

## What We Do

At Challenge Success, we believe that our society has become too focused on grades, test scores and performance, leaving little time and energy for our kids to become resilient, successful, meaningful contributors for the 21st century. So every day, we provide families and schools with the practical research-based tools they need to raise healthy, motivated kids. Success, after all, is measured not at the end of the semester, but over the course of a lifetime.

The next generation will face global, economic, and social challenges that we cannot even imagine. What are the skills our children will need in this uncertain future? Above all else, they will need to be creative, collaborative, adaptable critical thinkers. Our current hyper-focus on grades, individual achievement and rote answers gets in the way of healthy emotional development and a real love of learning, and it also prevents students from acquiring the exact skills that the new global economy demands.

Founded by Madeline Levine, Jim Lobdell, and Denise Pope at Stanford University, Challenge Success offers research-based courses, conferences, and presentations for educators to develop school and classroom policies that encourage students to reach their individual potential, develop their talents and interests, and remain enthusiastic learners. We provide tools for parents to help children regain their balance, strengthen their sense of self, improve their physical health, and learn how to deal effectively with the inevitable challenges of life. For more information, visit our [website](#).

# CHALLENGE SUCCESS

2013

## The Advanced Placement Program: Living Up To Its Promise?

### Overview

The College Board's Advanced Placement (AP) program is considered by many to be the gold standard for a top-notch high school education, and it is often heralded as a powerful tool for achieving educational equity, but is it? This paper, based on extensive review of the literature, will consider:

Does taking AP classes make students more likely to succeed in college?

Does taking AP classes boost a student's chances of college admission?

Does taking AP classes make college more affordable?

Does the AP program help to narrow achievement gaps?

Does the AP program enrich students' high school experiences?

Are schools with an AP program better than those without?

We conclude by offering a series of recommendations for educators and students aimed at making the Advanced Placement program a net positive.

The College Board's Advanced Placement (AP) program, aimed at making college-level courses available to high school students, is considered by many to be the gold standard for a top-notch high school education and is often heralded as a powerful tool for achieving educational equity. Since its inception in 1955, and particularly over the past two decades, the AP program has expanded rapidly. Currently, the AP program offers 37 courses in a wide variety of subject areas including math, science, English, history, social sciences, art, and world languages. The College Board (2009) reported that from 2004 to 2009, the number of students taking AP courses rose by nearly 50%, reaching 1.6 million, and there is continued momentum to add additional courses, revise current offerings, and reach more students in more schools. The College Board and other proponents claim that the AP program can help students succeed in college, narrow the achievement gap, and level the playing field for traditionally underserved high schools and students.

Yet as it has grown, the AP program has become more controversial. Some worry that it has been oversold, distorted, and that real collateral damage is being wrought, straining schools, rewarding rigid, superficial memorization, and discouraging true intellectual curiosity in students.

What does the research show? Is there value to the AP program? Does the AP program do more harm or good? In this paper, we examine four common claims about the AP experience. Our discussion is rooted both in the history of the AP and in a careful review of over 20 research studies on the topic, including those presented by leading researchers in the comprehensive volume resulting from a 2007 research conference on the AP program at Harvard University (Sadler, Sonnert, Tai, & Klopfenstein, 2010). We conclude with suggestions for educators, parents, and students.

### **Claim #1: The AP program gives students several advantages in terms of college**

This claim is actually comprised of three separate points:

#### **1. Taking AP classes makes students more likely to succeed in college**

There is an ongoing debate between those who claim a direct relationship between participation in AP courses in high school and academic success at the college level, and those who don't believe there is a causal relationship. Champions of the AP program claim that students who take AP courses tend to earn better grades in college, work harder, take less time to graduate, and are generally more likely to succeed in college than are students who do not take AP classes.

In fact, several studies link high school AP experiences to college success and college completion (e.g., Morgan & Ramist, 1998;

## Four Common Claims about the AP Program

1

The AP program gives students several advantages in terms of college

2

The AP program helps to narrow achievement gaps

3

AP programs enrich students' high school experiences

4

Schools with AP programs are better than those without AP programs

Morgan & Maneckshana, 2000). However, a closer look at studies such as these reveals some potential problems with the notion of causality. Studies that simply establish that students who are involved with the AP program in high school perform better in college do not necessarily provide proof that the AP program *caused* the students to be successful in college. It should come as no surprise that the same motivated, hardworking, and advanced students who take AP classes in high school are still motivated, hardworking, successful students when they get to the university. So how can we know if it was the AP program that caused these students to do better in college?

