

MPS TEAM GEAR UP 2016 Evaluation Report

Educator Perceptions of Ways to Improve the Success of Students in AP Classes

August, 2016



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The evaluation team would like to thank Milwaukee Public Schools for their ongoing support of the project and to the following individuals for their contribution to the efforts of the evaluation:
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Terms and Definitions

Term	Definition
AP	Advanced Placement: courses offered in high school under the College Board
AP Exam	Exam given at the end of an AP course; scored on a scale of 1-5, and students scoring a 4 or 5 are eligible to receive college credits. A "3" is considered passing
Cohort	Group of specific students served by GEAR UP; the classes of 2017-18
ELA	English / Language Arts Classes
GEAR UP Schools	The eight high schools served by the GEAR UP grant
MPS - Milwaukee Public Schools	Wisconsin's largest public school system; recipient of GEAR UP grant
SREed	Socially Responsible Evaluation in Education; the evaluation team working with GEAR UP from the University of Wisconsin - Milwaukee
Team GEAR UP	The full time staff for the GEAR UP grant; consists of a project coordinator and three GEAR UP advisers, each of whom work with specific high schools

Executive Summary

The office of Socially Responsible Evaluation in Education (SREed) partnered with Team GEAR UP and Milwaukee Public Schools to conduct semi-structured interviews with high school guidance counselors, Advanced Placement (AP) teachers, and AP support staff at eight designated GEAR UP high schools. These interviews were done to develop a deep understanding of the challenges MPS must overcome to both increase AP enrollment and improve performance. Further, educators were asked to provide feedback regarding a number of possible strategies designed to increase AP participation and success. A total of 38 teachers across subject areas were interviewed, representing a minimum of three teachers from each of the eight Team GEAR UP high schools. Six counselors from six separate GEAR UP high schools and one AP support staff person were also interviewed.

I) Student characteristics that promote success

Teachers attributed much of why students succeed in AP classes to their character, command of academic skills, and study skills/work habits. For students considered successful in AP, having motivation, drive, and grit were seen as important character attributes for success and often missing in students who fail. Study skills were deemed useful for student success, and particularly successful students were described as those who “do the work.” Academic skills identified as important for success centered on strong reading and writing abilities.

These characteristics informed which students were recommended for AP classes. However, there was no standardized process through which students are selected, recruited, or enrolled in AP classes. The most common method for student enrollment in AP classes was through teacher recommendation, although there were some classes where teachers were not involved in the selection process. Teachers recommended students for AP primarily based on the students’ performance in past classes.

II) Possible strategies for improving student recruitment and performance in AP

Teachers were asked to share their impressions regarding a number of proposed modifications to increase students’ enrollment in AP and/or improve student performance (See

Table 1

Table 1 Definitions of proposed modifications for AP classes

Proposed Modification	Definition
Using predictive data to recruit students	Providing information to schools to assist in enrolling students in AP classes
Weighted grades for AP classes	Giving letter grades in AP courses a higher numerical value when calculating GPA, due to the rigor of the course
Providing a trial period	Allowing students a certain amount of time to test a class before deciding if they would like to remain enrolled
Offering more non-prerequisite AP classes	Offering more AP classes that would not require students to have passed specific classes before enrolling
Offering AP classes pass/fail	Providing students the ability to take an AP class for credit without receiving a letter grade
Providing support staff during AP classes	Having a person responsible for assisting a lead teacher in an AP class

Teachers were asked for their impressions of each proposed modification and their responses were then coded as either positive, negative, or mixed. Table 2 lists the breakdown of teachers’ reactions to each modification, as well as some perceived benefits and concerns shared by teachers.

Table 2 Teacher opinions on proposed changes to AP classes

Proposed Change	Positive	Negative	Mixed	Key Benefits	Key Concerns
Predictive Data	72%	14%	14%	-validate current enrollment practices	-fear that it could be used to exclude students from classes
Weighted Grades	70%	3%	27%	-rewards students for taking challenging classes	-dissatisfaction with current implementation -students may not understand the concept of weighted grades
Trial Period	58%	14%	28%	-try classes without punishment for exiting	-lack of clarity on duration, feasibility in scheduling -who makes decision to withdraw?
Non-Prerequisite Classes	71%	5%	24%	-increase offerings to student always a positive	-must be done with intentionality -would adverse experience affect future course choice.

Proposed Change	Positive	Negative	Mixed	Key Benefits	Key Concerns
Pass/Fail	19%	53%	28%	-allow more students to pass	-lowers expectations -send mixed message in a rigorous class
Support Staff	42%	24%	34%	-more help is always a good thing	-require feasibility, planning, preparation -must be the right fit

The use of weighted grades receiving the most positive feedback, while offering classes pass/fail received the lowest percentage of positive reactions. Most teachers were interested in having better data to identify students who are likely to succeed in AP. However, teachers shared concerns with each strategy that should be considered if implemented.

Teachers listed additional strategies that could be used to increase AP enrollment and academic success. These included:

- Holding additional tutoring and group study session opportunities
- Enrolling students in AP study hall
- Reducing class sizes
- Screening students on certain criteria before enrolling them in AP classes
- Modifying classes to block scheduling and starting the school year earlier
- Building an AP culture
- Increasing family engagement
- Improving student study skills and time management
- Ensuring AP preparation and alignment
- Examining teacher approaches to AP

III) Professional development, resource, and support needs of AP teachers

Expressed professional development needs ranged from basic reminders and refreshers on AP to analytical teaching techniques to how to work effectively with urban youth. Teachers requested continued and increased opportunities to collaborate with other AP teachers, particularly those that teach the same subject in the district. Teachers referenced support from district level administration, but would like to see increased support for AP from their school administrators.

These results build upon an existing study that looked at quantitative measures of AP in MPS. One of the goals of Team GEAR UP was to increase participation in AP classes to constitute 25% of juniors in AP classes. Using transcript files from 2015-2016, 500 of 1,793 juniors at GEAR UP schools took at AP class, constituting 27.9% of these students and meeting the 25% goal set by GEAR UP.

Educator Perceptions of Ways to Improve the Success of Students in AP Classes

The purpose of this study was to collect information from a variety of educators in the Milwaukee Public Schools about aspects of advanced placement (AP) courses that both promote and inhibit student participation and success. This was done with the hope that this information would prove useful to Team GEAR UP in its efforts to both increase participation and improve how well students perform in AP classes. Historical AP data suggest that fewer than 25% of students participate in AP and nearly half of all AP classes taken by students in Team GEAR UP schools result in either a D or U grade. Thus, it is critical that any efforts to increase participation in AP also include efforts for improving how well students perform in these rigorous classes. Interviews with AP teachers and other educators involved in AP were used to inform these efforts.

AP classes help prepare students for college

Exposing students to rigorous coursework is directly correlated to success in college.^{1,2} In particular, high academic rigor within the high school curriculum is argued to be the best predictor of college success.³ As AP classes follow a college-level syllabus, offering AP courses is one way schools can provide rigorous opportunities for high school students. According to the State of College Admission Report in 2015, students' grades and the academic rigor of their courses are worth more than standardized test scores, high school rank and demonstrated student interest in the admission decision made by colleges.⁴ This provides further support that AP classes might be beneficial for admission decisions.

¹Hallett, R. E., & Venegas, K. M. (2011). Is increased access enough? Advanced placement courses, quality, and success in low-income urban schools. *Journal for the Education of the Gifted*, 34(3), 468-487.

²Horn, L., Kojaku, L. K., & Carroll, C. D. (2001). High school academic curriculum and the persistence path through college: Persistence and transfer behavior of undergraduates 3 years after entering 4-year institutions. Washington, DC: U.S. Department of Education. Retrieved from <http://nces.ed.gov/pubs2001/2001163.pdf>

³Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. Washington, DC: U.S. Department of Education. Retrieved from <http://knowledgecenter.completionbydesign.org/sites/default/files/58%20Adelman%20toolbox%20revisited%202006.pdf>

⁴Clinedinst, M. (2015). State of college admission report. The National Association for College Admission Counseling. Retrieved from <http://www.nacacnet.org/research/PublicationsResources/Marketplace/research/Pages/StateofCollegeAdmission.asp>

Since high achieving students tend to self-select to take AP classes, and these students are more likely to go on and succeed in college, it can be difficult to discern to what extent taking AP classes results in more positive college outcomes or whether positive college outcomes are more due to other student characteristics or academic preparation.⁵ Regardless, many students and parents believe that taking an AP class will be both challenging and rewarding, and can provide a financial advantage by earning college credit while still in high school.^{6,7,8}

In addition to potentially earning college credit, numerous studies show passing AP scores are strong predictors of college success.^{9, 10, 11, 12, 13} In many cases, however, not all students will pass or even take an AP exam. Without taking the AP exam these students are not eligible for college credit. However, some longitudinal research suggests that there may still be beneficial impacts for students who take AP classes without passing or taking the AP exam; in one study that followed a large cohort of 8th grade students for nine years, it was found that students who failed an AP exam or did not take the exam still had a higher probability of completing college

⁵ Dougherty, C., Mellor, L., & Shuling, J. (2006). The relationship between Advanced Placement and college graduation. Austin, TX: National Center for Educational Accountability. Retrieved from <http://eric.ed.gov/?id=ED519365>

⁶ Sadler, P. M., Sonnert, G., Tai, R. H., & Klopfenstein, K. (2010). *AP: A critical examination of the Advanced Placement program*. Cambridge, MA: Harvard Education Press.

⁷ MacViar, R. (1988). Advanced Placement: Increasing efficiency in high school-university articulation. Phoenix: Arizona Board of Regents. Retrieved from <http://eric.ed.gov/?id=ED306835>

⁸ Pushkin, D. (1995). The AP exam and the introductory college course. *The Physics Teacher*, 33(8), 532-535.

⁹ Klopfenstein, K., & Thomas, M. K. (2009). The link between advanced placement experience and early college success. *Southern Economic Journal*, 75(3), 873-891.

