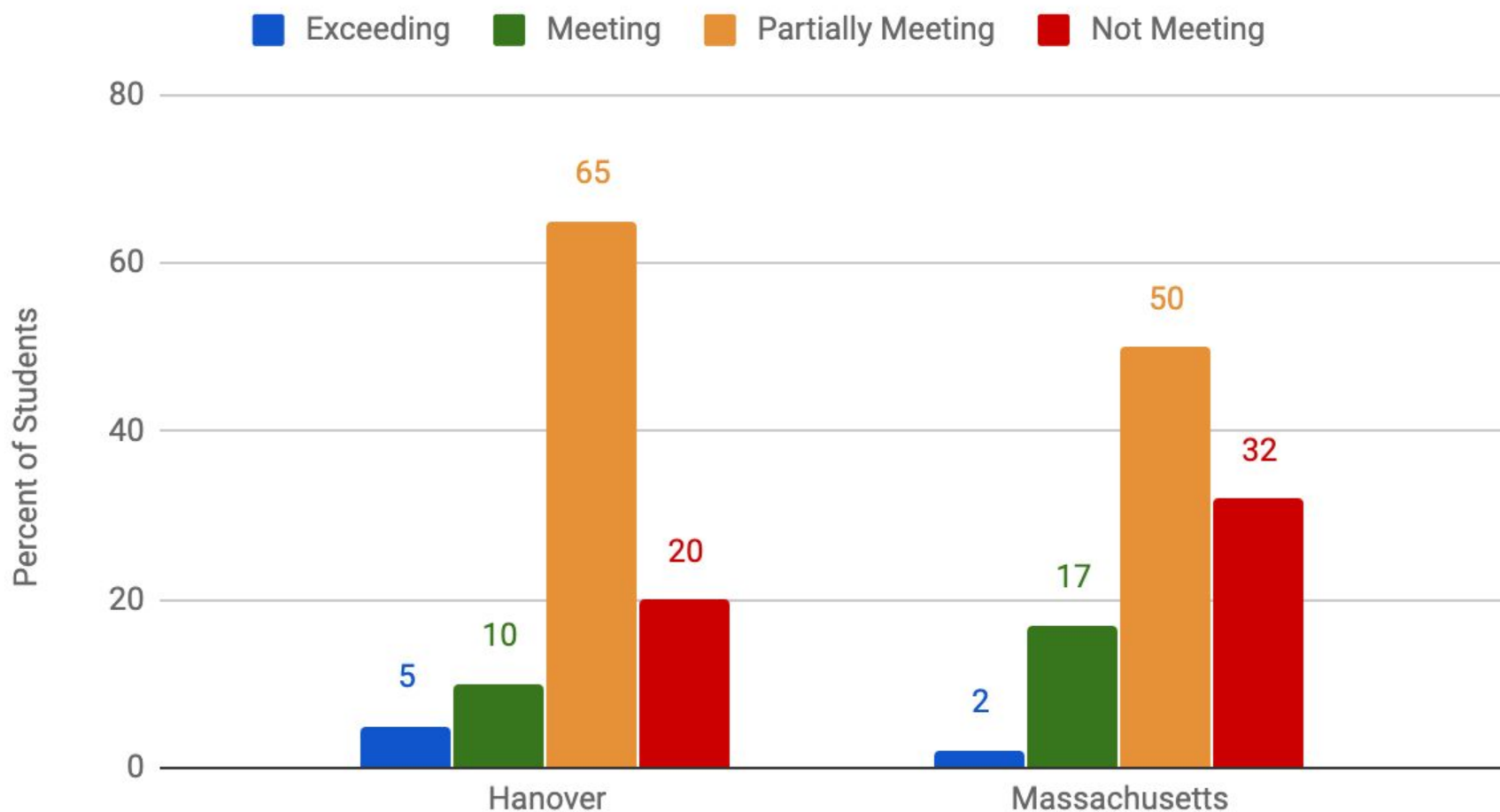
Mathematics (Math)

- All Students
- Special Needs Students
- Economically Disadvantaged Students
- High Needs Students
 - Special Needs, Economically Disadvantaged, English Language Learner

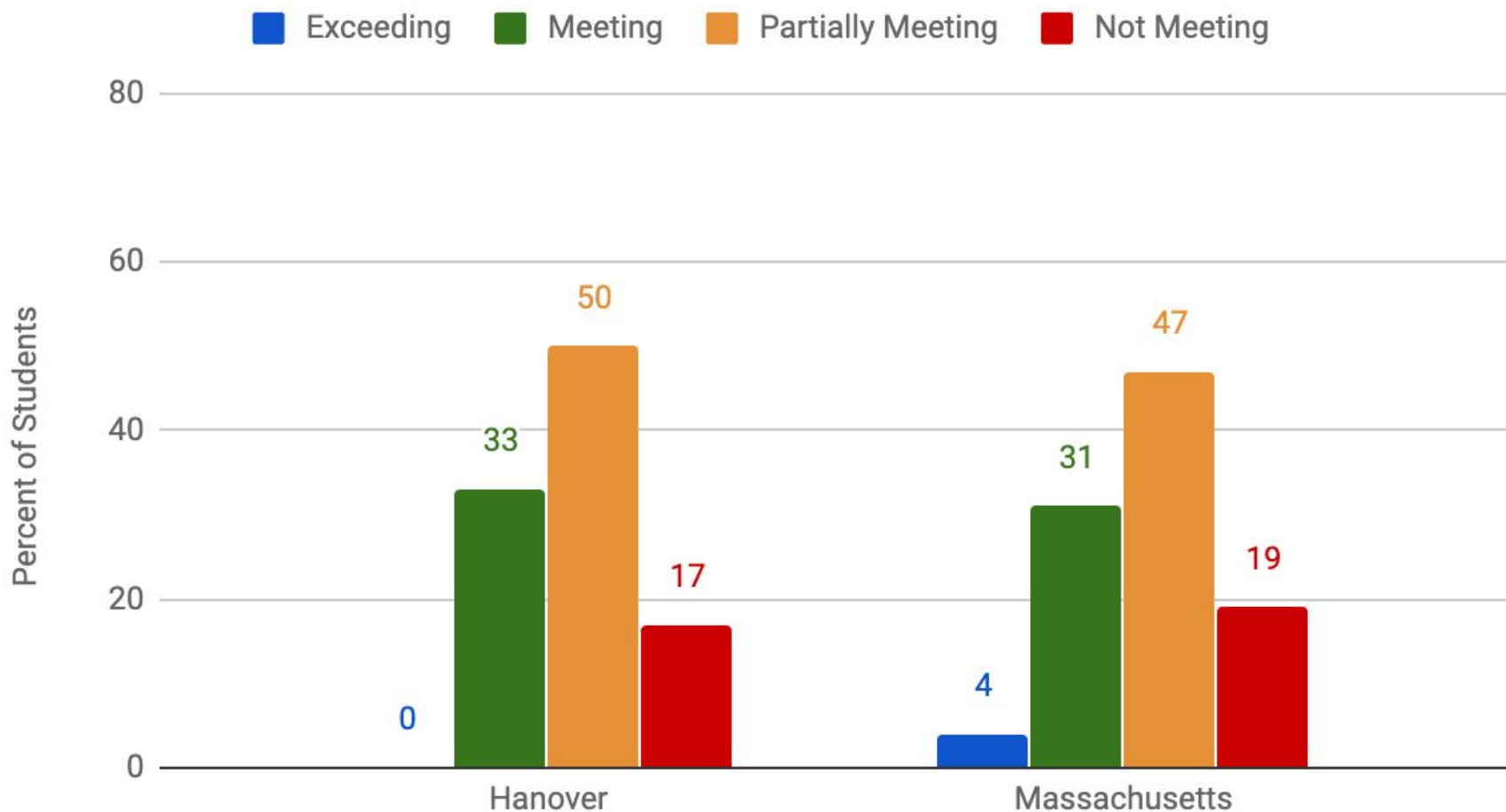
Math, Class of 2021 - All Students [211]



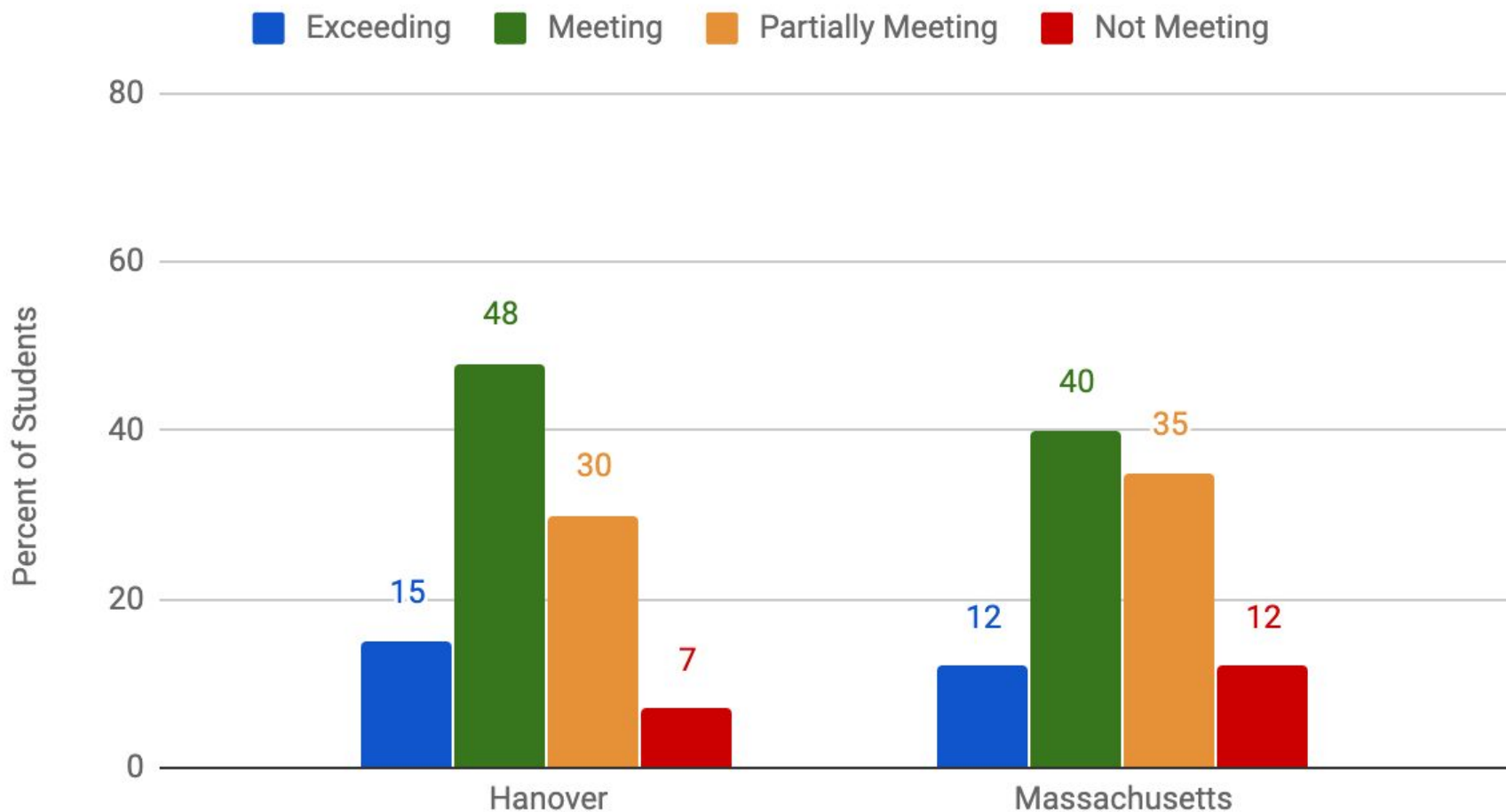
Math, Class of 2021 - Special Education Students [20]



Math, Class of 2021 - Economically Disadvantaged [12]



Math, Class of 2021 - High Needs Students [30]



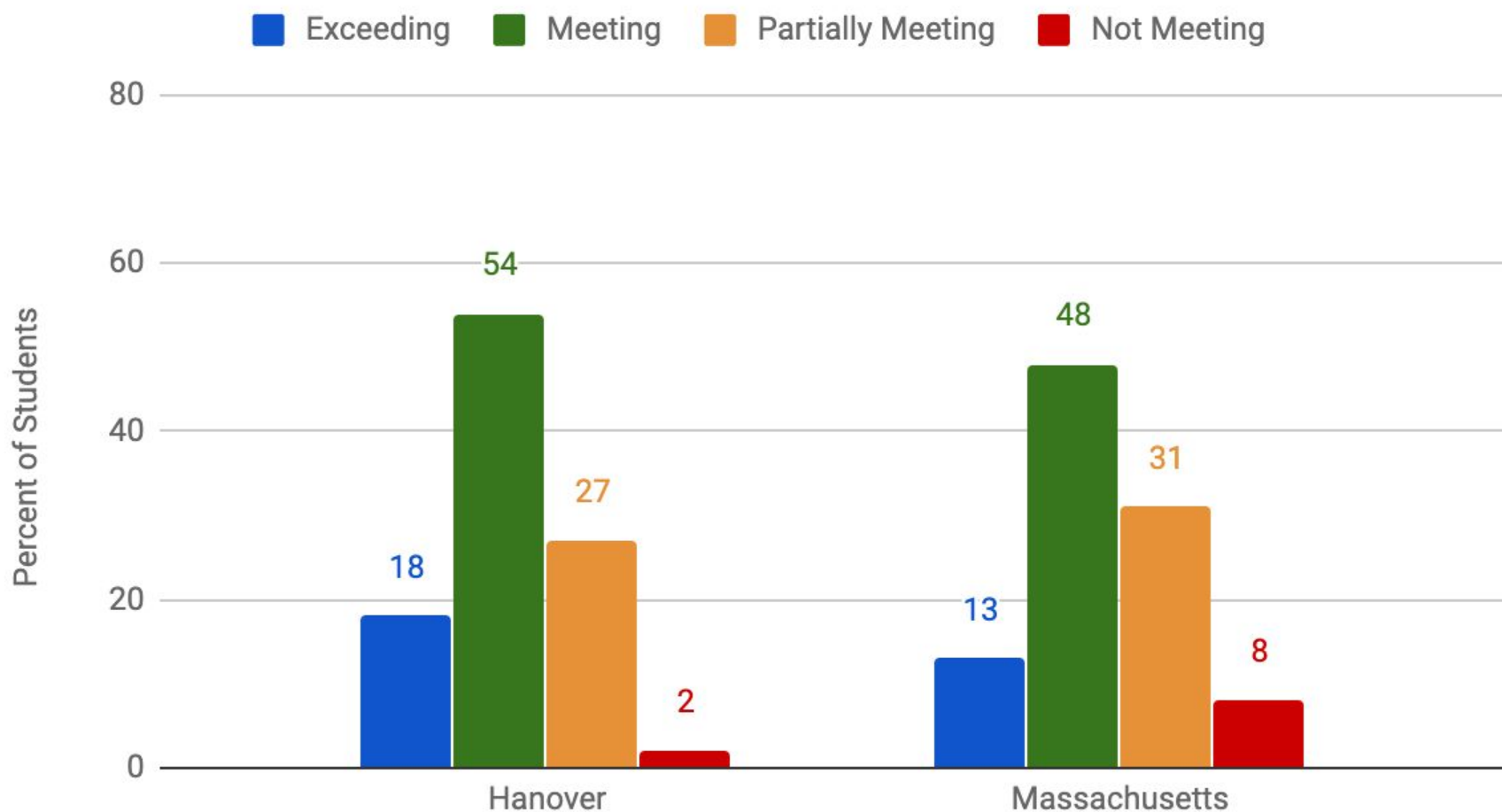
1c.

