Strategic Plan Information and Advocacy Report

TO: Board of Education

FROM: Sarah Straka, Director of Instruction

DATE: September 21, 2020

RE: Information and Advocacy Report - Learning and Growth



OVERVIEW

Board Goal I: Learning and Growth - We will graduate lifelong learners.

Objective B: Increase access and performance in college preparatory work.

- Indicator 1: Percent of students taking at least one AP course in their high school career
- Indicator 2: Percent of students taking an AP test during their high school career
- Indicator 3: Percent of students scoring a "3 or better" on AP tests
- Indicator 5: Percent of students receiving dual credit

INDICATORS

Each indicator has longitudinal data to show potential change over time. Tables and figures have been included with each indicator's narrative to best show trends, strengths, and areas of potential improvement. Additionally, specific reflections and teacher commentary related to the spring and fall mandatory closure are included to help answer questions related to how teachers have and will approach these courses in the virtual learning environment.

Indicator 1: Percent of Students Taking at Least One AP Course in Their High School Career

The College Board's Advanced Placement (AP) classes aim to prepare high school students for the rigors and expectations of college-level academics through even more challenging courses. Students have the opportunity to earn college credit, advanced placement or both - while still in high school.

The number of unduplicated Mount Horeb High School students taking AP courses and the total amount of students enrolled in AP courses has remained relatively stable over the past five academic years (Table 1). While the school year just began, the 2020-2021 enrollment numbers and percentages were reviewed to determine if students would shy away from AP courses. The contrary has occurred. The percentage of students taking an AP course has increased from the prior school year.

Table 1: AP Course Enrollment by Academic Year

	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Total # of Students Taking AP Course(s)*	199	227	212	265	286	248	229	268
Total # of Enrollments in AP Course(s)	317	330	342	436	436	415	365	428
Total HS Enrollment	703	758	728	751	775	774	789	787
Total % of Students Taking AP Course(s)	28.3%	29.9%	29.1%	35.2%	36.9%	32.1%	29%	34.1%

^{*}unduplicated

<u>Indicator 2: Percent of Students Taking an AP Test During Their High School Career</u>

The above information in Indicator 1 focused solely on the number of Mount Horeb High School students enrolled in AP <u>courses</u>. Indicator 2 focuses on the number and percentage of students who participate in AP <u>tests</u>. Students who take an AP course are not required to take the AP test. While this is the case, last year approximately 90% of students who enrolled in an AP course also took the corresponding AP exam.¹ Moreover, many Mount Horeb students take more than one test. This percentage is just as high or even higher than previous school years. Even with the mandatory school closure and having to switch to an online test environment, Mount Horeb High School students followed through in taking their AP tests.

Table 2: AP Test Participation

	13-14	14-15	15-16	16-17	17-18	18-19	19-20
Total # of AP Students	150	179	181	205	256	202	205
Total # of Exams	237	260	281	333	362	299	300
Total HS Enrollment	703	758	728	751	775	774	789
Total % of AP Students	21.3%	23.6%	24.8%	27.2%	33.0%	26.1%	25.9%

Indicator 3: Percent of Students Scoring a "3 or better" on AP Tests

As shown below in Figure 1, over the last five years, the percentage of students earning a score of 3 or better has fluctuated between 76% and 84% with the average being 80%. According to the College

¹ This percentage was calculated by dividing the "Total # of AP Students" by the "Total Number of Students Taking AP Courses". In 2019-2020 there were 205 total tested AP students/229 students taking AP courses.

Board, a score of 3 or higher represents the score point that research finds predictive of college success and college graduation. The College Board cites research indicating that AP students outperform their non-AP peers in a variety of academic achievement measures (e.g. entrance exams, graduation rates, rates of attaining advanced degrees); however, a relatively new base of research is diving further into the potential academic benefits of the Advanced Placement Program². Regardless of the research base, Mount Horeb High School students are outperforming their Wisconsin and global peers. Additionally, our high school students are often outperforming local school districts as well. Please access this <u>District Comparisons</u> document for further information; it will show that during the most recently public reported testing season (18-19), Mount Horeb High School students collectively performed higher than any other Badger Conference High School, even with more Mount Horeb students sitting for the test (as compared with similarly sized schools)

Mount Horeb High School has been recognized by the Wisconsin Advanced Placement Advisory Council's recipient of the <u>Level 1 2018 PaceSetter Award</u>³. Additionally, Mount Horeb High School was named to the <u>9th Annual AP District Honor Roll</u> in 2018.