¹⁰ Willingham, W. W., & Morris, M. (1986). Four years later: A longitudinal study of Advanced Placement students in college. College Board report No. 86-2 Ihinceton, NJ: Educational Testing Service. Retrieved from <http://eric.ed.gov/?id=ED280358>

¹¹ Morgan, R., & Maneckshana, B. (2000). AP students in college: An investigation of their course-taking patterns and college majors. Statistical Report 2000-09. Princeton, NJ: Educational Testing Service. Retrieved from <http://www.collegeboard.com/ap/pdf/validity2.pdf>

¹² Hargrove, L., Godin, D. & Dodd, B. (2008). College outcomes comparisons by AP and non-AP high school experiences. The College Board. The University of Texas at Austin. <https://research.collegeboard.org/publications/content/2012/05/college-outcomes-comparisons-ap-and-non-ap-high-school-experiences>

¹³ Keng, L., & Dodd, B. G. (2007). An investigation of college performance of AP and non-AP student groups. Retrieved from https://www.researchgate.net/profile/Leslie_Keng/publication/267769321_An_Investigation_of_College_Performance_of_AP_and_Non-AP_Student_Groups/links/55132cde0cf23203199ba37f.pdf

compared to students that did not take an AP course.¹⁴ This relationship was found to be true across all race/ethnicities after controlling for individual and school level factors. See Table 3 for data from this study demonstrating the increased probability of college completion based on AP Exam score or no exam in comparison to students that did not take an AP class.

Table 3 Probability of college completion after taking advanced placement courses*¹⁵

Student Group	Passed AP Exam (score of 3, 4, or 5)	Failed AP Exam (score of 1 or 2)	Took AP Course, Not Exam
African American	28% higher	22% higher	16% higher
Hispanic	28% higher	12% higher	10% higher
White	33% higher	22% higher	20% higher
Low-income	26% higher	17% higher	12% higher
Not low-income	34% higher	23% higher	19% higher

*This table is taken directly from a previous report.

While these data suggest promising results for students who did not do well on the exam or did not even take the exam, it is unclear if students benefit by taking and failing AP classes. So, while there appear to be benefits on college attendance and completion for students who take AP classes, unanswered questions remain on how the poorest performing AP students do in future high school or college coursework.

The challenge of Team GEAR UP to increase participation in AP

In 2011, Milwaukee Public Schools (MPS) was awarded a 7-year, federal GEAR UP grant to promote college awareness and readiness. The grant provides outreach to students from the high school classes of 2017 and 2018, through a variety of programming and support systems at the following eight high schools: Audubon, Bay View, Bradley Tech, Hamilton, James Madison, Milwaukee High School of the Arts, Morse-Marshall, and Vincent.

MPS Team GEAR UP consists of two primary objectives. Objective 1 seeks to increase educational expectations for participating students and family knowledge of postsecondary education, options, preparation, and financing. Objective 2 seeks to increase academic performance, high school graduation, and post-secondary readiness and enrollment. In order to

¹⁴ Dougherty, C., Mellor, L., & Jian, S. (2006). The Relationship between Advanced Placement and college graduation. 2005 AP study series, report 1. National Center for Educational Accountability. Retrieved from <http://eric.ed.gov/?id=ED519365>

¹⁵ The Abell Foundation. (2007). A “jump start” on college: How early college access programs can help high school students in Baltimore city. Retrieved from <http://eric.ed.gov/?id=ED505075>

achieve these objectives, six design principles were followed. These include: 1) high academic standards and rigorous course content, 2) tutoring and targeted supports for underperforming students and those at risk of dropout, 3) supports for transitions to high school, 4) parental involvement, 5) access to post-secondary education, and 6) accountability at the student, school, and systems levels.

A focus of Team GEAR UP has been to increase the number of students enrolling and succeeding in AP classes to 25%. Previous analyses have shown that between the 2009-2010 and 2013-2014 school years only 18% of students in their junior year took an AP class.¹⁶ Even with the lower participation rate, in commonly offered AP classes offered in Team GEAR UP schools, 49% of classes resulted in either a ‘D’ or ‘U’ grade.¹⁷ Students who earn low grades in AP classes not only have failing grade on a transcript, which may make being accepted into college more difficult, but also may have failed these common courses frequently constitute graduation requirements, which makes on-time graduation less likely.

MPS Team GEAR UP is acting on the believe that it is beneficial for students to take AP courses even if they do not take the exam, and even in some cases where students earn low grades, as the exposure to an AP class can help build college level skills.^{18,19} The challenge is to both increase AP participation while also helping more students to succeed. To help meet these goals, the Team GEAR UP evaluation team at the University of Wisconsin – Milwaukee’s Socially Responsible Evaluation in Education conducted a study of AP educators across Team GEAR UP schools. This study was designed to gather information from MPS educators that could help Team GEAR UP both increase participation and improve student performance in AP.

Methods

Interviews were conducted with high school guidance counselors, AP teachers, and AP support staff. When high school guidance counselors were interviewed, contact information for the AP teachers at their schools was requested. Teachers, as well as support staff present in their

¹⁶ Jones et al. (2015). MPS Team GEAR UP 2015 Evaluation Report. Socially Responsible Evaluation Education, University of Wisconsin-Milwaukee. Value-Added Research Center, University of Wisconsin-Madison.

¹⁷ Jones et al. (2015). MPS Team GEAR UP 2015 Evaluation Report. Socially Responsible Evaluation Education, University of Wisconsin-Milwaukee. Value-Added Research Center, University of Wisconsin-Madison.

¹⁸ Jones, C. (2015). MPS TEAM GEAR UP 2015 Evaluation Report. Socially Responsible Evaluation in Education.

¹⁹ The 10th Annual AP Report to the Nation. (2014). The College Board. Retrieved from <https://research.collegeboard.org/programs/ap/data/nation/2014>

classrooms, were then contacted for interviews. During interviews, teachers were asked to recommend additional AP teachers at their schools for subsequent interviews. All interviews were conducted in May and June in 2016.

Of the eight GEAR UP schools, a total of six guidance counselors at six high schools were interviewed. A total of 55 AP teacher names were obtained for the eight GEAR UP schools, through guidance counselor or teacher interviews. The number of AP teachers identified per school ranged from four to thirteen, with four to six teachers interviewed at most schools and two schools providing names for over ten teachers. Contact information was not available for six teachers. All other teachers were contacted through either phone or email. Semi-structured interviews were conducted and recorded with participant permission. Notes were taken during interviews and entered into an electronic database. Recordings were referenced for participant quotes and further details. Data were compiled for each question and themes were identified. For questions related to proposed strategies for improvement, responses were coded to be positive, negative, or mixed based on the response of the participant. Discrepancies in coding were discussed by two evaluators to reach consensus when needed.

Participants

A total of 38 teachers were interviewed, with a minimum of three interviews done at each Team GEAR UP school. Six high school guidance counselors at six separate schools and one AP support staff were also interviewed. The majority of AP teachers interviewed taught Social Studies or English/Language Arts (ELA). Fewer AP teachers were interviewed in in Music/Arts and Science/Math (See Figure 1). This reflects the overall pattern in the type of AP courses taught in GEAR UP Schools.

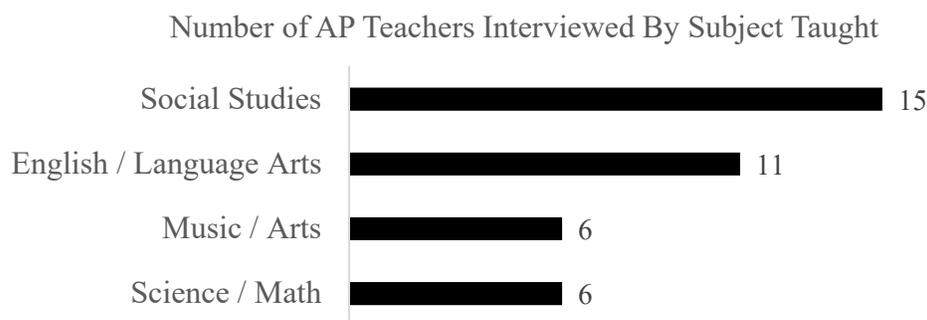


Figure 1. Number of AP teachers interviewed by subject taught

Among teachers interviewed, the average years of teaching experience was 14.8 years, with an average of 8.9 years teaching at their current school, and 5.3 years teaching AP classes (See Table 4). Over 50% of teachers interviewed had 3 years or less experience teaching AP.

Table 4 Years of Experience of AP Teacher Interviewed

Number of Years	N	Mean	Std. Dev.	Min	Max
Teaching	38	14.8	9.5	1	46
Teaching at current school	38	8.9	7.2	1	29
Teaching AP class(es)	38	5.3	4.7	1	20

Findings

How do schools select and recruit students to take AP classes?

One of the challenges facing schools is how to recruit students to take AP classes when there is a history of students not doing well in AP. All counselors interviewed said that the vast majority of students enrolled in Advanced Placement classes are recommended by their teachers. Teachers endorse students primarily based on the students’ performance in previous classes and performance in their current classes. However, a number of students who are recommended for AP decide not to take the class. As a result, schools have to expand recruitment to students who may be less likely to succeed in AP. Counselors described occasions where students who have not had a history of high academic achievement are still be placed in an AP class because of their demonstrated effort. In one such occurrence, according to one school’s counselor, a student, who had a history of low academic performance but was beginning to demonstrate a high degree of effort in school, was placed in an AP class and was successful. The counselor emphasized that this was not a student that teachers considered particularly “bright” but, instead, this student worked hard and this work ethic suggested they may do well in AP. According to the majority of counselors, teachers also recommend students who they wanted to have in class: students who will put in the required homework effort and students who are not disruptive.

In addition to teacher endorsement, some students choose to self-select into AP classes. In those instances, the counselor will talk to the teacher of the class to discuss the expectations and will then have a conversation with the student to verify that they are cognizant of what will be expected of them. One school counselor requires students enrolled in AP, either by

recommendation or by self-selection, to sign their course transcript, in hopes that doing so will help to formalize the students' commitment.

Regardless of teacher recommendation, there are still students who do not want to enroll in AP classes. All of the school counselors interviewed said the primary deterrent is the amount of work required in an AP class. At least two counselors speculated that students in MPS do not receive any homework assignments in their regular education classes so the possibility of homework in any quantity is a large enough disincentive to deter enrollment in an AP class. Getting a reluctant student enrolled in AP is primarily done through one-on-one conversations with the counselors and with the teachers. Counselors talk about future career goals and future life plans, in an effort to encourage students to think beyond their current situation. Counselors also emphasize the importance of having an AP course on their transcript for a college application, explaining that it demonstrates to college admissions the willingness of the student to work hard, regardless of passing the national exam. Most of the counselors interviewed said that teachers can be particularly persuasive to a reluctant student, well liked teachers usually get reluctant students to take their class. Another influence for a reluctant student is their peers; students who decide to take AP classes usually take them with their friends. Some counselors also noted that students in AP classes get "bragging rights" which encourages them to enroll.

