

# Canton Public Schools Advanced Placement Testing

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May 2017



## What is AP... or “Advanced Placement”?

The College Board's [Advanced Placement Program](#) (AP) is an extensive program that offers high school students the chance to participate in college level classes, thereby broadening their intellectual horizons and preparing them for college work. It also plays a large part in the college admissions process, showing both a student's intellectual capacity and his or her genuine interest in learning. The program also allows students to earn college credit for high performance; many colleges award 3 credits for scores of 3 or above on various AP exams.



# What AP classes did CHS students take in 2016?

- **Biology**
- **Calculus AB**
- **Chemistry**
- **English Language & Composition**
- **English Literature & Composition**
- **French Language and Culture**
- **Music Theory**
- **Spanish**
- **U.S. History**
- **Statistics**
- **Comparative Government**
- **Physics**
- **World History**





# Canton High School Totals

Canton High School (070115)

Total AP Students in Your School: 173

School Totals for this View	5	4	3	2	1	Total Exams
Number of Exams	57	86	81	31	16	271
Percentage of Total Exams	21	32	30	11	6	100
Number of AP Students	37	66	73	30	14	

Subject Totals	5	4	3	2	1	Total Exams
Seminar			1			1
Music Theory	1	1	1	1	2	6
English Language and Composition	8	10	7	1		26
English Literature and Composition	2	7	7			16
Comparative Government and Politics	3	9	4	5	3	24
European History		1				1
Psychology	4					4
United States Government and Politics			1			1
United States History	7	5	4			16
World History	3	11	21	11	1	47
Calculus AB	4	6	1	4		15
Statistics	8	10	13	1	4	36
Biology	1	6	9	3		19
Chemistry	9	5	2			16
Environmental Science	3	3	4	4	6	20
Physics 1	1	8	3	1		13
Physics C: Mechanics		1				1

# Canton's Results vs. Global Results

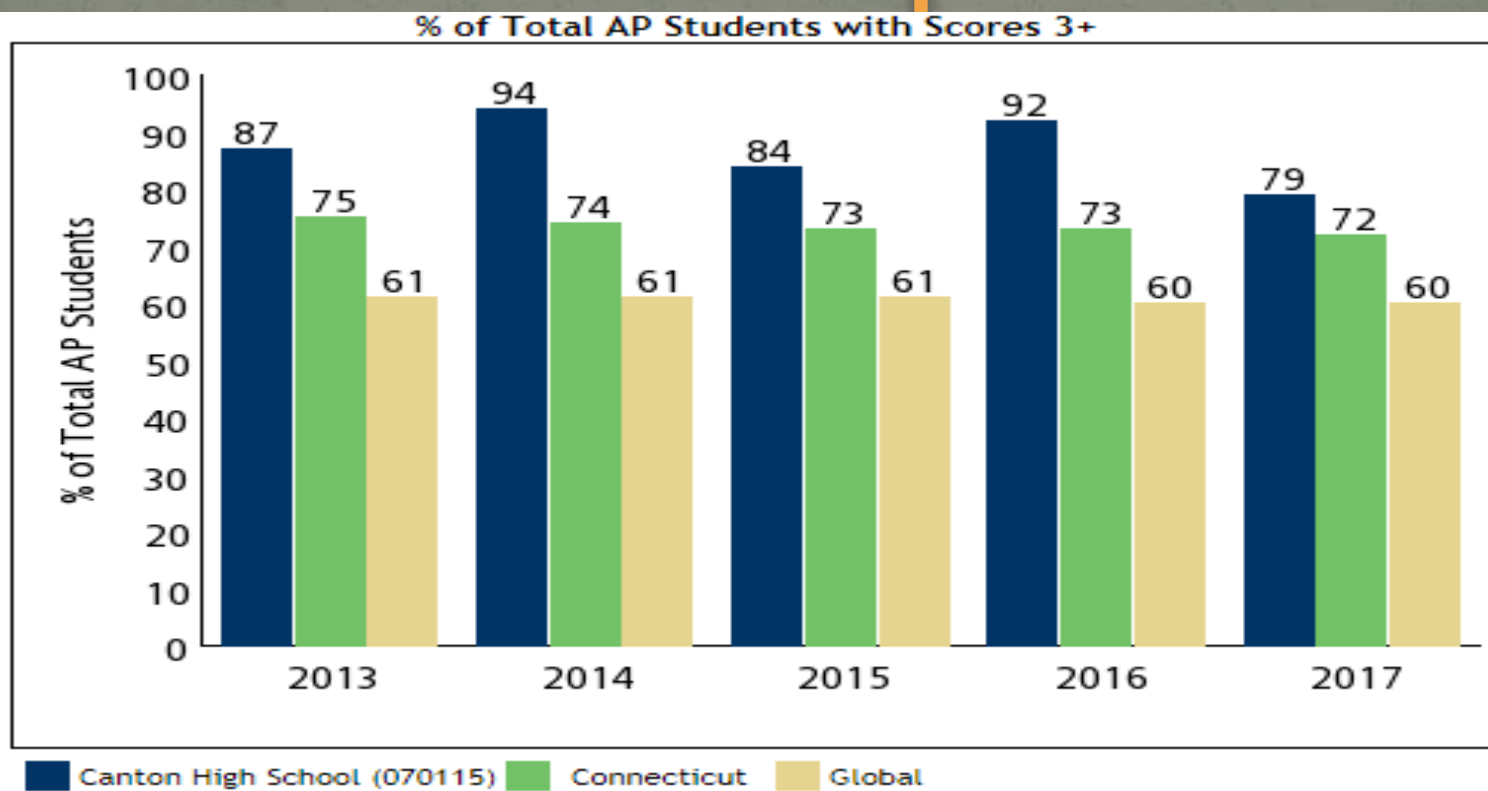
AP is an International test. So, how well do Canton's students do on the AP tests when compared to the State and the rest of the world?

