

THE VALUE OF TAKING AP BIOLOGY...

These are excerpts from a Jay Matthew's column in The Washington Post (11/23/2004)
<http://www.washingtonpost.com/wp-dyn/articles/A6900-2004Nov23.html>

Students who struggle in an AP course with its college-sized reading list and do not pass the college-level, three-hour final exam, are still much better off than if they did not take the course and the test. They have gained from the experience a visceral appreciation of what they are going to have to do to survive in college. That taste of academic challenge stays with them and helps them work hard enough to get their bachelor's degree.

A chart in the book "Do What Works: How Proven Practices Can Improve America's Public Schools," by Tom Luce and Lee Thompson give statistical proof that Advanced Placement (AP) courses lead to greater college success both for traditionally high achieving students and for disadvantaged students.

AP'S IMPACT ON TEXAS STUDENTS

Percent of Texas high school students receiving bachelor's degrees from Texas colleges and universities within five years of graduation:			
	Passed an AP Exam	Took, Did Not Pass AP Exam	Did Not Take AP
Anglo (47,647 students)	57%	43%	22%
Hispanic (19,868 students)	47%	26%	8%
African American (7,813 students)	42%	36%	11%
Low-Income (22,028 students)	40%	24%	7%
Total (78,079 students)	57%	37%	17%

Source: National Center for Educational Accountability

The left column in the chart, under "Passed an AP exam," is the easiest to understand. Those students showed academic talent in high school and have degree completion rates above the national average for five years after high school graduation. The exciting parts of the chart are the middle and right columns, under "Took, But Did Not Pass" an AP exam and "Did Not Take" an AP exam. Students who did not take AP in high school showed little success in college. That was not very startling. But look at the college completion percentages of students who took but did not pass an AP exam. They still substantially increased their chances of college success. Anglos who flunked an AP exam were twice as likely to get their degrees as Anglos who never took one. Hispanics, African American and low-income students were three times as likely to get their degrees if they at least tried AP. A 1999 U.S. Education Department study reported similar results from an analysis of 8,700 students.

ADVANCED PLACEMENT AS A POSITIVE OUTCOME FOR ALL STUDENTS

The following is a reprint of an article by Kathleen Plato published by New Horizons for Learning <http://www.newhorizons.org/spneeds/inclusion/teaching/plato.htm>

If anyone can think of an academic program in the last decade that has had as positive an impact on American public high schools as AP, I would like to hear what it is. I can't think of any that comes even close.

— Jay Mathews, "Advanced Placement" Education Week, Aug. 7, 2002, pg 68.

Jay Mathews is education reporter for The Washington Post and author of *Class Struggle: What is wrong (and Right) About America's Best Public High Schools*. He knows a lot about Advanced Placement (AP) and change in the American High School. In the early 1990s he was the first reporter to write about teacher Jaime Escalante and the amazing change that took place at Garfield High School in Los Angeles as high numbers of low-income and minority students took and passed advanced placement calculus. The public learned of that story in the popular movie, *Stand and Deliver*. Mathews continued to study and report on the tremendous growth in AP nationally as high schools worked on reform issues to better prepare students for competitive colleges and universities. Six years ago he invented a simple way of measuring AP participation in every high school called the Mathews Challenge Index. The Index is the number of AP exams taken divided by the number of graduating seniors. The Index is the basis for Newsweek magazine's 100 Top High Schools list, published each year and posted on The Post's website.

What is Advanced Placement?

Advanced Placement courses are college-level courses offered in high schools across the nation. The 34 different subject matter courses are standardized by the College Board. Passing the accompanying examinations may result in advanced placement or college credit. AP and advanced placement courses offered by the International Baccalaureate (IB) Organization are considered the most rigorous classes in U.S. high schools today. In May of 2003, over 1.5 million AP examinations were taken in the nation, twice the number since 1994. In Washington State, 28,378 examinations were taken, quadruple the exams taken in that same time period. Even more heartening is that fact that participation for low-income and underrepresented minority students is increasing at a steady pace.

What has sparked this tremendous growth in AP? Why are AP and IB programs ranked high on the list of reform factors transforming high schools across the nation? What positive outcomes result for all students as these programs are made available at a growing number of high schools? This article responds to these questions and presents the research and factors that support the argument for this powerful program.

AP is a Predictor of College Success

In 1999, a U.S. Department of Education study by Clifford Adelman titled "Answers in the Tool Box" examined the factors which could be used to predict college success — the attainment of the Bachelor's degree. Adelman was not examining factors that supported college admission; his research was focused on college completion. The study concluded, "No matter how one divides the universe of students... a high school curriculum of high academic intensity and quality is the factor that contributes to a student's likelihood of completing a college degree." Courses such as AP and IB outranked, grade point, class rank, SAT scores as contributing factor. Furthermore, rigorous high school courses were shown to mitigate the effects of socioeconomic status. Just one AP course exposes a student to college-level work. Even if the

examination is not taken or passed, the challenge of the course and the emphasis on critical thinking, study skills and increased content knowledge prepares a student for college work.