When teachers were asked about recruitment and selection, many of their answers were similar to counselor responses regarding the range of ways students are recruited. It was clear, however, that there was no consistent recruitment process for AP classes, but rather that each class varies. While the majority of teachers shared that recruitment occurred through a combination of teacher recommendations, counselor recommendations, and student self-selection, there were instances where teachers shared that they recruited 100% of their students and other instances where teachers shared that all students in their classes enrolled on their own. In one instance, a teacher shared a formalized process where students must receive teacher permission to enroll in the AP class:

"We used to have pre-reqs. No longer. Now their current [subject] teacher has to sign off for them to take AP and I have to sign as well. I interview students who are interested. If they need a little remedial work that's fine."

Other teachers shared that they had a less involved role in the recruitment and enrollment process, or that they were not involved at all in selection. In one case, a teacher shared what happened after students were placed without her recommendation,

“Those that were not recommended by me were the ones that dropped. I personally recruited them, all from my [general] class. From students interested in taking AP I looked at performance. There were some students that wanted to take AP that I did not recommend do so, but they ended up enrolled by guidance anyways. Those are the students that ended up dropping.”

One in five teachers interviewed stated that there were some students in their AP classes who did not know how they were placed in the class. One teacher stated that,

“100% (of students were) put in or auto-enrolled.”

Another teacher stated,

“I wasn't a part of enrollment . . . a lot of it were kids that got funneled in. . . 60% kids that should be in here 40% no business.”

Teachers also reflected on the processes they utilized for selection. A few teachers shared that they were satisfied with their selection process, but many indicated room for improvement with comments such as,

“I think we could do a better job of selection,” and, “Students ask and guidance places. Not the best way for AP classes to be run.”

One teacher explained that the AP selection process could be improved, citing teacher bias as a potential cause impeding the recruitment of some students for AP:

“We would probably benefit from a set system. Specifically because we have biases as teachers and we come from backgrounds with an idea of what an AP student looks like, normally this vision of a studious kid with a full book bag, a hyper-vigilant anxious kid. But that bias really hinders the AP system, slows us down, and impacts our judgement. Students we hand-pick, sometimes we are way off. I call some students 'Dark Horses.' 'Koju' is a dark horse. He really enjoyed being in my class and got a 4 on the exam. I wouldn't have expected that.”

All of their recruitment efforts have been met with mixed success. Many students who have a history of succeeding in previous courses are opting not to take AP. An analysis of historical AP course data demonstrated that there are many more students not in AP who are predicted to do well, then there are students in AP who perform poorly. This suggests that if MPS is able to encourage more of these students to take AP, the result may be that the increase in AP participation corresponds to an improvement in the performance of students who take AP. With this in mind, as part of their recruitment efforts for the 2016-2017 school year, school counselors are using predictive data provided by the University of Wisconsin – Milwaukee GEAR UP evaluation team. This involved the use of historical data to statistically predict the likelihood that individual students would earn a “C” or better in AP courses. For students who are reluctant to take AP, but are predicted to do well, counselors suggested that the predictive data may help students understand that they have the potential to succeed in more rigorous, college-level courses.

Which students should take AP?

Teacher opinions on this question ranged from the belief that all students should take AP to a more restrictive approach to selecting students. Teachers who indicated that AP was beneficial for all students stated,

"I'll take anyone,"

“The college board shows that students that take AP classes are statistically significantly more likely to have success in college. I would love to see every high school senior take my class,” and

"We're really trying to promote AP here. AP is important for everyone."

Many teachers echoed this sentiment, as 86% of them agreed that there is value in taking an AP class even for students who don't do well in the course. Some teachers shared stories of students that they did not believe would do well in AP but that excelled or improved from the experience of taking the class. One teacher shared,

"I had a special ed student that really wanted to try AP [English]. I told him, I can't hold your hand, but if you're willing to try I'm here. He wanted to take it because he wanted to learn big words. When we did the formative assessments, other teachers said 'his writing really sucks but his ideas are great; give him notes to encourage him.' I've seen him grow. I don't think he would have improved as much (if he wasn't in AP). AP - the atmosphere is different, there is a feeling of drive."

A smaller percentage of teachers expressed more concern when asked whether there is value in students taking an AP class for those that do not do well, with one teaching stating:

"This is a tough question. The experience is valuable but if they're not ready and fail the class that is harmful."

Other teachers expressed qualities or readiness levels that students should have before taking an AP class. One teacher stated that students need to have a "desire" to take the class and recommended screening for AP by reading levels and previous academic performance. Further student characteristics were expressed by another teacher:

"AP is not good for everyone and not all kids should be in AP – disruptive kids, those that don't do anything,"

While the majority of teachers believe that AP is a good experience for students to prepare for college and be advanced to rigorous coursework, some MPS teachers believe that certain students are not ready for AP or are not prepared and should not take AP classes. It is likely that these viewpoints on which students should enroll in classes influence teacher selection, which is a large component of the recruitment process for many AP classes in GEAR UP schools.

Teachers felt that student motivation and interest were critical factors for promoting success in AP courses.

Teachers described students that showed drive motivation and desire as being more independent and more likely to succeed:

"Number one reason (they succeed) is they are motivated! They show a love for the material. Kids are here everyday, they try, they struggle. Students that pass the AP exam have 93% or higher attendance."

The drive and motivation characteristics mentioned by teachers are not only present because students want to succeed, but also because they are interested, and really enjoy learning. The desire to succeed, and the desire to learn new material were mentioned by multiple teachers as critical for student success.

Teachers also mentioned focus and grit. They shared that being able to devote significant attention and persistence to demanding material important for student success. In addition, the idea of grit, or overcoming failure and adversity was seen as being important in succeeding in AP classes:

"(They are) willing to struggle, and (are) not giving up because they don't know right away."

This mindset implies that students who succeed in AP classes aren't expecting answers to be handed to them, that they have a willingness to inquire and struggle, and persevere. This is reflected by another teacher who said,

"The ones who do well say 'I'm not sure, but I'm willing to try.'"

Conversely, some teachers shared that students who were struggling or failing were said to be "lacking," lacking in understanding of the expectations of AP, lacking in the motivation or desire to do work for the class, and lacking a passion for the subject or course. These characteristics were summarized by one teacher who stated,

"It's not so much a lack of skills that keeps students from succeeding, but more of an attitude."

The teachers interviewed weren't asked *why* students possess certain characteristics or not. However, they did frequently cite them as a reason why students are both successful and unsuccessful in AP classes.

Students need to do the work.

"The only way you're going to fail is if you don't do the work. If someone's a poor reader, we'll get them help."

Teachers shared that there are some students who do not come to class or do not complete work for the AP class, and these are the students who are struggling or failing. Many teachers stated

that students with low academic skills could be provided support as needed to help them catch up, or that they began with some remedial skills in the beginning of class.

The work in and out of class that teachers said were important were informed by study skills and work habits. Teachers consistently mentioned that students needed to complete homework and assignments in class. Relatedly, teachers also mentioned that study skills were important for student success. Study skills, as opposed to completing the work, relate to ideas on how to study, how to organize work, and how to "do the drafts, tweaks, revisions." Since AP classes are more demanding, students have to process more challenging material, and devote more of their time to doing so, since the class demands it. The idea of "studying, redoing, revising" might be a step up from what might be required in non-AP classes, where a first effort might be good enough. From the teacher perspective in these responses, those students who truly flourish know how to study, and how to work to become successful in a challenging classroom environment.

Finally, knowing how to budget and manage time accordingly was a characteristic that some teachers brought up during the interviews. As one teacher mentioned:

"(It's) time management and being able to balance everything. AP kids are the ones who do everything - committed athletes, in debate, forensics. They're doing 90% of the stuff in the building, while 80% of the students aren't involved in anything. I've had some brilliant kids not pass because they check out."

Some teachers mentioned that they have students that are enrolled in multiple AP classes, and that they know how to balance everything accordingly so that they are able to not only complete the work required, but to complete and succeed. Other teachers cautioned that some students were enrolled in too many AP classes at once, and worried that some of these students lacked the time management skills to handle such a heavy academic load.

Students need the strong academic skills to succeed.

When asked why students succeed or which skills they possess that help them succeed in AP classes, teachers mentioned the presence of strong academic skills. More teachers, however, mentioned low academic skills as reasons why students are struggling. In addition, very few teachers mentioned specific content knowledge as a reason for student success in AP classes. Instead, almost every response related to academic skills mentioned either writing and/or reading

skills, regardless of content area. Writing skills in particular were seen as crucial for helping students succeed on the AP exam. A few teachers also mentioned the ability to write quickly and avoid fatigue in doing so, sharing that students without this skill were more likely to struggle.

When teachers shared the importance of reading skills, they mentioned the ability to use context clues, provide analysis, interpret, and think about more complex material. For students who were struggling, however, teachers did suggest that some students were deeply behind, with multiple teachers stating that it is common for students to come into their AP classes with fifth grade reading levels. One teacher stated that reading levels were as low as third grade for some of his AP students. Teachers mentioned that students who possessed higher-level and critical thinking skills succeed in AP classes, since the courses often require participants to explain material in a way that goes beyond basic fact or content recall. One teacher explained the starting level of some students who do not possess critical thinking skills using a book report as an example:

“For example, if you or I were asked to do a book report we could give the characters, the plot, the conclusions, etc. No interpretation by kids, very little (would be given for a book report).”

Strong writing, reading, and critical thinking skills were the primary academic skills that teachers stated for student success in AP classes.

Proposed strategies for improving student recruitment and performance in AP

A number of possible strategies for improvement student recruitment and performance in AP were presented to AP teachers. Teacher reactions to each strategy were coded as either *Positive*, *Negative*, or *Mixed*. Figure 2 summarizes how teachers responded to the six strategies.

