



**A REVIEW OF ACCELERATION MECHANISMS  
IN  
FLORIDA PUBLIC EDUCATION**

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**Report and Recommendations of the  
Florida Postsecondary Education Planning Commission**

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**JANUARY 1997**

## **POSTSECONDARY EDUCATION PLANNING COMMISSION**

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The Postsecondary Education Planning Commission, initially created by executive order in 1980, given statutory authority in 1981 (SS 240.145 and 240.147, Florida Statutes), and reauthorized by the 1991 Legislature, serves as a citizen board to coordinate the efforts of postsecondary institutions and provide independent policy analyses and recommendations to the State Board of Education and the Legislature. The Commission is composed of 11 members of the general public and one full-time student registered at a postsecondary education institution in Florida. Members are appointed by the Governor with the approval of three members of the State Board of Education and subject to confirmation by the Senate.

The major responsibility of the Commission is preparing and updating every five years a master plan for postsecondary education. The enabling legislation provides that the Plan "shall include consideration of the promotion of quality, fundamental educational goals, programmatic access, needs for remedial education, regional and state economic development, international education programs, demographic patterns, student demand for programs, needs of particular subgroups of the population, implementation of innovative educational techniques and technology, and the requirements of the labor market. The capacity of existing programs, in both public and independent institutions, to respond to identified needs shall be evaluated and a plan shall be developed to respond efficiently to unmet needs."

Other responsibilities include recommending to the State Board of Education program contracts with independent institutions; advising the State Board regarding the need for and location of new programs, branch campuses and centers of public postsecondary education institutions; periodically reviewing the accountability processes and reports of the public and independent postsecondary sectors; reviewing public postsecondary education budget requests for compliance with the State Master Plan; and periodically conducting special studies, analyses, and evaluations related to specific postsecondary education issues and programs.

Further information about the Commission, its publications, meetings and other activities may be obtained from the Commission office, 224 Collins Building, Department of Education, Tallahassee, Florida, 32399-0400; telephone (904) 488-7894; FAX (904) 922-5388.

**POSTSECONDARY EDUCATION PLANNING COMMISSION**

***A REVIEW OF ACCELERATION MECHANISMS  
IN  
FLORIDA PUBLIC EDUCATION***

Prepared in Response to Specific Appropriation 188  
of the  
1996 General Appropriations Act  
Chapter 96-424, Laws of Florida

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## EXECUTIVE SUMMARY

In proviso language accompanying Specific Appropriation 188 of the General Appropriations Act, the Postsecondary Education Planning Commission is directed to:

*examine the effectiveness of advanced placement, dual enrollment, and international baccalaureate instruction and address factors such as cost, average number of hours earned, and impact on the time to degree. A report and policy recommendations related to these acceleration mechanisms shall be submitted to the Legislature and State Board of Education by February 1, 1997.*

Acceleration mechanisms, such as advanced placement (AP), dual enrollment (DE), and International Baccalaureate instruction (IB), have been widely used in Florida public education since the 1970s. These mechanisms support the State Articulation Agreement and two-plus-two articulation policies designed to promote the transition of students through the education system, from one level to the next. Their purpose as stated in Section 240.116(1), Florida Statutes, is to:

*serve to shorten the time necessary for a student to complete the requirements associated with the conference of a degree, broaden the scope of curricular options available to students, or increase the depth of study available for a particular subject.*

During the Commission's review of the three acceleration mechanisms, considerable testimony was received from front-line representatives of the public schools and postsecondary institutions. The report focuses on three areas: student and school participation, program effectiveness and funding.

### **PARTICIPATION IN ACCELERATION PROGRAMS**

Acceleration programs and courses are developed and offered in Florida public and private schools as a result of articulation agreements that are approved locally by specific high schools, school districts, community colleges and universities. Effective acceleration requires a specific, comprehensive and coherent articulation agreement between the participating educational entities, with the student being the focal point of the agreement.