On the next slide, Canton's averages for 2012 – 2016 are shown.

Canton's students outperform the State and the World on the Advanced Placement exams.



# Canton's Results vs. Global Results



# 5 Year Sunnary

2013 2014 2015 2016 2017  
Canton High School (070115)

Total AP Students	100	102	123	108	173
Number of Exams	181	195	212	220	271
AP Students with Scores 3+	87	96	103	99	137
■ % of Total AP Students with Scores 3+	87.0	94.1	83.7	91.7	79.2

Connecticut

Total AP Students	30,924	32,202	33,885	34,533	35,683
Number of Exams	57,057	59,358	62,886	64,881	67,043
AP Students with Scores 3+	23,144	23,944	24,642	25,074	25,759
■ % of Total AP Students with Scores 3+	74.8	74.4	72.7	72.6	72.2

Global

Total AP Students	2,225,625	2,352,026	2,497,164	2,625,319	2,747,323
Number of Exams	3,955,410	4,199,454	4,516,044	4,741,566	4,973,285
AP Students with Scores 3+	1,354,800	1,442,136	1,515,264	1,583,115	1,656,153
■ % of Total AP Students with Scores 3+	60.9	61.3	60.7	60.3	60.3



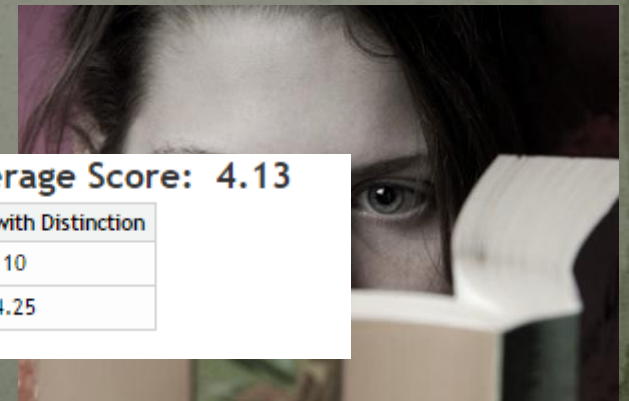
# AP Scholar Report 2016 and 2015 respectively