Several researchers have raised this point and have posed credible critiques of the research that links AP experience to college success. For example, students who take AP courses often are a self-selecting group, and it may be that their personal characteristics allow for better college performance, regardless of having AP program experience or passing AP exams (Dougherty, Mellor, & Jian, 2006). Furthermore, students who have access to the AP program typically attend better-resourced schools in communities of higher socioeconomic status, and these students tend to perform better in college (Klopfenstein & Thomas, 2005). Moreover, AP courses tend to be taught by more advanced teachers (Paek, Braun, Ponte, Trapani, & Powers, 2010). If AP students are more successful in college, it could be attributable to any of these factors or a combination thereof. Studies that don't use research design or analytic methods to control for these many factors don't necessarily *prove* that AP participation predicts later college success.

In fact, because of these variables and the inherent challenges of designing effective studies to test the impact of the AP program, researchers are finding it extremely difficult to establish that AP participation alone has an impact on college success. Recent research on the topic has been somewhat equivocal. For example, in one large study (Hargrove, Godin & Dodd, 2008), researchers attempted to control for the background variables of

ability and socioeconomic status by matching students in the AP and non-AP groups based on SAT scores as well as their eligibility for participation in the free or reduced lunch program. Researchers measured college success in terms of first- and fourth-year college grade point averages and four-year graduation rates. Researchers found that students who took AP courses as well as AP exams did better in college and had higher graduation rates than did students with no AP experience, and better than students who took AP classes but didn't take AP exams. The students who took AP classes but not the exams also did better in college than did the students with no AP experience. Of particular note is that researchers in this study found that not only did students who passed AP exams do better in college than students with no AP experience, researchers found that even students who earned a failing grade of 2 on the AP exam did better in college as well.

In a different study (Dougherty, Mellor & Jian, 2006), researchers found that indeed students taking AP courses and passing the exams enjoy greater college success than non-AP students, but these researchers strongly cautioned that it wasn't possible to conclude that this proves causality. Even though they were able to control for some variables, including students' academic preparation in eighth grade and demographic characteristics of the students, the researchers stated that this was not enough to conclude the observed difference was due to the impact of the AP program alone. Rather, these researchers state, "We may be observing an overall effect of better student academic preparation. That is, high schools and school districts that do a better job of preparing students for college produce more students who take and pass AP exams and also produce more students who later graduate from college" (Dougherty & Mellor, 2010, p. 221). Further, their conclusions with regard to students failing the AP exam conflict with those from the aforementioned study. After controlling for demographic characteristics, as determined by students' eligibility for participation in the free or reduced lunch program, and academic preparation in eighth grade, these researchers

found that students (and particularly low-income students and students of color) who failed an AP exam were no more likely to graduate from college than were students who did not take an AP exam.

In other studies that attempted to control for background factors, the impact of the AP program on various measures of college success was found to be negligible. For instance, in a study of nearly 800 college students at the University of Tennessee at Martin, Duffy (2010) originally found that students who were awarded college credit through the AP program had greater persistence and better grades compared to other students. However, once background variables, such as family income and parental education were accounted for, these differences were no longer significant. Similarly, in a large study of over 81,000 students matriculating at the University of California over four consecutive years, Geiser and Santelices (2004) found that after controlling for academic and socioeconomic factors, there was no relationship between having taken AP courses in high school and students' freshman or sophomore grades. Klopfenstein and Thomas (2005) conducted a study with similar results.

Interestingly, we did find a few rigorous studies that demonstrate some benefits for students in the science fields. Sadler and Sonnert (2010) found that even after controlling for background factors such as academic ability, prior course history and performance, students who pass the AP exam in biology, chemistry, or physics earn significantly higher grades in that same subject in college than do students who did not pass the AP exam in these subject areas. In spite of this finding, Sadler and Sonnert caution that the advantage of passing an AP exam in the sciences was not so great that students didn't benefit by repeating the course in college.