Dual enrollment is a program of study that allows high school students to enroll in high school and college courses simultaneously. It provides students with the opportunity to earn college credit that also doubles as credit toward their high school diploma, enabling them to advance their college education before graduating from high school. In consideration of the current state funding formula for dual enrollment, the Commission recommends promoting greater efficiency and productivity through the establishment of specific high school grade point averages as guidelines for participation in dual enrollment. Further, the funding formula for dual enrollment should be applied only to courses that will directly apply to the student's postsecondary degree/certificate.

**Recommendations:**

1. *The Dual Enrollment Interinstitutional Articulation Agreement Guidelines, developed by the Articulation Coordinating Committee, should be implemented by all educational sectors for use in the establishment of interinstitutional articulation agreements. Following its statewide review of the use of the guidelines in articulation agreements, the Articulation Coordinating Committee should determine whether the guidelines are being consistently implemented throughout the State.*
2. *The following unweighted student grade point averages (GPA) should serve as guidelines for participation in dual enrollment, in addition to the common placement examination:*  
  
*3.0 GPA for college credit dual enrollment courses, and  
2.0 GPA for vocational certificate dual enrollment courses.*

*If the need for an exception policy to these prerequisites is identified by the local education entities, the terms should be specified in the dual enrollment interinstitutional articulation agreement.*

3. *Academic courses that are designated as dual enrollment courses for the purposes of receiving state funding, as stated in Section 236.081, F.S., should be limited to general education core courses and appropriate electives that will directly apply to the dual enrolled student's postsecondary degree/certificate.*
4. *Section 240.1163, Florida Statutes, that addresses joint dual enrollment and advanced placement instruction, should be reviewed by the Legislature, in conjunction with the Department of Education, for clarity and intent. As a part of this review, the funding methodologies used by the school districts and community colleges for the joint courses should be examined.*
5. *The delivery of acceleration courses (dual enrollment, advanced placement, International Baccalaureate) to rural and/or remote high schools that request such courses should be a priority of the distance learning initiatives of the State's public schools, community colleges and universities.*

**EFFECTIVENESS OF ACCELERATION MECHANISMS**

Through acceleration courses, high school students are able to accrue academic credit that will apply toward the requirements for a postsecondary degree/certificate. When the college credit gained fulfills such requirements, students accelerate toward the completion of a degree/certificate with reduced time and cost. Since current Florida law allows high school students to be exempt from payment of acceleration courses, considerable cost savings are available to students and families through these efforts.

The acceleration of a student through his/her postsecondary degree program, however, is not assured. An effective plan whereby a high school student gains college credit through acceleration mechanisms requires two components: (1) a motivated student who is academically and emotionally prepared for college work, and (2) individualized, accurate academic advising regarding the most efficient path for completion of a postsecondary degree/certificate. The Commission believes that the early and accurate advising of high school students is crucial to ensure the effective use of acceleration credit at the postsecondary level. Additionally, it will be important to track students who earn acceleration credit through the education system, from high school through a postsecondary program to completion of a degree/certificate, to determine the impact of the acceleration credit on time-to-degree and on degree/certificate completion.

The Articulation Coordinating Committee's Standing Committee on Alternative Ways of Earning Credit can be an effective vehicle to review issues and propose solutions to the technical aspects of how acceleration credit is earned, counted, weighted and funded. The following technical issues were identified during the study:

- Dual Enrollment Course Values
- Advanced Placement Examination Fees
- Funding for Instructional Materials
- Credit for Vocational Dual Enrollments
- Calculation of Acceleration Funding for AP and IB Students
- Funding Dual Enrollment Programs offered via Distance Learning

***Recommendations:***

6. ***The Department of Education should designate personnel to assist school district and high school administrators in the development and coordination of articulation agreements and acceleration mechanisms, as prescribed by Florida law.***
7. ***The Board of Regents and the State Board of Community Colleges should conduct an analysis of the acceleration credit (advanced placement, dual enrollment, International Baccalaureate) of graduates of their institutions to determine the impact of the acceleration credit on time-to-degree and on degree/certificate completion.***
8. ***The Postsecondary Education Planning Commission, through its Student Progression Study, should analyze the impact of the acceleration credit (advanced placement, dual enrollment, International Baccalaureate) that each high school graduate in the cohort brings to the postsecondary system on the students' postsecondary degree completion rate and the time required to complete the degree. An analysis of these indicators will provide valuable information on the extent to which college credit earned in high school through acceleration mechanisms enhance the likelihood and efficiency of degree completion.***
9. ***The Board of Regents and the State Board of Community Colleges should direct that each institution conduct a review of its academic course catalog to ensure that policies***