Teacher reactions to proposed changes to AP

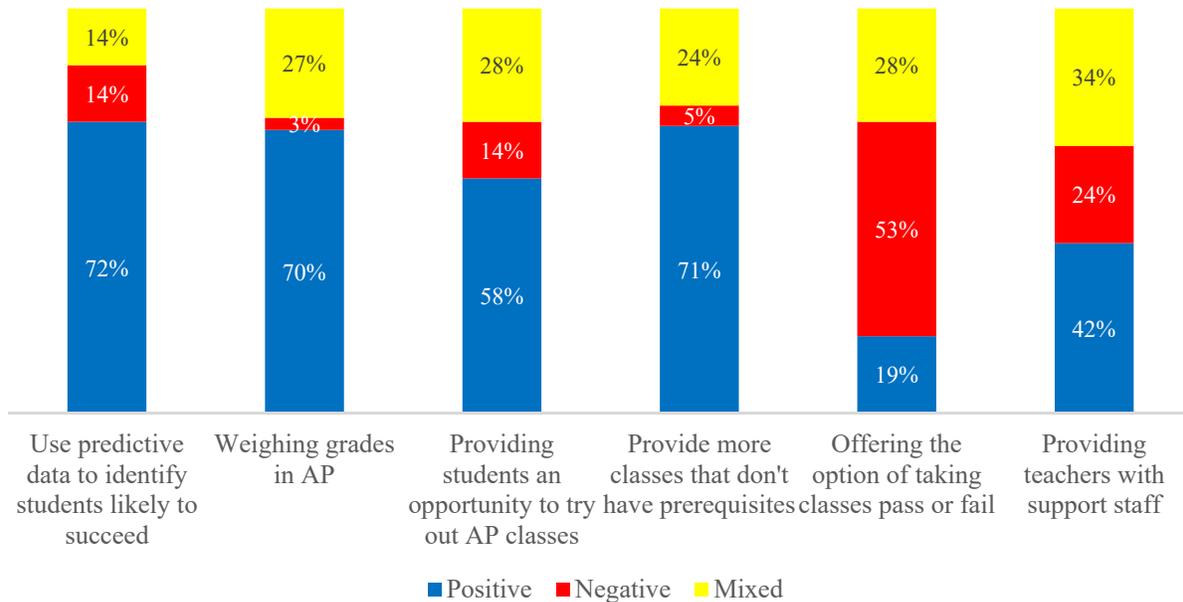


Figure 2: Teacher reactions to proposed changes to AP

- *Most teachers were interested in having better data to identify students who are likely to succeed in AP.*

As previously mentioned in this report, the evaluation team provided MPS with data for all 2015-16 sophomores regarding how they would be expected to do in AP courses as juniors. AP predictive data was presented in a meeting to AP coordinators across the MPS district. Coordinators, who are primarily school guidance counselors, received access to all the AP predictions for current 10th grade students regarding how they would likely perform in AP during the 2016-17 school year. All school counselors indicated that they were aware of the AP predictive data. Counselors shared that they used the data to verify student placements in AP classes. While they stated that the predictions were mainly confirmatory, they still found the data to be helpful.

AP teachers were asked whether they had heard of and seen the AP predictive data. Two teachers at two different schools were familiar with the data but had not seen it. They believed the data was being used “generally” but did not have specific information on utilization. Teachers at two

additional schools reported that they had seen the data. At one school, only one teacher interviewed had seen the AP predictive data and it was not clear to him how it was being used. In the other school, the AP predictions were shared during an AP committee meeting. Teachers divided into groups by department and discussed the predictive data and the students. All teachers interviewed at this school reported seeing the AP predictive data. These teachers expressed that it was helpful to have more information to assist with recruitment and that data can be used in a constructive way. One educator shared,

“It was helpful (to review the data), it allowed us to look at a large range of students by department. Kids tend to line up with predictions, the way we assume they would.”

Among teachers that had seen the data, there were a few educators that expressed some concerns. One shared that, while some students were ranked to do well as expected, others that were predicted to do well were unexpected and one of the students on the list was currently failing an honors class. Teachers shared that while some data were good there were concerns over the validity of the predictions. In one case, an educator shared that grade levels were inaccurate for some students. There was concern over including GPA in the model and a desire to include other variables, such as whether a student is striving. As one educator stated,

“For me, yeah, some of this is great, but this is not good predictive valid data. We need to get more in-depth analysis. . . . it doesn't show levels of creative intelligence. (Predictive data do a) good job of targeting and vetting kids that ‘seem’ like they're ready. Overall, I think it helps, it's just another tool.”

Among teachers who had seen the predictive data there was consensus that it would be useful to have predictions for younger grade levels, starting with predictive data for middle schoolers that could be used to help place beginning high school students into honors or AP classes. Another teacher stated that it would be helpful if predictive data could differentiate between success in honors and AP classes. Six of the seven teachers who had seen the data believed that they could be used to help with recruitment for AP classes. The additional teacher stated that the predictions could be used for placement but raised concerns about whether they could help with recruitment. One teacher explicitly stated a desire for the predictions to continue across grade levels.

However, the majority of teachers interviewed had not heard of the AP predictive data. These teachers were given an oral summary on how predictions were developed and provided a sample of de-identified data. From among this teachers who received the description and saw the sample data ($n = 28$), 72% believed that grade predictions could help them with recruitment for AP classes.

Teachers who indicated that AP predictive data can be helpful for recruitment listed that having background knowledge, looking at actual data, and data-driven enrollment can be beneficial for recruitment. As one teacher stated,

"Yes! We've seen that success with our students. (Data) helps us see. Kids resonate with data."

Teachers agreed that prediction data could be good for counselors and for scheduling. Multiple teachers mentioned that the data can be used as a tool to encourage, motivate, and "sell" students on AP. While doing so, they reinforced the need to be upfront with students about the rigor of the class when talking with students. This is reflected in one teacher's comment:

"I would share (the predictions) with students to encourage enrollment, but also to let them know upfront how tough the class is going to be."

A common theme from teachers was the importance of using predictions as just another "tool" for making decisions, and not as the only factor in placing students in AP classes. Particularly, teachers do not want to see data used to exclude interested students from taking AP classes. These sentiments were reflected by another teacher,

"I would not like to see it used to cut students out based on data. It could be useful, but not as an end-all decision for enrollment."

Teachers shared that they would use the data to either directly recruit or to cross-reference their current recruitment efforts. Looking at students who were shaded the color green, indicating that they were predicted to get a C or higher in his AP class, one teacher stated,

"I would hunt down every one of those kids in the green."

To cross-reference recruitment efforts teachers said they would align their existing efforts with the predictive data. As one teacher stated,

“They talk about kids that would do well, but it would be nice to match up what they have with this (the predictive data).”

Lastly, one teacher stated that, even though enrollment was already completed, she would like to see the data in order to gauge how students in the fall may perform in her class. She mentioned that active outreach could be done to make sure that students who are more likely to struggle could receive additional help and support in a more pro-active manner.

A minority of teachers did not believe that predictive data would be helpful for recruitment and expressed concerns about the creation and utilization of predictions. Teachers in the Arts did not have predictions for their subject and also believed that students who fail other courses can excel at art. Another teacher mentioned that their department’s selection process was already effective, so additional data was not needed. As he shared,

“I don't think this would fit for our AP classes, because we already have a process that works well for recruitment.”

The remaining minority of teachers who did not believe predictive data was helpful thought that data might not lead to enough students predicted to do well or they might be used to keep students out of classes. One teacher believed that AP was good for all students and so didn’t see a need for data, sharing that:

"If I do my job well, I can motivate all kids to learn and succeed. I would still offer AP experience to every kid that I can."

Contrary to the actual prediction data, two teachers did not believe that there would be enough students that would be predicted to get a C or higher and as a result the data would not be helpful. Many other teachers who believed the data could be helpful but had concerns on utilization also listed a lack of eligible students as a major concern. One teacher believed predictive data would cut the population for enrollment in AP classes by a third to one half if only students who were predicted to do well were recruited for AP classes. Another believed only three students would be predicted to do well in his class. A lack of eligible students also raised concerns over class sizes and being able to offer AP, with one teacher sharing the concern that predictive data wouldn’t work:

“ . . . because our district can't seat a 10-15 person AP class, even though this is commonplace in other districts.”

Due to the same belief that there would not be enough students predicted to do well, one teacher shared that using predictive data may itself be inequitable:

“We would have no one using the AP prediction data. If we use this, this is not equity and access. We have very low GPAs and test scores. How we do it (recruit), we talk as a department and give kids a benefit.”

This same teacher went on to share that she already knows that there are high-achieving kids who are not in AP classes but didn't believe that AP predictive data would help in recruiting to solve that problem. As she continued:

“I don't have all the top 10 kids in my class. How to get those high achieving students in AP? If I knew that I would be rich.”

Another teacher listed that AP predictive data would likely not impact student choice, and would also be inefficient at recruiting top students for AP classes. He stated:

“But I still think a lot has to do with the individual student. (I'm) not sure how significant the data can be because students have frequently already made up their minds about AP classes.”

Other teachers who were unsure about the usefulness of predictive data were concerned that data could lead to tracking. In particular, one teacher shared a concern that predictions neglect to account for the natural maturity of students who may not have been ready for an AP class one year but could be emotionally mature enough the following year. She shared, it's:

“Also a big transformation from sophomores to juniors. Sometimes they just mature at that time and students who I wouldn't expect to do well step up.”

The last concern from a teacher was related to the evidence of effectiveness in using AP predictive data to recruit more students and/or recruit students that are more likely to pass the class with a C or higher. He shared:

“I don't know the overall success rate (of the predictive data). I don't think it would be worse, but would need more evidence to suggest that it's better (for recruitment).”

- *Weighing grades was viewed as a useful recruitment tool.*

Weighted grades signify that an AP participant receives a letter grade that has a higher numerical value on their GPA than they would in a non-AP class, due to the comparative rigor of the course. MPS has already begun to implement weighted grades, so some teachers had personal experience with weighted grades while others had not yet used it for their classes.

Weighted grades for AP classes has been implemented for students in the class of 2018, but not for the class of 2017. As a result, in AP classes with mixed student cohorts, this concept has posed some challenges for teachers and students. Teachers have indicated that grading can be a more complicated process, and that students are receiving different grades for the same level of performance. Still, despite the challenges of implementation, most teachers voiced positive responses to the concept (Figure 2).

Most teachers felt that it would "reward kids for taking harder classes." In schools that already have weighted grades, the response has been favorable, with one teacher mentioning that this process "has already helped" increase enrollment. A few teachers, while in favor of the idea, also shared the need to ensure that students understand the concept, so they could understand how grades are weighted and how this change could benefit them:

"I'm not sure that students are aware, or if they understand the ramifications of it."

Additionally, while many teachers supported the idea of using weighted grades in AP classes, this didn't necessarily mean that they thought it would increase enrollment. Instead, it would reward kids for taking more challenging classes, especially those who are performing near the top of their class.

The minority of teachers who expressed negative opinions about weighted grades did not like the expectation that weighted grades might have for college:

"When they get to college they wouldn't have weighted grades. I think it's risky in setting up that expectation. I don't think it would have an impact on student enrollment. "

There was also some concern expressed about the role out for some students but not others.

"I like the idea, but don't like how it is being implemented, due to the split in classes. MPS should grandfather in other graduating classes to have weighted grades as well. It is a nightmare to grade, and not fair to mixed class students."

