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WR 13100

Professor Clauss

December 10, 2012

### For the Advancement of Advanced Placement

Situation: As a graduate of Margaretta High School, near Sandusky, Ohio, who found he was much unprepared for the academic difficulty of college, I am giving a speech to the Margaretta Local Schools Board of Education to present the advantages of the Advanced Placement (AP) program. Only four AP classes are currently taught at Margaretta High School, which I believe is an insufficient amount to adequately prepare a student for success in college. I hope to convince the Board of Education to offer more AP classes at Margaretta High School.

Good evening. I would first like to thank the Board members for giving me the opportunity to speak tonight. As Margaretta is a small community, I personally know most of you present. But for those with whom I am not familiar, my name is Derek ---, the son of Dr. ---. I graduated this past fall from Margaretta High School tied for 1<sup>st</sup> Place in my class. I am currently attending The University of Notre Dame. I began my education at Notre Dame with the intention of following in my father's footsteps and studying Pre-Med. But after only one semester of taking courses in the sciences, specifically chemistry, I found that I was very inadequately prepared for college level courses. Not only do the depth and difficulty of the material taught in these courses far exceed Margaretta High Schools' classes, but also the material is presented at a much faster pace. Quite frankly, I struggled to keep up. On the other hand, the majority of my peers were managing just fine. Through talking with many of my fellow students, I discovered that almost all of them had taken comparable courses in high school. Virtually all of them told me that they had attended a high school where ten or more Advanced Placement courses were offered. It seems that there is a significant correlation between participation in Advanced Placement courses and success in college. It is my firm belief

that offering more Advanced Placement courses at Margarettta would significantly help prepare our students to be successful in college.

Let me begin by first describing the AP program and then its presence at Margarettta High School. The College Board, the organization that administers the program, describes AP as a way to offer college level courses in the high school setting. Each AP class is intended to culminate in a comprehensive exam taken in May. If a student does well enough on these exams, they can potentially earn college credit, depending on their college's specific AP credit policy. Each AP exam is graded on a scale of 1 to 5. According to the College Board, a score of 5 represents "extremely well qualified", a 4 means "well qualified", a score of 3, which is typically considered the "passing score", represents "qualified", a 2 means "possibly qualified", and finally a 1 represents "no recommendation". Currently, the College Board offers AP classes and exams in 34 subjects.

Through a telephone interview with Mrs. Heather Lott, Margarettta High School's guidance counselor, I confirmed that at present Margarettta offers only four AP classes: Spanish, English Literature and Composition, Calculus AB, and United States History. In addition to these courses, Margarettta offers several classes that, despite being sponsored by the College Board, are not being taught at the AP level, such as: Chemistry, Biology, Physics, Psychology, Statistics, and Microeconomics. As you see, Margarettta fails to offer many classes at the AP level, especially in the sciences, even though there are opportunities readily available.

Now, I will discuss three separate studies, as well as my personal experiences, in order to demonstrate the advantages of the AP program. The first study, which was conducted by Dougherty, Mellor, and Jian, is entitled "The Relationship between Advanced Placement and College Graduation." This study used a sample of 54,556 students from an assortment of Texas

high schools (6). In short, this study strove to find if there really were a correlation between AP classes and college graduation rates. The test subjects were separated into four categories: those who had passed an AP exam, those who had taken an exam but did not pass, those who had taken an AP course but not an exam, and those who did not take an AP course or exam (7). Additionally, the subjects were also divided by their race and their household income levels. This study found that there was a positive correlation between the AP program and the graduation rates for all demographics studied (8). Because the Margareta community is primarily white and has many households that earn low incomes, I have found the statistics corresponding to those two demographics as the most important. White students who passed an AP exam were 33% more likely to graduate from college than those who did not take an AP exam or course. Even white students who took an AP class but not attempt to take the corresponding exam were 20% more likely to graduate (9). The statistics for low-income students, who were defined as accepting free or reduced lunches from their high school (9), were quite comparable to the results for white students. Only 7% percent of low-income students who did not take an AP class or exam eventually graduated from college. Whereas, 46% of those who passed an AP exam graduated, and 27% of those took an AP course but did not attempt an exam graduated from college (8). The findings of this study are especially relevant for Margareta because they demonstrate that even students who are disadvantaged financially can still significantly benefit from the AP program.

The second study that I will bring to your attention is entitled “High School Academic Curriculum and the Persistence Path through College.” This study was conducted by Horn, Kojaku, and Carroll, who all worked under the U.S. Department of Education’s National Center for Education Statistics. This study primarily looked at the correlation of the rigor of students’

high school curriculum and their likelihood to maintain a four year bachelor's degree track, specifically 3 years after enrollment. This study used only 3 definitions of high school curricula: Rigorous, Mid-level, and Core Curriculum or less. The study defined a Rigorous curriculum as "4 years of English, 4 years of Mathematics (including pre-Calculus or higher), 3 years of a Foreign Language, 3 years of a Social Study, 3 years of Science (including Biology, Chemistry, and Physics), and at least one AP class or test taken," (4). This study found that of those students who took a Rigorous high school curriculum, 78.1% of them had been continuously enrolled in a Bachelor's degree track 3 years after enrolling in college, while of those who had taken only the core curriculum or less only 54.6 were continuously enrolled (vi). These statistics help further my point that both AP classes and an emphasis on the sciences lead to greater success in college.