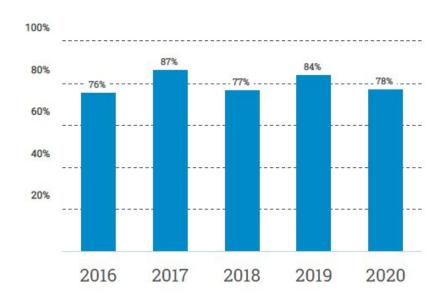


Figure 1: Percentage of Total Mount Horeb AP Students with Scores 3 or Above

When other state assessment results are disaggregated by District, there are often glaring discrepancies between student groups. These gaps do not seem as apparent when viewing the groups of students, below.

<u>Table 3: Desegregation of Students with AP Exams Scores 3 or Above</u>

	14-15	15-16	16-17	17-18	18-19
Male	86.7%	84.7%	88.8%	84.7%	79.4%
Female	81.8%	73.8%	87.3%	74.3%	87.3%

² Warne, Russell T. (2017). *Research on the Academic Benefits of the Advanced Placement Program: Taking Stock and Looking Forward*. Vol 7, Issue 1. https://doi.org/10.1177/2158244016682996.

³ Level 1- 30% or more of all student participation in at least one AP exam AND 70% or more earning scores of 3 or above on the exams.

American Indian					
Asian	25%	37.5%	100%	0%*	50%*
Black			100%	0%*	100%
Hispanic	100%	62.5%	100%	83.3%	80%
Pacific Islander					
White	84.4%	81.5%	87.9%	79.4%	84.2%
Two or More		80.0%	75%	66.7%	87.5%
Students Labeled w/ a Disability	100%	100%	100%	100%	83.3%
Students Identified as ELL		79.6%	88.0%	78.8%	

^{*}Less than 3 students

However, a question to look further into would include the testing participation rate of students in each of the above groups. For example in past years, 100% of students who are identified with a disability received a score of 3 or above; however, if very few students with a disability had the opportunity to take AP coursework (when compared to their nondisabled peers), then the pathway to AP course enrollment should be reexamined. The same has occurred when looking at students who identified as a race other than white. Approximately 40% of white students (280/703) took the AP exam in 18/19; this is in sharp contrast to test participation rates for other racial and ethnic groups at Mount Horeb High School: 11% of black students (1/9), 15% of Hispanic students (5/34), 22% of Asian students (2/9), and 36% of students identifying as two or more races (8/22). The high school administrative team may want to review AP course pathways to determine if particular student demographics are ensured equal access to AP offerings.

Table 4 provides more specific information regarding student performance on the most recent series of 2019-2020 AP testing. The table lists the total numbers of each score (1 to 5) for each AP subject and the total number of unique students for each AP score. The below table provides an overall summary of student performance in rather unique testing times with the shift to the virtual testing of students from their home. In virtually all classes, students performed on par when compared to other school years.

Table 4: AP 2019-2020 Score Summary

Subject Totals	5	4	3	2	1	Total Exams
English Literature and Composition	2	2	7	3	0	14
Psychology	25	24	14	7	5	75
United States History	0	0	0	2	3	5
World History	2	15	11	16	6	50

Calculus AB	20	16	9	3	0	48	
Statistics	2	1	2	2	2	9	
Biology	Due to low 6	Due to low enrollment, not offered in 19-20 but offered in 20-21					
Chemistry	5	5	28	5	1	44	
Environmental Science	5	8	10	7	3	33	
Physics	4	5	2	3	1	15	
Number of Exams	65	76	83	48	21	293	
Percentage of Total Exams	22%	26%	28%	16%	7%		

In digging a bit deeper into the data, there were several additional success stories. For example, the overall mean score for students in Calculus AB was higher than the previous two years (2018 Mean: 3.93, 2019 Mean: 3.76, 2020 Mean: 4.10); this was the same for Physics 1 (2018 Mean: 2.93, 2019 Mean: 3.09, 2020 Mean: 3.53). These scores and the other high scores are a testament to our amazing students who stepped up to the plate on testing day and the tireless efforts of our AP teachers who prepared them for not only taking the AP test(s) but also taking them in a virtual environment.