However, this issue will only be relevant for one more year, as the upcoming 2016-17 school year will be the final year in which weighted grades are not available to all students.

- *Many teachers felt that students should be given the chance to try out an AP class before committing to take it.*

An AP trial period would allow students the opportunity to "test out" a class before deciding if they would like to remain enrolled, without negatively affecting their GPA. The idea of a trial period was also a bit different than a true proposed modification, since students already have the option to withdraw from a class without affecting their GPA, for a period of two weeks.

The overall response to having a trial period for AP classes were mostly positive, and only 14% of the responses were strictly negative (Figure 2). However, it should be noted that many of the positive or mixed responses were also conditional, in terms of how long the trial period would need to be, as well as mentioning the reality of how something like this could potentially be a challenge to implement logistically for school programmers.

For positive responses, teachers thought that students would benefit from being allowed to try an AP class without negative consequences on their grade or GPA, with a teacher mentioning that it would "help more kids try at less risk." Another teacher mentioned that this would be beneficial in allowing students who really didn't want to be in there to remove themselves, allowing for a more beneficial experience for those who want to remain in the class. Some teachers recommended allowing the trial period to last for a longer period-either an entire unit of study or even a quarter, so that they can experience the class, without dropping after looking at a challenging syllabus:

"It would be nice if kids could stay through a sample unit or lesson before deciding. A two week trial period is pretty arbitrary, and the first few days of class aren't as heavy on content."

In addition to mixed responses about the possible duration of the trial period, a few teachers suggested that it might be beneficial to have the trial period occur the year before, or in the form

of a summer boot camp, with the idea that AP students are coming to the first day of class ready to learn, and with a clear idea of the expectations from an AP class.

The responses that were negative cited the lack of commitment on the students' part. Those respondents mentioned that students will tend not to challenge themselves:

"I think it would feed into the teenage tendency to take easy classes. Once they realize the amount of work required they would just fall back into a less demanding course."

In this line of thinking, teachers don't believe that being able to "opt-out" is a positive, since kids won't be held up to their commitments, and will elect to fall back into non-AP classes. The negative sentiment indicated that students should stick to something challenging, which echoes previous comments about why students succeed in AP classes: they persevere and overcome challenges.

For some of the mixed responses to this question, the teachers supported the idea, but were concerned about the logistics of such an endeavor:

"This only works if there's a regular and an AP class."

Continuing this concern, the staff buy-in would be important, since there would be a potential for much student movement during the school year:

"Other teachers would have to realize that they might get a flux of kids who transfer out. Need others to play ball. There's too many teachers that don't play ball."

- *Teachers generally felt that more students should be encouraged to take AP classes that do not have prerequisite requirements.*

Teachers were asked for their opinions on schools having an increased focus on offering AP classes without prerequisites (e.g. Human Geography). Of the proposed AP modifications, this option raised the most confusion, as some teachers took it to mean an increased emphasis on offering AP classes to younger students, not an overall emphasis on offering AP classes (such as Human Geography) that might not have a prerequisite. For those who viewed this option positively, some mentioned that it is always good to have more choices for students:

"It's all so important - we need to have all kinds of amazing classes. More opportunities are better. We've taken away all their opportunities - electives out, music, etc."

Additionally, one teacher mentioned that it allows students to plan out their course work, and put serious thought into what classes they choose early on:

"Giving students the opportunity to plan early on is good. Students have a lot of goals, but not roads between where they are and where they want to be. It would great if starting in 9th grade they could make out their four year plan as a freshman to see the goal of 'what I need.'"

A few teachers also mentioned that these offerings will promote an AP culture early on in a school, through challenging younger students with more demanding courses. Finally, many teachers felt that this was a great way to gauge AP readiness for future or additional AP classes. While Human Geography might not be a direct correlation with AP English Literature, it might give students and teachers alike an idea of rigor and capabilities in a rigorous setting.

For those who viewed this option negatively, there was hesitation about promoting AP to just anyone:

"It's important to think about what kind of background is needed for those classes, and to get a feel for the interest level of the student. We may need to integrate an intermediate class to see which students could be a good fit before throwing them into a class with a lot of homework and rigor."

This teacher stressed that AP isn't just for anyone at any time, and that there might need to be more intermediate classes to screen for potential AP students. Another teacher who had a more cautious response similar to that above, mentioned that this idea,

"Should be done with intentionality in terms of how it is being integrated into the existing curriculum (I.e. feeder classes, what grade levels). I waited a year before teaching human geography (for sophomores) so that we didn't rush into it."

In this case the teacher was open to the idea, but wouldn't want to rush into it, for the sake of offering it. Instead, it would be beneficial to think about how it might align with other courses in the department as well as other AP offerings at the school.

- *Teachers were opposed to the idea of allowing students to take AP classes "Pass or Fail".*

The option of taking an AP class pass/fail means that a student could take an AP class for credit, but without receiving a letter grade, a concept that isn't unique to AP classes. Only a small minority of teachers (19%) felt this was a good idea (Figure 2). A few respondents had mixed reactions, as they wanted to encourage enrollment, but weren't sure if pass/fail would diminish the AP experience for students.

Teachers who liked the idea of a pass/fail option for AP classes thought that it could help students try a rigorous class without negatively affecting their GPA, which might persuade someone who was indecisive and unsure. Additionally, teachers who liked the idea thought it could co-exist well with standards-based grading. A final positive sentiment shared was that the grade wasn't the most important part of an AP class, but rather the experience:

"Take the class learn, gain experience. There is something to be said for that".

The idea of getting exposure and learning from it took precedence over letter grades, since students wouldn't have to be overly concerned with their grade. Depending on how "passing" is defined, one teacher thought that it could allow more students to pass the class as well.

The negative reactions centered largely on how it would impact effort in the classroom:

"That encourages students to do just enough to pass."

The concern was that students will do just enough to get by. And in this sense, having students take a challenging course pass/fail sends the wrong message:

"Life isn't a pass/fail. Life is hard work. AP is AP. This is no joke. Having low expectations will cause students to be slapped across the face by work and UWM (college)."

Another teacher mentioned that the AP exam isn't pass/fail either, so this sends a conflicting message. Finally, one teacher shared her concerns about how this option could send a mixed message, especially in being implemented in addition to weighted grades:

"Depends on the student. Some might not take it seriously. This drags on the morale in class. Especially for those who take it as a weighted grade."

This would indicated some concerns about having some students taking the class and doing just enough to get by, while others are participating on a very different grading scale that could have more impact on their GPA.

- *Teachers had a number of concerns with the idea of inserting support staff person into their classroom.*

Teacher had mixed reactions to the idea of having support staff in their classrooms (Figure 2). Many teachers who reacted positively to the idea had previous positive experience with support staff. As one teacher stated,

“Oh my goodness yes! Last year I had a para. They put him with me - it was so nice.”

Other positive feedback included that support staff could be helpful for specific purposes, which included both in-class and out-of-class reasons. Teachers shared that in-class support staff could work with small groups of three to five students to build writing skills, provide one-on-one support, and assist when running a lab. As one teacher stated,

“That would be phenomenal! Individualized support is huge! Especially when running a lab.”

Teachers also listed out-of-class activities where support staff could play a beneficial role by providing feedback on student essays to increase the timeliness of feedback and to provide tutoring to students after school.

Primary reasons against support staff included that it would be difficult to find qualified staff to appropriately assist an AP class, that support staff may have lower expectations, and that the finances to pay for support staff may not be the best allocation of resources. Some teachers indicated that they are the experts in the subject matter and were capable of working with students without additional assistance. As one teacher noted:

"No. I'm the expert. I'd rather have more time to work with them," and "I've had co-teachers for special ed. No offense, I'd rather teach the class myself. I can get the kids to do what I need to - they (support staff) might not have high expectations. Not to say no to coordinating with other teachers."

Another teacher shared how a lack of clear expectations with support staff led to extra work when support staff was provided in a similar capacity and implementation was not ideal:

"They brought in someone to assist us and lead a writing class as sort of an extension of AP. I had been told it would be standalone but I ended up having to do all the prep. I had them read a current article and write a paper around it in a certain structure, but the support person was never able to take over and it was like having an extra class to lead, which meant I lost my prep time."

Teachers were generally in agreement that if they were to be provided a support staff person, that person would need to be consistently present starting in the beginning of the school year. As one teacher stated,

"(Having support staff) could work out just fine, but would have to consistent. So the support staff would need to be there week one and if they were going to be there two days a week they would need to be there during those times every week, or if it was everyday then they need to be there every day. Need to uphold and keep that standard."

The other concern with support staff was hiring the "right" person. Teachers would like support staff with strong writing and analysis skills, content knowledge, and an understanding of how AP works. Many teachers also mentioned the importance of having the right "fit" between the teacher and support staff in the classroom.

In addition to being asked to give their opinions on the idea of having a support staff person, teachers were probed to find out what would be the most important prior experience specific skills and qualities this person should possess. Teachers typically felt that content knowledge and specific academic writing and reading skills were the most important qualities for a support staff person. Additional areas mentioned with less frequency: having AP experience, and having general experience working with kids.

Content knowledge was said to be important, since AP material can be extremely specific, and thus beyond the reach of a general after school tutor, or support staff member. As one art teacher mentioned:

"The one I have is perfect, has an art degree, makes his own jewelry."

While teachers didn't mention this person having a specific degree, the idea that they would have specific content knowledge would imply that they have taken a "bunch of classes" related to the subject matter.

The other most commonly mentioned area of prior experience desired by AP teachers in a support staff person is that of academic reading and writing. Some teachers emphasized these skills as being more important than content knowledge:

"Don't need to know about US history. Writing. And need to know how to connect things. Writing, not English, historical writing. Someone who can fill in the narrative."

For the few teachers who mentioned prior AP experience, the emphasis was based on how the support person could help with preparing for AP testing. Knowing the significance, structure, and scope of the exam would be experience that is specifically tailored to support students preparing to take AP exams.

Finally, a few teachers specifically mentioned having general experience working with kids, with one mentioning one-on-one experience specifically. Teachers also felt that support staff should be able to connect with a classroom teacher, be open-minded, and approachable. The relationship between support staff and classroom teacher would ultimately play a large role in the impact of this position, so it is unsurprising that this was mentioned by several teachers. As one teacher mentioned, it is

"Like a match with a student teacher. We need a chance to talk to each other and feel each other out. It needs to a process of teacher and support getting connected, way more likely to be beneficial."