MCAS - Results for the Class of 2021

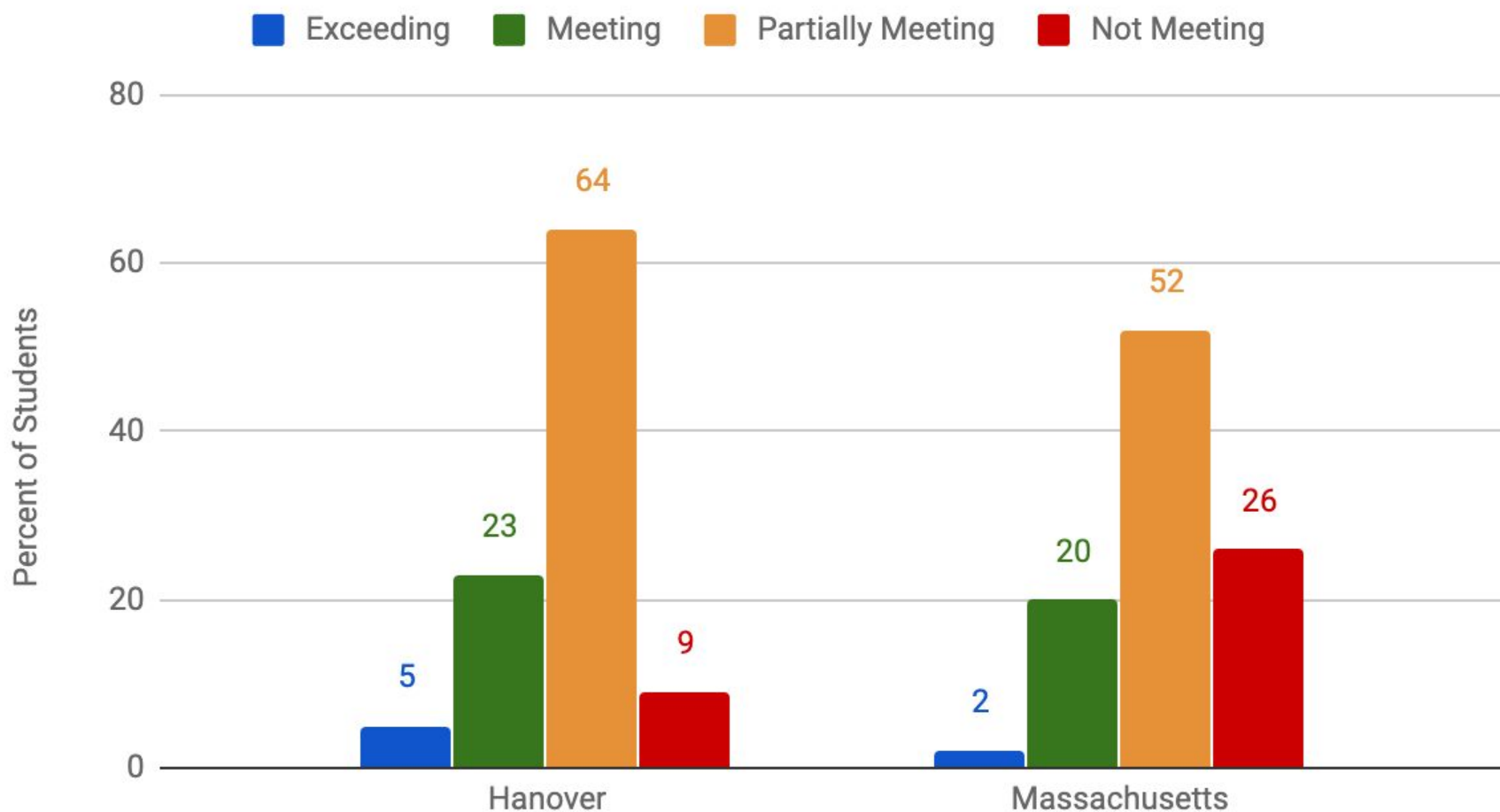
English Language Arts (ELA)

- All Students
- Special Needs Students
- Economically Disadvantaged Students
- High Needs Students
 - Special Needs, Economically Disadvantaged, English Language Learner

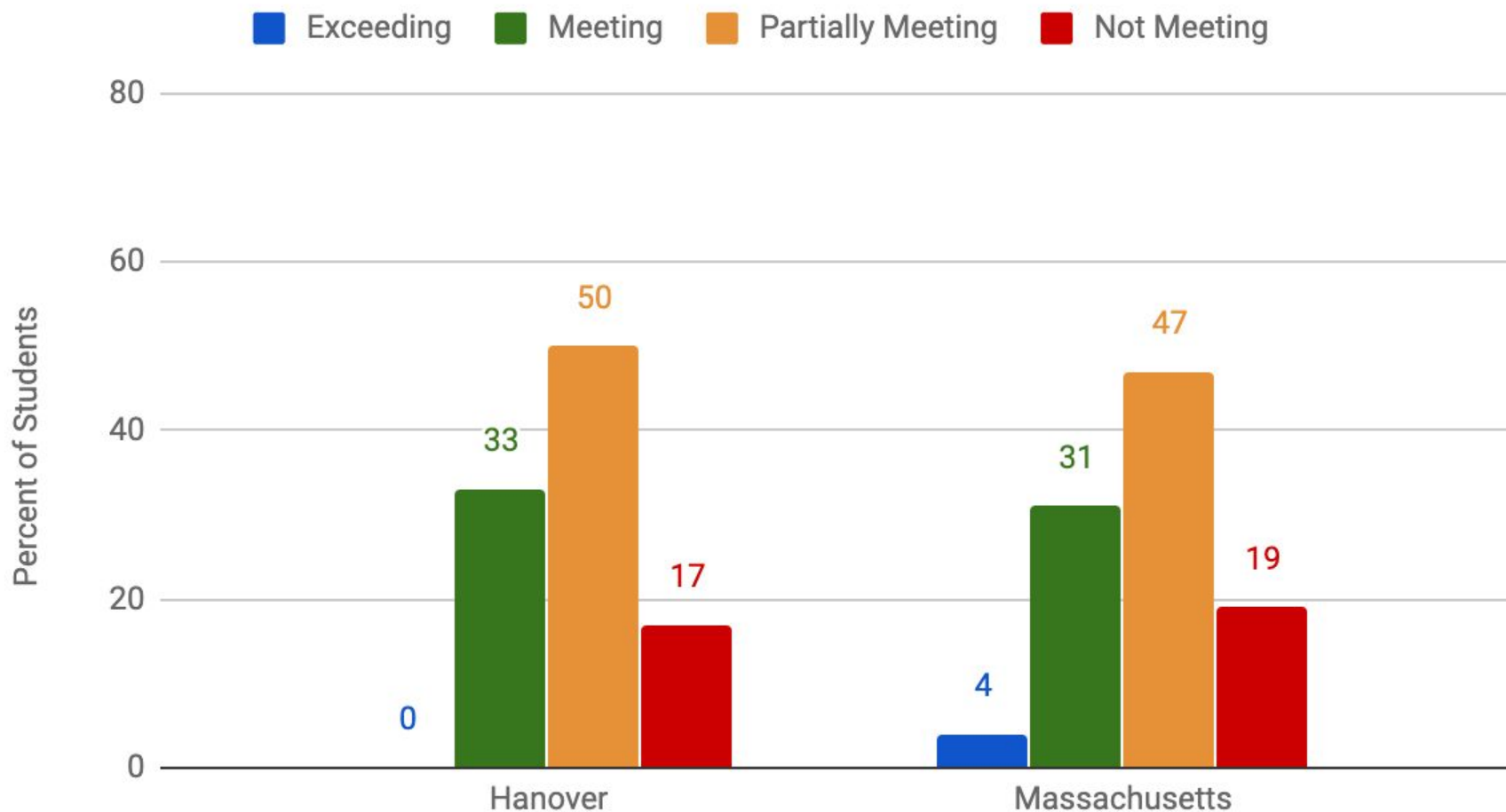
ELA, Class of 2021 - All Students [211]



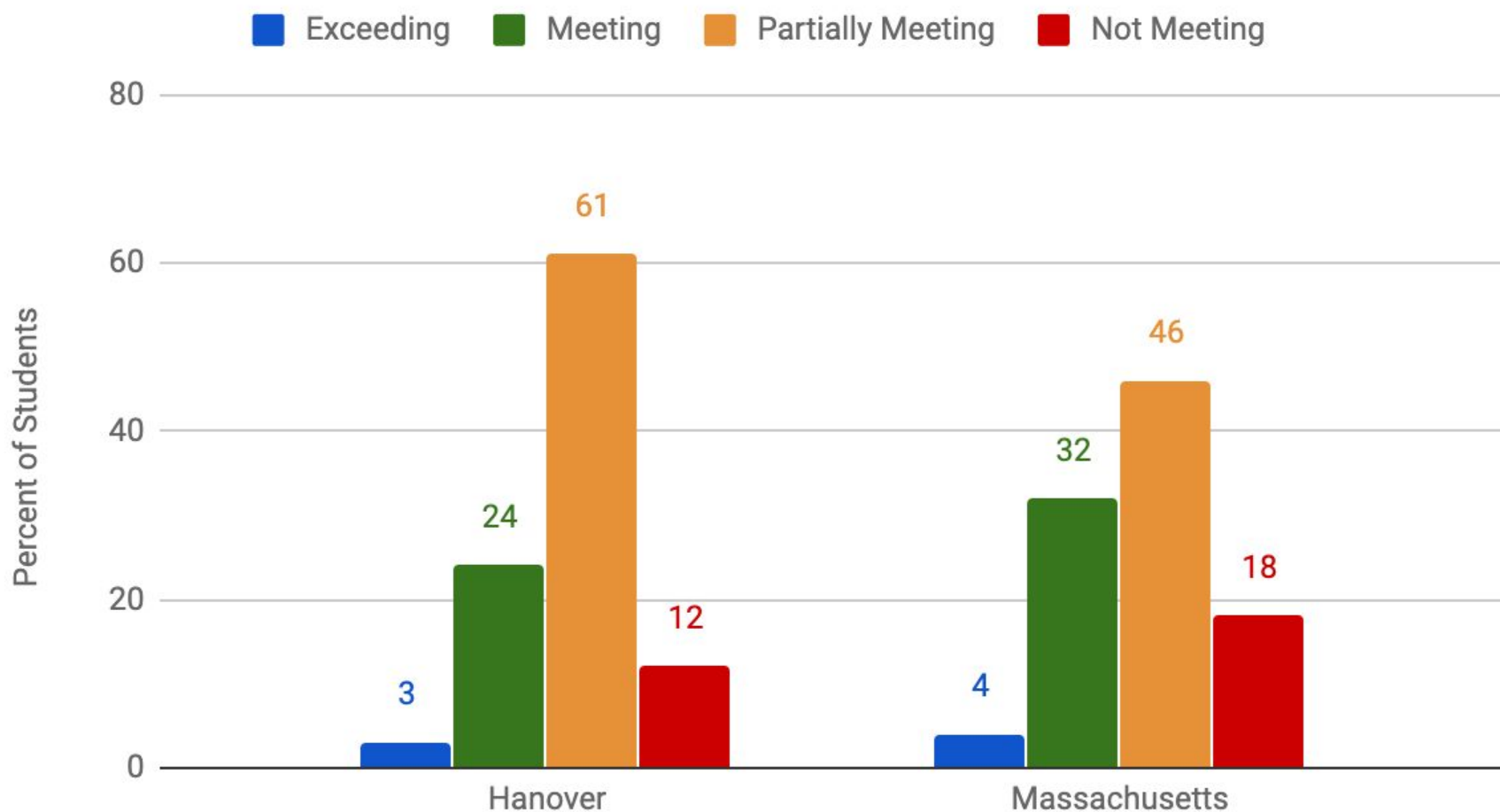
ELA, Class of 2021 - Special Education Students [22]



ELA, Class of 2021 - Economically Disadvantaged [12]



ELA, Class of 2021 - High Needs Students [33]

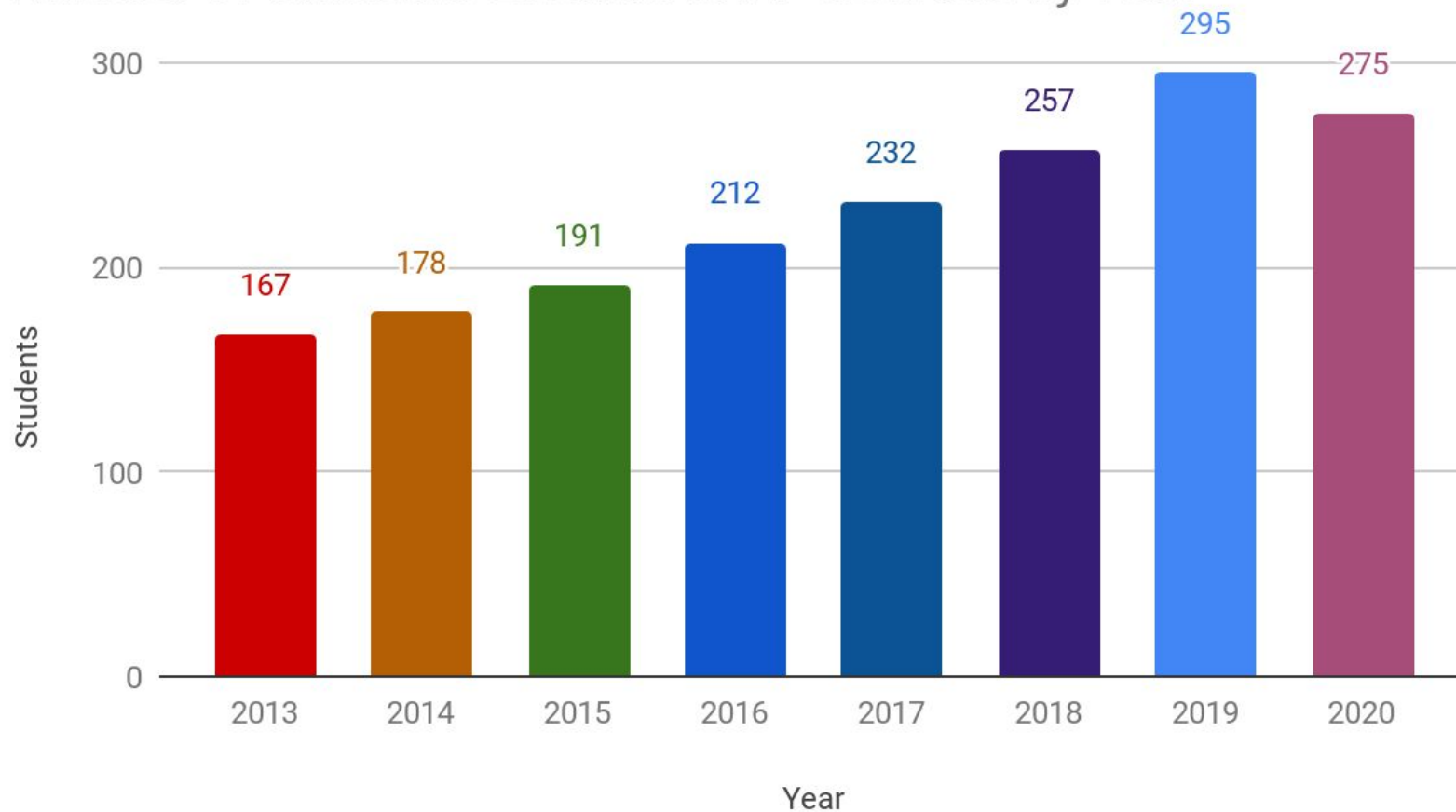


2a.

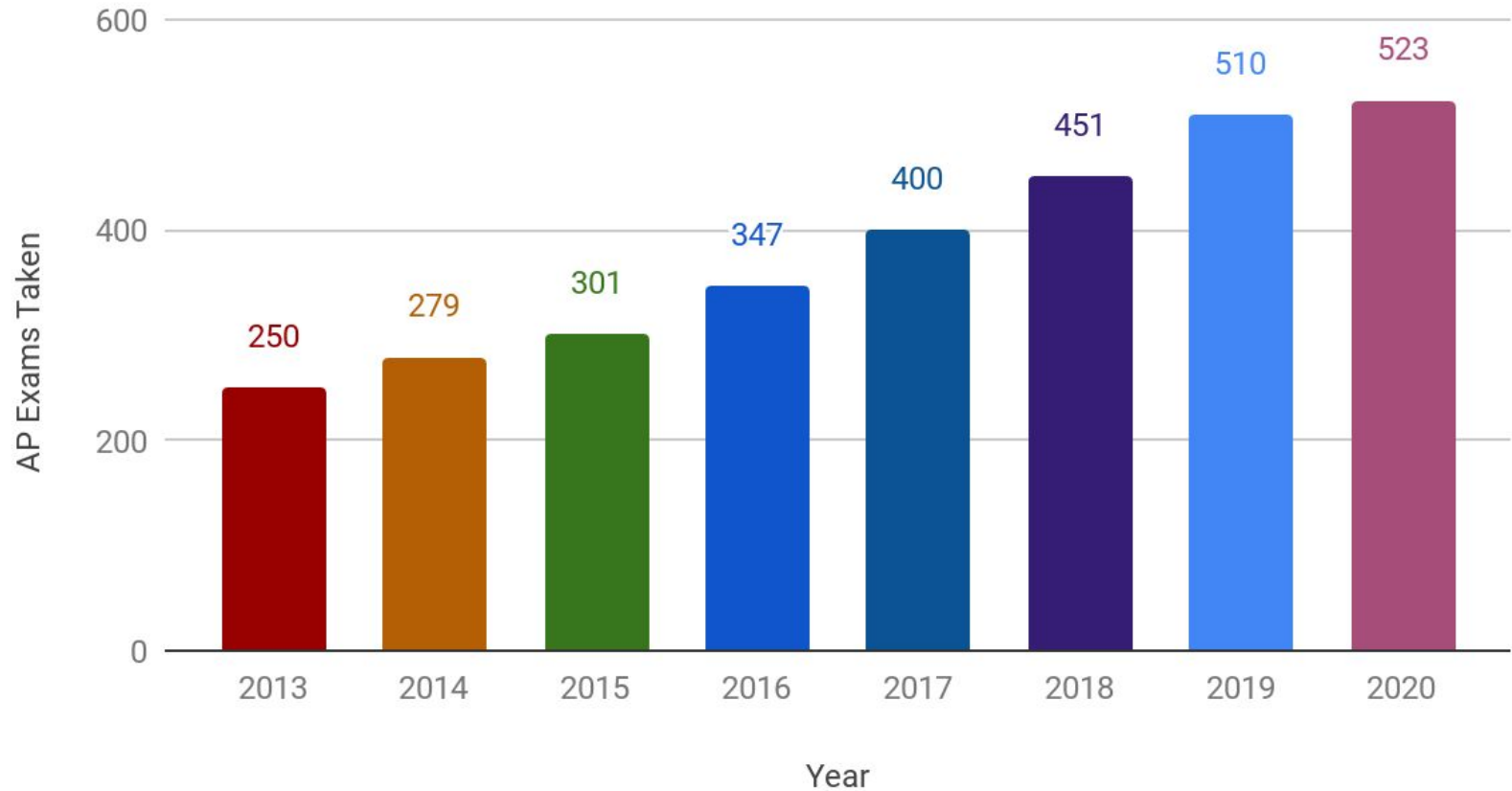
AP - Overview & Enrollment Trends

- Overview of Advanced Placement
 - Students enrolled in AP classes take the exam in May
 - Scores are weighted and scaled 1-5, with 5 being the highest
 - Multiple choice and open response (essay or problem solving)
 - Some colleges may grant credit or waive requirements
 - National standardized test for students enrolled in AP classes
- Trends at Hanover High School
 - Enrollment, Exams, Qualifying Scores (3, 4, or 5)