*and procedures regarding college credit gained from acceleration mechanisms (advanced placement, dual enrollment, International Baccalaureate) are accurate, comprehensive and comply with Florida law. Each catalog should include the recent amendment to State Board of Education Rule 6A-10.024 regarding acceleration mechanisms and should link specific acceleration credit to the common course numbering system.*

- 10. As an important advising tool used by school counselors, teachers, parents and students, the Department of Education's Counseling For Future Education Handbook should include all current policies on acceleration mechanisms, including the grade point average weighting policies of each state university for college credit earned through all acceleration mechanisms.*
- 11. The computer-assisted student advising system should provide access for students and counselors to the policies and procedures of each postsecondary institution regarding the use of college credit gained from acceleration mechanisms (advanced placement, dual enrollment, International Baccalaureate), including each institution's general education core requirements, policies for the application of credit toward specific degree requirements and the weighting procedures used to apply acceleration credit for grade point average calculations. The system should be user-friendly and enable a student to easily apply the information to a specific degree path.*
- 12. The Department of Education should work with the College Board's Southern Regional Office and the College Board's Florida Office to assist schools that offer advanced placement programs to develop and implement methods to improve the performance of Florida residents on the Advanced Placement examinations.*
- 13. The Articulation Coordinating Committee's Standing Committee on Alternative Ways of Earning Credit should be convened to consider technical issues on how acceleration credit is earned, weighted, counted and funded. Proposals to remedy problems should be forwarded to the Articulation Coordinating Committee for appropriate action. The Standing Committee should include an equitable number of representatives of the public school system, the applied technology and adult education system, the state community college system, and the state university system.*

## **FUNDING**

Since the early 1970s, the Legislature, through statute and rule, has provided funding for both the secondary and postsecondary sectors for students enrolled in dual enrollment programs and has provided enhanced funding for successful participation in the advanced placement program (.24 FTE for every advanced placement exam grade of three or higher) and in the International Baccalaureate program (.24 FTE for each IB examination grade of four (4) or higher and an additional .3 FTE for every student who earns an IB diploma).

Florida government is continuing its dramatic reform of how state dollars are allocated to its entities through the implementation of a performance-based budgeting system. The Division of



Community Colleges was the first education agency to implement performance-based measures for distribution of a portion of its state budget. The Division has expressed concern that dual enrollment was created by the Legislature to provide acceleration for high school students and is not an integral part of a community college degree program. Since the current performance budgeting process focuses on completers as the primary outcome measure, the fact that most dual enrollment students do not seek a degree at a community college has a negative impact on state appropriations to the Community College System. This situation is exacerbated by the lack of enrollment workload funding in the new community college funding process.

***Recommendations:***

- 14. At least 80 percent of the state funds that are appropriated to school districts for passing scores on advanced placement examinations should be allocated for advanced placement instruction.***
- 15. Dual enrollment should be funded as a separate calculation within the Community College Program Fund. The calculation should be based upon the annual change in dual enrollment FTE multiplied by direct instructional costs.***

## **I. INTRODUCTION**

### **Legislative Charge**

In proviso language accompanying Specific Appropriation 188 of the General Appropriations Act, the Postsecondary Education Planning Commission is directed to:

*examine the effectiveness of advanced placement, dual enrollment, and international baccalaureate instruction and address factors such as cost, average number of hours earned, and impact on the time to degree. A report and policy recommendations related to these acceleration mechanisms shall be submitted to the Legislature and State Board of Education by February 1, 1997.*

### **Background Information**

Acceleration mechanisms, such as advanced placement (AP), dual enrollment (DE), and International Baccalaureate instruction (IB), have been widely used in Florida public education since the 1970s. Their purpose as stated in Section 240.116(1), Florida Statutes, is to:

*serve to shorten the time necessary for a student to complete the requirements associated with the conference of a degree, broaden the scope of curricular options available to students, or increase the depth of study available for a particular subject.*

Articulation is the means by which schools, colleges and universities coordinate their programs and services to facilitate the movement of students through the educational system. Florida is considered a national leader in developing highly effective articulation at the state and local levels between and among institutions and education sectors. State policies have established articulation as an important component of student access by providing for the smooth movement of students who seek postsecondary education from secondary school through the Community College System and into the State University System. A State Articulation Agreement, first authored in 1957 and confirmed in 1971 by the State Board of Education, puts into practice the programs that support the two-plus-two system. As expressed in Section 240.115(1)(a), Florida Statutes, the agreement states that “every associate in arts graduate of a Florida community college shall have met all general education requirements and must be granted admission to the upper division of a state university...”

Florida law states that “the universities, community college district boards of trustees, and district school boards are authorized to establish intra-institutional and interinstitutional programs to maximize articulation” (Section 240.115(2), F.S.). More specifically, State Board of Education Rule 6A-10.024(1), FAC, states that:

*each state university president, community college board of trustees, and district school board shall plan and adopt policies and procedures to provide articulated programs so that students can proceed toward their educational objectives as rapidly as their circumstances permit. Universities, community colleges, and*

*school districts shall exchange ideas in the development and improvement of general education, and in the development and implementation of student acceleration mechanisms.*

In addition to the articulation agreement, which undergirds the State's two-plus-two articulation policy, the transition of students through the education system is supported by the Articulation Coordinating Committee, the Statewide Course Numbering System, discipline-specific articulation agreements among institutions, a network of institutional articulation officers, state financial assistance scholarship, loan and work-study programs, and acceleration mechanisms such as advanced placement, dual enrollment and International Baccalaureate instruction. This report provides detailed information on these three acceleration mechanisms nationally and in Florida.

### Past Commission Studies

A dominant theme in the original *Master Plan for Postsecondary Education* (1982) was coordination and cooperation between all levels and sectors of education. In the *Plan*, the Commission recommended state-level policies for improving the linkages between colleges and public schools. Specifically, the *Plan* stated that "cooperation between community colleges and public schools fostered by the dual enrollment concept should be encouraged and expanded, but not to the detriment of existing advanced placement courses and other advanced offerings in secondary schools."

In 1987, the Commission conducted *A Study of the College-Level Examination Programs (CLEP) in Florida* and found that CLEP examinations provide an important student acceleration mechanism for those who acquire knowledge through means other than traditional coursework and seek either higher level coursework or time-shortening educational opportunities.

In its 1988 study of the *Funding of Acceleration Mechanisms*, the Commission examined the funding formulas for advanced placement, dual enrollment and International Baccalaureate instruction. The Commission confirmed that acceleration options provide valuable opportunities for students to shorten the time necessary to complete a degree. Recommendations provided funding procedures that offset the cost of providing each form of instruction without making any one form financially advantageous to either school districts or community colleges.

In its 1991 study of *Student Access to Higher Education*, the Commission recognized the role of accelerated mechanisms in facilitating student progression from high school to higher education by providing opportunities for students to accumulate credit for college-level course work before the student actually enrolls in postsecondary education.

In its 1993 *Challenges, Realities, Strategies: The Master Plan for Florida Postsecondary Education for the 21st Century*, the Commission identified *Interdependence* as a key challenge facing the delivery of postsecondary education in the State. The *Plan* states that "Our education system must function as a continuum and provide for the smooth transition of students from one level to another." It calls for all education sectors to "strive for one coordinated education

system” and “to identify and remove barriers that may exist to the smooth transition of students among high schools, vocational-technical centers, community colleges and universities.”

