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December 2008 Report No. 08-70

# Student Participation in Acceleration Programs Has Increased; Legislature Has Taken Steps to Reduce Program Costs

## at a glance

A growing number of Florida's high school students are taking advantage acceleration courses and programs. Compared to the 2002 high school graduates examined in our prior report, a larger percentage of 2007 graduates participated in at least one acceleration course. Most of this growth resulted from a large increase in the number of students taking Advanced Placement courses. While more high school students are participating in Advanced Placement courses, the percentage of these students qualifying for college credit has decreased slightly since 2002.

Acceleration programs relatively are expensive to provide at high schools and the state's costs of generating college credit hours through these programs exceeds the cost of providing comparable courses at postsecondary institutions. Consistent with prior recommendations, the 2008 Legislature took steps to address this issue and control program costs by reducing the rate of incentive funding for accelerated programs. This change should save the state \$34 million.

# Scope -

In accordance with state law, this progress report informs the Legislature of the actions taken in regard to a series of OPPAGA reports published in 2006 on high school acceleration programs. <sup>1</sup> The report also compares 2002 student participation and performance in acceleration programs to a 2007 cohort of high school graduates.

# **Background**

Florida has established several programs to enable high school students to take accelerated courses in order to broaden their curricular options, increase their depth of study in particular subject areas, and reduce the time it takes to earn a college degree. <sup>2</sup> Students who pass these courses and exams are eligible to earn college credit that may be used toward degree requirements. Acceleration programs can benefit both students and the state. The programs provide students with broader curricular offerings and more in-depth study. The programs also can reduce state costs of higher education and free classroom space for other students. There are five categories of acceleration programs.

<sup>&</sup>lt;sup>1</sup> Acceleration Programs Provide Benefits But the Costs Are Relatively Expensive, OPPAGA Report No. 06-24, March 2006; Most Acceleration Students Perform Well, But Outcomes Vary by Program Type, OPPAGA Report No. 06-25, March 2006; Most Students Receive College Credit for Accelerated Courses; Programs Reduce University Class Time, OPPAGA Report No. 06-26, March 2006; and State's High School Acceleration Programs Are Funded Through a Variety of Sources, OPPAGA Report No. 06-27, March 2006.

<sup>&</sup>lt;sup>2</sup> Section 1007.27(1), F.S.

**Advanced Placement (AP).** Offered in 55 Florida school districts, advanced placement courses prepare students to pass national subject matter exams. <sup>3,4</sup> Students who earn requisite test scores on AP exams at the end of the year are eligible to receive college credit (students may also take these exams without enrolling in AP courses). In Fiscal Year 2007-08, 129,779 Florida high school students were enrolled in AP courses.

**Dual enrollment.** Each of Florida's 67 school districts have partnered with colleges and universities to allow high school students to simultaneously take and earn credit for high school and college courses without having to pay college tuition. To participate in dual enrollment courses, students must maintain a 3.0 grade point average to enroll in college credit courses or a 2.0 grade point average to enroll in career education courses, and pass the Common Placement Test (CPT). <sup>5</sup> Students must then pass the course with a C or better to earn college credit. In Fiscal Year 2007-08, 35,323 Florida high school students took dual enrollment courses. <sup>6</sup>

International Baccalaureate (IB). Available in 27 school districts, high schools offering the IB program provide an intensive two-year curriculum that allows students to earn an IB diploma in addition to their high school diploma. The curriculum is designed to enable students to meet various university entrance international standards. Students participate in the IB program at authorized schools and earn high school credits based on related coursework. Students who take an IB course examination at the end of the school year are also eligible to receive college credit. (These students may also opt to take AP exams in addition to IB exams but may earn the same college credit.) In Fiscal Year 2007-08, 9,802 Florida high school students were enrolled in IB courses.

Advanced International Certificate of Education (AICE). The AICE program was recognized as a state-funded acceleration program by the 2002 Legislature. Offered in 14 school districts, the program provides accelerated courses to academically able students in grades 11 and 12. The coursework is based on an internationally developed curriculum. Students who take an AICE course examination at the end of the school year are also eligible to receive college credit. In Fiscal Year 2007-08, 2,171 Florida high school students enrolled in AICE courses.

