

## Anniversary Reflections: AP and IB at Princeton High School

Tim Dugan

An anniversary is a good time to reflect on the past. This year, International Baccalaureate (IB) North America celebrates its 30<sup>th</sup> year in the IB world, and Princeton High School in Cincinnati, Ohio, celebrates 20 years of involvement with the International Baccalaureate Diploma Programme. Princeton held its initial IB exams in May 1985. Our first diploma candidates graduated in May 1986.

In 1988, I completed a five-year analysis showing the short-term effects of the implementation of the IB on the Advanced Placement (AP) enrollment and total academic success for advanced students. I have taken the occasion of our 20<sup>th</sup> anniversary to re-examine the overall effects of IB and AP programs on our school. I served as Princeton High School's IB coordinator from 1984 to 1992. In 2002, I became the Advanced Studies coordinator, with responsibilities for both the AP and IB programs. These two positions have given me a unique opportunity to observe and analyze two areas that are of concern to many in the IB world. First, what are the short-term effects of implementing the IB curriculum in a school that already offers AP courses? Second, how do these programs co-exist successfully?

Princeton High School is a large and comprehensive public high school. It has maintained a student population between 2,100 and 2,400 for the last 25 years. The demographics of the high school have shifted, although not radically. The African-American student population has increased from 42% to approximately 53%, while the Hispanic population has increased from less than 1% to 4%. With a wide range of socio-economic levels present, Princeton has approximately 45% of its population eligible for free or reduced lunches.

As a result of the implementation of the IB Diploma Programme, there is an increase in the number of international students. There are at least 55 different nationalities represented at Princeton High School.

As a public high school, Princeton places no barriers to enrollment in either advanced studies program (other than pre-requisite preparatory courses). Students select AP or IB based on their own goals. Princeton also underwrites the entire cost to students for the exams in

both programs.

In 1984, before the IB was implemented, Princeton High School offered only two Advanced Placement courses: AP United States history taken by students in their junior year and AP English literature taken by students in their senior year. Enrollment in those courses was approximately 42 each year, with virtually the same students taking both courses. The AP exam was not a requirement of the course, so comparing exam marks is problematic. However, in 1984, 42 students enrolled in AP English, and of those, 29 took the AP exam, with 15 receiving a passing score (three or higher out of five). As measured against enrollment, this is a passing rate of 36%. In AP US history, 42 were enrolled, 18 took the exam and 13 passed; as measured against enrollment, this is a passing rate of 31%. Of the 1984 graduating class, approximately 42 students enrolled in two AP courses, with fewer than 40% of those enrolled passing the corresponding exam.

Fast forward to 2004. In 20 years, Advanced Studies at Princeton High School have changed significantly. In May of 2004, 229 students sat for 402 AP or IB exams. Approximately 80 sophomores, 70 juniors and 67 seniors took either an AP or IB exam. Of these 67 seniors, 237 exams were taken in their three years (with an average of three to four exams per student) with exam marks higher than in 1984 (94% received a mark of four or higher on their IB exam; 59% received a mark of three or higher on their AP exam). Please note students are now required to take the AP and/or IB exam for the course. Therefore, the passing rate is a percentage of those enrolled.

Of the graduating class of 2004, approximately 25% took at least one AP exam at some time during their high school career at Princeton. This number is more sig-

nificant than it may seem, as the most recent research by the Department of Education indicates. In 1999, a U.S. Department of Education study by Clifford Adelman, titled *Answers in the Tool Box*, examined the factors that could be used to predict college success, seen as the attainment of the Bachelor's degree. Adelman's research focused on college completion. He 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" (1999). Courses such as AP and IB outranked grade point, class rank and SAT scores as contributing factor. Furthermore, rigorous high school courses were shown to mitigate the effects of socio-economic 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.

Based on the Adelman study, improving enrollment without improving test scores is a positive for students. The goal for Advanced Studies at Princeton High School is that we continue to increase enrollment, while not adversely affecting performance. True to this goal, we have increased enrollment in all advanced programs (AP and IB) by over 400%, while still raising the percentage of those passing to 68% (AP: 272 / IB: 402). As presented in Tables A, B and C, the 2004 numbers are not an anomaly. Rather, they are part of a longer-term trend. The student scores on AP and IB exams over a five-year period show that the percentage rates have stayed constant.

Overall scores combining both programs show a consistent trend toward both goals, including increased enrollment and improved scores.

Other factors are also important when evaluating curricular programs at a large comprehensive high school. As highlighted in the U.S. federal *No Child Left Behind* legislation, any program must serve all students. For this reason, it is important to include ethnic and cultural information on our enrollment. In 1984 there were few, if any, minority students registered in the AP classes. Minorities reflected less than 5% of the AP course enrollment in any year. Today, the total minority enrollment in our advanced studies programs is approximately 37%. In just the AP and IB courses, minority enrollment is 33%. We see this increase continuing in the lower levels. Ninth grade minority enrollment is 45%. These numbers indicate that in areas of increasing African American and Hispanic enrollment in this district, progressively more minority students are enrolled in Honors classes.

There is convincing evidence that the AP courses and the IB program can co-exist. In fact, at Princeton, it appears the competition for students and the availability of different courses was a net gain for both programs. Even with significant increases in general enrollment, overall scores have improved. The enrollment numbers and scores in both the IB and AP courses show significant gains over the last two decades. Clearly the Advanced Studies program is stronger with a greater number of students enrolled in AP and IB courses and obtaining college credit for their scores. We continue to encourage enrollment at the earlier levels in order to increase the number of students prepared for these challenging programs. We will continue to offer both AP courses and the IB Diploma Programme for all of our students.

*Tim Dugan is the Advanced Studies Coordinator for AP and IB at Princeton High School.*

**Table A**

AP Totals	2000	2001	2002	2003	2004	Totals	Percentage
5	9	19	24	19	12	83	6.8%
4	31	26	41	29	47	174	14.3%
3	65	68	74	85	82	374	30.6%
2	72	81	76	95	59	383	31.4%
1	30	40	42	54	41	207	17.0%
Total Exams	207	234	257	282	241	1221	
% Passed (>=3)	51%	48%	54%	47%	59%	52%	
Total Students	147	187	213	190	197	747	

**Table B**

IB Totals	2000	2001	2002	2003	2004	Totals
7	5	8	7	13	33	6%
6	33	32	12	28	105	20%
5	59	34	35	64	192	37%
4	48	32	32	45	157	30%
3	7	3	5	10	25	5%
2		2	1	1	4	1%
1		1			1	0%
Total Examined	152	112	92	161	517	
%Passed (>=4)	95%	95%	93%	93%	94%	

**Table C**

Year	2001	2002	2003	2004
Total All Exams	385	369	374	402
Total Passing	276	345	319	372
% Passing	72%	66%	59%	68%

*Reference*

Adelman, C. (1999). *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, DC: OERI, U.S. Dept. of Education. (ERIC Document Reproduction Service No. ED 431 363)