In 1994, the Commissioner of Education’s Council on Education Interdependence asked the Commission to review the Board of Regents’ first-time-in-college (FTIC) enrollment policy and to study the appropriate share of the state’s first-time-in-college students by postsecondary sector. In *Access to the Baccalaureate Degree in Florida*, the Commission examined access from two perspectives: *Access to Postsecondary Education* and *Access to a Baccalaureate Degree*. The Commission determined that an FTIC enrollment policy that is based on the assignment of a specific percentage of high school graduates to each postsecondary sector does not address the access needs of Florida residents to baccalaureate education. Recommendations centered on a postsecondary admissions process that provides options for academically qualified Florida residents to enroll in institutions of their choice where they are likely to succeed.

### Commission Activities

To direct this study, the Commission Chairman appointed a Program/Planning Committee under the chairmanship of Mrs. Karen Plunkett that included Commission members Mrs. Inez Bailey, Mr. Ivie Burch, Dr. Thomas Haynes and Mr. Edgar Tolle. Seven public meetings of the Committee were held between June 1996 and January 1997 and included considerable testimony from representatives of public schools and postsecondary institutions. During three of the meetings, panel discussions occurred with front-line educators who work directly with acceleration mechanisms, including high school counselors, school district administrators, community college faculty and staff and university registrars and admissions deans. Through this testimony on acceleration programs, issues were identified and recommendations made in the areas of student and school participation, program effectiveness and funding.

## **II. ACCELERATION MECHANISMS**

### **A. THE ADVANCED PLACEMENT PROGRAM**

The Advanced Placement Program is a cooperative educational endeavor between secondary schools and colleges and universities. The program provides students with an opportunity to pursue college-level studies while still attending secondary school and receive advanced placement, credit, or both, in college.

The AP program is sponsored by the College Board under the coordination of national groups of educators, its Council on College-Level Services, and its academic advisory committees in the disciplines concerned. The College Board, founded in 1900 with headquarters in New York City, is a non-profit membership organization of nearly 2,900 colleges and universities, schools, school systems and education associations. In operation of most of its testing programs and related services, the College Board contracts for technical and operational services with Educational Testing Service (ETS), an independent, non-profit organization with headquarters in Princeton, New Jersey.

#### **History of the AP Program**

The advanced placement program was established forty years ago as an attempt to optimize the articulation between high school and college. According to the College Board, a well-educated populace was necessary to address the rapid pace of technological change, the technical ascendancy of the Soviet Union, and the armed conflicts of the period.

In 1951, the Ford Foundation's Fund for the Advancement of Education began to recommend the placement of able high school seniors in college. This placement ensured the students two years of postsecondary education before they were eligible for the draft. The following year, the Fund recommended that some high school seniors enroll in introductory college-level courses while still in high school and that the courses be accepted for credit through a series of examinations. This was the beginning of the AP program. The College Board assumed responsibility for the Program in 1954 and administered the first AP exams in 1956.

#### **Florida Statutes and Rules**

According to Section 240.116(4), Florida Statutes, "...Postsecondary credit for an advanced placement course shall be limited to students who score a minimum of 3, on a 5-point scale, on the corresponding advanced placement examination. The specific courses for which students receive such credit shall be determined by the community college or university that accepts the student for admission." As stipulated in Section 240.116(4), F. S., students enrolled in advanced placement courses "shall be exempt from the payment of any fees for administration of the examination."

In September 1996, State Board of Education Rule 6A-10.024(7), FAC, was amended to state that "transfer of credit ....is mandatory provided that the institution awarding the credit did so on the basis of *minimum scores and maximum amount of credit guaranteed to transfer and*

*recommended courses.....”* A list of minimum scores, maximum credit guaranteed, and recommended courses is expressed in the amendment. This rule also states that “the institution awarding College Board AP credit should specify course(s) for which credit is being awarded. The standard policies of the institution prohibiting credit for overlapping courses shall apply.”

### **Structure of the Program**

The AP program monitors introductory-level college curricula, outlines courses that generally satisfy the learning objectives of those curricula, and offers these course outlines to high schools, along with support materials and professional development. The program also designs and administers national examinations that measure the knowledge and skills acquired by students who have taken advanced placement courses. The AP program works as follows: (1) the program makes descriptions of, and examinations in, introductory college-level courses available to interested schools; (2) the program presents the results of those examinations to the colleges of the student’s choice; and (3) participating colleges grant credit, advanced placement, or both to students who have performed at a qualifying level on AP examinations (approximately 1,400 colleges and universities indicate that students may begin as sophomores on the basis of sufficient AP grades).