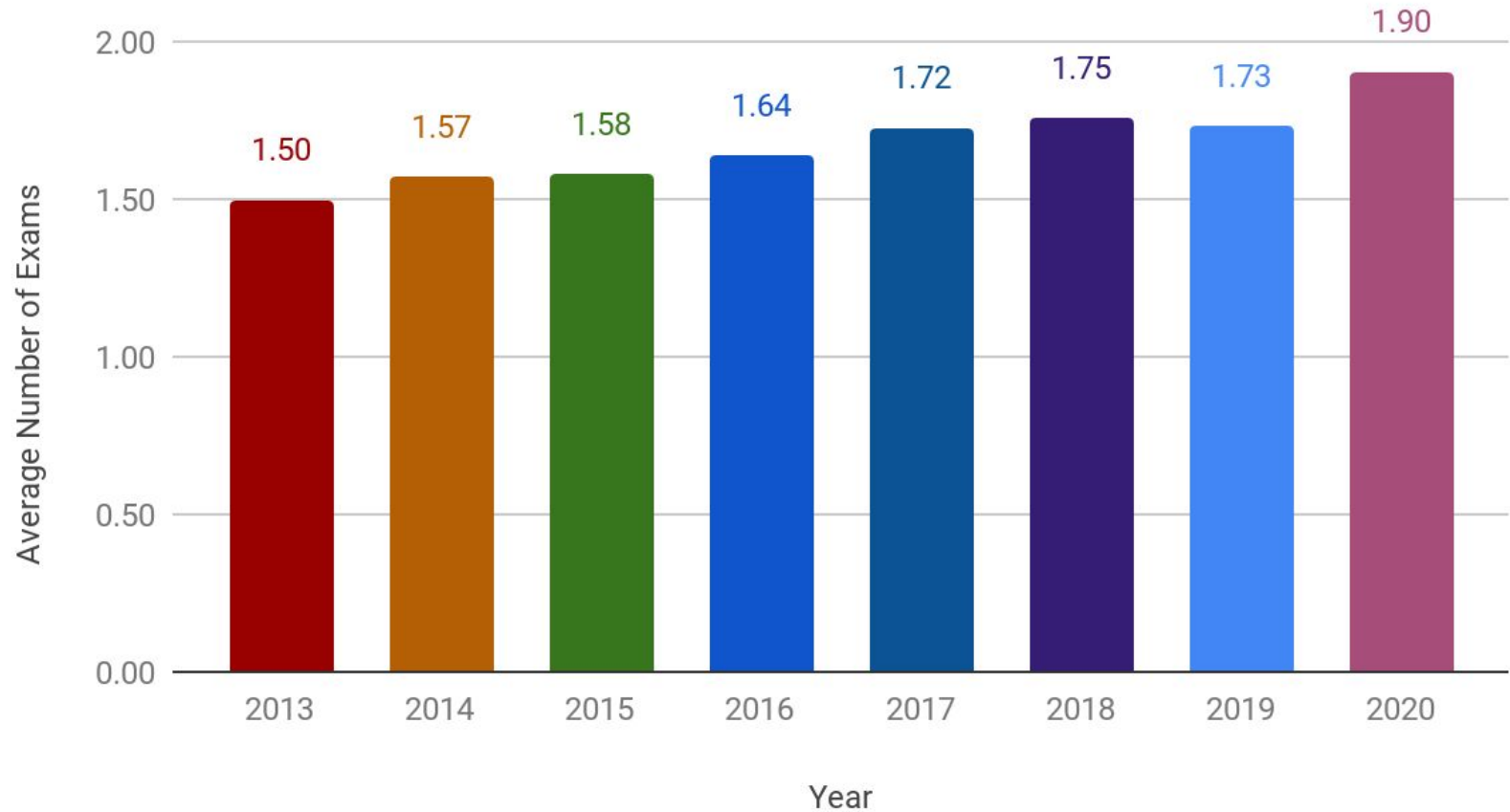
Number of Students Enrolled in AP Courses by Year



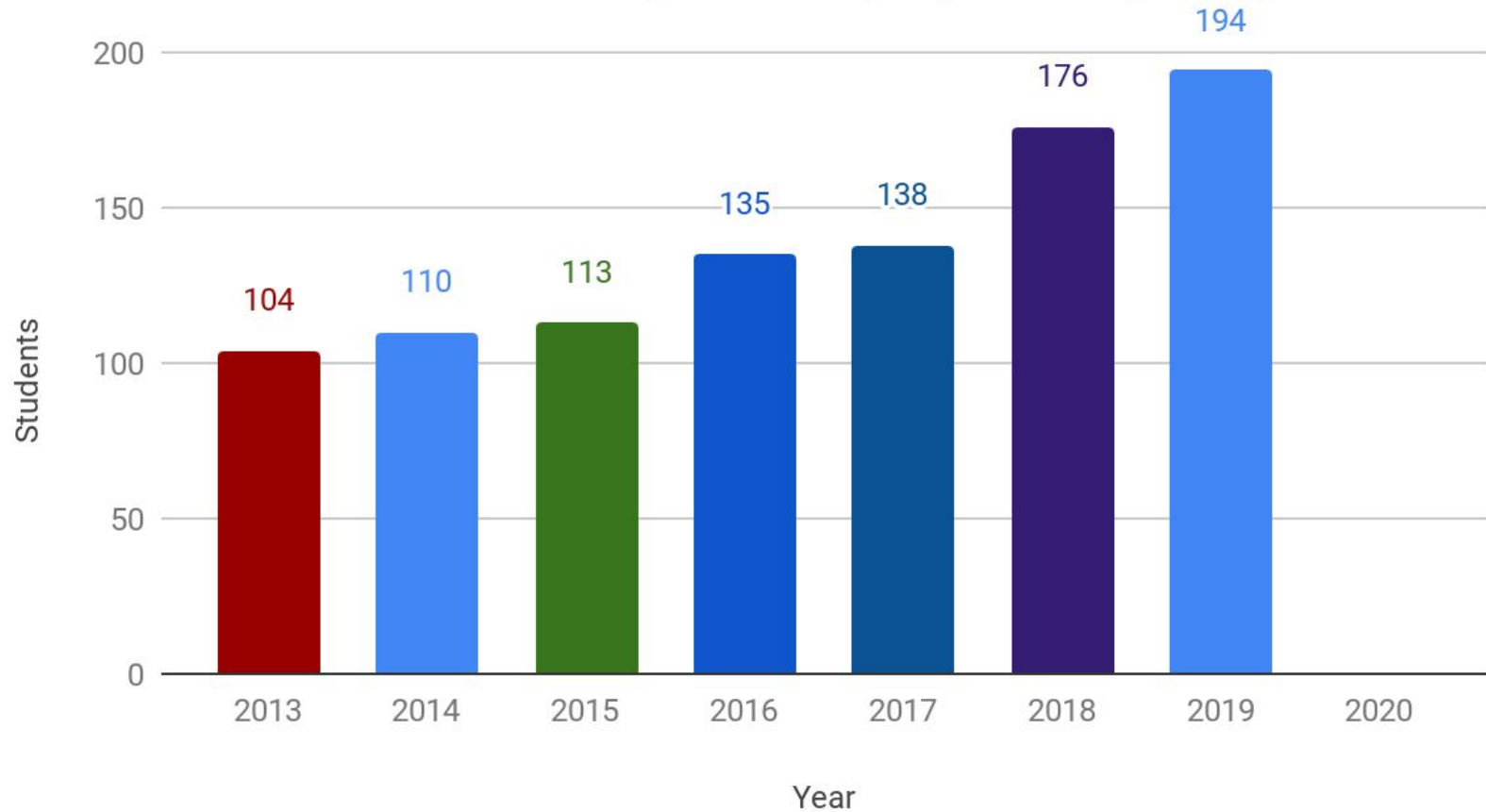
AP Exams by Year



Average Number of Exams per Student



Number of Students Earning a Qualifying Score (3+) by Year



2019 AP Exams

Summary by Class & Number of Exams

Exams	Seniors	Juniors	Sophomores	Freshmen	Total Students	Total Exams
1	55	44	48	1	148	148
2	42	40	14	-	96	192
3	27	11	1	-	39	117
4	7	-	-	-	7	28
5	4	-	1	-	5	25
Totals	135	95	64	1	295	510

2b.

AP - Summary of Results by Exam

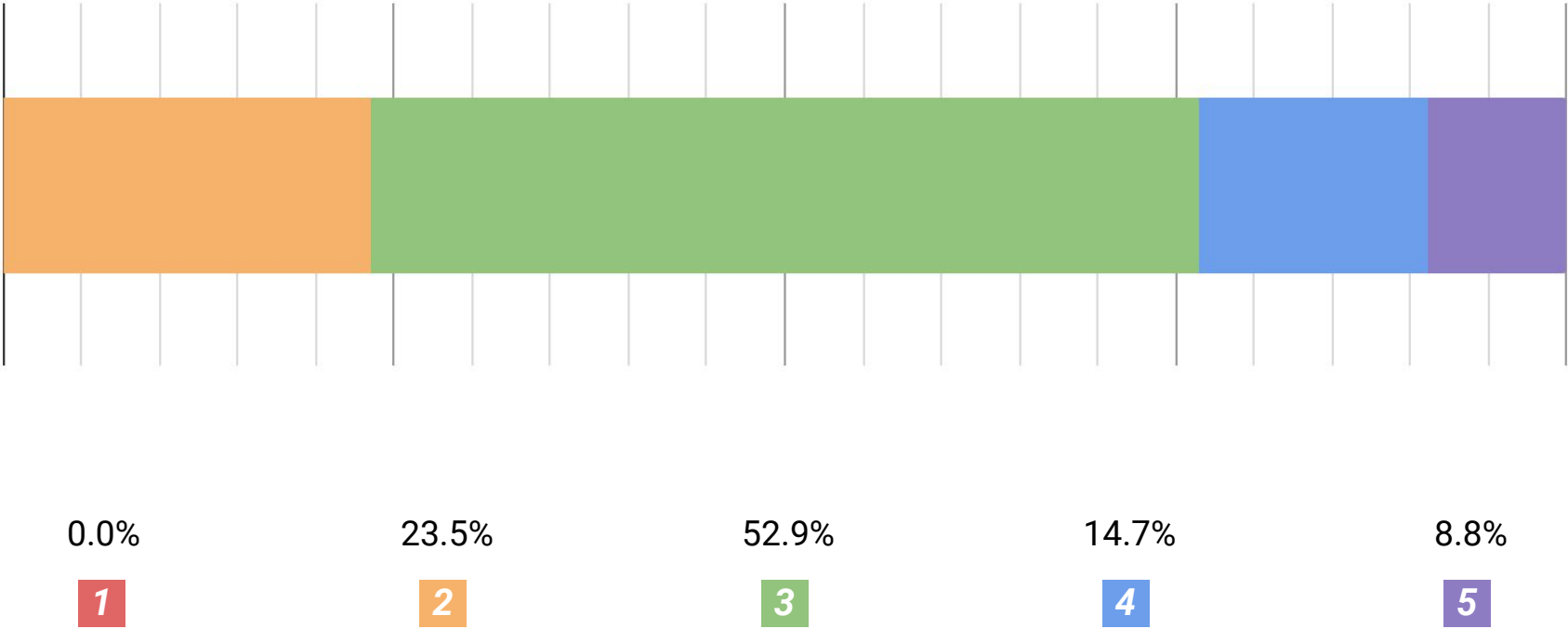
- Biology
- Calculus AB
- Chemistry
- CS Principles
- English Language
- English Literature
- Environmental
- French
- Music Theory
- Physics 1
- Psychology
- Spanish
- Studio Art - 3D Design
- Studio Art - Drawing
- US Government
- US History
- World History

Note: **Historical** represents the average for HHS students taking that exam, when offered 2010-2019.

Biology

Enrollment: 34

	Hanover	State	Global	Historical
Average Score	3.09	3.17	2.93	2.68
Scores 3+	76.5%	72.8%	64.7%	54.1%



Calculus AB

Enrollment: 35

Average Score

Hanover

3.29

State

3.18

Global

2.97

Historical

3.63

Scores 3+

74.3%

65.0%

58.4%

79.2%



0.0%

25.7%

37.1%

20.0%

17.1%

1

2

3

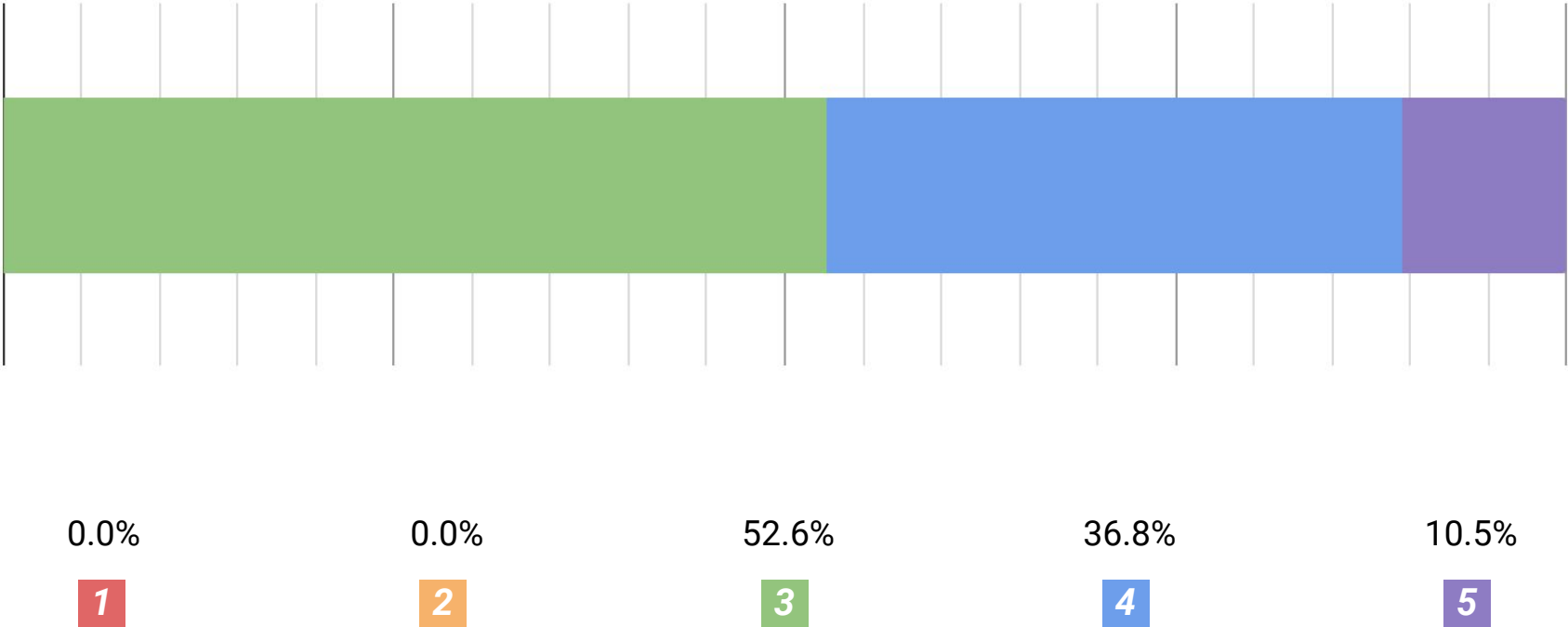
4

5

Chemistry

Enrollment: 19

	Hanover	State	Global	Historical
Average Score	3.38	3.11	2.74	2.68
Scores 3+	100.0%	67.4%	55.6%	56.4%