The third and final study that I will bring to your attention made two relevant findings that I plan to discuss. This study, conducted by Willingham and Morris, looked at the college performances of 4,814 students who matriculated into 9 academically elite colleges (6). This study considered a very long list of outside variables. For example, type of high school attended, parents' occupation and education, class rank, and SAT scores, were all noted in the study (7-9). The first relevant finding in this study deals with the grade average of students who took AP classes and exams compared to students who attempted neither an AP class nor an exam. In their first year of college studies, 59% of AP students maintained a B-average or better but only 37% of non-AP students matched this feat. Additionally, in their fourth year of studies, 72% of AP students maintained a B-average while only 52% of non-AP students could do the same (14). These numbers are important and relevant because they demonstrate that AP students not only begin college with an advantage, but also that they maintain this advantage throughout their time

in college. It is clear that offering more AP classes to our students would help them achieve high grade point averages throughout their years in college.

The second relevant finding from the study conducted by Willingham and Morris deals with the correlation between the AP subjects studied in high school by a given student and that student's pursued major in college. The study isolated six subject areas: English, History, Languages, Biology, Mathematics, and Physics/Chemistry. It was found that, for all the subjects listed previously, a student that took an AP exam and course in that specific subject was more likely to major in that subject area than students who did not participate in the AP program. This correlation was most significant in the sciences: Biology, Physics, and Chemistry. In this study, only 9% of all college seniors were majoring in Biology, but 30% of the seniors who took the AP Biology course and exam were found to be majoring in Biology. Similarly, only 4% of all college seniors were majoring in Physics or Chemistry, whereas 26% of those who participated in an AP class and exam in either Physics or Chemistry were found to be majoring in one of those subjects (26). These statistics are important because they support my argument that Margaretta should offer more AP classes in the sciences. Offering more such courses would give our students a realistic experience of what studying science actually entails, which would then help students decide if they find the sciences interest them enough to pursue or not.

In addition to these quantifiable statistical studies, my personal experiences are also quite relevant. While attending Margaretta, I pursued the most rigorous curriculum available, which included taking the four AP classes currently offered. Undoubtedly, the knowledge I gained in those courses has been invaluable in my short time in college. The subject that most clearly demonstrates this is Calculus. The AP course I took in Calculus familiarized me with the material discussed in the course and has allowed me to excel in the corresponding college course.

On almost a weekly basis, I have assisted several of my classmates who did take Calculus in high school. As I briefly mentioned earlier, I am unfortunately on the other side of this situation when it comes to Chemistry. As you are probably aware, Margaretta does offer a course in Chemistry, but it is not taught at or even near the AP level. Because of the speed at which the material is presented in a college style course, I have found it extremely difficult to keep up in Chemistry. My friends who are also taking Chemistry had to help me, usually step by step, so that I could finish each homework assignment. On top of that, my friends have scored significantly higher than me on each exam. I first believed that my friends were simply smarter or more capable students than I was. But after talking to several of them, I discovered that they had all attended high schools where ten or more AP classes were offered. Essentially, my friends were better at Chemistry because they had previously seen the material, meaning this course was mostly review for them. By adding AP courses in sciences like Chemistry, we could give our students a similar advantage going into college.

Not to be overlooked, the college credit aspect of the AP program has also helped me in a noticeable way. Though I took all four AP classes offered at Margaretta, the only exam I attempted was in US History. I was fortunate enough to earn a passing score and thus earn 3 hours of college credit at Notre Dame. Though this seems like a small advantage, it will later allow me to study a minor without having to overload my schedule at any time. If more of Margaretta's students were fortunate enough to pass exams, they could potentially study an additional minor or major, or they could even potentially graduate from college early. As Margaretta is typically a low-income area, this could save families significant money in tuition.

Of course, these arguments have their weaknesses. Most noticeably, the studies cited previously find correlations between the AP program and success in college; these studies do not

entirely prove *causative* relations. It could be argued that the AP program only appears to lead to college success because the majority of those who participate in the program have other advantages, such as attending high schools that focus on college preparation. But as the first study showed, even those coming from low income households were more likely to graduate college if they had previously taken AP classes in high school. It could be logically concluded that taking AP classes would lead to improved grade point averages and decreased drop-out rates, like demonstrated in the second and third studies, even for those coming from low income households.

Up to this point, I have primarily discussed the advantages of the AP program. Now, I hope to address some of the problems associated with starting more AP classes, and I plan to present a strategy to overcome these difficulties. Not surprisingly, the biggest problem with the AP program specific to Margareta is the cost associated with the implementation of AP courses. The two main costs being the textbooks required for AP level courses and the training of teachers who will lead the AP courses. Though training for teachers is highly recommended, it is not actually required by the College Board. If you, the Margareta Board of Education, did want Margareta's teachers to pursue training for these AP classes, Margareta High School could apply for an AP Fellows grant. These grants are intended to subsidize the cost of sending a teacher to a summer AP Institute. These week long institutes are intended to familiarize prospective AP teachers with the AP program and the way its courses are meant to be taught. In addition to paying for the training that the teachers of these AP classes will need, Margareta High School will also have to pay for textbooks and, in the case of the science courses, lab materials. Fortunately, the AP supports multiple textbooks for each of its courses. It would not be difficult to find a textbook for each subject that has a price similar to the non-AP textbooks that

Margaretta already purchases. Similarly, Margaretta High School already purchases lab materials. The school could focus spending money on the AP required lab materials instead of the non-AP lab materials. Currently, Margaretta High School purchases new textbooks and lab materials every several years. In order to offset the potentially high cost of starting AP classes, each AP class could be implemented only on the years where the Board of Education has previously planned to purchase new textbooks. Using this strategy, Margaretta could gradually add more AP classes without adding significant costs.

Considering the many statistics I have presented, the personal anecdotes I have mentioned, and the strategies I have suggested, I hope that I have convinced you that offering more AP classes at Margaretta is not only necessary, but also practicable. By investing more in our students, we will undoubtedly improve the lives of ours students and ultimately our community.



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