**Other types of acceleration programs.** Unlike the other acceleration programs, the College-Level Examination Program (CLEP) and other credit by exam programs are administered by postsecondary institutions and are not offered in high schools. These testing programs enable students to take a college-level exam and earn credit hours in certain subject areas. In Fiscal Year 2007-08, 10,807 students took 12,681 CLEP tests at Florida test centers. <sup>8</sup>

## Program funding

Funding for high school acceleration programs is allocated to school districts through the Florida Education Finance Program (FEFP). Students who enroll in these courses are included in their school districts' full-time equivalent (FTE) student count. In addition to basic student funding, the Legislature also provides incentive funding to school districts for students passing AP, IB, and AICE exams. Districts may use these incentive funds to pay for the AP, IB, and AICE exam fees. Incentive funds are also used to pay teacher bonuses. In addition, students who participate in dual enrollment programs with Florida's community colleges and universities also are included in the community college or universities' FTE count for funding purposes; these students are not required to pay college tuition for the courses.

<sup>&</sup>lt;sup>3</sup> Advanced placement courses are offered in 22 subject areas, including calculus, American history, biology, economics, and several languages. In addition, Florida students in all districts have access to AP courses through Florida Virtual School.

<sup>&</sup>lt;sup>4</sup> Advanced Placement course curricula are developed by the AP Development Committee (by subject field) composed of both university faculty and experienced high school AP teachers.

<sup>&</sup>lt;sup>5</sup> Section 1007.271, F.S.

<sup>&</sup>lt;sup>6</sup> In 2007-08, 33,112 high school students were dually enrolled at community colleges and 2,211 students were dually enrolled at state universities.

Other exam based programs include DANTES (Defense Activity for Non-Traditional Education Support) Subject Standardized Tests (for military service members) and Excelsior Exams which are developed by Excelsior College using national committees of faculty consultants.

<sup>8</sup> CLEP test takers include out-of-state students and students attending private institutions.

## **Current Status -**

A growing number of Florida's high school students are taking advantage of acceleration courses and programs. Compared to the 2002 high school graduates examined in our prior report, a larger percentage of recent graduates have participated in at least one acceleration course. Most of this growth is attributable to a large increase in the number of students taking AP courses, as participation in IB and dual enrollment programs has remained stable or declined. However, while more high school students are participating in AP courses, the percentage of these students qualifying for college credit has decreased slightly since 2002.

Greater participation in acceleration programs indicates that more students are completing academically rigorous coursework while in high school and are potentially more prepared for postsecondary coursework. While beneficial, increased participation can also be costly to the state. Our prior reports noted that AP and IB programs are relatively expensive to provide at high schools, and the state's costs of generating college credit hours through these programs exceeded the cost of providing comparable courses at postsecondary institutions. Consistent with our prior recommendations, the 2008 Legislature took steps to address this issue and control program costs by reducing incentive funding for accelerated programs.

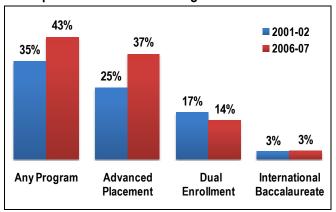
# Student participation in acceleration programs has increased significantly over the last five years

An increasing number of Florida's high school students have taken advantage of acceleration programs. Our prior reports noted that 40,469 of Florida's 116,873 high school graduates (35%) participated in at least one acceleration course in 2002. By 2007, the number of high school graduates participating in acceleration programs had increased to more than 40%. In that year, 57,932 high school

graduates (43%) had participated in an acceleration program. This increase is significant because it indicates that more students are completing academically rigorous coursework while in high school and are potentially more prepared for postsecondary coursework. See Appendix A for information on participation rates by district.