Just as last spring, the current high school AP teachers are concerned about providing the required amount of content for students to perform well during the Spring 2021 test administration. In order to best prepare students, AP English teacher Molly Bilse recommends that students view the AP Daily Videos provided by the College Board outside of class to cover content so that class sessions may focus on application and the practice of skills. Christopher Ball, AP Environmental Studies, is providing students with more material and outside resources as well to help prepare students. While the face-to-face instructional time will be less per week in a virtual environment (two days per week with 45 minute class periods compared to the traditional five days per week with 45 minute periods), teachers will take advantage of Touchpoint times during the morning which is an additional 40 minutes per week. This will be coupled with additional independent, asynchronous work provided by the AP teacher. Mount Horeb High School AP teachers will continue to do right for their students by offering them not only the content needed to do well during their spring AP exam(s) but also provide them the skills and application knowledge as well.

Indicator 5: Percent of Students Receiving Dual Credit

Dual enrollment credit allows a student to receive technical college credit upon successful completion of a college-level course taken in high school. The dual credit course has the same competencies, assignments, grading policies, textbooks, and software as the college-level version of the course.

Mount Horeb High School offers seven dual credit programs from Madison College (MC) or Blackhawk Technical (BHT) College in Janesville. These courses are listed below in Table 5. In previous years, the total number and percentage of high school students enrolled in a dual credit class remained relatively stagnant; however, the 2020-2021 school year will see its highest number and percentage of student participants when compared to the previous five school years. This

increase is a success story for our District and our high school students as we are working intentionally to increase these course offerings.

Table 5: Dual Enrollment Course Information

			Number of Student Participants						
WTCS Course	MHHS Course	WTC	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Accounting Principles	Accounting II	MC	15	7	19	17	22	30	19
Animal Science & Livestock Manag.	Animal Science	ВНТ				20	7	17	16
Elementary Algebra	Intermediate Algebra	МС	21	18	17	20	12	24	14
College Reading Strategies AND Intro to College Writing	Intro to College Reading & Writing	MC	6	10	3	10	15	21	38
Plant Science and Crop Science	Plant Science	ВНТ				15		3	20
Marketing Principles	Marketing & Sports and Entertainment Marketing	MC	18	16	19	13	13	15*	13
Biotech Applications and Career Seminar in Biotech	Biotechnology	MC							42
Total # of Students			61	73	65	98	72	110	162
Total HS Enrollment			758	728	751	775	771	788	787
Total % of Students Receiving Dual Credit			8.0%	10.0%	8.7%	12.6%	9.3%	14.0%	21%

^{*}Transcripted credit rather than dual credit due to change in course instructor.

As mentioned in previous advocacy reports, all Wisconsin Technical College System (WTCS) colleges are governed by the Higher Learning Commission for accreditation. Therefore, all secondary instructors teaching courses within a high school are now required to meet the same qualifications as WTCS part-time instructors, which in many cases means a Masters Degree or higher. In technical-related fields and coursework, the instructor will often need related work experience. Since many high school dual credit teachers have not worked in the industry in which they instruct, Madison College and other technical colleges have developed "externships" where dual credit teachers complete an eight-week course and work 40 hours in a job shadow experience.

Pre-pandemic, several Mount Horeb High School teachers were scheduled to complete their externships this summer; however, due to the full or partial closure of many businesses, this did not occur. Fortunately, the Dual Enrollment Credential Grant that Madison College provides to cover the costs related to coursework and externships has been extended through the 2021 Summer.

Lastly, Mount Horeb High School planned on fulfilling an agreement with Madison College to offer the Ag Welding I and Ag Welding II courses for dual credit. Unfortunately, due to virtual instruction, students will not have enough lab hours to complete the coursework requirements for dual credit status. In looking long term, Mount Horeb High School will be able to offer these Ag Welding classes for dual credit to future students. This is especially important as welding has historically been in the top three programs in which students enter Madison College with the intention to complete and then actually complete upon graduation (see Figure 2).

Figure 2: Top 3 Programs in Madison College for Mount Horeb Graduates (2011-2015)



Final Thoughts

The end of the 2019-2020 school year and the beginning of the 2020-2021 school year has been challenging at the instructional level for both high school students and staff. Fortunately, Mount Horeb administration and staff are committed to make online learning a quality experience. Teachers will continue to prepare students for their AP exams and look for ways to increase dual credit offerings as students plan for their post-secondary journey.