The AP program currently provides course descriptions, teaching guides and examinations for 16 subject areas including: art, biology, chemistry, computer science, economics, English, French, German, Latin, Spanish, government and politics, history, calculus, music theory, physics, psychology, and statistics. Other subjects currently in development include: environmental sciences, and international English language for overseas populations.

Before a new AP course is initiated, a development committee surveys college and university departments throughout the nation to determine the span of information and skills that the students will be expected to master. Required activities and assignments for each course and various methods of measuring achievement are also addressed in the survey. A representative sample of high schools is then surveyed to determine whether high schools are prepared to teach the proposed course. This process is repeated every few years for each course.

Advanced placement examinations are developed by a national committee of qualified college and high school faculty members over a period of two or more years. The expertise of the college faculty members, in their respective fields, ensures that the examination reflects the knowledge and skills of students completing a college-level course. The current fee for each examination is \$73, of which the school normally retains \$7. The College Board offers a \$22 per exam credit to qualified students with acute financial need (schools are expected to forgo their \$7 rebate for these candidates). Today, over a third of all states pay for teacher training, four states pay for all AP exams, and four pay for the exams of economically disadvantaged students.

Each AP exam (except in studio art) contains both a multiple-choice section and a “free-response” section (i.e., analytical essays, complex problems or taped performances). Multiple-choice questions are designed to permit students to demonstrate knowledge of many aspects of a subject, while free-response questions allow students to demonstrate depth of understanding and the ability to organize and present ideas. The free-response answers are scored by over 3,500

high school and college faculty members at the annual AP Reading held on five university campuses. These scores are then combined with the computer generated multiple-choice scores to create a composite raw score for the examination as a whole. Composite scores are converted to a five point scale allowing a comparison of current student performance with that of previous years and that of college students at selected institutions. The AP program's 5-point scale is as follows:

5 = extremely well qualified	2 = possibly qualified
4 = well qualified	1 = no recommendation
3 = qualified	

Examination grades are reported to the students, their secondary schools, and the colleges that they have selected by early July. Colleges then decide whether to grant credit, advanced placement, or both, depending on their standards of achievement.

Advanced placement examinations are open to students in any grade. The College Board recommends that students be selected to participate in an AP course based on their preparation for such a course, their willingness and ability to meet its academic challenges, and the level of support they have from family and friends. Educators may wish to analyze the courses the student has already taken and interview the student and family to determine whether a student is prepared to take an AP course. Those students who are particularly self-directed may also choose supervised independent study as a method for completion of an advanced placement course.

### **AP Worldwide**

Due to a growing number of requests from schools, colleges and universities, the College Board's trustees have approved the offering of an Advanced Placement International Diploma (APID) for students whose postsecondary education plans include attending an institution of higher learning outside the United States or Canada. The AP International Diploma is now offered to all AP students planning to study at an overseas university.

The College Board's trustees have also approved the development of a course and examination that will assess knowledge of the English language for an advanced university-level setting. This will be offered to candidates who are non-native speakers of English, in non-English speaking countries, whose language of instruction is not in English. In essence, the proposed course and examination will be for other language nationals an English-language equivalent of the AP courses in French, German, and Spanish. The College Board's trustees have approved the concept and a schedule is being considered that would offer the first exam in May 1998.

### **Teacher Training and Selection**

There are an estimated 70,000 AP teachers worldwide, with 5,000 added every year. For these teachers, the advanced placement program offers a variety of professional development opportunities, ranging from ongoing workshops to summer institutes.

Assignment to an AP class is commonly viewed as a recognition of expert and experienced teaching. Individual schools are responsible for selection of qualified teachers. Preparation for AP teaching usually begins with a one-day workshop where teachers are introduced to the concept of AP, how to plan an AP course, and the nature of AP examinations. The next step requires participation in one of the summer institutes, which are subject-specific intensive learning sessions of one or more weeks held on college campuses. The College Board provides teachers with assistance and information regarding the organization and instruction of advanced placement courses, while also providing a forum for the exchange of ideas and information about the program.