CS Principles

Enrollment: 26

Average Score

Hanover

3.42

State

3.02

Global

2.97

Historical

3.20

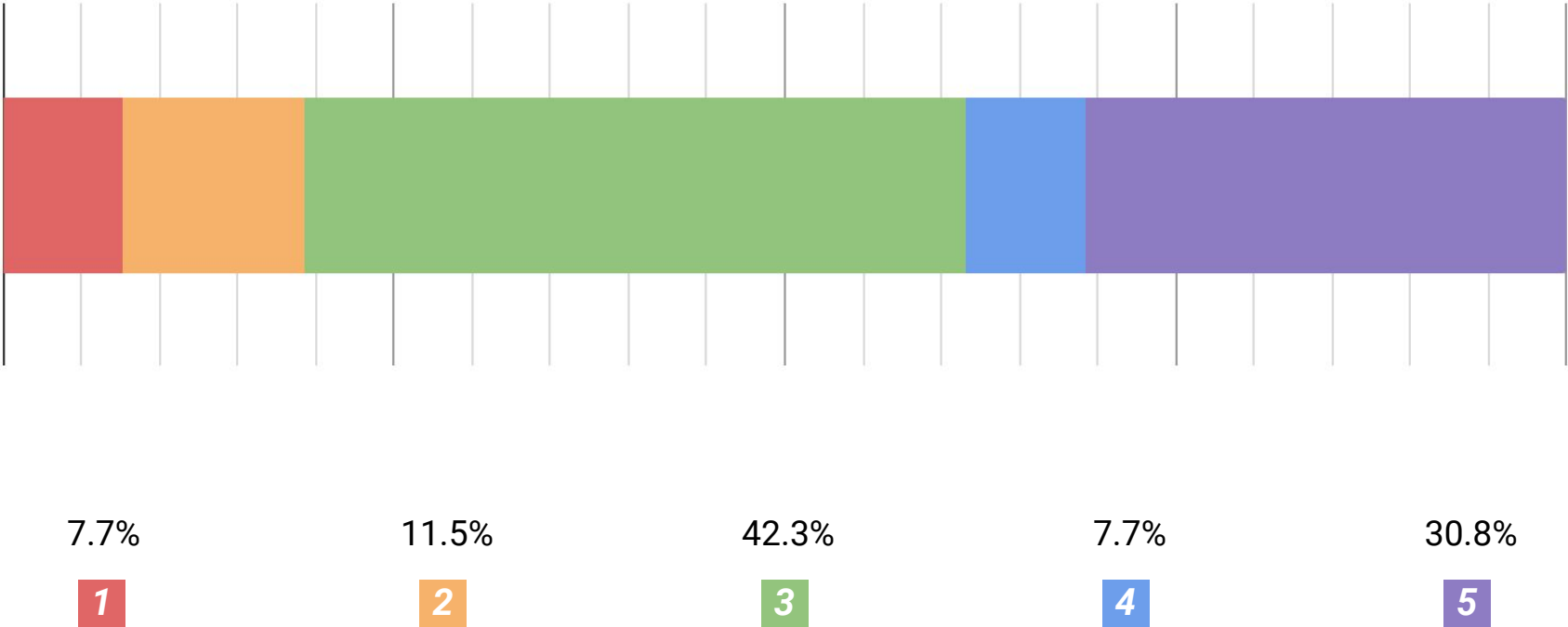
Scores 3+

80.8%

68.3%

66.8%

75.5%



English Language

Enrollment: 38

Average Score

Hanover

3.24

State

3.11

Global

2.78

Historical

3.23

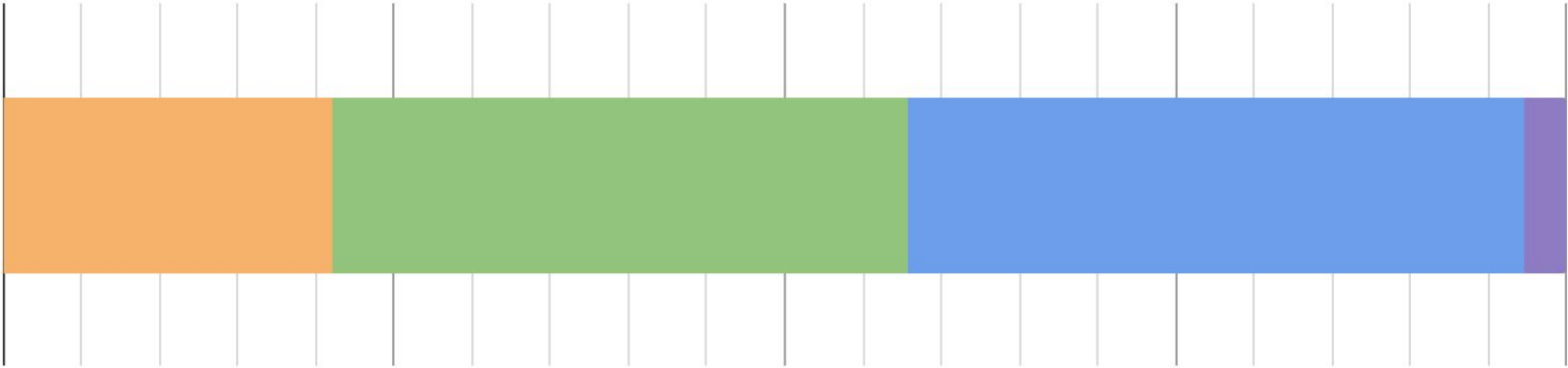
Scores 3+

78.9%

66.3%

54.2%

72.6%



0.0%

21.1%

36.8%

39.5%

2.6%

1

2

3

4

5

English Literature

Enrollment: 65

Average Score

Hanover

2.40

State

2.95

Global

2.62

Historical

2.91

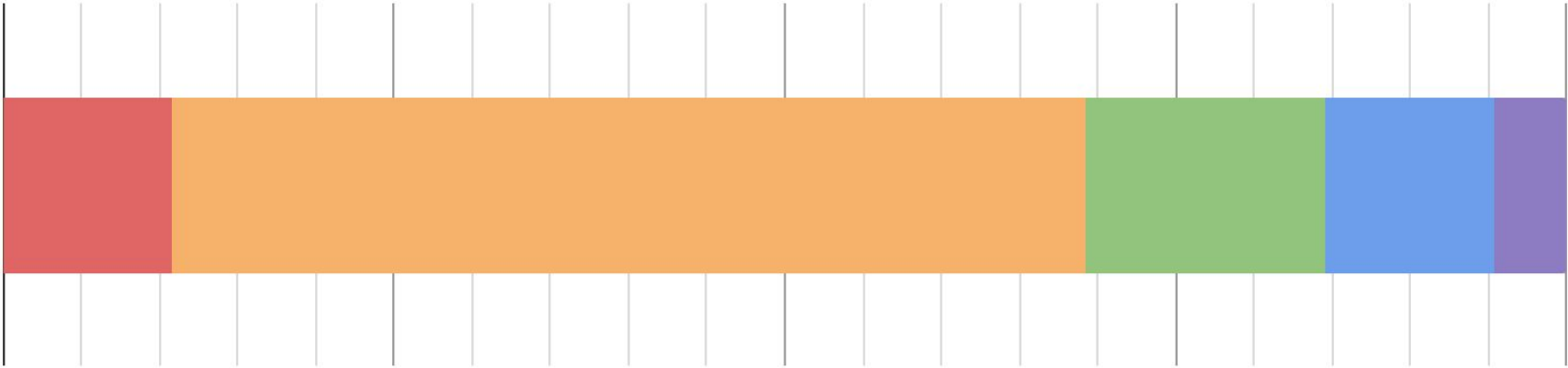
Scores 3+

30.8%

62.6%

49.6%

61.1%



10.8%

1

58.5%

2

15.4%

3

10.8%

4

4.6%

5

Environmental

Enrollment: 66

Average Score

Hanover

2.83

State

3.00

Global

2.68

Historical

2.23

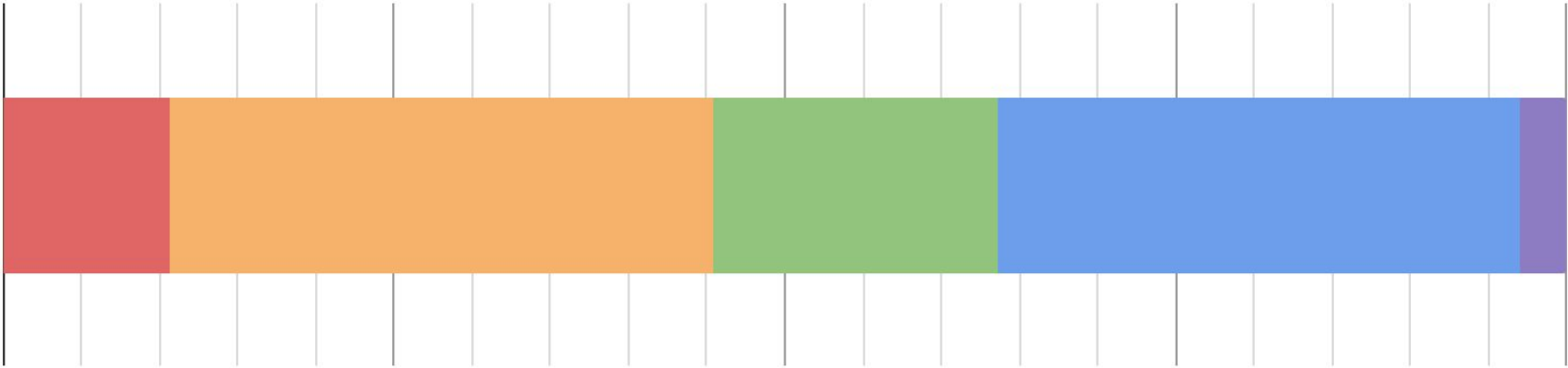
Scores 3+

54.5%

59.1%

49.2%

35.1%



10.6%

1

34.8%

2

18.2%

3

33.3%

4

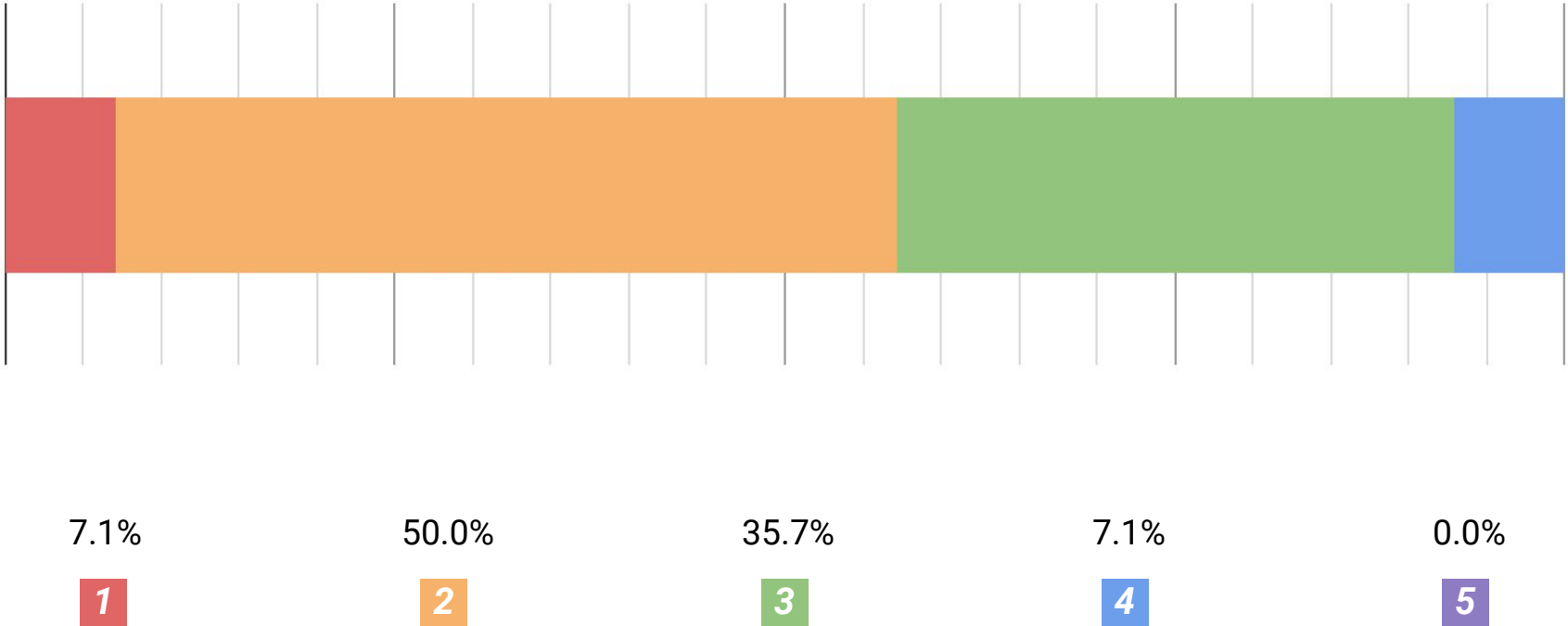
3.0%

5

French

Enrollment: 14

	Hanover	State	Global	Historical
Average Score	2.43	3.55	3.29	2.45
Scores 3+	42.9%	84.9%	76.6%	46.4%



Music Theory

Enrollment: 8

Average Score

Hanover

2.63

State

3.60

Global

3.10

Historical

3.49

Scores 3+

37.5%

75.9%

63.3%

76.3%



37.5%

25.0%

0.0%

12.5%

25.0%

1

2

3

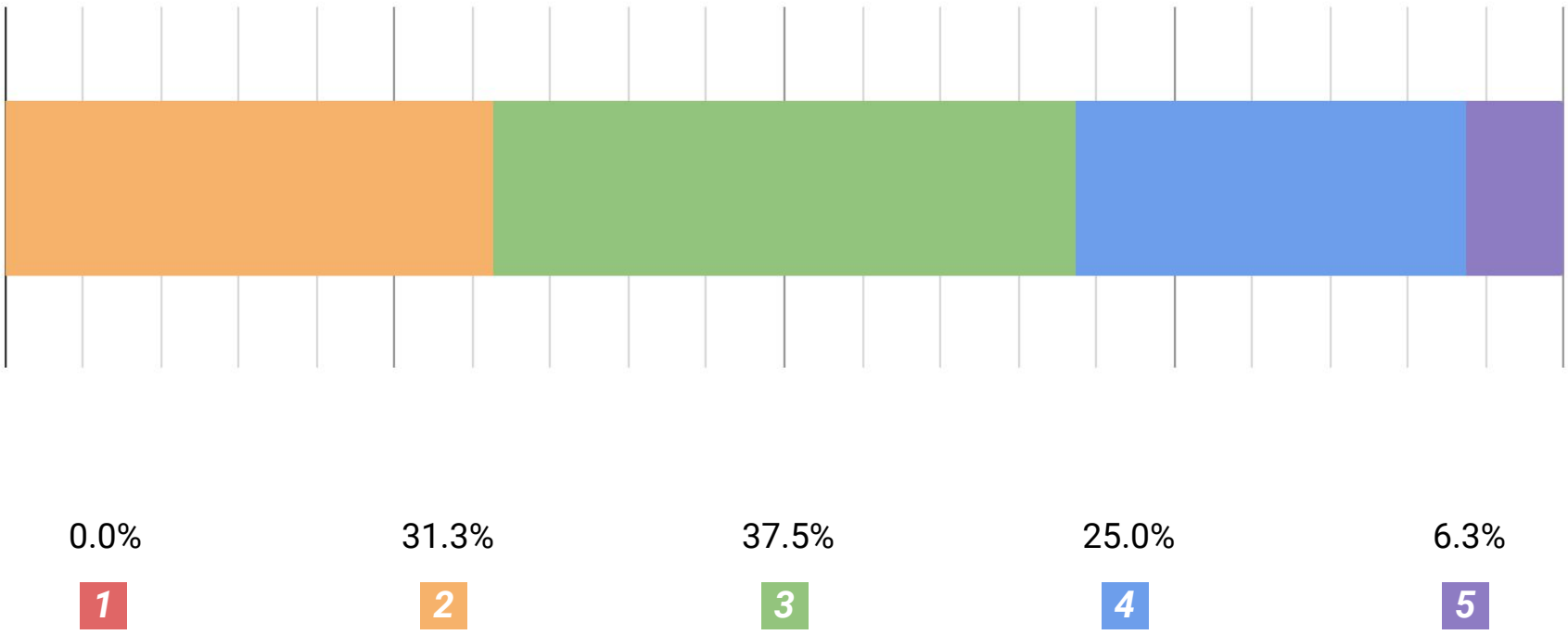
4

5

Physics 1

Enrollment: 16

	Hanover	State	Global	Historical
Average Score	3.06	2.54	2.51	2.67
Scores 3+	68.8%	45.5%	45.4%	58.0%



Psychology

Enrollment: 44

Average Score

Hanover

1.86

State

3.26

Global

3.09

Historical

2.41

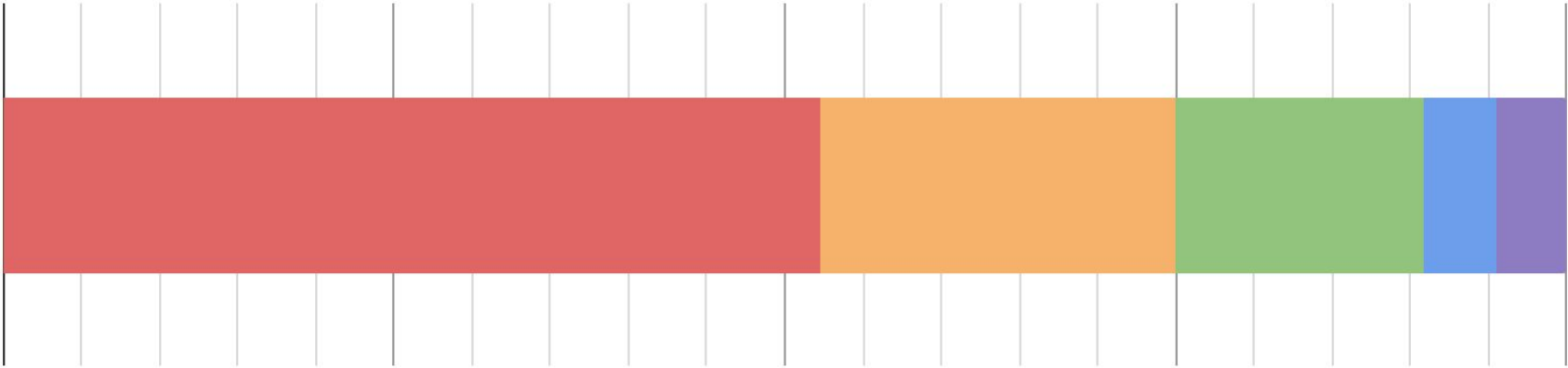
Scores 3+

25.0%

69.5%

64.5%

45.2%



52.3%

1

22.7%

2

15.9%

3

4.5%

4

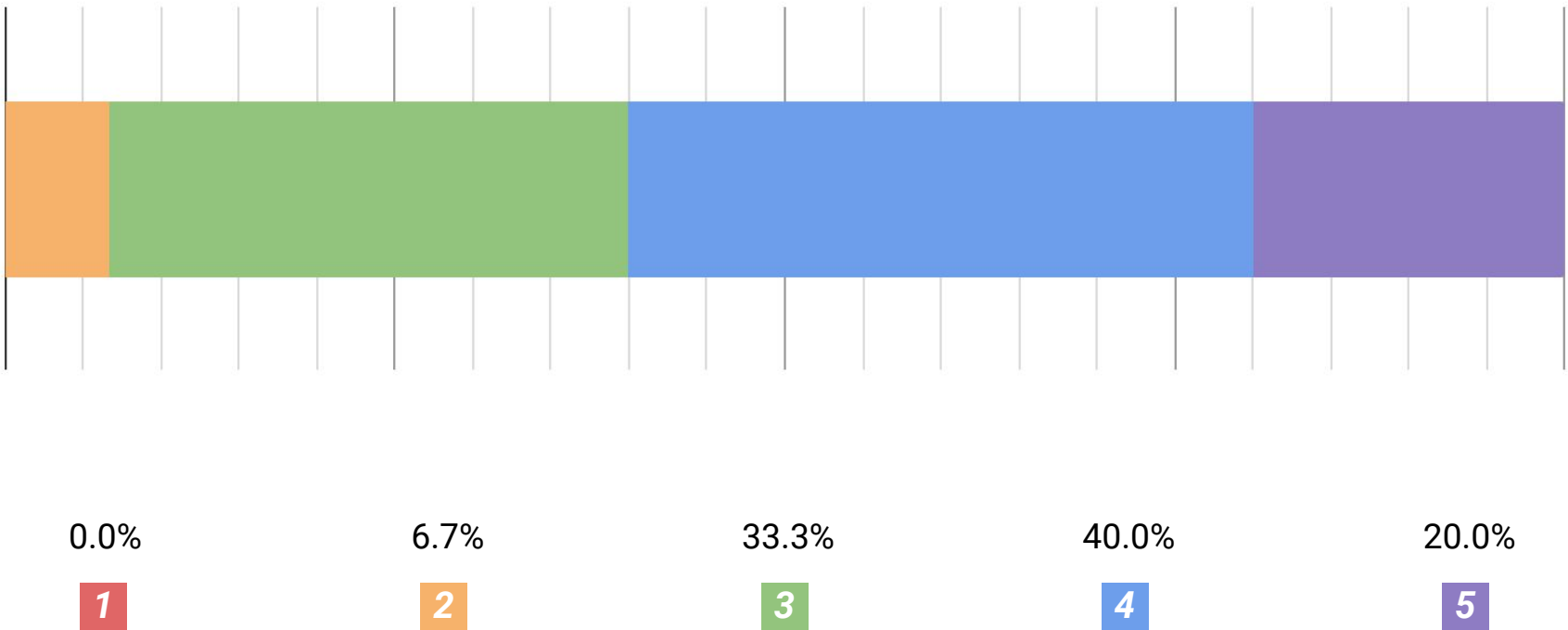
4.5%

5

Spanish

Enrollment: 15

	Hanover	State	Global	Historical
Average Score	3.73	3.75	3.69	3.59
Scores 3+	93.3%	89.9%	88.2%	89.8%