Research by Tai, Liu, Almarode, and Fan (2010) reveals another finding with regard to AP enrollment. Even after taking into account relevant background variables, such as prior academic achievement, parental education,

and eighth grade career expectations, students who took an exam in AP calculus were more likely to earn degrees in physical science and engineering concentrations than were students who did not take any AP calculus exams, while students who took an exam in AP biology, chemistry, or physics were more likely to earn degrees in life science concentrations (as opposed to non-science concentrations) than were students who did not take any AP science exams. These findings aren't necessarily surprising: If students are interested enough in a subject to enroll in an AP course, they might be more likely to pursue a major in that field or a related area in college.

In conclusion, though somewhat challenging to parse, the research suggests that while AP students, especially those who pass the exams, experience more success in college than do those who did not take AP courses in high school, this success may not be attributable to the AP program alone. Though we found some rigorous studies that after controlling for certain variables showed positive results of the AP program, especially in the sciences, we believe more research needs to be done before we can verify the broad claim that taking AP classes makes students more likely to succeed in college.

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## **2. Taking AP classes boosts a student's chances of college admission**

As it was originally intended, the AP program was designed to provide advanced students with challenging college-level coursework that

could be used for purposes of college credit and placement, but it was not intended for purposes of college admission decisions. However, starting in the 1980s, information about AP enrollment began to seep into college admission decisions. According to a survey of deans at 264 colleges and universities, this was born out of the need – particularly at highly selective colleges and universities – to use AP exams as common forms of assessment to help distinguish among the multitudes of highly qualified applicants (National Research Council, 2002). This practice gained steady momentum, and according to a study of 539 colleges and universities in 2005, 91% considered AP experience in the admission process (Sathre & Blanco, 2006). However, the way this information is used in admission decisions varies from college to college. Some universities calculate students' high school grade point averages and give extra weight to AP courses, while others simply factor in the AP courses a given applicant has taken as part of an overall assessment of the application (Geiser & Santelices, 2004). College admission officers at more selective universities often tell future applicants to take a "challenging and rigorous course load" that includes honors and/or AP courses, but students are often left on their own to figure out exactly what that means, how many, and which courses to take.

Increasingly, researchers caution universities and policy makers that the practice of using AP experience for the purposes of admission is potentially problematic because, as previously discussed, the research isn't clear on whether AP experience alone increases the probability of college success (Klopfenstein & Thomas, 2010). Furthermore, they caution that it is problematic from an equity standpoint, as students from rural, small, or lower socioeconomic status schools tend to have less access to AP courses (Sadler, 2010; Geiser & Santelices, 2004). So, the claim that taking AP courses boosts a student's chances of college admission needs some qualification: it depends on the college.

### **3. Taking AP courses and exams makes college more affordable**

One of the arguments used to encourage AP enrollment is that it can make college more affordable for students by reducing the time it takes students to earn a degree. Earning college credit while still in high school and shortening the length of time it takes to earn a college degree holds a certain financial appeal to students and their families (MacVicar, 1988). Though we know of some cases where students have saved money due to AP credits in college, this tends to be the exception rather than the rule. Research shows that after controlling for background variables between AP and non-AP students, taking AP courses has very little impact on time to degree (Klopfenstein, 2010). In part, this is because colleges treat AP scores differently. For instance, while some colleges allow students to earn college credit with a passing exam score, others may advance students to the next level in a given subject but not award them any credit. Moreover, the very definition of a passing score varies from school to school, with a 3, 4, or 5 constituting a passing score at many schools and departments, while only a 4 or above is a passing score at others. For instance, in 2002, Harvard stopped awarding credit except for scores of 5, and recently, Dartmouth announced that it would stop awarding credit for AP courses altogether (Lewin, 2013). Another reason that the AP experience seldom results in less time to degree is because even among those students eligible to receive college credit, many opt to repeat the course (Sadler & Sonnert, 2010). Finally, it is rare that students pass enough AP exams to skip an entire semester or full year ahead, thus allowing them to graduate in three or three and a half years (Klopfenstein, 2008 & 2010).

#### **Claim #2: The AP program helps to narrow achievement gaps**

In recent years, the AP program has been hailed as a potential tool to narrow achievement gaps and promote educational equity for traditionally underserved students. In 2000, Gaston Caperton, president of the College Board, and Richard Riley, the

Secretary of Education, launched an initiative to expand the AP program, recommending that by 2010, every high school in the US offer ten AP courses. The expansion effort was purportedly fueled by the belief that the AP program could potentially level the playing field, raise expectations and standards, focus on college preparation for all students, and provide a common curriculum and means of assessment (College Board, 2000; U.S. Department of Education, 2000; Lichten, 2010).