The Mellon Foundation has funded the participation of selected teachers at Summer Teaching Institutes since 1987. Teachers who work primarily with minority students or in schools located in economically disadvantaged areas receive a stipend to attend the institute of their choice. The advanced placement program and the College Board also publish numerous publications to supplement the AP examinations and courses (e.g. student guides, teacher guides, free-response scoring guides, released exams, computer software, etc.).

### **State Funding**

In 1984, the State of Florida passed legislation to provide additional financial support for school systems that offer advanced placement (as well as International Baccalaureate and dual enrollment) courses. According to Section 236.081(q), Florida Statutes, school districts receive extra funding (.24 FTE) for every advanced placement exam grade of three or higher, which districts use to pay examination fees for students, provide in-service training of teachers, or purchase additional classroom materials. Since the legislation was enacted, school and student participation has grown significantly.

### **Current participation**

The number of students participating in the AP program each year has been steadily increasing since the inception of the program. The College Board recently reported that more than 200,000 students will begin college this fall with academic credits on their records. About 33,000 have enough credits to enter as sophomores, and 750 are qualified to enter as juniors. In 1996, more than 535,000 students in all grades took over 824,000 examinations. Women represented 55 percent of the total and female participation has been rapidly increasing in all subject areas (up from 49 percent a decade ago). Minority AP participation is also increasing (at a faster rate than white AP participation). In 1996, 29 percent of students taking exams indicated that they belonged to a minority group, a number that has more than doubled over the last 15 years. In Florida, females represented 57 percent of AP students and over 34 percent of students reported that they belonged to a minority group.

In Florida, 1996 participation in the AP program was at an all-time high, with over 32,000 students taking almost 55,000 examinations. The number of AP exams taken by Florida students has increased nearly tenfold over the last 15 years, and the number of participating Florida schools has increased over 100 percent during the period. See Table 1.



**TABLE 1**

**Florida AP Program Statistics  
(Public and Private Schools)**

<b>NUMBER OF</b>	<b>1981</b>	<b>1986</b>	<b>1991</b>	<b>1996</b>
<b>Schools</b>	174	287	337	371
<b>Students</b>	4,299	16,030	23,832	32,760
<b>Exams</b>	5,652	22,477	37,570	54,876
<b>Grades 3-5</b>	3,615	NA	NA	29,790

Data compiled by the Department of Education reveals that the greatest participation in advanced placement courses in Florida public schools is found in the following courses: AP American History, AP English Literature Composition, AP English Language Composition and AP Calculus. See Table 2.

**TABLE 2**

**1995-96 Top 10 AP Courses By Enrollment**

<b>AP COURSE</b>	<b># OF STUDENTS</b>	<b># OF DISTRICTS</b>
AP American History	8849	35
AP English Lit. Comp.	7206	40
AP English Lang. Comp.	5560	31
AP Calculus	5196	39
AP Biology	2910	27
AP European History	2592	24
AP Spanish Lang.	2294	29
AP Chemistry	2054	30
AP American Gov't.	1735	16
AP Physics B	1386	23

In 1996, a total of 29,790 exams taken by Florida public school students (54 percent) received a grade of 3 or higher. Table 3 shows that, although Florida ranked third in the number of tests taken during 1996, in a comparison of the ten most populous states, Florida ranked tenth in the percentage of successful exams taken.

**TABLE 3**

**1996 Percentage of AP Exam Grades of 3 - 5  
for 10 Most Populous States (public schools only)**

STATE	NUMBER OF EXAMS TAKEN	% OF GRADES 3-5
California	144,905	64.6%
New York	88,922	67.7%
Florida	54,876	54.3%
Texas	52,156	62.1%
Illinois	36,692	70.5%
Virginia	33,683	64.0%
New Jersey	31,720	68.9%
Pennsylvania	29,442	64.0%
Ohio	25,533	64.6%
North Carolina	24,595	56.2%

Tables 4 and 5 rank Florida and Out-of-State postsecondary institutions according to the frequency of submissions of AP examination results from Florida students.