Studio Art - 3D Design

Enrollment: 5

Average Score

Scores 3+

Hanover

3.40

80.0%

State

2.96

64.3%

Global

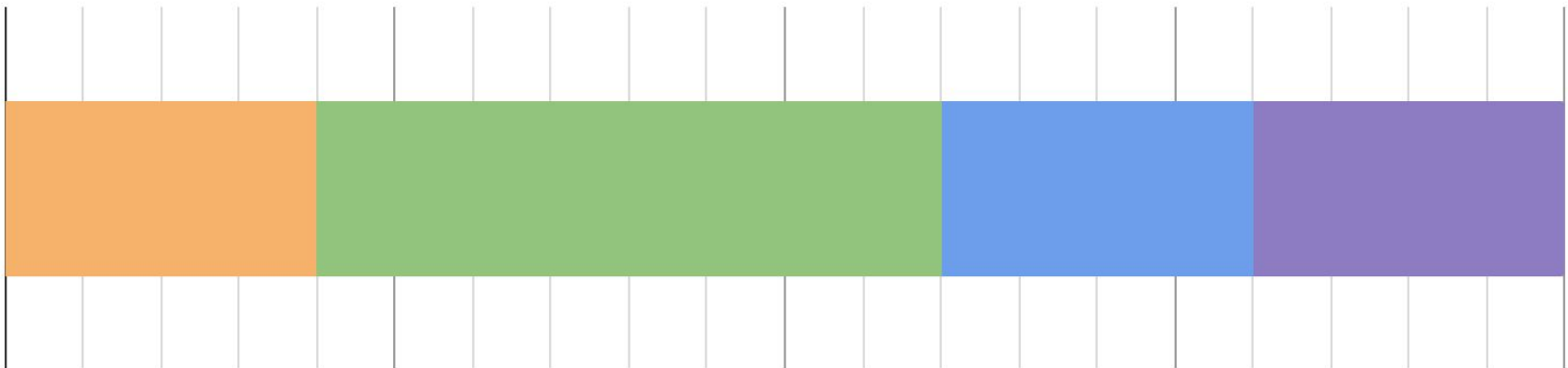
3.08

70.0%

Historical

2.74

62.1%



0.0%

20.0%

40.0%

20.0%

20.0%

1

2

3

4

5

Studio Art - Drawing

Enrollment: 7

Average Score

Hanover

3.86

State

3.62

Global

3.63

Historical

3.34

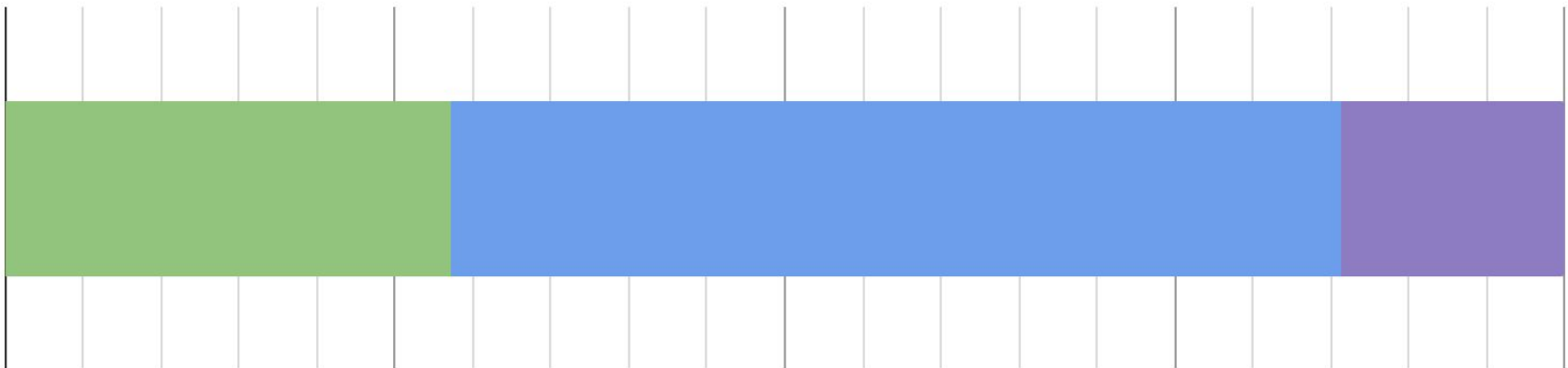
Scores 3+

100.0%

89.9%

90.7%

84.6%



0.0%

1

0.0%

2

28.6%

3

57.1%

4

14.3%

5

US Government

Enrollment: 19

Average Score

Hanover

3.58

State

3.02

Global

2.73

Historical

3.08

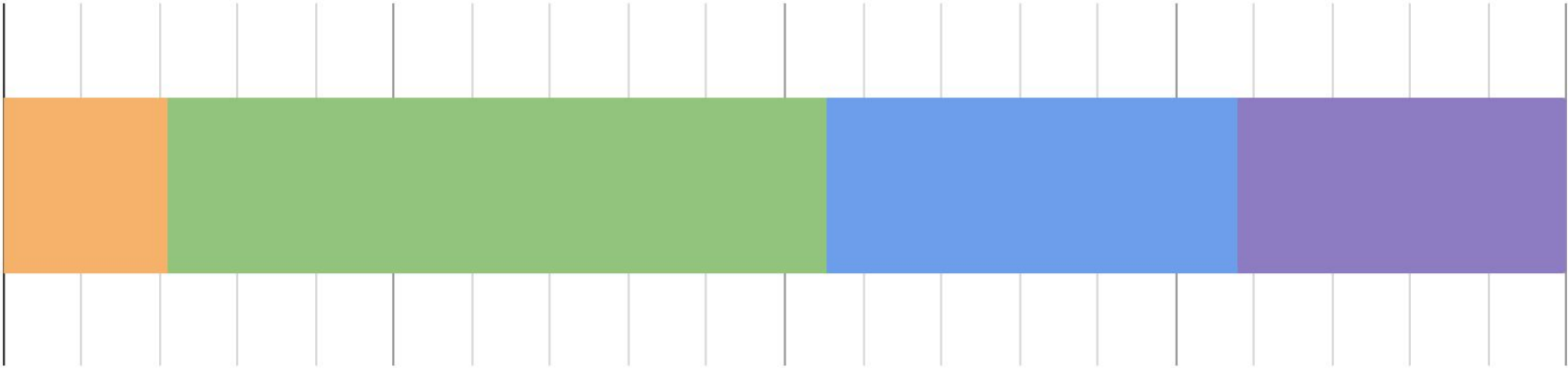
Scores 3+

89.5%

63.4%

55.0%

63.1%



0.0%

1

10.5%

2

42.1%

3

26.3%

4

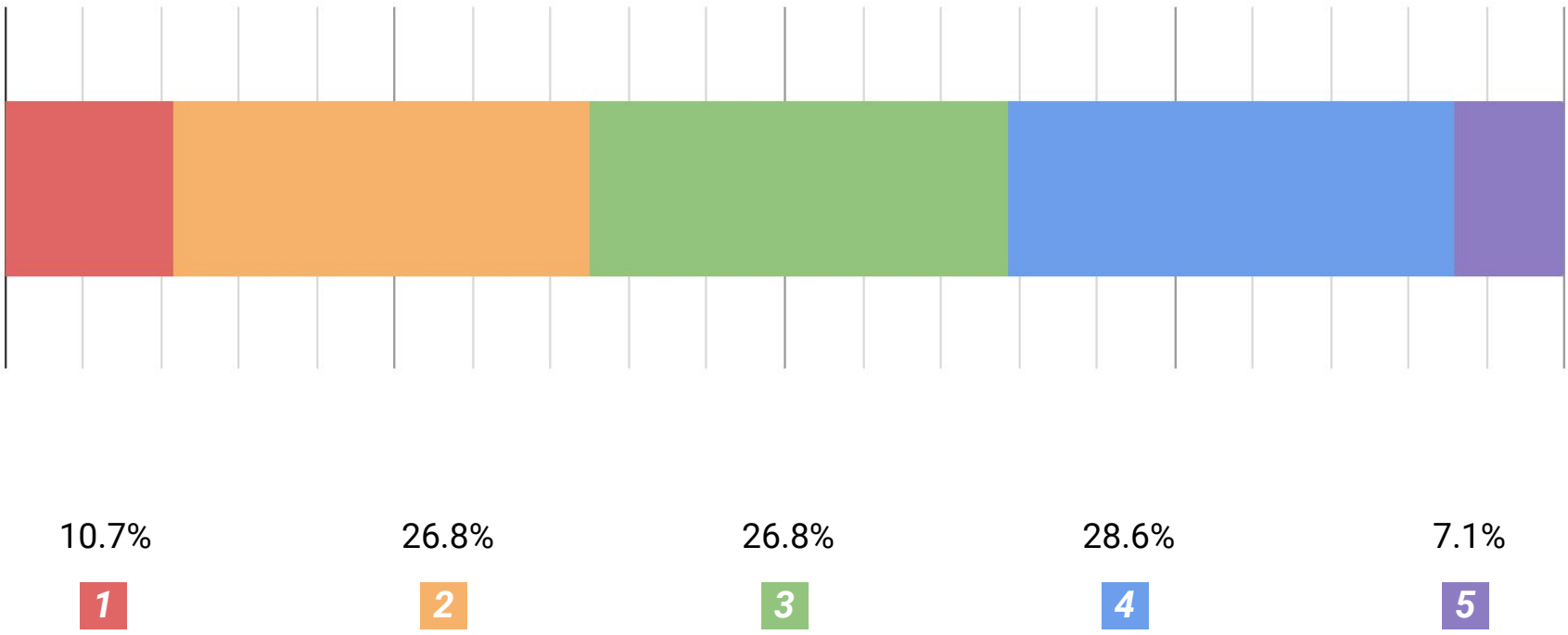
21.1%

5

US History

Enrollment: 56

	Hanover	State	Global	Historical
Average Score	2.95	3.21	2.71	3.24
Scores 3+	62.5%	69.4%	53.6%	71.7%



World History

Enrollment: 37

Average Score

Hanover

3.38

State

3.29

Global

2.76

Historical

3.61

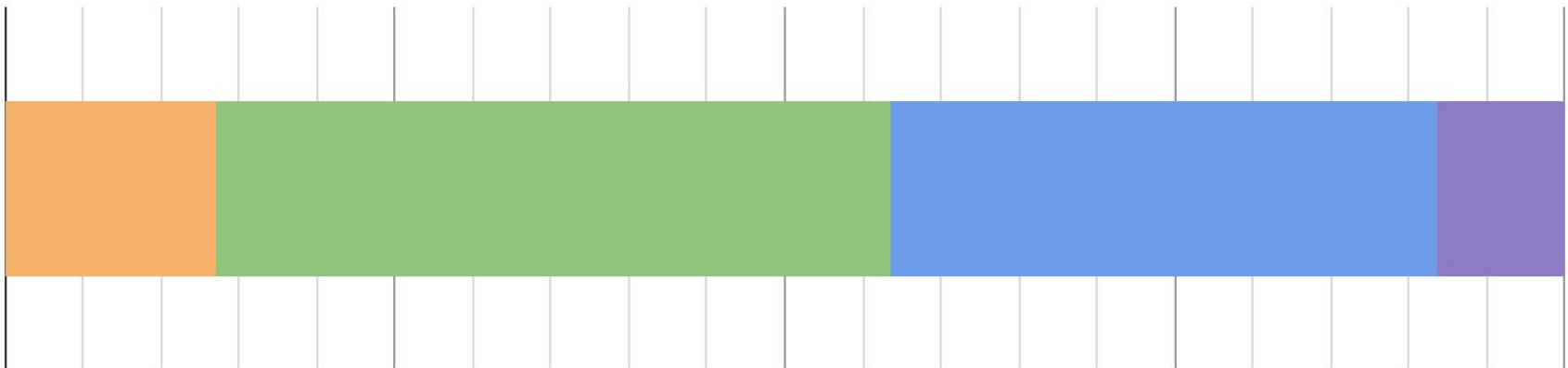
Scores 3+

86.5%

73.4%

55.4%

90.8%



0.0%

13.5%

43.2%

35.1%

8.1%

1

2

3

4

5

AP - Plan for Improvement - Summary

- Standardize enrollment criteria for AP courses
 - Introduce grade 12 honors English
 - Manage AP enrollment, e.g., grade 12 students
 - Increase student motivation
- Adjust curriculum and instruction
 - Utilize AP Classroom tool through CollegeBoard
 - Utilize the Albert assessment tool
 - Provide formal practice testing
 - Emphasize test taking strategies in ELA and math classes

3a.

SAT - Overview

- SAT: Scholastic Aptitude Test
- Administered throughout the year
- Scoring: 1600 total points
 - 800 in Evidence-based Reading and Writing
 - 800 in Mathematics
 - No penalty for a wrong answer
- 5 Sections, from 25 to 65 minutes each
- SAT takes about 3 hours to complete

3b. SAT - Results

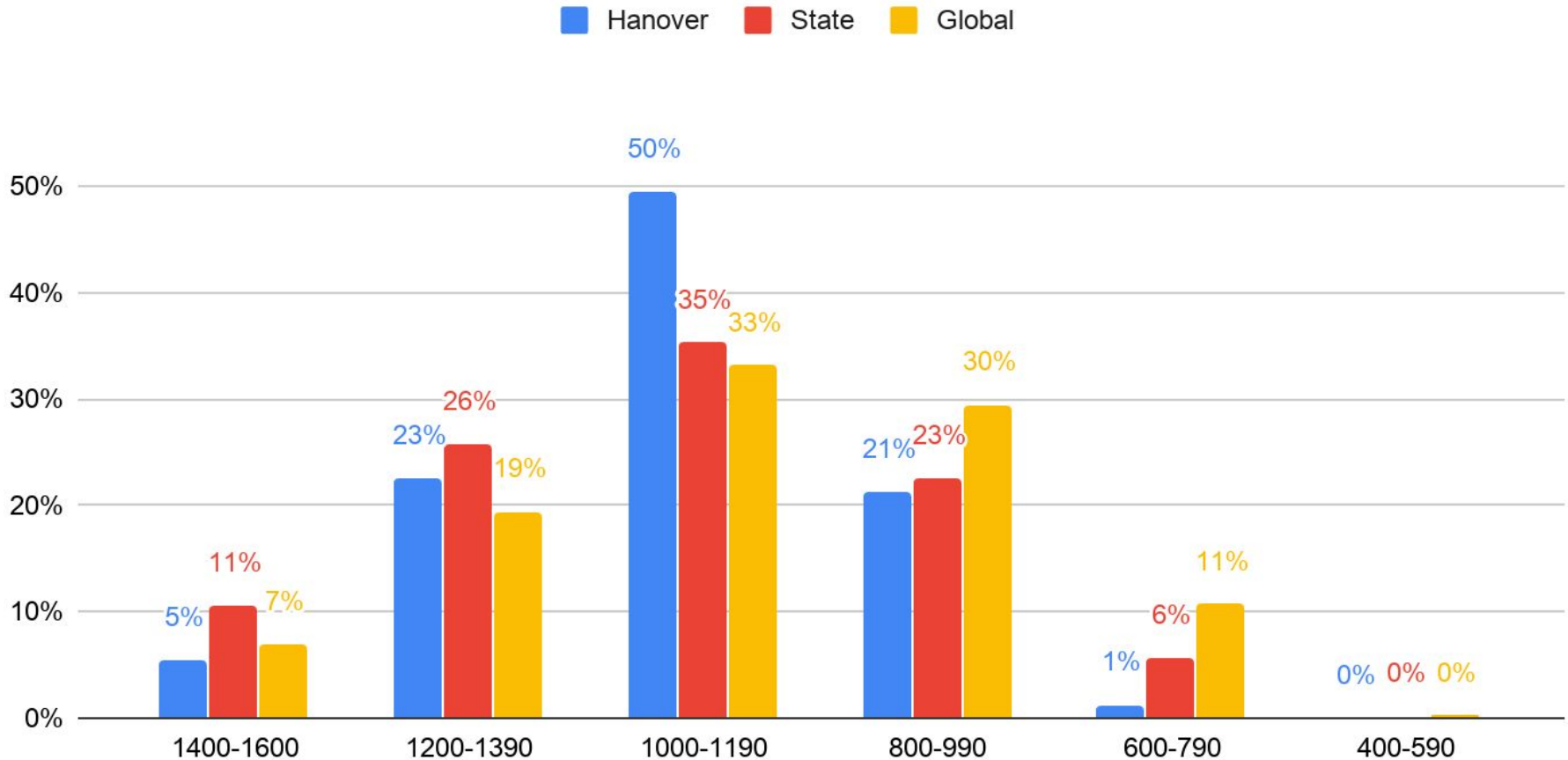
Exam Results from the 2018-2019 School Year

- Total Score
 - Evidenced-based Reading and Writing
 - Mathematics

SAT Results, 2018-2019 School Year

	Total Score 1600	ERW Score 800	Math Score 800
Hanover	1106	559	547
State	1098	548	550
Global	1059	531	528

SAT Results, 2018-2019 School Year



Goal Setting: Analysis of DART/Neighbors

We know that our DART districts, DART high schools, and many local high schools, outperform Hanover High School on the SAT. Therefore we examined some trends and underlying correlations to inform our strategies and set goals for improvement.