Unfortunately, Lichten (2010) shows that many expansion efforts in inner city schools have been unsuccessful, with the bulk of students not earning passing scores on AP exams and with little indication that the introduction of AP courses into the schools has improved the quality of learning or caliber of education for students. This has played out in many cities including Jacksonville, FL; New York, NY; Detroit, MI; and Philadelphia, PA (Lichten, 2010). The most probable explanation for the lackluster results of expansion efforts such as these is that too often, the AP courses were introduced without the necessary attention to preparation and prerequisites. AP courses are intended to be college-level courses. As Dougherty and Mellor (2009) emphasize, simply putting AP programs in high schools and enrolling students is not going to work if students lack the academic background that is necessary to prepare them successfully to do college-level work.

In cases in which the AP program does appear to be instrumental in improving the quality of education students receive, the AP is but one part of a larger reform effort. For instance, as part of the Advanced Placement Initiative Program (APIP), a Texas based program that began in 1996, students receive extra tutoring and teachers receive professional development in conjunction with their participation in the AP program. Moreover, the program implemented curriculum changes in earlier grades to equip and prepare high school students for college-level AP coursework. The apparent success of this program resulted in its replication in several other states with grants from the National Math and Science Initiative. For instance, Mass Math

+ Science Initiative, the Massachusetts (MMSI) version of this program, has reported promising results (Mass Insight Education, 2012). Again, however, the AP program has not been implemented without other accompanying changes. Rather, the success of MMSI is likely the result of many changes and factors including clear goals and metrics, buy-in from the participating schools, awards, funding, extra instruction for students, and extra training for teachers.

To be fair, there may be some advantage to students who take an AP course but fail the exam (as noted in the Hargrove study above), but we maintain that using the AP program alone as a tool for narrowing the achievement gap is insufficient. If the AP program is to be used effectively to help make a difference in underserved schools, it will need to be part of a broader initiative that includes changes in professional development and the overall curricular sequence to better prepare students for college-level work.

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### **Claim #3: AP programs enrich students' high school experiences**

Proponents of the AP program claim that students enrolled in AP courses get to study a subject with greater intensity, depth, and perspective, often in a smaller class with more motivated students and more experienced teachers. When implemented well, this may indeed be the case. However, it is a mistake to assume that all AP students' high school experiences are enriched by the AP program.

One reason is that not all AP classes are the same. Though the College Board has an audit

process to check that course syllabi and materials meet the standards to be considered part of the AP program, and the Board strongly recommends professional development for AP teachers, there are no mandatory prerequisites to teach an AP course. This can lead to highly varied results. In general, teachers in AP classrooms tend to be more experienced (Finley, 1984). However, even among AP teachers, there is great variance, and students' classroom experiences and performances on the AP exams tend to depend on the quality of the teacher (Paek, Ponte, Sigel, Braun, & Powers, 2005; Milewski & Gillie, 2002). For instance, in a study of over 1,000 AP biology teachers, Paek et al. (2010) found that students with teachers who had more than three years of experience performed better than did students with teachers who had less experience. The same study also found that the amount of time teachers spend preparing students for the exam, or teaching to the test, varies widely, and that the students of teachers who spend less than 20% of their time the month prior to the exam prepping for the test fared the best and obtained the best results. This may surprise certain teachers, parents, and students who believe that more test prep will lead to higher test scores.

The practice of teaching to the test is a second reason some fear that the AP program may detract from students' high school experiences. Critics of the AP program worry that in many subjects, the AP curriculum and exam is too superficial and broad, and that the breadth of the curriculum requires and rewards rote memorization over mastery of the subject matter. Teachers may feel the need to teach to the test instead of focusing on critical thinking and a deep understanding of the concepts in the course (National Research Council, 2002). Critics worry that students in such classes may actually be at a disadvantage when they enter college classes where scientific inquiry is valued, and some college professors lament the fact that the AP program may cause them to lose potential stellar students in the field who were turned off to a subject by the cursory yet broad exposure they encountered during an AP class (National Research Council, 2002). In light of this criticism, the College Board is

revamping the AP curriculum and exam in certain subjects. Plans to redesign some of the subject areas began in 2001 after a committee from the National Research Council highlighted problems with the biology curriculum and test. The changes to biology were implemented in the 2012-13 school year. The goal of the new curriculum and exam is to place more emphasis on lab work and to more closely reflect what goes on in the college science classroom and the process of science and inquiry, including hypothesis testing, experimentation, and analytic reasoning as opposed to memorization. Changes to other science courses and exams, along with the US history curriculum and some world language courses, are also in the works.