**Canton High School (070115) Total Scholars: 39; Average Score: 4.15**

	AP Scholar	AP Scholar with Honor	AP Scholar with Distinction	National AP Scholar
Number of Scholars	15	12	12	2
Average Score	3.74	3.93	4.42	4.76

**Canton High School (070115) Total Scholars: 40; Average Score: 4.13**

	AP Scholar	AP Scholar with Honor	AP Scholar with Distinction
Number of Scholars	15	15	10
Average Score	4.06	4.07	4.25





# Strategic Focus Summary

All Advanced Placement teachers work review of data and reflect on their practice to formulate a strategic focus each year.

- Continue training and professional development
- Build skills of inquiry and synthesis
- Continue integrating testing opportunities (timed, untimed, formative sections) throughout the year.
- Consider curricular implications of a “redesign”
- Continue to advance 21st Century skills



# Comparative Government

2016 A.P. Score	Total # of Students Achieving Score (22 students)	Percentage of Total
5	5	23%
4	7	32%
3	3	14%
2	5	22%
1	2	9%

2015 A.P. Score	Total # of Students Achieving Score (24 students)	Percentage of Total
5	3	12%
4	9	38%
3	4	18%
2	5	20%
1	3	12%



# Instructional Points

## Highlights

- 2016 scores saw a notable increase in the percentage of students earning a 5; from 14% in 2015 to 23% in 2016.
- 55% of students earned a 4 or a 5 which is the common threshold for earning college credit in this course. The 55% mark was significantly higher than the national average of 42% earning a 4 or better.
- The class of 2016 had the highest percentage of graduates taking the AP Comparative Government course in CHS history. 22.4% of all graduates took the class including five students for which Comparative Govt. was their first and only AP class at CHS

## Strategic Focus for 2016-2017

- The 2015 - 16 class was the first cohort to take the AP Comparative Government and Politics class without having taken Government in their 10th grade year. As the year progressed, the difference in foundational knowledge on government and politics became increasingly evident. In 2016 -17, there will be a much more in-depth study of American Government to better provide a foundation to connect the themes of the class with and then later provide a model to contrast other countries' political systems with.





# World History (1.5 years)

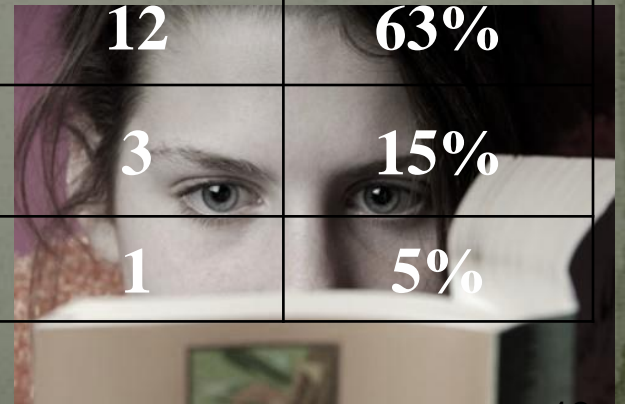
2016 A.P. Score	Total # of Students Achieving Score (19 students)	Percentage of Total
2	2	11%
4	6	32%
3	10	53%
2	1	4%
1		

2017 A.P. Score	Total # of Students Achieving Score (27students)	Percentage of Total
5	3	11%
4	7	27%
3	9	33%
2	8	29%
1		



# World History (1.0 years)

<b>2017 A.P. Score</b>	<b>Total # of Students Achieving Score (19students)</b>	<b>Percentage of Total</b>
5	-	-
4	3	17%
3	12	63%
2	3	15%
1	1	5%