Student participation in AP courses has grown significantly, while participation in dual enrollment programs has declined. Our prior reviews noted that students who participate in accelerated courses most frequently enrolled in AP courses. enrollment pattern has continued and most of the growth in acceleration programs has resulted from a large increase in the number of students taking AP courses. As shown in Exhibit 1, the percentage of high school graduates taking an AP course increased from 25% in 2002 to 37% in 2007. In contrast, the percentage of graduates taking a dual enrollment course decreased from 17% to 14%, and the percentage of graduates participating in the IB program remained stable. Nearly a fourth (24%) of the 2007 graduates in acceleration programs took more than one type of acceleration course, the same pattern found by our prior reports.

Exhibit 1
A Larger Percentage of 2007 High School Graduates
Participated in Accelerated Programs



Source: OPPAGA analysis of Florida Department of Education high school course information.

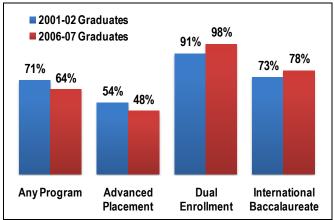
# The percentage of students in acceleration programs who qualify for college credit has decreased slightly in recent years

While an increasing number of high school graduates are participating in accelerated programs, the percentage of these students qualifying for college credit has decreased slightly since 2002. Our prior reports found that most (71%) of the 2002 high school graduates participating in acceleration programs passed the required examinations and/or achieved the specified course grades needed to qualify for college credit. In 2007, the overall success rate for students in acceleration programs had dropped to 64%.

Advanced **Placement** success rates decreased over time. Success rates varied by program type, with much higher percentages of students in IB or dual enrollment courses qualifying for college credit than students completing AP courses. This is similar to the pattern noted by our prior reports. As shown in Exhibit 2, the differences in success rates among the acceleration programs have widened in recent Specifically, the percentage of high years. school graduates taking and passing required examinations for AP courses has declined from 54% in 2002 to 48% in 2007. In contrast, the success rate for students in dual enrollment courses has increased from 91% to 98%, and the rate for students in IB programs has also increased from 73% to 78%. <sup>10</sup> See Appendix B for a more detailed comparison of the eligibility rates.

The changes in success rates for acceleration courses may be linked to the changes in participation rates for the programs. For example, the declining success rate for students taking AP exams is likely due to the significant increase in the number and the types of students completing these courses in recent years. As a result, less academically advanced students may be attempting AP exams than in previous years. Conversely, the increased success rate for dual enrollment courses may reflect the decrease in the number of students attempting these courses.

Exhibit 2
A Smaller Percentage of Recent High School Students in Accelerated Programs Qualified for College Credit



Source: OPPAGA analysis of Florida Department of Education high school course information.

# More recent high school graduates with accelerated credit enrolled in a Florida public postsecondary institution

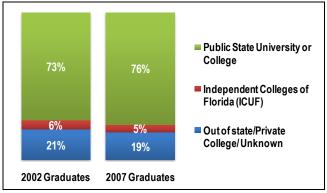
While a declining percentage of students in acceleration programs are qualifying for college credit, those students who do qualify are subsequently enrolling in a Florida postsecondary institution at an increased rate. Our prior report found that 73% of the 2002 high school graduates who were eligible to receive college credit from accelerated programs subsequently enrolled at a Florida community college or state university.

<sup>&</sup>lt;sup>9</sup> Students must score a 3 or higher on an AP exam and a 4 or higher on an IB exam to be eligible for college credit. Students must pass the dual enrollment course to receive college credit.

Our 2006 study reported that 91% of students participating in dual enrollment in 2001-02 earned high school credit. In order to compare eligibility rates across programs for the 2007 graduates, we used a slightly different methodology. We reviewed all 2007 students who earned high school credit for dual enrollment courses to determine if they would be eligible to receive college credit based on earning a grade of C or better in the course. For the 2007 graduates, 98.6% of students (18,154 of 18,417) who took dual enrollment courses earned high school credit and 98% of these students (17,818 of 18,154) earned a grade of C or better in at least one dual enrollment course.

In 2007, the percentage of graduates attending Florida institutions had increased slightly to 76% (see Exhibit 3). This increase is potentially beneficial to the state if postsecondary institutions are awarding these students appropriate credit and if the students are electing to use this credit to expedite their degree.