Initially, we looked at:

- Per pupil spending
- Median household income
- College graduation rates within the community

Goal Setting: Analysis of DART/Neighbors

We know that our DART districts, DART high schools, and many local high schools, outperform Hanover High School on the SAT. Therefore we examined some trends and underlying correlations to inform our strategies and set goals for improvement.

We also surveyed these schools regarding:

- Priority on standardized testing?
- Targeted curriculum?
- Testing strategies and supports?
- Programs for college readiness?

Goal Setting: Analysis of DART/Neighbors

We know that our DART districts, DART high schools, and many local high schools, outperform Hanover High School on the SAT. Therefore we examined some trends and underlying correlations to inform our strategies and set goals for improvement.

Initial Next Steps:

- Using this data, we are able to identify target schools and districts that outperform trends and expected outcomes, and we hope to model strategies to replicate their success.

DART Districts

N = 12

	ERW	Math	Total SAT	Per Pupil Expenditure	Median Income	% Adults with BA+
Longmeadow	606	613	1219	\$13,999.90	\$112,831.00	65.00%
Westwood	596	611	1207	\$17,306.17	\$145,799.00	70.40%
Groton-Dunstable	590	610	1200	\$14,474.93	\$123,918.00	66.20%
Hamilton-Wenham	600	592	1192	\$16,442.18	\$112,250.00	68.90%
Newburyport	579	585	1164	\$15,433.77	\$89,887.00	61.00%
Scituate	586	575	1161	\$14,521.29	\$111,865.00	54.70%
Reading	578	582	1160	\$12,764.42	\$114,354.00	62.00%
Lynnfield	575	574	1149	\$14,599.12	\$117,706.00	53.10%
King Philip	572	560	1132	\$13,396.09	\$113,493.33	47.00%
North Reading	565	567	1132	\$14,487.82	\$124,750.00	52.30%
Hanover	559	547	1106	\$13,447.83	\$111,311.00	46.10%
Wilmington	558	543	1101	\$15,157.78	\$118,549.00	40.80%

DART High Schools

N = 11

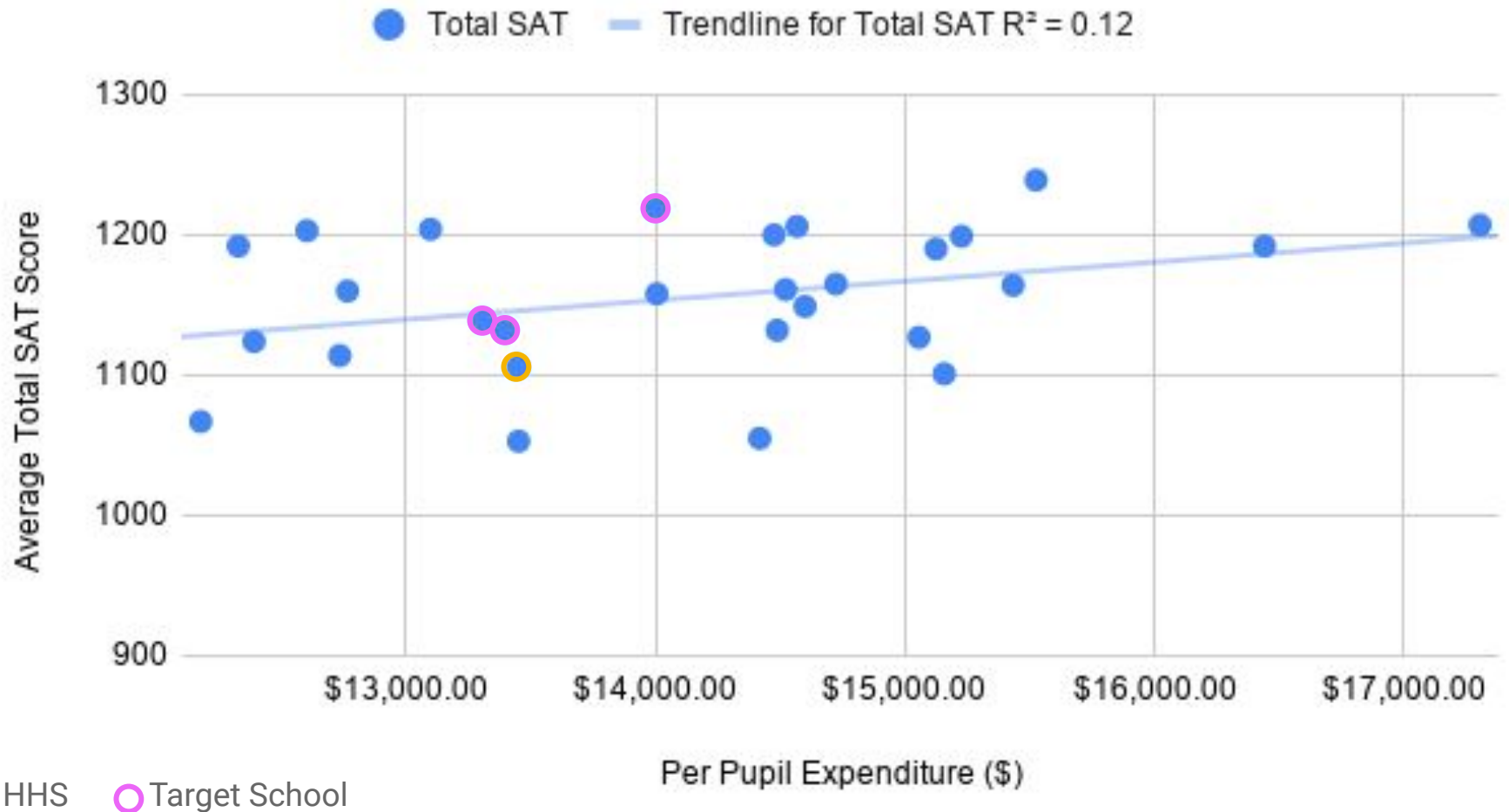
	ERW	Math	Total SAT	Per Pupil Expenditure	Median Income	% Adults with BA+
Sharon	611	628	1239	\$15,525.87	\$132,734.00	73.9%
Medfield	599	607	1206	\$14,567.07	\$153,847.00	72.5%
Arlington	603	601	1204	\$13,097.27	\$103,594.00	70.0%
Groton-Dunstable	590	610	1200	\$14,474.93	\$123,918.00	66.2%
Holliston	594	598	1192	\$12,326.61	\$118,933.00	62.3%
Nashoba	591	599	1190	\$15,124.77	\$132,323.00	67.4%
Newburyport	579	585	1164	\$15,433.77	\$89,887.00	61.0%
Medway	567	572	1139	\$13,307.71	\$115,432.00	59.0%
King Philip	572	560	1132	\$13,396.09	\$113,493.33	47.0%
Mendon-Upton	568	559	1127	\$15,056.19	\$122,604.00	49.7%
Hanover	559	547	1106	\$13,447.83	\$111,311.00	46.1%

Neighbor High Schools

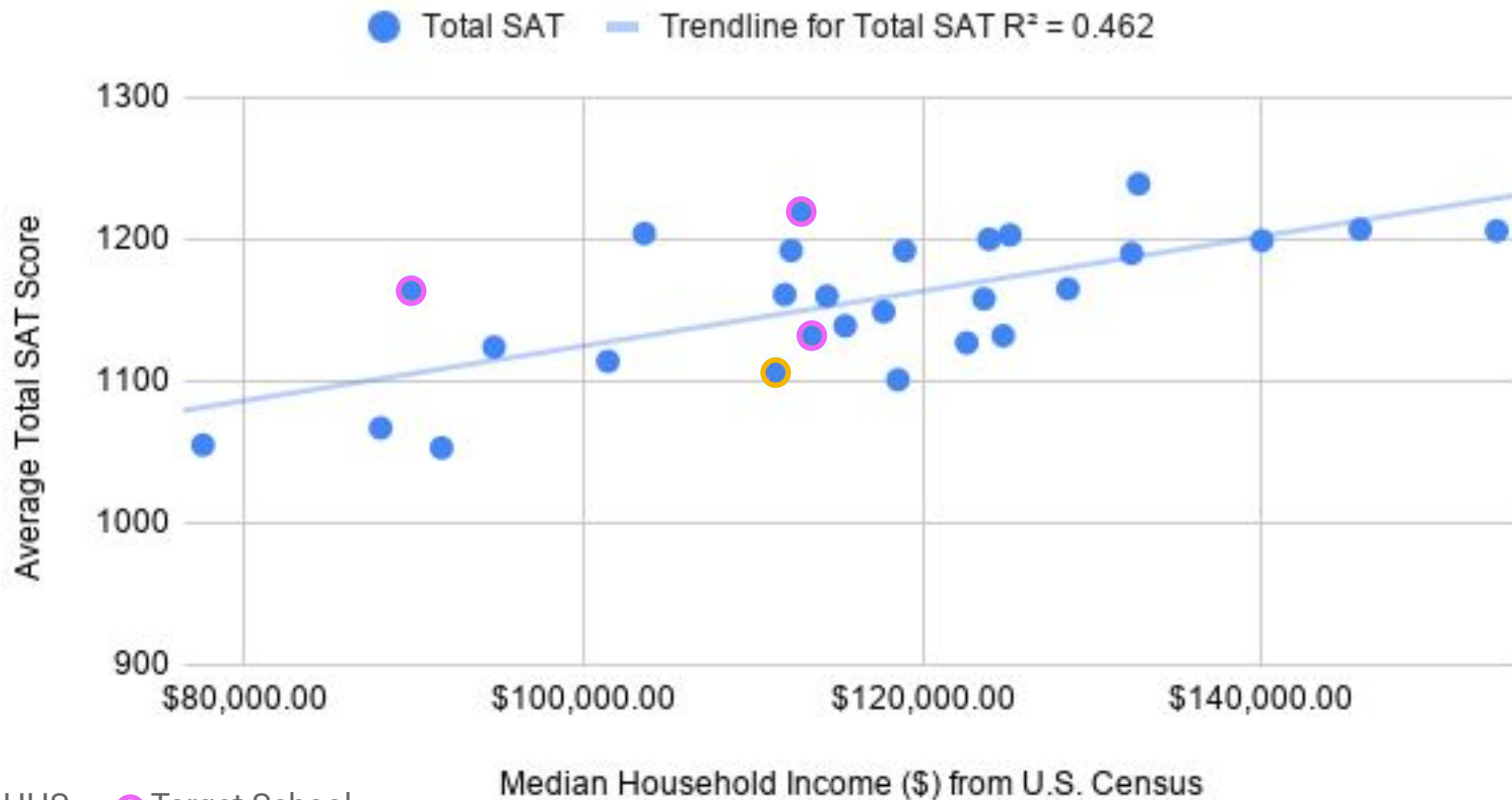
N = 11

	ERW	Math	Total SAT	Per Pupil Expenditure	Median Income	% Adults with BA+
Hingham	603	600	1203	\$12,601.87	\$125,144.00	69.70%
Cohasset	611	588	1199	\$15,226.77	\$140,000.00	73.30%
Norwell	588	577	1165	\$14,723.26	\$128,563.00	63.10%
Scituate	586	575	1161	\$14,521.29	\$111,865.00	54.70%
Duxbury	585	573	1158	\$14,005.09	\$123,613.00	68.60%
Marshfield	565	559	1124	\$12,389.45	\$94,737.00	43.70%
Pembroke	557	557	1114	\$12,733.53	\$101,447.00	38.40%
Hanover	559	547	1106	\$13,447.83	\$111,311.00	46.10%
Whitman-Hanson	541	526	1067	\$12,175.79	\$88,047.00	30.90%
Rockland	524	531	1055	\$14,417.57	\$77,573.00	29.00%
Abington	528	525	1053	\$13,450.43	\$91,643.00	33.90%

Per Pupil Expenditure and Total SAT Score



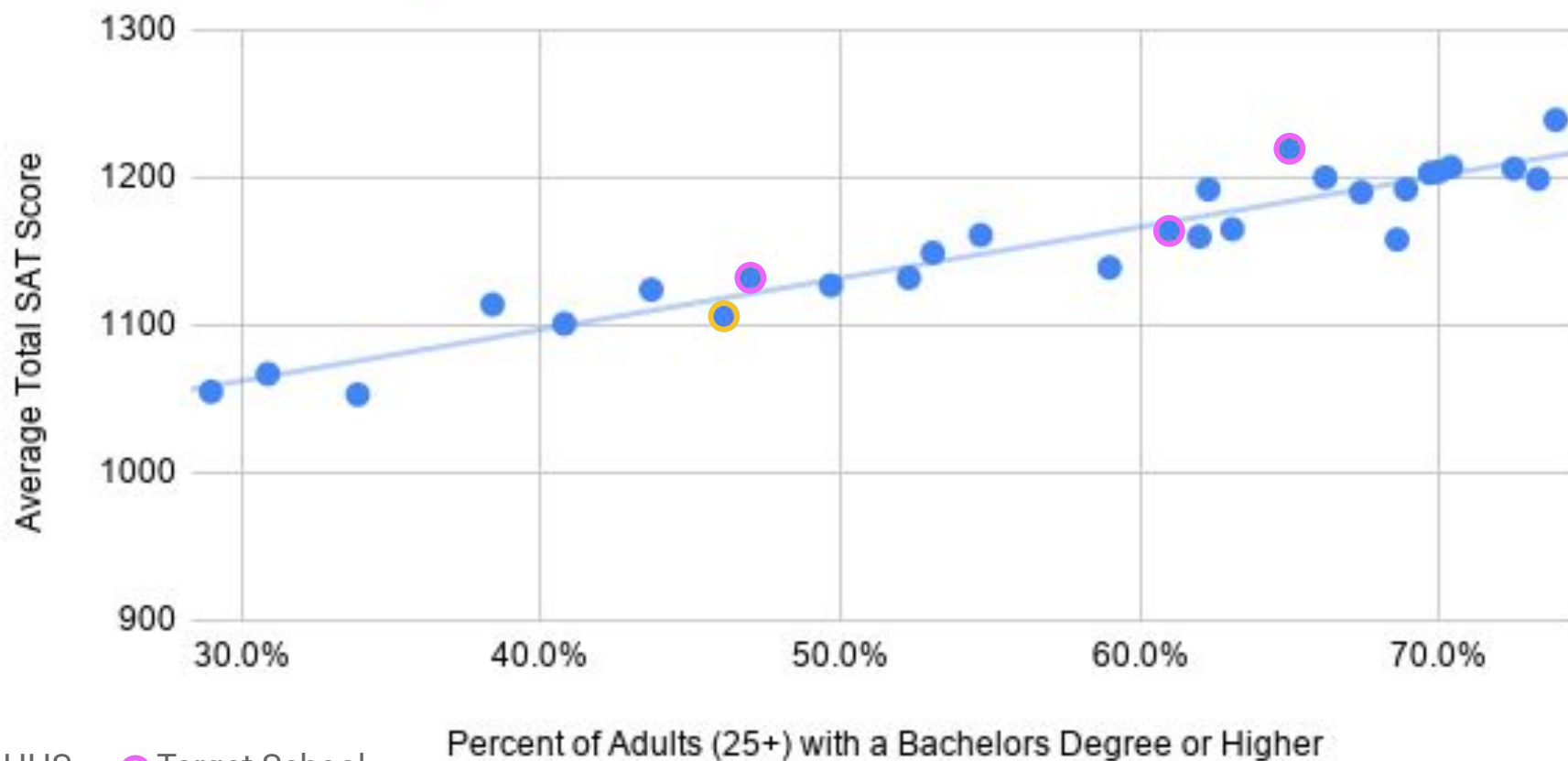
Median Household Income and Total SAT Score