# Instructional Points

## Highlights

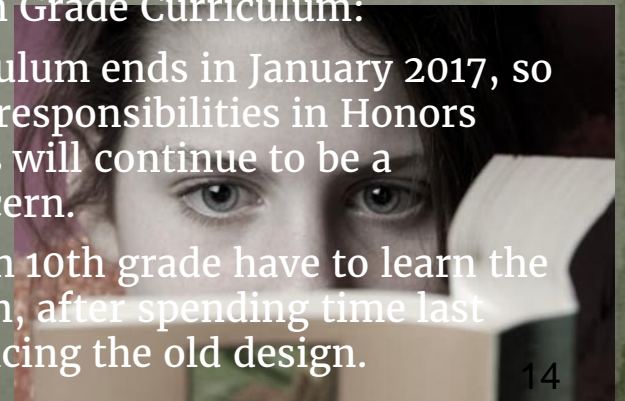
- 2015-2016 is the second year that students at CHS have taken the exam.
- VERY pleased with the results for 2016-2017:
  - 95% of CHS students received a 3+ in 2016, compared to 51.2% globally.
  - Also a huge jump from last year: 59.1% of CHS students who took the exam in 2015 scored a 3+.
- Many scores were predictable = i.e., class grades/assessments matched with score.

## Strategic Focus for 2016-2017

- Both classes (9th grade APWH and 10th grade APWH) are both taking the exam this year.
- 2016-2017 is the first year of the APWH redesign.
  - Teacher resources that reflect the redesign are slowly being released.
  - First year that APWH is being taught to 9th grade in one year; therefore, teaching important “advanced placement” skills, as well as relevant content, is a key focus of instruction.

## Focus for 10th Grade Curriculum:

- The curriculum ends in January 2017, so balancing responsibilities in Honors Economics will continue to be a focus/concern.
- Students in 10th grade have to learn the new design, after spending time last year practicing the old design.





# Calculus AB

2016 A.P. Score	Total # of Students Achieving Score (15 students)	Percentage of Total
5	6	40%
4	4	27%
3	4	27%
2	1	6%
1	-	

2017 A.P. Score	Total # of Students Achieving Score (15 students)	Percentage of Total
5	4	27%
4	6	40%
3	1	7%
2	4	26%
1	-	



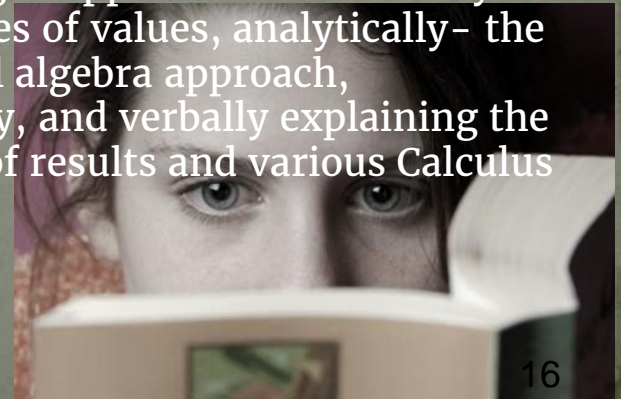
# Instructional Points

## Highlights

- CHS students earned a 4 or a 5 (67%) compared to globally, where 41% earned a 4 or a 5.
- 93% of Canton students earned a score of 3 or better compared to 59% globally.

## Strategic Focus for 2016–2017

- Continue to offer the students timed and untimed AP Calculus free response questions and also sets of AP Calculus multiple choice questions released by the College Board.
- Continue to stress conceptual understanding of Calculus as well as the mastery of the analytical areas of the subject.
- Continue to approach problems from a four pronged approach- numerically using tables of values, analytically- the traditional algebra approach, graphically, and verbally explaining the meaning of results and various Calculus notations.



# Chemistry

2016 A.P. Score	Total # of Students Achieving Score (17 students)	Percentage of Total
5	7	41%
4	8	47%
3	2	12%
2	--	--
1	--	--

2017 A.P. Score	Total # of Students Achieving Score (16 students)	Percentage of Total
5	9	57%
4	5	31%
3	2	12%
2	-	-
1	-	-





# Instructional Points

## Highlights

- Global % for AP Chemistry this year were as follows: 9.7% 5's and 15.0% 4's; CHS 41% 5's and 47% 4's.
- Global % for the free response section on the AP exam - 25.0% scored in the highest fourth; CHS 94.1%.