The trust and connectedness between support staff and teacher could help eliminate tension and ambiguity in the role.

Since MPS is an urban setting, there were a few teachers who mentioned that being comfortable in an urban setting would be essential to being a productive support staff member. Support staff should

"Not be freaked out by the culture of the school, the misbehavior and boundary testing."

Finally, the idea of a support staff person being approachable to kids was something that a few teachers stressed as well. In this case, one teacher acknowledged their inability to more closely relate to students, and thought that this might be an opportunity to have someone different that might resonate more effectively with the students:

"Personality and background wise different from the teacher, which could allow students to related differently as they may connect to one but not the other. Don't have clones in the room (in terms of teacher and support person)."

Ideally this person could maintain their sense of professionalism, but yet remain approachable from the perspective of the students in the room.

Two schools piloted this strategy in the spring of the year, providing a support staff in a small sample of AP classrooms in Team GEAR UP schools. Teachers, support staff, and Team GEAR UP staff indicated similar findings as those reported in teacher interviews. There were challenges in finding and hiring support staff, with more successful implementation occurring where support staff had strong writing skills and experience working with diverse youth. The teacher-support staff partnership with the most success also mentioned that they worked well together and were a good "fit." Teachers and support staff indicated that more time was needed to help prepare for classes, and that further support in getting started and clear expectations on the role for both teachers and support staff could assist in strengthening the strategy and increasing the benefits for students.

Additional strategies for improving student recruitment and performance in AP

Teachers also mentioned a number of other strategies that are currently used or could be used by MPS to promote success in AP. These included:

Vertical teaming and collaboration - Teachers shared that through collaboration and vertical teaming they have been able to standardize teaching practices across departments, increasing students' readiness by the time they reach AP classes. The Center for College Readiness expanded on this definition to define the goal of vertical teaming:

"To equip students with the necessary foundational skills at each grade level, through vertical alignment of the curriculum, to ensure student success once they reach college level, AP courses. Vertical teams create a forum that fosters communication between

teachers of different grade levels, improves accountability, and generates a common vision.”²⁰

This readiness has increased the number of students they recruit for classes and has occurred in a number of ways. One manner involved using similar writing and analytical techniques in classes leading up to AP. A social studies department shared that all classes utilized the Document-Based Question exercise (DBQs) which helps students to analyze and write.²¹ One English department referenced a training and vertical teaming manual²² that led to their collaborative work in vertical teaming to increase students’ readiness and understanding throughout high school to prepare for AP English classes.

Another practice of collaboration and vertical teaming has been to offer more honors courses before AP classes. Many teachers shared that honors courses were beneficial or potentially helpful in recruiting students for AP. As one teacher shared,

“The majority in my AP class were in honors before. (I) try to push some others from non-honors classes as well . . . I hope honors is helpful in recruiting and supporting students in AP. I don't know, it will probably take a while to see a difference and know.”

Another teacher followed this up by stating,

“Having honors changed everything.”

Tutoring - Tutoring was mostly commonly mentioned by teachers as a needed support strategy. Some teachers recommended implementing "mandatory" tutoring sessions, since existing tutoring and study sessions can be sparsely attended, and those who do attend are the students who already tend to be excelling in the class. One teacher recommended mandatory tutoring during the lunch hour if you failed an AP exam. Tutoring supports were mentioned to be offered during the week as well as after school.

²⁰ Center for College Readiness. (2015) Vertical Teams. Rice University. Retrieved from <http://collegeready.rice.edu/vertical-teams>.

²¹ The DBQ Project. (2015). Retrieved from <http://www.dbqproject.com/index.php>.

²² College Entrance Examination Board. (2002). *The AP Vertical Teams Guide for English*. Sadler, P. M., Sonnert, G., Tai, R. H., & Klopfenstein, K. (2010). *AP: A critical examination of the Advanced Placement program*. Cambridge, MA: Harvard Education Press.

Study hall - Several teachers discussed study halls as another means of providing academic support to AP students. According to one teacher, this would be beneficial

"because many of our students don't have the time to study. They have to work or they have family obligations."

Study halls would be an in-school option for academic support taught by the existing AP teacher. The advantage of that would be that the AP teacher would have the content and AP knowledge to provide to classroom students. Some schools are offering AP study halls this fall, which would be an idea wherein students who are taking multiple AP classes would have a study hall specifically for them, as a time to do extra work for the demanding classes they have.

Decreasing class size - Some teachers mentioned lowering class sizes as a way to improve student AP performance, by allowing more opportunities for teachers to support individual students who might be struggling in the class. While the average AP class for teachers interviewed for this report was close to 25 students per class, some teachers reported higher numbers than that, especially at the beginning of the school year. On average, AP classes did experience attrition, with year-end averages closer to 20 students per class, as reported by the AP teachers that were interviewed.

AP class screening and enrollment - Many teachers also mentioned improving or changing the process of how students enroll in AP classes. This idea manifested itself in different ways from the teachers interviewed, but the overarching theme was to have a way to limit who enrolls in AP classes. A few teachers recommended having specific prerequisites or grades achieved before enrollment, while another mentioned having to receive a teacher recommendation before enrolling. The sense was to avoid having AP be a "dumping ground" for any student:

"When they just take anybody that leads to it being a wildcard, and you'll get students that shouldn't be in there. Need to weigh exposure for students to rigorous classes with the higher risk of having students fail."

Another teacher shared that part of the improvement to enrollment process would also rely on schools making sure students better understand expectations and rigor in AP classes before enrolling.

AP class scheduling - Another group of responses that related to academically-focused changes talked about switching AP class schedules. For a couple teachers this meant starting the school year earlier, since AP exams occur in May, the instruction time after that point is usually lost. Also, since some students have ACT and AP exams to prepare for, the extra instructional time in the beginning of the year would be beneficial. Another teacher talked about switching to block scheduling to get more time to work through challenging material. Finally, a teacher mentioned spacing out AP exams, for the benefit of students taking more than one AP class. Included in this was really making sure schools prepare a quiet reliable space for students to be able to take the exam.

Building AP culture - Along with extra academic supports, the notion of changing the culture at a school to promote success in AP classes, and to engage kids in putting forth the effort to do well in a challenging environment was the other most frequently mentioned response as to how to improve AP performance. Changing the culture in the school means changing what is expected of kids, and what is important and valued in a school. One teacher mentioned that shifting to an academic environment is an important characteristic:

"You have got to change the culture. We do not have a culture of academics. Is the culture punitive or about learning?"

Instead of a focus on behavior management and keeping order there is a shift to focus on successes:

"More acknowledgment for students. Award ceremonies - making these kids feel they are really doing something important."

The idea of changing culture also follows in the thought that with low expectations comes low performance. By raising expectations as to what is expected of students and the school community as a whole, you raise performance and achievement across the school.

Increase family engagement - Several teachers mentioned that increase in parental involvement and engagement would assist in providing extra supports at home. This might include

"letting them know about the rigor of AP, and the needs at home."

One teacher talked about promising impact from an AP parent meeting that drew 35 people at the beginning of the prior school year. While there was acknowledgement of the difficulties of having a student population that comes from a background of high poverty, there was the implication that "kids need role models." For one teacher, lots of their students came from poverty, but "the kids that did good were the ones best off at home."

Improve study skills and time management - A few teachers also mentioned the need to build student study skills. This speaks to a different type of rationale than content knowledge or academic skill base. Instead, this brings into play how students organize their time, and prepare for class, something that was also mentioned during a previous discussion on why students succeed/struggle in AP classes. This was captured by a teacher who mentioned that,

"Kids don't know how to prioritize time. Required to help teach and implement study plans, to prepare for tests, manage time, to prepare appropriately. If they have time to do it, they do it."

Building study skills can help students better learn how to budget their time and appropriately prepare for a more demanding class by showing up ready to learn.

Ensure AP preparation and alignment - The role of schools in preparation and alignment of students enrolled in AP classes is another issue cited by teachers in terms of reasons as to how students can be better supported to be able to succeed in AP classes. To address this, a few teachers mentioned getting kids ready to learn and handle AP material, even in middle school grades. The lack of being challenged, and the lack of background institutional knowledge were mentioned as part of the reason students enter AP classes without the capacity to succeed:

"You have to work with what you have. Look at what was going on before they got to high school is a part of the process as well. Kids can do things, but the younger kids aren't being challenged enough. They need to learn skills."

In addition, a few teachers lamented the fact that students are enrolled in an AP dumping ground, not electing to be there, and maybe not meeting certain requirements before enrolling, which shows a lack of departmental communication and cohesion. This concept talks about actions that might take place before a student is enrolled in a class, or even thinking about taking an AP

class. By addressing pre high school curriculum and alignment within departments, the thought is that performance of AP students might be improved.

Question of effort - As was mentioned earlier, teachers discussed the lack of effort being put forth by kids in AP classes, which didn't directly correlate with the question being asked about extra supports being implemented. Some responses seemed to indicate a frustration with a lack of answers to how to improve performance, no matter what is tried:

"I don't know what else they COULD do. There are college centers, tutoring after and before school. Really don't know what else to bring to the table. At what point, does the child have to think for them self?"

Another response indicated frustration as well:

"Feeling sorry for these kids is the biggest problem. When you make excuses for them no one else will when they get older."

The thought amongst some teachers is that at a certain point, the extra supports can only do so much, and that it is the students who need to put forth what is required to succeed, that they need to improve within the current structures in place.

The teacher responses that pertain to student effort bring up some key topic to examine in the context of AP performance in MPS schools. It suggests that there should be additional thought into why students have low motivation and effort, as well as why they are perceived to have low motivation and effort. Some of the reasons might be structural, but there might be additional discussion on strategies to use with classroom teachers to increase student engagement in AP classes.

Pedagogical approaches to AP described by teachers suggest a lack of alignment

Teachers have different views on who should be in AP and what constitutes an AP class. As expressed in the section on recruitment and selection for AP, some teachers believe that all students should try AP classes, while others believe that screening using criteria such as reading levels or past academic performance should inform who enrolls in AP classes. Since teachers are largely involved in recruiting students for AP, the philosophy that they use to recruit likely

impacts enrollment. As a result, understanding these philosophies may be integral in meeting goals to increase AP participation.

In terms of academic success, another factor that may impact enrollment and achievement is a teacher's approach to their AP class. Teachers shared a variety of philosophies they use in how they approach their class. Understanding the expectations for their AP courses is important as it likely informs the rigor and environment of the class, and subsequently the teaching and learning experiences of teachers and students respectively.