AP as an Equity Issue

Colleges and universities look for AP and IB on a student's transcript for this very reason. AP and IB are college level courses. AP courses and examinations represent a national standard of teaching and learning. An AP Calculus course in Olympia, Washington follows the same outline and covers areas in the same depth as one offered in Tampa, Florida or New York City. Students in these cities would be taking the exact same examination on the same day in May. Taking AP presents a challenge to students but is proven advantage in the highly competitive admissions process. Not offering AP or IB can potentially place a high school's graduates at a disadvantage at competitive institutions.

In California, this issue became the basis of a 1999 lawsuit. The American Civil Liberties Union filed a class action lawsuit on behalf of public school students who were being denied access to advanced placement courses. The state was challenged for not supporting the development of AP in all areas of the state. This resulted in a significant state funded initiative supporting AP in all high schools regardless of the socioeconomic status of the community and students. At about this same time, major federal initiatives such as the AP/IB fee reduction program for low-income students and the Advanced Placement Incentive Program aimed at schools with 40 and above percent poverty levels efforts have had a major impact on the development of new AP and IB programs in even the smallest, most rural communities with high poverty concentrations. Increased access gives greater numbers of underrepresented students the opportunity to meet the AP challenge and reap the benefits.

Advanced Placement Prompts Curriculum Reform and Alignment

The education reform movement in America in the early 1990s centered on the development of standards and performance-based assessments. Virtually all states took on the task of "ratcheting up" and systematizing what students need to know and do at various grade levels and by subject. In addition some states added provisions to their reform legislation to move toward a "seamless" system of education from Kindergarten through college. Since then, the state standard movement is firmly in place, however, in many states the "seamless" system development has been hindered by conflicts between different governance systems for K-12 and various higher education options. Advanced Placement as one of several "dual credit" type options for students is that is greatly aiding this effort by bridging the gap between college and high school systems without the controversial transferring of funding out of one educational system to another.

Advanced Placement has existed since the 1960s. Over the last forty plus years, the same process for course and examination development has taken place. The College Board brings together subject matter experts from universities and secondary schools across the country. The result is coursework offered in the high school setting that is considered to be "college-level". To bring students to this level, high schools and middle schools engage in curriculum alignment through the formation of "vertical teams" by subject area, of teachers in the grades 6 through the high school grade when the AP course is taught.

In addition, some systems implement "pre-AP" courses which are those courses that prepare students at the middle level with the study skills, critical thinking skills and the increased content knowledge necessary for AP. As the process of linking the college-level standards and expectations to the grade levels below becomes established and merges with the efforts to implement the state performance standards, teaching and learning improves and all students, not just AP course and exam takers benefit.

Dan Newell, Principal of Blaine High School in Blaine Washington, sums it up this way, “It (Advanced Placement) was the most influential thing I have ever done as far as putting a new level of enthusiasm in my building and adding incredible strength to an already strong, small school schedule.”

In summary, the tremendous growth of Advanced Placement and the International Baccalaureate programs in Washington State and the nation is having a powerful effect on our education system in general and providing positive outcomes for all students. Due to AP participation, Washington State’s Bellevue school district had three of its high schools make the top 20 on Newsweek magazine’s 100 Top High Schools list this past year, and was featured on the cover and as the lead story in the June 2, 2003 edition of Newsweek. Increased numbers of students are prepared for college-level work and success, high expectations and achievement levels are being reached as more low-income and minority students take on the most rigorous courses, closing the achievement gap, and our overall education system is being strengthened as middle and high school are being reformed and imbedded with a culture of academic achievement and high expectations.

About the author:

Dr. Kathleen Plato Ph.D. is Supervisor, Advanced Placement Programs at the Washington State Office of Superintendent of Public Instruction. She has been with the state education agency for 24 years in a variety of program, policy and evaluation positions. Her areas of expertise are education research, evaluation and large-scale program management. Dr. Plato has served as principal investigator; advisor and project director for many U.S. Department of Education funded studies. Currently, she manages the Advanced Placement and International Baccalaureate Fee Reduction programs and will serve as Project Director for the newly received, federally- funded Advanced Placement Incentive Grant. The Washington State project, one of twenty-two funded nationally, will focus on increasing Pre-AP and AP classes in schools with high percentages of low-income students. She presents frequently on the topic of equity and access to AP to state policy boards and at state and national conferences. Dr. Plato is a former President of the Washington Education Research Association. Email: KPlato@ospi.wednet.edu