Exhibit 3 A Higher Percentage of 2007 Graduates Eligible for College Credit Attended a State University or College



Source: OPPAGA analysis of State University, State College, and ICUF enrollment information.

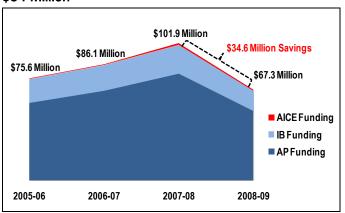
# The Legislature has taken steps to control the costs of acceleration programs

Our prior reports noted that acceleration programs were relatively expensive to provide at high schools. We concluded that Florida's incentive funding levels for AP and IB courses exceeded the cost of providing the college-level courses at postsecondary institutions. We also noted that state incentive funding for these programs had increased substantially over the years as a result of rising participation rates.

The 2008 Legislature took steps to address this problem and to control the costs of accelerated programs. Specifically the Legislature modified s. 1011.62, *Florida Statutes*, to reduce the amount of incentive funding that school districts receive for each AP, IB, and AICE exam passed by high school students. As shown in Exhibit 4, this change is projected to reduce the total amount of incentive funding for the three programs from \$102 million in Fiscal Year 2007-08 to \$67 million in Fiscal Year 2008-09, a savings of approximately \$34 million. Since this is the first year of the new incentive funding rates, it is unknown if these reductions will effect participation in the programs.

An upcoming report will provide additional options to modify the incentive funding provided.

Exhibit 4
Legislative Changes to the Incentive Funding Formula for Acceleration Programs Will Save an Estimated \$34 Million



Note: The 2008-09 incentive funding total is estimated based on the second FEFP calculation. This is the best estimate available at the time of publication.

Source: Florida Department of Education, Florida Education Finance Program (FEFP) calculation.

## Appendix A

# Student Participation in Acceleration Programs Varies by School District

Student participation in acceleration programs varies by school district across the state. The following table provides total participation data for the state's 2006-07 high school graduates in acceleration programs as well as a breakdown of participation for each program.

		Students Attempting High School Credit Through Accelerated Coursework							
District	2006-2007 Graduates	Any Type		Dual Enrollment		Advanced Placement		International Baccalaureate	
Alachua	1,651	899	54%	314	19%	744	45%	155	9%
Baker	229	50	22%	49	21%	2	1%	0	0%
Bay	1,466	874	60%	761	52%	438	30%	70	5%
Bradford	167	46	28%	46	28%	1	1%	0	0%
Brevard	4,613	2,401	52%	1,491	32%	1,529	33%	101	2%
Broward	14,013	6,100	44%	1,042	7%	5,674	40%	230	2%
Calhoun	111	42	38%	42	38%	1	1%	0	0%
Charlotte	1,131	340	30%	280	25%	209	18%	0	0%
Citrus	855	259	30%	133	16%	218	25%	0	0%
Clay	2,016	758	38%	273	14%	666	33%	52	3%
Collier	2,235	891	40%	162	7%	836	37%	0	0%
Columbia	435	160	37%	88	20%	119	27%	0	0%
Dade	17,575	7,567	43%	1,111	6%	7,366	42%	449	3%
DeSoto	208	95	46%	90	43%	14	7%	0	0%
Dixie	110	47	43%	31	28%	42	38%	0	0%
Duval	5,359	3,116	58%	889	17%	2,953	55%	194	4%
Escambia	2,192	752	34%	420	19%	601	27%	103	5%
Flagler	580	238	41%	168	29%	109	19%	22	4%
Franklin	58	26	45%	15	26%	23	40%	0	0%
Gadsden	174	55	32%	20	11%	41	24%	0	0%
Gilchrist	160	50	31%	50	31%	2	1%	0	0%
Glades	37	9	24%	4	11%	8	22%	0	0%
Gulf	145	37	26%	37	26%	4	3%	0	0%
Hamilton	58	22	38%	15	26%	19	33%	0	0%
Hardee	227	94	41%	69	30%	66	29%	0	0%
Hendry	348	78	22%	57	16%	31	9%	0	0%
Hernando	1,143	417	36%	289	25%	277	24%	2	1
Highlands	577	215	37%	186	32%	140	24%	0	0%
Hillsborough	9,220	4,199	46%	908	10%	3,941	43%	260	3%
Holmes	171	65	38%	62	36%	26	15%	0	0%
Indian River	922	376	41%	226	25%	211	23%	35	4%
Jackson	380	84	22%	84	22%	0	0%	0	0%
Jefferson	46	14	30%	12	26%	3	7%	0	0%