There were some teachers who clearly indicated that they view AP courses as college courses, and that they provide assignments, feedback, and grades in accordance with these expectations. This is indicated by a teacher who stated,

“This is a college class. I run it like a college class. They give me the excuse, they say this is high school. There is no hand holding.”

Another teacher expressed a similar sentiment by stating that he,

“Want(s) them to get the real experience of having a college class.”

Other teachers expressed the opposite opinion, that AP is explicitly not a college course. As one teacher shared,

“This is not a college class, it's college material in a high school class.”

Another teacher expanded upon this statement, explaining the process he goes through in teaching college-level material in a high school class:

“AP doesn't mean college. Teachers need to make sure the structure of the AP class, while teaching college-level material, is still appropriate for high school students. Empower them a little, and need to work on the scaffolding so that maybe by the end of the class the course can look more like it has college structure. For example, this means being flexible with deadlines, allowing students to have a window to make up a test. We're shaping kids, that doesn't happen overnight.”

Still other teachers expressed that AP is neither college nor high school. One teacher expressed that AP is a college class within the context of the high school environment. She stated,

“It’s a college class, not high school . . . but I can’t get away from the fact that we’re in a high school. Trying to turn the corner. They did not keep on my schedule, but I tell them the [final assignment] is due 10 days before it actually is, and give earlier deadlines for everything.”

Another teacher came to the conclusion that the course is both college and high school, sharing

“I think it's a combination of a college class with a high school classroom. At first, I have really rigid deadlines and I have to be really mean the first few weeks with my juniors. In semester two they seem to either meet the expectations or get out.”

Immediately after, the same teacher discussed the homework policy at MPS that allows students to turn in homework throughout the semester without being penalized for late assignments.

Referencing this grading policy appeared to be an example of how the high school environment does not align with college expectations. She continued, saying,

“But the MPS grading policy sets them up for failure. It says they can turn in any material till the end of the semester. That really hurts AP. We used to be able to penalize them for late work. So instead now I'll wait to give them feedback if they turn it in late. I know this sounds mean, but we have to train [the students].”

As shared by this teacher, grading is also impacted by expectations of what constitutes an AP class. Grading may also set a precedence for future enrollment and recruitment, as students may be reluctant to take a class that in which previous peers received failing or low grades. With the variations in expectations and differences of their AP classes, some teachers shared their process of assigning grades. One teacher explicitly stated that s/he "went easier on grading" and another expanded upon the same sentiment, saying,

"That's where I'm being a little soft. . . those that attended, that has some thoughts, get Ds. If I was hardcore I'd fail 5 or 6 (students) and a dozen more would have a D. Precedent has to be set. Part of it is if you fail kids they turn off. With Ds that might be a reality check for half of them without them turning off.”

Some teachers struggled with whether or not to fail students, with many teachers sharing that if, at a minimum, students showed up and demonstrated effort they would pass the class. Overall, it

appeared that teachers were more likely to give Ds to students instead of failing grades if students demonstrated effort.

While most teachers expressed that taking an AP class is good for a student regardless of whether they do well in the class, it is unclear if students who fail, or just barely get a D are better off for future coursework and college acceptance and performance. Future work should explore this question, particularly due to the fact that regardless of how teacher recruit students, approach classes, or assign grades, it is clear that teachers desire AP to prepare students for college. As one teacher shared,

"I don't want kids to just get into college, I want them sold on the idea that they feel better prepared for college having taken this class."

Another teacher shared the readiness of students for college after taking AP, stating,

"I had students come back, they say my class was harder than their college freshman class."

Interviews clearly demonstrated that the approaches teachers use to approach their AP class, including recruitment, expectations, and grading, varies by teacher and these varying approaches may have resulting impacts on student enrollment and academic achievement. As a result, addressing teacher approaches may assist in increasing AP participation and success.

Professional development, resource, and support needs of AP teachers

AP teachers value the trainings and support they receive and would like continued professional development around specific aspects of AP.

Currently, MPS offers a professional development day in the spring specifically for AP teachers where they receive training and have the opportunity to meet with other AP teachers in the district. A fall networking meeting is held that is similar in scope but held as an after-school opportunity. Teachers shared that they appreciated this time to collaborate and work with other AP teachers in the district that teach the same subject. Recent training was provided through the College Board that provided new teaching ideas and different strategies for scoring the writing section of the AP test. Teachers mentioned that this training in the spring of 2016 for AP was

excellent and they hope to see similar training in the future. In addition to this training, multiple teachers shared that the district does a good job with professional development (PD), sharing:

"I love the PD",

"I feel lucky to have the support currently provided," and

"The PD they offer now is really good, which is mostly around resource sharing and collaborative planning."

Teachers shared that support came from MPS administrative staff. AP Teachers overall were aware of administrative staff at the district level, and some mentioned that district PD staff would come to visit their schools, answer questions with them over the phone, and observe classes and provide feedback. There was appreciation that the current Advanced Academic Coach in MPS has experience teaching, and that,

"[She] does a really good job of putting PD together."

Another teacher stated,

"[The Gifted and Talented Program Coordinator] does a wonderful job with support."

There was a minority of teachers who indicated the need for improvement with training and support, stating,

"I don't think we get much support," and

"I don't think you can consider much of anything support."

One teacher indicated that "district support comes and goes", and mentioned the relationship between outside grants and funding and support provided for AP. Some teachers mentioned that they are not in need of additional training, referencing the "law of diminishing returns" on continued training and stating that,

"I've been doing it a long time," and that

"New teachers could use some (additional training)."

However, the majority of teachers listed different areas where they could use support as well as specific training content / structure that would be helpful moving forward. Teachers wanted

continued training on how to teach analytical thinking and learning strategies, particularly around reading, writing was consistently shared by multiple educators.

Some additional areas mentioned by teachers included:

- How to write a thesis statement or assist students to read their textbook,
- Assisting students to develop ideas for concentrations, as students want "to be told what to do" and need assistance to develop and defend their own ideas,
- Discussion techniques,
- Helping students to work in groups and collaborate,
- Strategies to help kids do better on the exam, specifically to assist students in multiple choice sections and to manage writing fatigue,
- How to differentiate instruction for lower performing MPS students while still providing rigor.
- How to prepare urban students for college,
- How to make AP more fun for kids,
- Training to become an AP reader.
- For AP science, training on lab implementation,
- For AP Art, understanding what makes a good portfolio,
- For AP social studies classes, access to resources with the Gilder-Lehrman Institute of American History by becoming an affiliate school and help accessing Free Response Questions (FRQs) that are only available to students and not teachers online.

Structurally, one teacher stated that the

"Best (PD) days are half training and half mingling."

Time to connect was reflected by other teachers who requested "open" time for interactions with those who teach the same AP subject to share ideas. Another teacher stated,

"During PD days, instead of having two mini lessons, let's just talk."

A few teachers requested breakout sessions by subject areas, referencing the need to have training for courses including AP Psychology or AP Art, as breakout trainings have not always pertained to these subjects in past PD days.

One teacher asked for two days of training instead of one and for it to be offered earlier in the school year stating,

"I could only implement the techniques I learned towards the end of the school year."

Another teacher recommended that expert trainers do not have to be provided in-person, and that web-conferencing could be used to cut down costs. Teachers also felt positively about the training experts from the College Board. There is a desire to have new trainers who are not from the area but have experience working in an urban setting. It was recommended to have training by an expert with Vertical Team experience and that it may be helpful to reach out to Alverno College and UW-Milwaukee to partner together for training (See **pError! Bookmark not defined.** on Vertical Teaming for definitions and further explanation). It was also recommended to bring in guest instructors or other outside partners to facilitate trainings.

Teachers want more opportunities to collaborate with their peers.

Some teachers shared specific scenarios where collaboration was strong. For example, teachers shared that they had strong collaboration with other AP teachers teaching in the same department at their school, particularly with those who teach the same AP subject. Among some shared subjects, there are networking meetings every fall for AP teachers to meet on a Saturday. Online networking is also available through a portal to upload curricula and share with other teachers, and an AP teacher online group that is present among teachers in some subject areas.

Multiple teachers stated a need to network collaborate with other AP teachers, and to be provided the time and support to do so. Networking is desired to exchange ideas with colleagues, talk about what's working, and build community around AP. As one teacher stated in reference to the isolation of teaching AP at his school:

"I kind of feel like I'm on an island,"

Some teachers mentioned the desire for a school-wide AP committee or common planning time with other AP teachers in the same department. Other recommendations included time to shadow other AP teachers and time to coordinate shared AP activities in a school, such as Saturday study sessions across AP classes.

Teachers would like to network and collaborate with teachers at the middle school and college level. With middle schools, they would like to see what is being taught and collaborate with students transitioning to high school for placement in honors classes or AP Human Geography. On the college level, a couple of teachers said they would like to see an updated college level syllabus and sit down to talk about what's going on and what skills college professors would like to see from students. This was expressed in order to help students to be college ready, as indicated by a teacher who made this recommendation and stated,

"In my mind, this is not just AP for an exam, we want them to go to college and be successful."

Teachers need more resources, such as new textbooks and computers.

Teachers shared that they have access to College Board resources, online websites or listservs specific to their subjects, and the ability to ask for funds to purchase paper or books. One teacher mentioned that they were supported to buy review books and another stated that the school's librarian assisted in obtaining practice books.

The most common resource requested were books, particularly updated review textbooks, and enough books for each class for each student. One teacher stated that they had difficulties finding books and had to use a combination of old and new books. Also shared was the burden of heavy textbooks, and that due to size students are less likely to take them home due to long commutes, taking multiple buses, and navigating in unsafe neighborhoods. A desire to be able to provide online textbooks was expressed.

Other resources requested included having laptops and Chromebooks in the classroom at all times. One teacher who made this request did so because

"Kids learn more when they look up information themselves compared to me just telling them."

Science teachers expressed the need for lab supplies. Lastly, in reference to books, materials, resources, and technology, one teacher stated:

"Right now it's kind of like whatever's at your school is what you get."

She shared that having a wider range of access to materials and more collaboration across schools could be helpful.

Teachers felt the summer institutes were helpful but some were unsure how they could obtain funding to attend.

A number of teachers mentioned attending Summer Institutes. Some stated that the training and travel costs were covered while others mentioned that they had to pay the cost. In reference to an AP Institute offered at UW-Madison taken before her first year of teaching AP, one teacher shared,

"I would have been totally lost without that training."

A few teachers mentioned that they had attended an AP sponsored conference outside of Wisconsin, with one stating,

"It really opened my eyes!"