Finally, not all students take AP courses for the same reasons. Many students take AP classes to pad their resumes and college applications, and are not necessarily interested in the subject matter or engaged with the course (Pope, 2001). Other students over-enroll in AP courses, taking several courses at a time (sometimes more than a typical college student might take). Since AP courses tend to have more homework and require extra studying for the exams, students may find themselves overloaded. For instance, in a Challenge Success study, students who took 5 or more AP or honors courses reported doing significantly more homework each night (on average, approximately 4 hours nightly), than those students who were taking fewer AP or honors courses (Challenge Success, 2011). And students handle the stress associated with more challenging courses differently. Researchers found that students who took one AP or honors course have similar levels of stress about academics as students who were taking multiple AP or honors courses (Challenge Success, 2011).

Other students take AP courses because they are motivated by extrinsic rewards in the form of financial incentives. Certainly exam fee exemptions for socioeconomically disadvantaged students make sense from an equity standpoint, and they have proven effective in increasing the number of students taking the AP exam (National Center for

Education Statistics, 2002; Jeong, 2009). However, some states and programs now offer financial incentives far beyond fee exemptions. For instance, as part of the previously mentioned APIP program in Texas, students and teachers receive cash incentives for passing AP exam scores (Jackson 2008). The research on the efficacy of performance-based financial incentives is equivocal. A 2009 study (Jeong) found that performance-based incentives were not effective in increasing the chances of passing AP exams scores and were in fact negatively associated with scoring well on the English literature, composition, and AB calculus exams. However, in contrast, Jackson (2012) found that such incentives were effective in increasing passing exam scores. One possible explanation for this discrepancy is that Jackson's research focused on the APIP program, where financial incentives are only one part of program; APIP also includes teacher training, additional student tutoring, and curriculum changes so that both teachers and students are better prepared for the college-level coursework. Without these other elements, it seems unlikely that paying unprepared students alone would result in an increase of passing scores.

For all of these reasons, we qualify the claim that the AP program enriches students' high school experiences: Some students may benefit from an engaging and challenging experience, while others may not. It depends on the teacher, the particular course and curriculum, and it depends on the students and their reasons for taking the courses, their overall workload, and how they handle the increased demands of a college-level class.

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#### **Claim #4: Schools with AP programs are better than those without AP programs**

There can be no doubt that many construe a school's AP offerings as an indicator of the school's quality. *Newsweek* compiles an annual list of top high schools across the nation (<http://www.thedailybeast.com/newsweek/features/2010/americas-best-high-schools/list.html>), and schools' AP course offerings are a key factor in determining which schools make this list.

When implemented thoughtfully and effectively, the AP program may benefit certain students and allow for common assessments across schools and districts. This may be a useful tool for colleges and outside evaluators in assessing school efficacy. However, the presence of an AP program in a high school is not necessarily a valid indicator of a school's quality. There are a number of reasons for this.

As noted above, AP courses and teachers can vary greatly from school to school. In some schools, students may get high grades in their AP courses, but many of these students are unable to pass the AP exams. In these cases, the value, content, and caliber of the course may be called into question. Perhaps the content of the course is so watered down, that the course itself is not deserving of an AP label? Or perhaps more scaffolding needs to be in place for the students or teachers to help them benefit from the AP experience? Or, as in the case of biology mentioned above, perhaps the course content and exam need to be revised to align better with college-level expectations and subject matter goals?