		Students Attempting High School Credit Through Accelerated Coursework							
District	2006-2007 Graduates	Any Type		Dual Enrollment		Advanced Placement		International Baccalaureate	
Lafayette	48	15	31%	14	29%	1	2%	0	0%
Lake	1,901	655	34%	245	13%	535	28%	0	0%
Lee	3,618	1,238	34%	508	14%	988	27%	264	7%
Leon	1,624	950	58%	346	21%	830	51%	76	5%
Levy	267	44	16%	43	16%	1	0.4%	0	0%
Liberty	62	8	13%	8	13%	0	0%	0	0%
Madison	133	36	27%	29	22%	20	15%	0	0%
Manatee	1,917	718	37%	274	14%	657	34%	67	3%
Marion	1,926	626	33%	183	10%	514	27%	98	5%
Martin	1,048	515	49%	223	21%	369	35%	80	8%
Monroe	463	240	52%	175	38%	193	42%	0	0%
Nassau	575	234	41%	105	18%	146	25%	0	0%
Okaloosa	2,051	1,046	51%	247	12%	936	46%	71	3%
Okeechobee	310	78	25%	70	23%	27	9%	0	0%
Orange	8,371	3,555	42%	558	7%	3,383	40%	274	3%
Osceola	2,487	989	40%	406	16%	747	30%	65	3%
Palm Beach	8,988	4,101	46%	1002	11%	3,822	43%	365	4%
Pasco	2,901	975	34%	449	15%	801	28%	48	2%
Pinellas	5,808	2,603	45%	838	14%	2,210	38%	249	4%
Polk	3,941	1,372	35%	465	12%	1,135	29%	54	1%
Putnam	474	144	30%	122	26%	71	15%	0	0%
Santa Rosa	1,551	724	47%	561	36%	407	26%	2	1
Sarasota	2,318	991	43%	546	24%	843	36%	102	4%
Seminole	3,915	2,178	56%	178	5%	2,152	55%	100	3%
St. Johns	1,628	774	48%	109	7%	746	46%	63	4%
St. Lucie	1,647	593	36%	226	14%	454	28%	65	4%
Sumter	346	65	19%	30	9%	40	12%	0	0%
Suwannee	319	67	21%	30	9%	49	15%	0	0%
Taylor	165	41	25%	41	25%	1	1%	0	0%
Union	115	41	36%	32	28%	22	19%	0	0%
Volusia	3,431	1,570	46%	416	12%	1,354	39%	346	10%
Wakulla	242	47	19%	30	12%	34	14%	0	0%
Walton	307	119	39%	104	34%	35	11%	0	0%
Washington	169	69	41%	59	35%	17	10%	0	0%
Other schools <sup>2</sup>	338	135	40%	58	17%	100	30%	0	0%
Total	134,016	57,932	43%	18,154	14%	49,954	37%	4,062	3%
Number of Districts	67	67	100%	67	100%	65	90%	30	45%

<sup>&</sup>lt;sup>1</sup> Santa Rosa and Hernando school districts do not offer IB courses, but had graduates who transferred from other districts that offered IB courses.

 $Source: \ OPPAGA \ analysis \ of \ Florida \ Department \ of \ Education \ high \ school \ course \ information.$ 

 $<sup>^2</sup>$ The "other schools" category includes schools that are funded separately from districts including the School of Deaf and Blind, FAMU Lab School, FAU Lab School, FSU Lab School, and UF Lab School.