Teachers shared that having costs paid for AP summer institutes and other workshops already is/would be beneficial. As one teacher stated,

"It would be nice for MPS to make it clear that they really want you to go to an AP Institute that they will pay for it. Make it a big push."

Teachers did not feel that they received enough support from their school administrators.

Teachers shared that, while there was district level training, there was little support within their school itself for AP, due to a lack of resources and a lack of time for class preparation and teacher collaboration. This was indicative even as teachers were making requests, for instance when stating,

"[We] could use a schoolwide AP committee but would need the school time and support to do so."

Low awareness of AP was also indicated within schools, with one teacher sharing that other teachers did not know that she offered an AP class. Conversely, there were a few teachers who stated that their school supported AP classes in their school, as indicated by principals providing free space on Saturday for study sessions or through the school reimbursing them for tutoring and study sessions. A few teachers also mentioned that guidance counselors provide support.

Teachers would like to have extra prep time for AP classes and at least one teacher desired more feedback on how they are performing not just as a teacher, but as an AP teacher specifically. A few schools were considering adding an AP class for freshman and one school was looking to implement the AP Capstone project. Teachers said it would be helpful to have support from the school with these efforts. One teacher stated that it would be helpful to have "cross-categorical collaboration" by all AP teachers at the school to coordinate Saturday study sessions that are available for all students taking any AP class. This would allow teachers to share the responsibility of setting up the sessions, providing support, and pool funding with a potential end goal of provide bussing for students to attend. As this teacher stated,

"It would be nice to not always have to do it myself. This could be helpful even if teachers are not content experts in each AP class because they could make sure students were on track with study goals."

Some teachers expressed that it would be helpful for the school to assist in recruiting AP students, particularly those for freshman AP classes or transfer students. One teacher shared that having AP Psych housed with Science teachers or as an independent department could be beneficial, due to the variance in the class content, experiments, writing style, and structure of the AP exam. Lastly, teachers at a few schools mentioned the need for an increased school environment and culture around academic learning and success.

Conclusions

The information in this report was compiled from interviews with teachers across many different subjects in eight different high schools across MPS. Each of these teachers had varying levels of experience, and shared many different interpretations based on their experiences teaching AP classes. Teachers discussed characteristics of AP students that promote success, displaying varying viewpoints as to why students do well in AP classes. In addition, teachers shared many mixed and sometimes contrasting opinions on specific strategies that may increase AP participation and improve outcomes. Finally, when discussing supports and professional development opportunities, AP teachers shared options and resources that could be utilized to help them in their role. While teachers had a variety of ideas on how to improve AP classes in MPS, they almost universally enjoy teaching AP classes. Many believe that there is great value in AP courses for students, even if they don't achieve a high letter grade. However, while there is strong support for the AP experience, teachers also acknowledged that there is room to for improvement in AP. The key findings and conclusions from the study are as follows:

Schools need to improve AP alignment

The ability to strategically organize AP courses within a school and within a department is important in ensure that students enroll in AP classes as part of a larger course plan. Schools should provide more opportunities for teachers to collaborate across grade levels and within departments, as this will allow schools to create more consistent systems of enrollment and support for AP students, as collaboration allows for a more clear understanding of how AP classes fit with other school offerings.

With the district emphasis on AP inclusiveness, it is imperative that systematic challenges be addressed in order to improve student performance.

The official district philosophy on AP classes is that of increased participation and inclusiveness for all students. From our interviews it is clear that teachers believe in the benefits of AP for students. However, it is also critical that MPS address large obstacles that students face in AP classes. The primary issues mentioned by teachers include providing increased academic supports, increasing family engagement, ensuring AP alignment and readiness, enhancing study skills and time management, and building an AP culture within a school.

When considering proposed AP course modifications, it is important to engage key stakeholders.

Teachers shared a wide range of opinions and concerns while discussing various AP course modifications. This is exemplified by the concept of weighted grades, a modification that is currently being implemented. While there is widespread support for weighted grades among teachers, there is still a lack of clarity in terms of students understanding of what it means and how it is being implemented. If MPS is to consider future changes to AP course offerings, they should engage stakeholders in order to build buy-in, understanding, and consensus among teachers, students, administrators, and parents.

MPS should continually reinforce key AP course information for teachers

While many teachers were aware of AP updates and district resources, there is an opportunity to increase the dissemination and understanding of AP strategies, philosophies, information, resources, and professional development opportunities among AP teachers. This could be done through existing AP networking and professional development days and other multiple other channels throughout the year.

There are complicated socio-cultural contexts within schools that are barriers to student achievement

The question of student motivation and effort in AP classes is complicated. There are different socio-cultural contexts that explain individual student characteristics as perceived by educators. Instead of looking to these characteristics as reasons for low performance, schools could work collaboratively with district leadership, staff, students, and families to examine and eliminate barriers to student engagement and performance in AP classes.

Schools should take into account student and family voices when considering extra academic supports for AP students.

Many teachers mentioned that students in AP classes would benefit from extra academic supports. In addition, some teachers shared that some of these supports exist, and that only a small group of students regularly take advantage of these opportunities. Schools would benefit from engaging students and families in determining not only the most beneficial type of support, but also *when and how* to offer extra assistance. This would be helpful in offering more effective targeted supports that take into account the lived realities of students and families in Milwaukee.

Appendix - AP exams

Teachers were asked questions about the structure of AP exams, how they prepare students to take these exams, and how they feel about student performance. AP exams can vary between subjects in terms of organization and structure. While traditional classes have multiple choice questions and essay responses, called free response questions or FRQs, other exams like AP Art involve the submission of a portfolio. Writing styles can vary between classes, for instance one teacher shared that there is a different writing approach between AP Psychology and AP social studies courses.

Teachers prepare students for the AP exam in a variety of ways throughout the year. Most teachers shared that they provide previous practice tests, previous essay questions, or Free Response Questions to students. Many of the first semester exams, midterm exams, or final exams are structured to be similar to the AP exam, consisting of the same proportion of multiple choice and written sections. Many teachers shared that they timed the test as well, just as the AP exam is timed. As a result of these efforts one teacher stated,

"Every kid felt prepared and said, 'I knew the structure, I knew the words, nothing was a surprise.'"

Some departments collaborate together in providing practice exams to students. All AP English teachers in the district assign one writing test per semester and teachers work together to grade exams. Some teachers shared that they review the results of practice exams, sample tests, or past exams in depth with students in class. As one teacher stated,

"Lot of practice tests, essays breaking down the concepts. We look at examples of essays by the number they get. We break down the multiple choice test. We have them take a full practice test and then we go back over every section. It takes a lot of time but it's useful - I see the light bulb go on."

Teachers shared a variety of ways that they integrate test preparation into their classroom. These integration techniques included the following:

- Build up on the difficulty level of previous test questions throughout the year
- Have students write a shorter paper each week using the same writing structure for the AP exam
- Use google classroom for instant feedback to students for improvement

- Provide a review packet for each unit
- Assign all writing assignments with the AP style
- Conduct binder checks
- Hold students accountable to due dates
- Review relevant vocabulary
- Implement techniques to break down writing (learned in AP professional development)
- Allow students to do tests in small groups
- Focus on interpretation and analysis
- Provide prompts to start a writing section
- Grade notecards for every unit
- Use varied learning methods during classes (online games, note-taking forms, fishbowl discussions, flashcards, and small group discussions)
- (AP Art) Show work by previous artists to inspire students
- Model desired writing techniques: "I present my novel guide and then have them do it after they've seen me model it."

Other ways that teachers prepared students was through summer work, study sessions, tutoring, extra classes and test prep resources. Two teachers explicitly mentioned that they provide summer work to help prepare for the AP exam (others may assign summer work but did not mention it as a way to prepare students for the AP exam). Study sessions were held on Saturdays, after school, and before school. One teacher shared that they offered two extra classes each week before or after school second semester. Teachers provided and recommended AP test preparation guides, study books, and supplemental materials to help students prepare for the exam. Lastly, teachers shared that AP classes themselves have a higher level of rigor, provide homework daily or almost every day, and focus more on analysis and interpretation than non-AP classes. A few teachers shared feedback from students after they took the AP exam that indicated the benefits of higher rigor:

“(I) made exams tough: some students said the AP exam was easier than the in-class exam,” and

"They said it (the AP exam) was really hard but they thought it was going to be harder, so I think that's a good sign.”

Some teachers also shared their thoughts about student exam scores. A handful of teachers expressed pride in getting students to achieve a two on the exam.²³ Teachers stated that getting a two was still an accomplishment for students, even if it did not indicate a passed exam. At least one teacher openly shared that she was instructed that getting students to pass the exam should not be the end goal. These thoughts are reflected by one teacher,

"I was told 'don't think about getting them to pass the exam'. . . As juniors there were lots that had twos, which means they were close and could get there. I say to them 'A two says you're ready for college.'"

Another teacher shared that she aims for high exam scores, but still tells students that achieving a two is a positive result:

"I want the three. I want the five. . . I was the first AP teacher to get twos from students. I tell students if you have a two you're ready for college. If you have a three you're already at the college level."

A few teachers shared reflections on the struggle to balance more students experiencing AP while also keeping high expectations of the AP exam. One teacher shared,

"We are in a place where we want more kids to experience AP, but (we) also want them to be qualified. We don't want to water it down. We want them to pass the AP exam."

Another teacher directly discussed the connection between the number of students taking exams and the passing rates when he shared,

"(The) school has an issue with bragging about how many kids are taking AP exams, but not talking about how many are actually passing them. We need to teach accountability and responsibility. . . . The district could save money by not forcing kids to take ACT/AP exams when they aren't even close to being ready for it."

The majority of AP students took the exam with a few exceptions. Some students choose not to register or do not show up on exam day, and a few AP teachers shared that not all students were registered for the exam. As one teacher shared,

"(This year) 30 took it. We've set limits the last few years. It didn't make sense when 50-60 students were majority ones."²⁴

²³ The range of AP scores ranges from one to five. A three is considered a passing score.

²⁴ The scores on the AP exam range from one to five, with a three indicating a passing score."

Lastly, two teachers shared concerns on the testing environment where the AP exam is held. One teacher shared,

"They're in the cafeteria and there are lots of noises and distractions. There were particular problems with Spanish listening tests. The students need a consistently quiet place to take the test."

Another teacher connected the testing environment with administration support for AP, indicating that if the administration knew how rigorous the AP test is they might be more supportive in finding a quiet environment for the exam. Overall, teachers indicate that they are doing a number of things to help prepare AP exams, that most students take the AP exam itself, and that few students are predicted to do well on the AP exam.