## Strategic Focus for 2016-2017

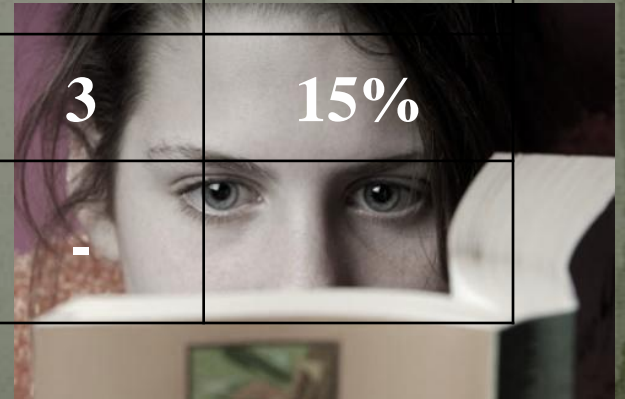
- More focus will be placed on guided inquiry activities and inquiry based experiments.
- Continued focus that all major free response assessments will mimic the AP's format of 7 questions & 105 minutes.



# Biology

2016 A.P. Score	Total # of Students Achieving Score (12 total)	Percentage of Total
5	1	8%
4	3	25%
3	6	50%
2	2	17%
1	-	-

2017 A.P. Score	Total # of Students Achieving Score (19 total)	Percentage of Total
5	1	5%
4	6	32%
3	9	48%
2	3	15%
1	-	-



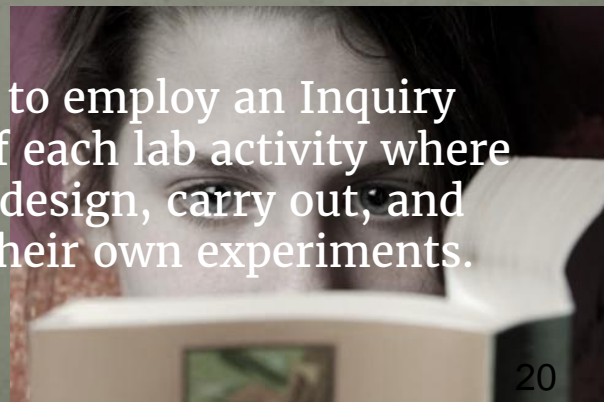
# Instructional Points

## Highlights

- Globally, a score of 5 was achieved by only 6% of students.
- 47% of Canton students scored a 4 (globally only 29% of students received a 4 or 5).
- Canton students scored higher than the average in 3 of the 4 themes (“Big Ideas”), for the other theme they equaled the average score.

## Strategic Focus for 2016–2017

- All tests will consist of a Free Response Section (2 longer essays, and 6 shorter response questions) using old AP Exam questions, in order to prepare students and help them learn to budget their time.
- **Focus on the Four Big Ideas and we will connect each discrete chapter to the broader overall themes.**
- Continue to employ an Inquiry section of each lab activity where students design, carry out, and analyze their own experiments.

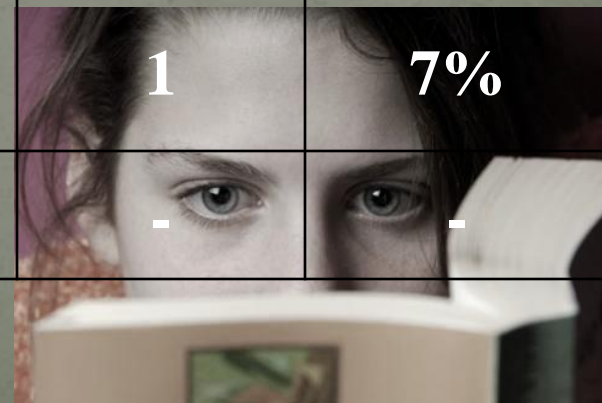




# Physics

2016 A.P. Score	Total # of Students Achieving Score (11 students)	Percentage of Total
5	1	9%
4	4	37%
3	3	27%
2	3	27%
1		

2017 A.P. Score	Total # of Students Achieving Score (13 students)	Percentage of Total
5	1	8%
4	8	62%
3	3	23%
2	1	7%
1	-	-