○ HHS ○ Target School

% Adults (25+) with Bachelors Degree+ and Total SAT Score

● Total SAT — Trendline for Total SAT $R^2 = 0.9$

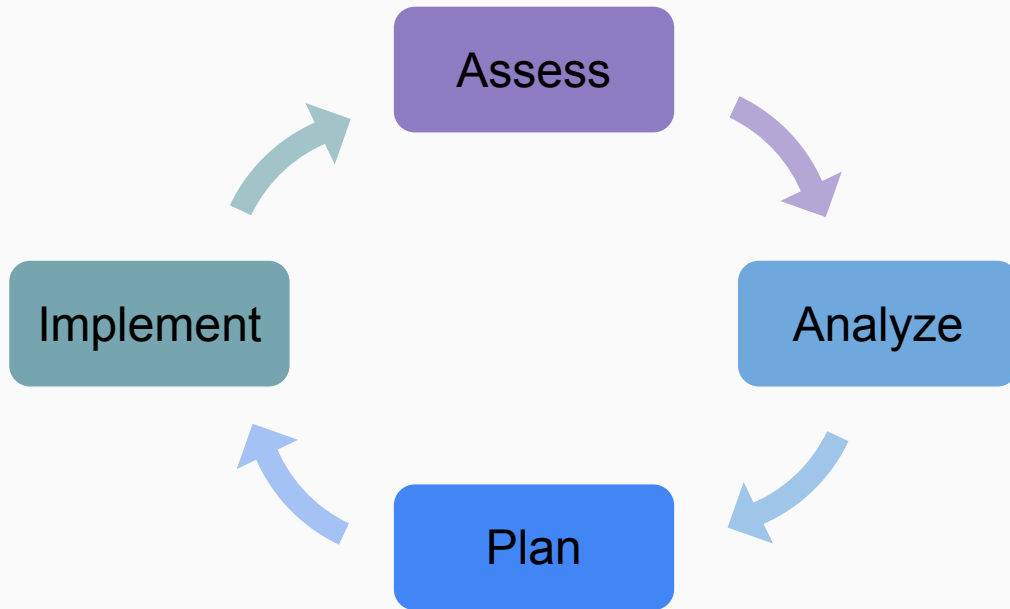


○ HHS ○ Target School

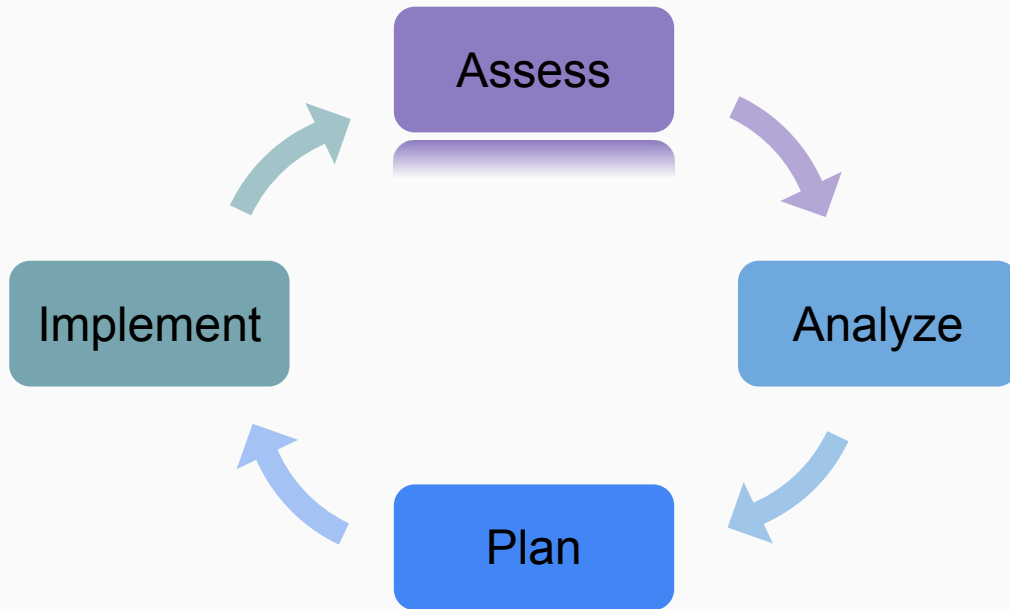
Summary

- There is a weak positive correlation between SAT scores and per pupil expenditure
- There is a moderate positive correlation between SAT scores and median household income
- There is a strong positive correlation between SAT scores and education level of the adults within the community
- We believe there is also a strong positive correlation between SAT scores and effective teaching, hard work, and practice
- We want to to improve against ourselves, the state, as well as against our local and DART schools.

Standardized Assessment Improvement Plan



Standardized Assessment Improvement Plan



- PSAT Administration
- MCAS, AP, SAT

MCAS - Sample ELA Question

From 1929 to 1939, the United States sank into the Great Depression, a period of extreme poverty and unemployment for most of the country. Read the passages that discuss a famous photograph, titled “Migrant Mother,” taken during that time. Then answer the questions that follow.

8 Thompson moved to Modesto in 1945 and went to work in a hospital there. She had one of the most famous faces in the United States, yet, to keep her family together, she had to work 16 hours a day, seven days a week. “I worked in hospitals,” Thompson told NBC in 1979, “I tended bar, I worked in the field, so I done a little bit of everything to make a living for my kids.” Thompson profited nothing from Migrant Mother. “I can’t get a penny out of it,” she once said, but she wasn’t exactly bitter. She had posed for the photo to help others, not herself, yet the disparity between her high profile and low status couldn’t help but bother her.

9 Meanwhile, Migrant Mother made Dorothea Lange’s reputation, helped earn her a Guggenheim

Which statement **best** describes the irony expressed in paragraphs 8 and 9 of “The Story of the ‘Migrant Mother’”?

- ☐ A. Thompson was the focus of other photographs, but no one ever noticed her in them.
- ☐ B. Thompson’s children grew up to lead successful lives, yet they were unable to support her.
- ☐ C. Thompson was finally recognized for the photograph, but she was too busy to appreciate it.
- ☐ D. Thompson’s image was supposed to aid people in situations similar to hers, yet she gained nothing from it.

MCAS - Sample Math Question

The number of customers doing business with a landscaping company each week, over t weeks since the beginning of last summer, can be modeled by this function.

$$f(t) = 21 + 4t$$

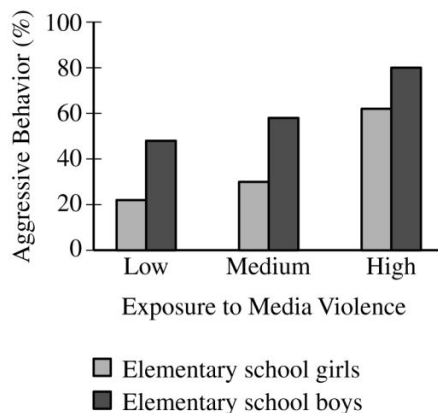
Based on the function, which of the following statements is true?

- ☐ A. The number of customers increased by 21 per week.
- ☐ B. The number of customers decreased by a factor of 4.
- ☐ C. The company began last summer with 21 customers.
- ☐ D. The company had a total of 21 customers after 4 weeks.

AP - Sample Calculus Question

4. An ice sculpture in the form of a sphere melts in such a way that it maintains its spherical shape. The volume of the sphere is decreasing at a constant rate of 2π cubic meters per hour. At what rate, in square meters per hour, is the surface area of the sphere decreasing at the moment when the radius is 5 meters? (Note: For a sphere of radius r , the surface area is $4\pi r^2$ and the volume is $\frac{4}{3}\pi r^3$.)
- (A) $\frac{4\pi}{5}$
- (B) 40π
- (C) $80\pi^2$
- (D) 100π

AP - Sample Psychology Questions



31. Which of the following provides an effective explanation for the data above?
- (A) Operant conditioning
 - (B) Classical conditioning
 - (C) Prepared conditioning
 - (D) Self-actualization
 - (E) Observational learning
32. A person will most likely develop aphasia as a result of damage to which of the following parts of the brain?
- (A) Occipital lobe
 - (B) Wernicke's area
 - (C) Auditory cortex
 - (D) Parietal lobe
 - (E) Basal ganglia
35. Heidi was trying to solve the anagram **TORYS** by rearranging every letter one at a time until she was able to identify the correct word: **STORY**. She could have attempted to solve the anagram more quickly by pairing common letters, like **ST**, but she did not do so. Her approach to solving the anagram involved
- (A) a heuristic
 - (B) an algorithm
 - (C) incubation
 - (D) inductive reasoning
 - (E) dialectical reasoning
36. Maria was never afraid of spiders until a spider bit her when she was eight. Today, even the sight of a plastic spider upsets her. Which of the following learning processes best explains Maria's fear of spiders?
- (A) Classical conditioning
 - (B) Operant conditioning
 - (C) Discrimination
 - (D) Observational learning
 - (E) Scaffolding
37. When Rosa has a cold, she cannot taste the flavor of her pizza. Which of the following psychological terms describes Rosa's inability to taste?
- (A) Vestibular sense
 - (B) Just-noticeable difference
 - (C) Feature analysis
 - (D) Optic chiasm
 - (E) Sensory interaction

SAT - Sample Reading Questions

It was how she viewed Naomi. Even though Naomi was eighteen and training endlessly in the arts
55 needed to make a good marriage, Chie had made no effort to find her a husband.

Akira blushed.

“Depending on your response, I may stay in Japan. I’ve come to ask for Naomi’s hand.”
60 Suddenly Chie felt the dampness of the night.
“Does Naomi know anything of your . . . ambitions?”

“We have an understanding. Please don’t judge my candidacy by the unseemliness of this proposal. I
65 ask directly because the use of a go-between takes much time. Either method comes down to the same thing: a matter of parental approval. If you give your consent, I become Naomi’s yoshi.* We’ll live in the House of Fuji. Without your consent, I must go to
70 America, to secure a new home for my bride.”

Eager to make his point, he’d been looking her full in the face. Abruptly, his voice turned gentle. “I see I’ve startled you. My humble apologies. I’ll take no more of your evening. My address is on my card. If
75 you don’t wish to contact me, I’ll reapproach you in two weeks’ time. Until then, good night.”

He bowed and left. Taking her ease, with effortless grace, like a cat making off with a fish.

“Mother?” Chie heard Naomi’s low voice and
80 turned from the door. “He has asked you?”

The sight of Naomi’s clear eyes, her dark brows gave Chie strength. Maybe his hopes were preposterous.

“Where did you meet such a fellow? Imagine! He
85 thinks he can marry the Fuji heir and take her to America all in the snap of his fingers!”

Chie waited for Naomi’s ripe laughter. Naomi was silent. She stood a full half minute

1

Which choice best describes what happens in the passage?

- A) One character argues with another character who intrudes on her home.
- B) One character receives a surprising request from another character.
- C) One character reminisces about choices she has made over the years.
- D) One character criticizes another character for pursuing an unexpected course of action.

2

Which choice best describes the developmental pattern of the passage?

- A) A careful analysis of a traditional practice
- B) A detailed depiction of a meaningful encounter
- C) A definitive response to a series of questions
- D) A cheerful recounting of an amusing anecdote

3

As used in line 1 and line 65, “directly” most nearly means

- A) frankly.
- B) confidently.
- C) without mediation.
- D) with precision.

SAT - Sample Writing Question

Questions 12-22 are based on the following passage and supplementary material.

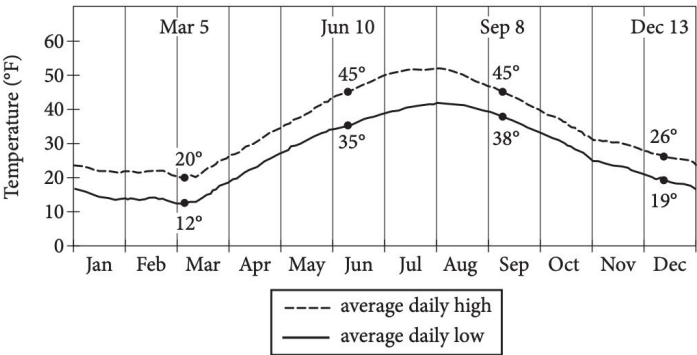
Dark Snow

Most of Greenland's interior is covered by a thick layer of ice and compressed snow known as the Greenland Ice Sheet. The size of the ice sheet fluctuates seasonally: in summer, average daily high temperatures in Greenland can rise to slightly above 50 degrees Fahrenheit, partially melting the ice; in the winter, the sheet thickens as additional snow falls, and average daily low temperatures can drop **12** to as low as 20 degrees.

12

- Which choice most accurately and effectively represents the information in the graph?
- A) NO CHANGE
 - B) to 12 degrees Fahrenheit.
 - C) to their lowest point on December 13.
 - D) to 10 degrees Fahrenheit and stay there for months.

Average Daily High and Low Temperatures Recorded
at Nuuk Weather Station, Greenland (1961–1990)

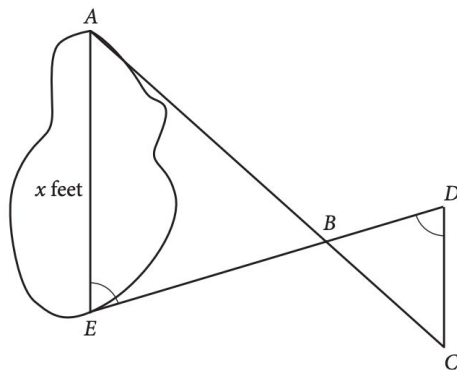


SAT - Sample Math Questions

16

If $t > 0$ and $t^2 - 4 = 0$, what is the value of t ?

17



A summer camp counselor wants to find a length, x , in feet, across a lake as represented in the sketch above. The lengths represented by AB , EB , BD , and CD on the sketch were determined to be 1800 feet, 1400 feet, 700 feet, and 800 feet, respectively. Segments AC and DE intersect at B , and $\angle AEB$ and $\angle CDB$ have the same measure. What is the value of x ?

18

$$\begin{aligned}x + y &= -9 \\x + 2y &= -25\end{aligned}$$

According to the system of equations above, what is the value of x ?

19

In a right triangle, one angle measures x° , where

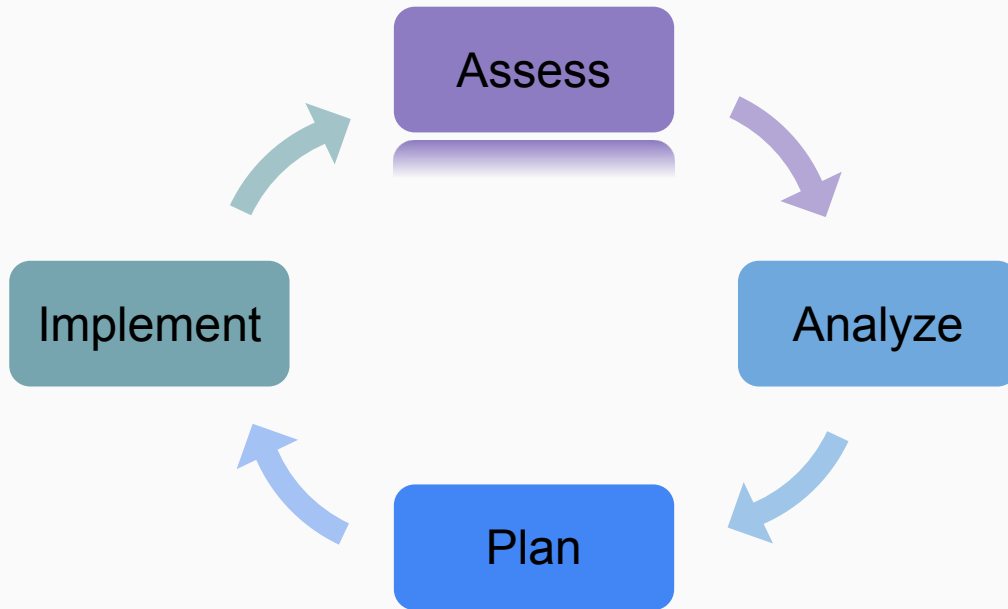
$$\sin x^\circ = \frac{4}{5}.$$

What is $\cos(90^\circ - x^\circ)$?

20

If $a = 5\sqrt{2}$ and $2a = \sqrt{2}x$, what is the value of x ?

Standardized Assessment Improvement *(continued)*



- PSAT Administration
- MCAS, AP, SAT
- Albert Assessment

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Albert - ELA Sample

ALBERT

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ELA

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1984

Redefine your understanding of "government control" with questions on surveillance, censorship, fear, and compliance.



A Midsummer Night's Dream

Delve into themes of gender, class, and supernatural intervention with this charming play.



A Raisin in the Sun

Explore themes of race, poverty and identity in this award-winning play.

Albert - Sample SAT Reading Passage

Beyond Good and Evil 7
Moderate

PREVIOUSNEXT⋮

Beyond Good and Evil

▼ Hide Passage

Questions 1-11 are based on the following passage.

This passage is adapted from *Beyond Good and Evil* by Friedrich Nietzsche.

In a tour through many finer and coarser moralities which have hitherto prevailed or still prevail on the earth, I found certain traits recurring regularly together, and connected with one another, until finally two primary types revealed themselves to me, and a radical distinction was brought to light. There is MASTER-MORALITY and SLAVE-MORALITY,—I would at once add, however, that in all higher and mixed civilizations, there are also attempts at the reconciliation of the two moralities, but one finds still oftener the confusion and mutual misunderstanding of them, indeed sometimes their close juxtaposition—even in the same man, within one soul. The distinctions of moral values have either originated in a ruling caste,

Albert - Sample SAT Reading Question

► Show Passage

Which choice best describes the author's attitude toward those who retain ancient traditions?

Elimination Tool ☐

A

He thinks them silly as they are behind the pace of change and should embrace modernity.

B

Nietzsche believes them to be evil as those who retain ancient traditions are acting with the worst parts of slave-morality.

C

He describes them with adoration and reverence as they preserve noble traditions.

D

Nietzsche thinks they are a necessary evil which must be tolerated.

MORE INFO

SHOW SOLUTION

SUBMIT ANSWER

Albert - Sample SAT Reading Explanation

Explanation

Choice 'C' is correct. This question is asking you to determine the author's attitude towards particular subjects in the passage. In this case, Nietzsche reveres those who have a "prejudice in favor of ancestors and unfavorable to newcomers."

Explanation of Distractors

Choice 'A' is incorrect. In fact, he thinks a quest for modernity can devalue the good qualities associated with master-morality.

Choice 'B' is incorrect. The discussion of these nobles is in a paragraph devoted to further discussion of master-morality, not slave-morality.

Choice 'D' is incorrect. Nietzsche thinks those who preserve tradition and respect elders are great bastions of noble morality.