Additionally, while some students might benefit from an AP program, several researchers note some hidden or opportunity costs involved in administering an AP program. Klopfenstein and Thomas (2010) offer three significant ways in which non-AP students at a school may pay the price for the AP program: they may receive lower instructional quality, as the best teachers are siphoned off to teach AP students; they are in larger classes, as AP classes are smaller than typical high school



classes; and non-AP course offerings are reduced or limited in order to fund, staff, and expand AP course offerings. In these ways, the presence of the AP program may actually be a detriment to a school. In fact, some teachers and school staff worry so deeply about the negative impact of AP courses and feel so strongly that it thwarts their ability to develop deep thinkers and engaged learners, they've dropped their AP program in favor of home grown honors/advanced courses that are not affiliated with AP testing (e.g., <http://www.independentcurriculum.org/>).

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## What does Challenge Success think about the AP program?

In the best of circumstances, the AP program can enrich some students' high school studies and offer opportunities to take challenging college-level courses, with motivated classmates and highly skilled teachers. For certain students who would not otherwise have access to these kinds of college-level courses, the AP program may be particularly beneficial. However, definitive claims about the AP program and its impact on students and schools are difficult to substantiate. Some of the research about the AP program merely establishes correlation and not causation:

Students who do well on AP exams tend to do better in college and have higher graduation rates, but it is unclear whether this is a direct result of the AP program. Colleges and universities want the best, the brightest, and the hardest working students, and enrollment in AP courses may signal this. Yet each institution handles the AP experience differently, and increasingly, universities seem to be moving away from awarding credit for AP courses. Moreover, there are pros and cons involved for high schools that offer an AP program. The program might allow certain students opportunities for higher level work, yet it also can siphon off the best students and teachers and may reduce the quality of education for non-AP students, and in some cases, cause undue stress for students enrolled in the program.

In light of this equivocal information, the question remains: What should schools, teachers, parents, and students do with the AP program? Based on our review of the research and our own experiences working with schools and families, we urge educators to take a hard look at their schools' practices and policies around the AP program, and we suggest that parents and students reflect carefully upon their reasons for considering AP courses. We offer the following recommendations for making the Advanced Placement program a net positive.

## Suggestions for Students

- Before enrolling in an AP class, carefully consider your reasons for doing so. There are several good reasons to take an AP course: you are passionate about the subject; you want to be in a small rigorous class with motivated, engaged students and a highly knowledgeable, prepared teacher; and you are willing and prepared to put in the extra time and effort.
- Don't take AP courses just to get into college. While many elite colleges will expect applicants to have enrolled in rigorous and challenging courses, particularly in subject areas of interest to the student, AP enrollment alone will not guarantee your college admission. Moreover, taking AP courses and doing poorly because you are taking them for the wrong reasons or are not interested in the subject or are in over your head or are spread too thin will not reflect well upon you, nor will taking AP courses that cause undue stress, limit your ability to participate in other meaningful activities, or impact your ability to get enough sleep each night. It's best to enroll in AP courses only in areas that are of real interest to you and in which you are prepared and able to work hard.
- Do your homework ahead of time. Know that not all AP courses are the same, even within the same subject. In spite of the common curriculum, courses vary between schools and between teachers. Avail yourself of older or experienced students, guidance counselors, information nights, and teacher expertise. Gather as much information from them as possible so that you have realistic expectations about the course content, expectations, quality, and workload.
- Understand how colleges award credit for AP courses. Policies for awarding credit vary between colleges and universities and even within universities, between departments. Some colleges may award college credit for passing scores (though what constitutes a passing score varies between institutions); others may not award credit but will allow students to forego prerequisite courses; while others still may not even allow students to opt out of introductory level courses. Furthermore, many students feel that it is valuable to repeat coursework in college even if they took the equivalent AP courses in high school and earned passing scores on their AP exams.
- If you are enrolled in an AP course and it is not going well, get help. Perhaps you've just hit a difficult topic and you need a little extra support, or perhaps you are in over your head and need to find a way to get out of the course. Talk with your teachers, guidance counselors, and principals. They will be able to help you formulate the best strategy.
- If you are deeply interested in a subject but do not have AP courses available to you, explore other avenues. Look into your school's honors courses or find out if you can enroll in a course at a local college. If you take a rigorous, advanced course and are then interested in taking the AP exam, you may. Students can take AP exams even when they aren't enrolled in an official AP course.
- If you are interested in taking the AP exam but cannot afford it, do not be deterred. Financial assistance is available. Visit the [College Board website](http://CollegeBoard.org).