# Instructional Points

## Highlights

- Nationally only 5% of students received a 5 and only 40% passed! (73% for CHS).
- 50% of our students scored in the top quartile and over 75% scored above average.

## Strategic Focus for 2016–2017

- Continue focus on experimentation and science as a process.
- Integrate even more use of technology with numerical modeling.



# English Language and Composition

2016 A.P. Score	Total # of Students Achieving Score (22 students)	Percentage of Total
5	7	32%
4	8	36%
3	3	14%
2	4	18%
1	-	-

2017 A.P. Score	Total # of Students Achieving Score (26 students)	Percentage of Total
5	8	31%
4	10	39%
3	7	27%
2	1	3%
1	-	-





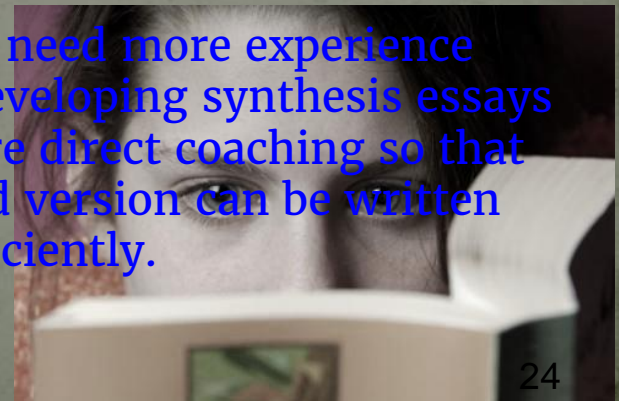
# Instructional Points

## Highlights

- 35% of Canton students were in the top fourth in the multiple choice section, compared with 25% of students globally
- 58% of Canton students were in the top half in the free-response section, compared to 50% of students globally

## Strategic Focus for 2016–2017

- Students need even more independent experience with reading analysis and argument
- Students need increased opportunities to discuss their research while it is in progress both with fellow researchers and the teacher who can coach them to expand their research skills.
- Students need more experience slowly developing synthesis essays with more direct coaching so that the timed version can be written more efficiently.



# English Literature and Composition

2016 A.P. Score	Total # of Students Achieving Score (17 students)	Percentage of Total
5	6	36%
4	5	29.5%
3	5	29.5%
2	1	5%
1	--	--

2017 A.P. Score	Total # of Students Achieving Score (16 students)	Percentage of Total
5	2	12%
4	7	44%
3	7	44%
2	-	-
1	-	-



# Instructional Points

## Highlights

- 35.3 % of Canton students received a score of 5 compared to 7.4% of students globally.
- 58.8% of Canton students were in the top fourth on the multiple-choice section compared to 25% of students globally.
- 82.4% of Canton students were in the top fourth on the free-response section compared to 25% of students globally.

## Strategic Focus for 2016–2017

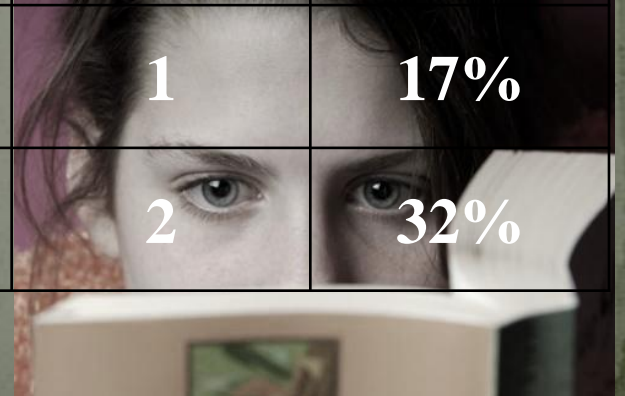
- Continue the level of analysis and writing instruction as set in last year's curriculum.
- Enrich instruction related to multiple-choice vocabulary and strategies.
- **Provide more frequent guided practice on free-response writing.**