48% answered this question **correctly**

[SHOW TOP ANSWERS](#)

Standard	Description
	POV.1.Analyzing Point of View : Determine the point of view or perspective from which a text is related or the influence this point of view or perspective has on content and style

Albert - Sample SAT Math Question

A calculator is allowed on this question.

When a particular object whose temperature is 32°F is placed in a tub of water whose temperature is 80°F , the Fahrenheit temperature F of the object after t minutes is described by the equation:

$$F(t) = 80 + (32 - 80)e^{-0.2t}$$

At what rate does the object warm between the second and the eighth minute?

(Calculator Allowed)

Enter your answer as a decimal or as a fraction, where applicable. If you enter a decimal, you can round or truncate the decimal. If you enter a fraction, enter it in the form $\frac{a}{b}$.

Do not enter more than 4 characters including decimal point or fraction bar.

Type answer here. Be careful with spelling.

MORE INFO

SHOW SOLUTION

SUBMIT ANSWER

Albert - Sample SAT Math Explanation

Explanation

3.74 or **3.75** are correct answers.

A **rate** is always a difference in values divided by the length of an interval, which usually represents time. So here we must find the temperature after two minutes and the temperature after eight minutes, take the difference, and divide by 6, the length of the interval.

After two minutes the temperature of the object is:

$$F(2) = 80 + (-48)e^{-0.2 \cdot 2}$$

$$F(2) = 47.824^{\circ}\text{F}$$

After eight minutes the temperature of the object is:

$$F(8) = 80 + (-48)e^{-0.2 \cdot 8}$$

$$F(8) = 70.308^{\circ}\text{F}$$

The difference between the two is:

$$\begin{aligned} 70.308 - 47.824 \\ = 22.484 \end{aligned}$$

...and so the rate is:

$$\frac{22.484}{6} = 3.747^{\circ}\text{F/minute}$$

Rounding gives the answer of **3.75** while truncating gives the answer **3.74**; either would be correct.

Albert - Sample SAT Math Explanation (continued)

Common Errors

When using some calculators it is necessary to enter expressions that are exponents inside parenthesis: so the temperature after 5 seconds would be entered as $80 + (-48) e^{(-.2 \cdot 5)}$.

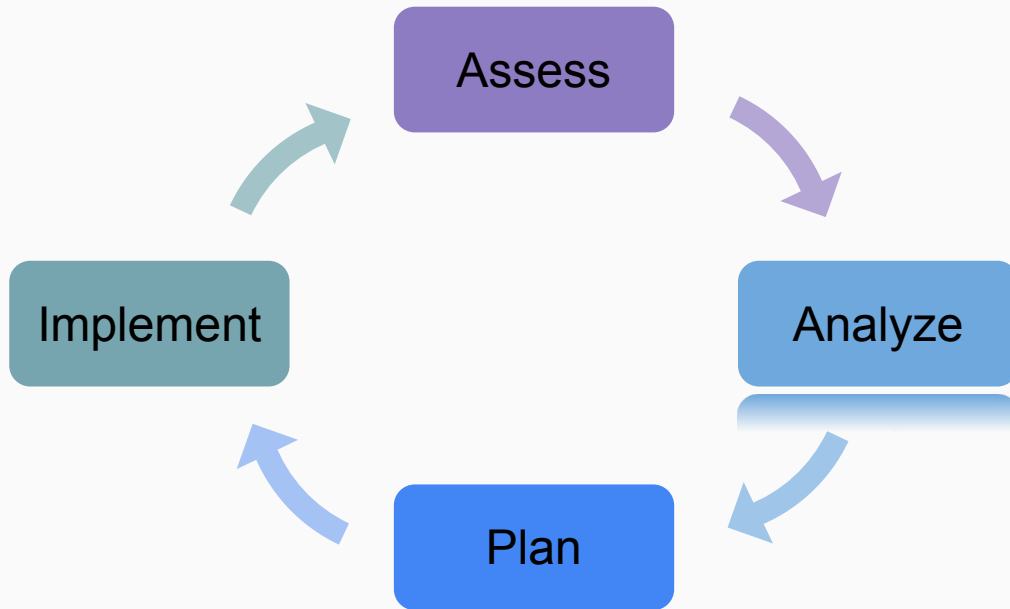
Without the parentheses some calculators would read the expression as $80 + (-48) e^{-.2} \cdot 5$, giving the completely incorrect answer of -116.495 . If you are not sure about using your calculator, play it safe and use parentheses.

Glve as many digits in a decimal answer as there is room for. Rounding the answer to 3.8 or to 4 would be incorrect.

✓ 23% answered this question correctly

Standard	Description
Heart of Algebra	HOA.LEOV.1: Create and use linear equations in one variable to solve problems in a variety of contexts.
Passport to Advanced Math	PAM.NF.2.c: For a quadratic or exponential function, for a function that represents a context, interpret the meaning of an input/output pair, constant, variable, factor, or term based on the context, including situations where seeing structure provides an advantage;
Heart of Algebra	HOA.LETV.3a: For a linear equation in two variables that represents a context, interpret a solution, constant, variable, factor, or term based on the context, including situations where seeing structure provides an advantage;

Standardized Assessment Improvement *(continued)*



- PSAT Administration
- MCAS, PSAT, SAT
- Albert Assessment
- Identify Strengths
- Identify Weaknesses

Albert - School Summary View

Hanover High School ▾ Dashboard Manage Staff Usage Reports							
	Subject ▾	Classes ▾	Teachers ▾	Students ▾	Student Attempts ▲	Assignments ▾	Performance
	SAT® Reading	35	10	548	10625	59	5699 / 10625 <div><div></div></div>
	High School Grammar	22	6	393	7294	50	5801 / 7294 <div><div></div></div>
	AP® Calculus AB-BC	6	3	70	6723	3	4551 / 6723 <div><div></div></div>
	AP® World History: Modern	6	4	97	4649	7	3710 / 4649 <div><div></div></div>
	AP® Psychology	2	1	46	4526	8	3193 / 4526 <div><div></div></div>
	SAT® Math	22	8	501	3556	28	2116 / 3556 <div><div></div></div>
	Geometry	12	5	200	2766	14	1036 / 2766 <div><div></div></div>

Albert - Class Dashboard *(student names redacted)*

Subject

AP® Calculus AB-BC

Attempt Number

Most Recent

Date

Custom

Start Date

10/27/2019

End Date

11/29/2019

20

active students

0

inactive students

1737

questions answered

25340

points earned

84%

average accuracy

15 hrs 35 min

time spent

Sort by Student name

Struggling

2 questions
50% raw accuracy

Passing

71 questions
66% raw accuracy

94 questions
62% raw accuracy

93 questions
62% raw accuracy

Proficient

87 questions
71% raw accuracy

Excelling

120 questions
80% raw accuracy

95 questions
88% raw accuracy

98 questions
84% raw accuracy

27 questions

Mastery

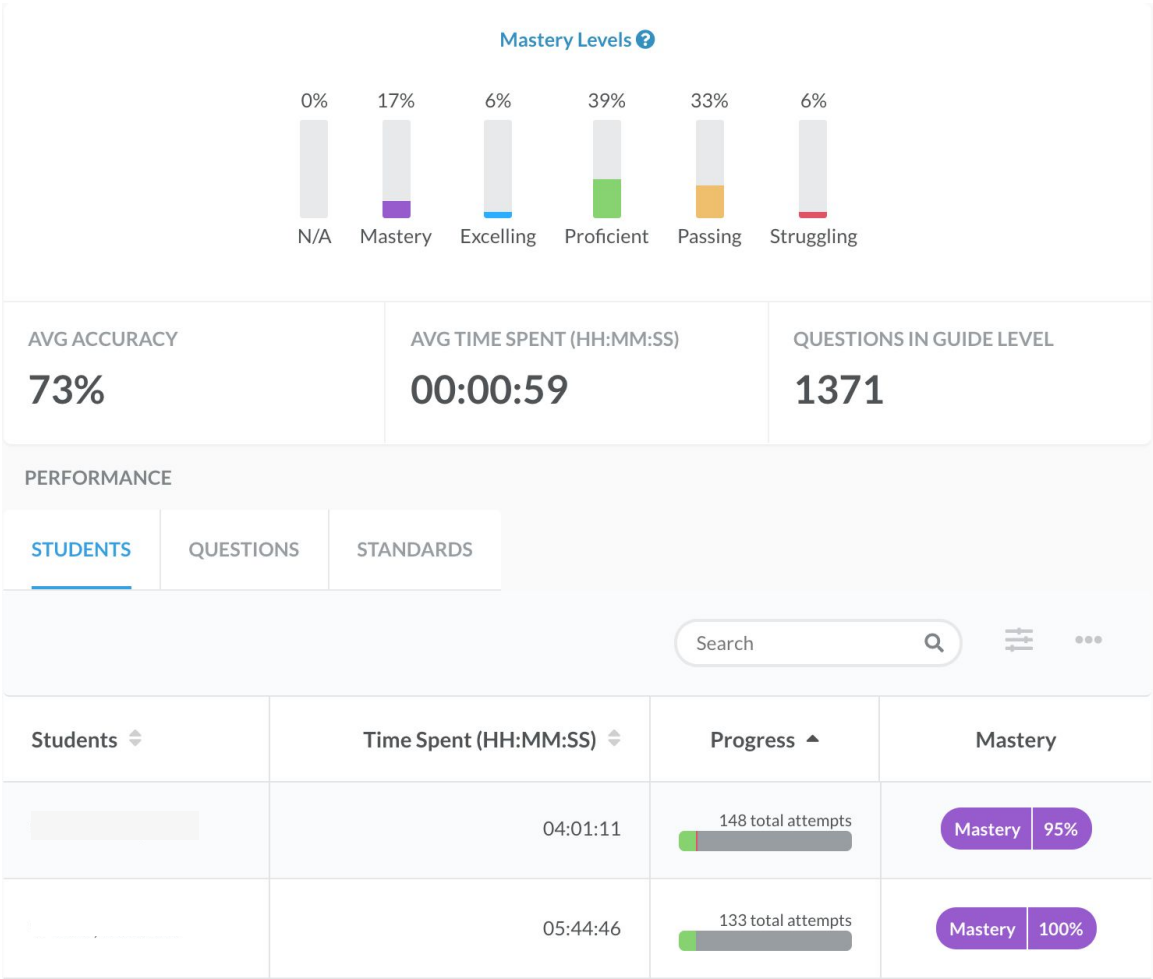
95 questions
100% raw accuracy

97 questions
92% raw accuracy

101 questions
99% raw accuracy

84 questions

Albert - Teacher View of Performance by Student *(student names redacted)*



Albert - Teacher View of Performance by Question

PERFORMANCE

STUDENTS

QUESTIONS

STANDARDS

Search

Q

	Questions ▾	Time Spent (HH:MM:SS) ▾	Answer Breakdown ▲	
E	Justifications for Ancient Rule	00:01:20	53 students attempted <div></div>	View question
E	Caveman Technology	00:00:31	54 students attempted <div></div>	View question
E	Comparing Ruling Ideologies	00:00:38	53 students attempted <div></div>	View question
M	Historian Examines Pottery	00:00:30	53 students attempted <div></div>	View question
M	Governmental Structure of the Maya	00:24:20	52 students attempted <div></div>	View question

Albert - Teacher View of Performance by Standard

PERFORMANCE

STUDENTS

QUESTIONS

STANDARDS

Search

Q

Standard ▾	Category	Questions	Time Spent (HH:MM:SS) ⬆	Progress ⬆	Accuracy
Argument Development	Disciplinary Practice 2	1	00:00:00	0 total attempts	0%
Causation	History Reasoning Skill 3	6	00:01:15	15 total attempts	87%
CDI	Themes	164	02:09:24	379 total attempts	89%
Comparison	History Reasoning Skill 2	67	06:37:14	645 total attempts	91%
Contextualization	History Reasoning Skill 1	103	25:22:03	991 total attempts	91%

Albert - Class Sections Dashboard *(student names redacted)*

Period 4

Subject

All Subjects ▾

All Subjects

High School Grammar

Middle School Grammar

SAT® Reading

Attempt Number

Most Recent ▾

Date

Custom ▾

Start Date

10/27/2019

End Date

11/29/2019

2088

questions answered

41345

points earned

74%

average accuracy

23 hrs 13 min

time spent

Sol

Struggling	Passing	Proficient	Excelling	Mastery
<div>35 questions</div> <div>37% raw accuracy</div>	<div>120 questions</div> <div>57% raw accuracy</div>	<div>49 questions</div> <div>71% raw accuracy</div>	<div>120 questions</div> <div>86% raw accuracy</div>	<div>40 questions</div> <div>93% raw accuracy</div>
	<div>57 questions</div> <div>63% raw accuracy</div>	<div>120 questions</div> <div>70% raw accuracy</div>	<div>59 questions</div> <div>81% raw accuracy</div>	
	<div>91 questions</div>	<div>120 questions</div>	<div>120 questions</div>	

Albert - Student Overview

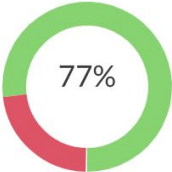
Overview Assignments Topics Info

Submission History



Submitted Submitted Late Not Submitted

Average grade on submitted assignments



Due Date ↓↑	Assignment ⇅	Submission Status ⇅	Time Spent	Completion	Grade ?	Mastery ?
11/27/2019 12:00 am EST	Albert Assessment	Submitted	33 min	<div><div></div></div>	70%	Proficient
11/15/2019 12:00 am EST	Subject/ Verb Agreement	Submitted	38 min	<div><div></div></div>	86%	Excelling
10/25/2019 7:00 am EDT	Review: Chapters 18-24	Submitted	31 min	<div><div></div></div>	25%	Struggling
10/22/2019 7:00 am EDT	Review: Chapters 11-17	Submitted	8 min	<div><div></div></div>	60%	Passing

Albert - Student Assignment Details

Back

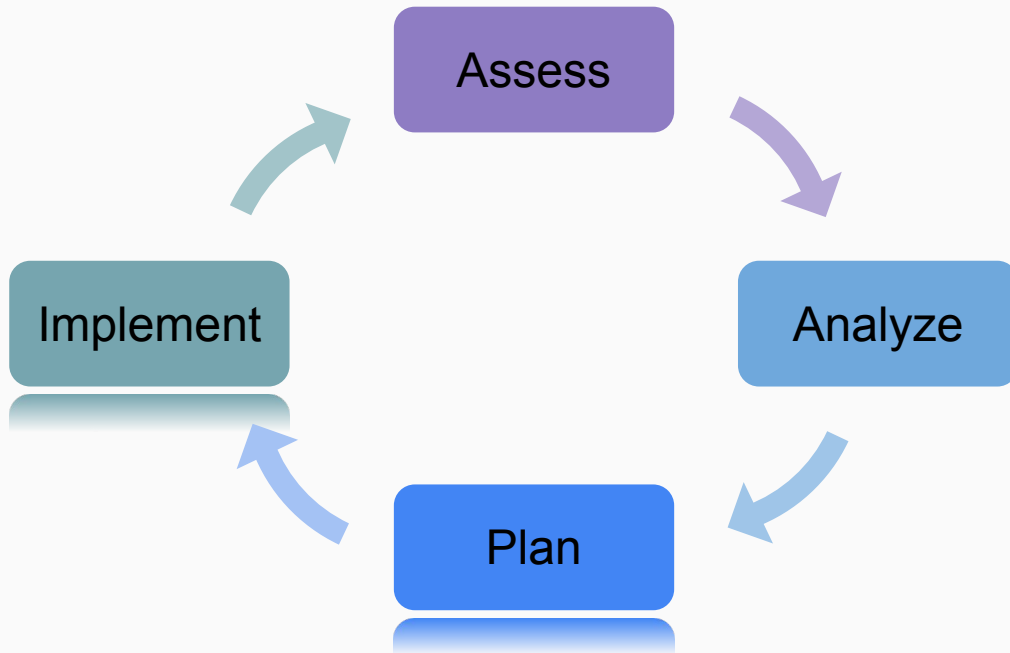
NEXT STUDENT >

Sample Student

Sample Student has answered 14 of 14 questions in **Unit 4: Learning**.

Question	Duration	Made At	Result
<div>E</div> Disliking Foods: Before and After the Flu	22s	11-20-19 @ 12:05pm	<div>✓</div>
<div>E</div> Social Learning: What is it?	37s	11-20-19 @ 12:06pm	<div>✓</div>
<div>E</div> Concept Demonstrated by Albert Bandura's Bobo Doll Experiment	16s	11-20-19 @ 12:06pm	<div>✓</div>
<div>M</div> Explaining Why Rosa Thinks She Cannot Learn Calculus	31s	11-20-19 @ 12:07pm	<div>✓</div>
<div>D</div> Drawing Conclusions: Taste Aversion	37s	11-20-19 @ 12:08pm	<div>✓</div>
<div>D</div> Who Do We Imitate?	41s	11-20-19 @ 12:09pm	<div>✗</div>
<div>E</div> Types of Learning: Finn Learns to Make Train Sounds	16s	11-20-19 @ 12:10pm	<div>✓</div>
<div>E</div> Jackson Learns a Conditioned Response	31s	11-20-19 @ 12:10pm	<div>✓</div>
<div>M</div> Running to the Door at the Sound of a Beep	43s	11-20-19 @ 12:11pm	<div>✗</div>

Standardized Assessment Improvement *(continued)*



- PSAT Administration
- MCAS, AP, SAT
- Albert Assessment
- Identify Strengths
- Identify Weaknesses
- Curricular Adjustments
- Instructional Adjustments
- Test-taking Strategies

Action Steps

- Curricular Adjustments
- Instructional Adjustments
- Test-taking Strategies
 - Khan Academy Bootcamp (before school, after school, weekends)
 - Practice Exam Sessions (possibly coincide with sophomore MCAS)
- College Readiness
 - Expand college application strategies
 - Broaden college application workshops
 - Double the enrollment in our college bootcamp
 - Hold college financial presentations for all grades
 - Create college alumni directories; staff and community members