## Suggestions for Educators

- If you are considering implementing an AP program in your school, consider the level of readiness and preparation of all involved. Do students and teachers have the background and support necessary to succeed? Are students in an AP program likely to thrive without the program being too big of a drain on the non-AP students? Take a hard look at the potential costs: teachers will require ongoing professional development, non-AP students will likely be in larger classes, non-AP course offerings might be reduced, and non-AP students may have less access to the best teachers in the school. Think carefully about whether it might be a better allocation of resources to invest in improving all existing classes and working with teachers to differentiate instruction for all learners.
- Know that in places where the AP program is being effectively used as a tool for school reform and increasing student achievement, the AP is but one part of a larger reform effort. Effective programs such as the National Math + Science Initiative not only provide access to and encourage enrollment in AP courses, they provide many supports such as funding, teacher training, and student tutoring, which are all crucial to the program's success.
- If you are assessing an existing AP program in your school, pay attention to how many students are passing the AP exams. As noted in one study above, it isn't *necessarily* a bad thing if some students are earning scores of 1 or 2 on AP exams. Perhaps these students were still exposed to a level of rigor that they might otherwise not have been, or perhaps the program is new and the kinks are still getting worked out. We suggest if the majority of AP students are not able to earn passing grades on the exams, check both the rigor level of the course and whether the teachers and students are prepared for this type of course and assessment. Make sure that the course curriculum is adequate for cultivating a deep understanding of the subject matter. It might be that the curriculum is not well aligned with the test or with the needs of your students.
- Invite students (and their parents) interested in AP courses to attend an AP information session that provides an overview of your school's AP program, course requirements and expectations, and a discussion of the commitment involved. Teachers from each department should be available to answer questions and provide information including course syllabi, sample assignments, and any expectations for summer work. In an effort to make sure students have given serious and realistic thought to their obligations and time management, consider also requiring students to get permission/signatures from parents, counselors, and teachers for each AP course in which they wish to enroll. Download [our free scheduling tool](#) to help facilitate better course scheduling and time management.
- Establish an open enrollment policy, and make AP classes available to all students who have an interest in taking them, not just top-tier students. Students can benefit from the AP for various reasons including their passion for a topic, the need for a challenge, or the exposure to what it means to do college-level coursework. However, along with open enrollment, consider creating a safety net for students in serious academic trouble who may need to be re-assigned mid-semester, so that they have an option other than failure. Some schools have had success when they combine AP and non-AP sections together in one classroom, where AP students do supplemental reading, research, and writing and meet a few additional times to prepare for the test. This way all students may benefit from increased rigor and better teaching.

- Assuming your school has an effective process for course enrollment that includes consultation with teachers and guidance counselors, *and* assuming you also have a safety net in place that allows for course re-assignment midstream if students need to transfer out of AP courses, don't cap or limit the number of AP classes in which students are permitted to enroll. We have found that there is no magic number or formula for determining the optimal number of AP courses for students. As mentioned above, our research shows that stress levels in students are not necessarily correlated to the number of AP classes they take. Some students will be able to handle a few AP courses at once and the homework load that accompanies them; while others will be unduly stressed by taking only one AP course (Challenge Success, 2011). Rarely do we see students who can handle 4 or 5 AP courses at once who are still able to participate in extracurricular activities and get the sleep they need, but setting general caps may not work as well as helping each student find the right courses and challenge levels that will allow for optimal learning.
- Don't confuse AP rigor with load. We have seen several successful teachers who can curb the homework load in their AP courses without sacrificing test scores. Just because a course is rigorous and offers college-level work, does not mean that students need to complete hours and hours of homework each night to succeed. Students may benefit more from fewer assignments and a focus on deep understanding of concepts learned in class. Some teachers offer an AP course over two years instead of one, in order to make the load more manageable for students. For more on how to make homework more effective and meaningful, see our Challenge Success white paper, "[Changing the conversation about homework from quantity and achievement to quality and engagement.](#)"
- Whatever your school decides about its AP policies and offerings, make sure that the School Profile that accompanies every college application accurately reflects your school's policies and most current offerings so that colleges will know how to interpret a student's choices.

### **For Further Information**

Challenge Success offers parenting classes and professional development workshops specifically on improving curriculum and assessment, as well as other issues that concern parents and schools. Please consider making a donation to Challenge Success to support our work so that we can continue to keep you informed on improving school practices. For more information please visit us at our [website](#).

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