# Music Theory

2016 A.P. Score	Total # of Students Achieving Score (4 students)	Percentage of Total	2017 A.P. Score	Total # of Students Achieving Score (6 students)	Percentage of Total
5	1	25%	5	1	17%
4			4	1	17%
3			3	1	17%
2	3	75%	2	1	17%
1	-	--	1	2	32%



# Music Aural Score

<b>2017 A.P. Score</b>	<b>Total # of Students Achieving Score (6 students)</b>	<b>Percentage of Total</b>
5	1	17%
4	1	17%
3	2	33%
2	2	33%
1		



# Instructional Points

## Highlights

- 50.2 percent of students taking the exam globally receive a 2 or 3.
- Canton's historical average of 3's and 4's is 65%.
- One student scored a 5, which is very difficult to achieve on this exam.
- One of the most difficult of the AP exams because its concepts require lifelong study and practice.

## Strategic Focus for 2016–2017

- Goal will be to continually use the data to target the areas of weakness and focus on them (i.e., harmonic dictation, form and analysis).





# Spanish

<b>2016 A.P. Score</b>	<b>Total # of Students Achieving Score (16 students)</b>	<b>Percentage of Total</b>	<b>2017 A.P. Score</b>	<b>Total # of Students Achieving Score (8 students)</b>	<b>Percentage of Total</b>
5	6	37.5%	5	2	25%
4	6	37.5%	4	3	37.5%
3	4	25%	3	3	37.5%
2	-	-	2	-	-
1	-	-	1	-	-



# Instructional Points

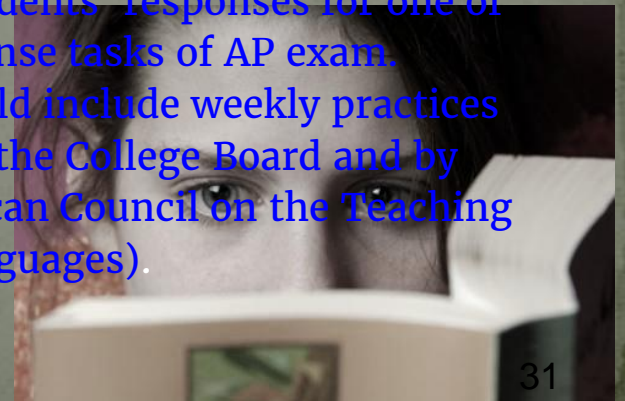
## Highlights

- 2015 scores are exceptional marking the first year students performed at the highest level on the AP exam. Scores show improvement with an equal percentage of 4's and 5's (37,5%). In total 76% of CHS students received a 4 or a 5 compared to 63% globally.
- It is important to note that while still competing against heritage/native Spanish speakers our students earned as many 5's as 4's. Knowing how rigorous the standards are, it is truly remarkable to attain such results for one class.

## Strategic Focus for 2016–2017

Continue the amount/level of interpretive communication (listening) as set forth by the College Board.

Increase the amount of spoken presentational communication and interpersonal speaking to develop and strengthen students' responses for one of the free-response tasks of AP exam. Strategies would include weekly practices as outlined by the College Board and by ACTFL (American Council on the Teaching of Foreign Languages).