## Appendix B

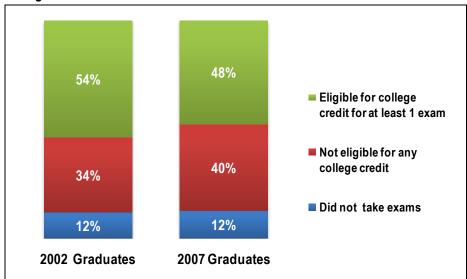
# Student Performance in Acceleration Courses Varies by Program

While student participation in acceleration courses has increased, the overall percentage of students in these programs who subsequently qualify for college credit has decreased slightly over the past five years. Student performance in acceleration courses varies by program. The following tables compare historical performance data for high school graduates who have participated in various acceleration programs.

### Advanced Placement

As shown in Table B-1, a smaller percentage of 2007 AP students were eligible for college credit. Specifically, the percentage of high school graduates taking and passing required examinations for AP courses has declined from 54% in 2002 to 48% in 2007. In 2007, a higher percentage of students who completed AP courses were not eligible to receive college credit as a result of either not taking an AP exam (12%) or not earning a passing score (40%).

Table B-1
A Smaller Percentage of 2007 Graduates Were Eligible to Receive College Credit from AP Exams

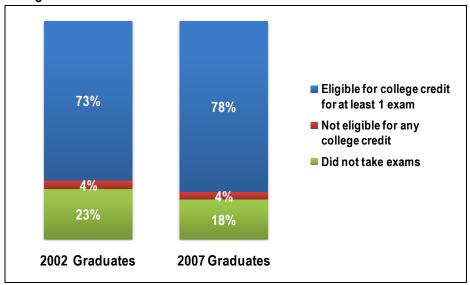


Source: OPPAGA analysis of Florida Department of Education AP exam information.

## International Baccalaureate

As shown in Table B-2, the success rate for students in IB programs has increased with 78% of 2007 graduates gaining eligibility for college credit compared to 73% in 2002. A higher percentage of 2007 students opted to take IB exams (18% did not take exams compared to 23% not taking exams in 2002).

Table B-2 A Higher Percentage of 2007 Graduates Were Eligible to Receive College Credit from IB Exams

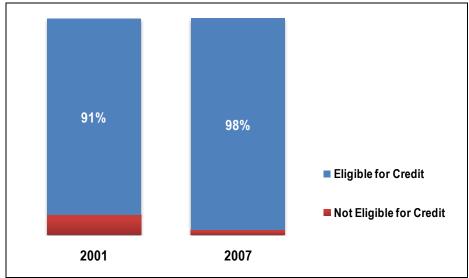


Source: OPPAGA analysis of Florida Department of Education IB information.

### Dual Enrollment

As shown in Table B-3, the percentage of students who took dual enrollment classes and became eligible for college credit has increased substantially. While the percentage of students participating in dual enrollment was lower in 2007 than in 2002, almost all 2007 students (98%) passed their courses and were thus eligible for college credit.

Table B-3
A Higher Percentage of 2007 Graduates Were Eligible to Receive College Credit from DE Courses



Source: OPPAGA analysis of Florida Department of Education DE information.

## The Florida Legislature

# Office of Program Policy Analysis and Government Accountability



OPPAGA provides performance and accountability information about Florida government in several ways.

- <u>OPPAGA reviews</u> deliver program evaluation, policy analysis, and Sunset reviews of state programs to assist the Legislature in overseeing government operations, developing policy choices, and making Florida government better, faster, and cheaper.
- Florida Government Accountability Report (FGAR), an Internet encyclopedia, <u>www.oppaga.state.fl.us/government</u>, provides descriptive, evaluative, and performance information on more than 200 Florida state government programs.
- <u>Florida Monitor Weekly</u>, an electronic newsletter, delivers brief announcements of research reports, conferences, and other resources of interest for Florida's policy research and program evaluation community.
- Visit OPPAGA's website, the Florida Monitor, at www.oppaga.state.fl.us

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Project supervised by Tim Elwell (850/487-9228)

Project conducted by Kimberly Barrett and Emily Sikes (850/487-9227)

Jane Fletcher, Staff Director, Education Policy Area

Gary R. VanLandingham, Ph.D., OPPAGA Director