# U.S. History

2016 A.P. Score	Total # of Students Achieving Score (16 students)	Percentage of Total
5	10	63%
4	5	31%
3	1	6%
2	-	-
1	--	--

2017 A.P. Score	Total # of Students Achieving Score (15students)	Percentage of Total
5	7	47%
4	4	26.5%
3	4	26.5%
2	-	-
1	-	-





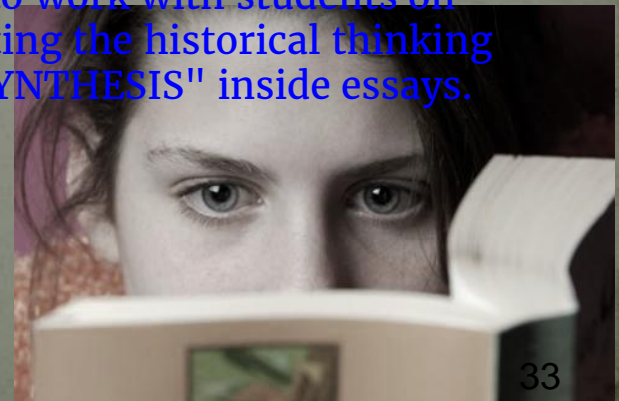
# Instructional Points

## Highlights

- Second year of Redesign and Average Score improved from 4.05 in 2015 to 4.27 in 2016.
- Pass rate remained consistent from 2015 (94%) to 2016 (95%). All but one student passed in each year.

## Strategic Focus for 2016–2017

- Continue to incorporate the new course rubrics given the discourse from the first Reading in the redesign from June 2015.
- Continue to work with analyzing primary sources for appropriate use in the document-based essay question.
- Continue to work with students on incorporating the historical thinking skill of "SYNTHESIS" inside essays.



# Statistics

<b>2016 A.P. Score</b>	<b>Total # of Students Achieving Score (34 students)</b>	<b>Percentage of Total</b>	<b>2017 A.P. Score</b>	<b>Total # of Students Achieving Score (36students)</b>	<b>Percentage of Total</b>
5	12	36%	5	8	23%
4	10	29%	4	10	29%
3	11	32%	3	12	33%
2	1	3%	2	1	4%
1	-	-	1	4	11%



# Instructional Points

## Highlights

- AP Stats is open to a wide range of students as it has a prerequisite of Algebra 2.
- AP Stats has had more students enrolled than any other AP course at CHS. This is the fourth year that over 34 students are signed up for the course.
- Globally, only 60% of AP Statistics students passed the exam. At CHS, 97% passed the exam in 2016. While nearly  $\frac{1}{4}$  of all who take the exam score a 1, no CHS student has ever earned a 1 on the AP Stats exam.
- Over  $\frac{1}{3}$  of students who graduated from CHS in 2016 took AP Statistics.
- 74% of CHS students in AP Stats earned scores on the free response questions in the top 25% of all students globally.
- CHS students scored higher on all sections of the exam, with group means that were as much as 1.3 points (out of 4) higher than those of all students who took it globally.

## Strategic Focus for 2016–2017

- Continue to use real world data and statistics to support curriculum.
- Continue to implement released AP problems and have students score using the College Board's rubric.






# Computer Science

<b>2016 A.P. Score</b>	<b>Total # of Students Achieving Score (1 student)</b>	<b>Percentage of Total</b>
2		
4	1	100%
3		
2		
1		



# Environmental Science

<b>2017 A.P. Score</b>	<b>Total # of Students Achieving Score (20student)</b>	<b>Percentage of Total</b>
<b>5</b>	<b>3</b>	<b>15%</b>
<b>4</b>	<b>3</b>	<b>15%</b>
<b>3</b>	<b>4</b>	<b>20%</b>
<b>2</b>	<b>4</b>	<b>20%</b>
<b>1</b>	<b>6</b>	<b>30%</b>



# European History

2017 A.P. Score	Total # of Students Achieving Score (1 student )	Percentage of Total	
5			
4	1	100%	
3			
2			
1			





# Psychology

<b>2017 A.P. Score</b>	<b>Total # of Students Achieving Score (4student )</b>	<b>Percenta ge of Total</b>
<b>5</b>	<b>4</b>	<b>100%</b>
<b>4</b>	<b>\</b>	<b>100%</b>
<b>3</b>		
<b>2</b>		
<b>1</b>		