**TABLE 4**

**Florida Postsecondary Institutions Receiving the Greatest Number  
of AP Grades for Students from the State of Florida  
1996**

INSTITUTION NAME	TOTAL # OF AP GRADES
University of Florida	6,804
Florida State University	1,974
University of Central Florida	1,344
University of Miami	1,239
University of South Florida	953
Florida International University	908
University of North Florida	557
Florida A&M University	338
Florida Atlantic University	298
Stetson University	278
Miami-Dade Comm. College South	200
Valencia Community College	200

**TABLE 5**

**Out-of-State Postsecondary Institutions Receiving the Greatest  
Number of AP Grades  
for Students from the State of Florida 1996**

INSTITUTION NAME	TOTAL # OF AP GRADES
Georgia Tech	414
Emory University	383
Duke University	305
Harvard College	300
Cornell University	206
Mass. Institute of Technology	189
Boston University	188
University of Pennsylvania	187

The College Board reported that, in 1995, 71 percent of Florida AP candidates remained in the State to attend college, although the net migration for the year was (- 2,339) as 2,204 candidates entered Florida postsecondary institutions while 4,543 candidates left the State. The University of Florida ranked third in the US in receiving the greatest number of AP examination results, behind the University of California-Berkeley and the University of California-Los Angeles.

**Benefits of the Program**

According to the AP program of the College Board, there are many benefits associated with advanced placement courses. Students can learn a subject in greater depth, allowing them to develop analytical reasoning skills and form disciplined study habits that will be critical to their success at the college level. According to the College Board, research has shown that AP students when compared to other students are:

- Better prepared academically on all college admission measures of ability and achievement;
- More likely to specialize in majors with tougher grading standards;
- More likely to complete course work and to take more higher level courses; less likely to drop out of school;
- Significantly higher achievers over four years in their course work;
- More likely to be successful in terms of leadership and significant accomplishments;
- More likely to graduate with a double major;
- Twice as likely to go into advanced study such as Ph.D. programs, medicine and law.

Many college admissions personnel view the advanced placement experience as an indicator of future success in college. Students may increase the probability of acceptance to a highly selective college after demonstrating success in a college-level AP course. Participation in the advanced placement program may also help to enrich the college experience through course exemption which allows students time to explore additional subject areas, participate in internships, or study abroad. Success on AP examinations can also help to ease the financial

burden of college, since college credit can be obtained without the cost of tuition, books, room, board, etc.

The AP program reports that teachers of AP courses are offered professional training (including College Board sponsored workshops) and most gain job satisfaction because they are able to discuss their subject matter in greater depth with a group of highly motivated students. High schools may benefit because it enhances the quality of their curriculum and challenges their academically capable students. The National Education Goals panel uses AP as a measure of academic excellence. Schools with successful AP programs are regarded by many as strong academic institutions and their participation in the AP program sets an academic tone for students and contributes to the faculty's professional pride.

The College Board believes that colleges and universities can also benefit from participation in the AP program because it identifies and attracts highly motivated students who have been successful in rigorous college-level courses and have demonstrated their ability through demanding national examinations. It provides admissions officers with an excellent predictor of student success in college and allows students to diversify and enhance their academic experience.

## **B. DUAL ENROLLMENT**

Dual enrollment is a program of study that allows high school students to enroll in high school and college courses simultaneously. It provides students with the opportunity to earn college credit that also doubles as credit toward their high school diploma, enabling them to advance their college education before graduating from high school. In many dual enrollment programs, students are given an opportunity to attend classes on both high school and college campuses, allowing courses taken during their last year of high school to count as part of their college degree program. Only courses that are transferable to a four-year institution are available to dual enrollment students.

Dual enrollment differs from the concept of early admission to postsecondary education. Many community colleges and universities have policies that allow capable students to enter college on a full time basis after completion of their junior year in high school. In order to pursue this option, a student must leave high school completely to begin college coursework. Dual enrollment offers students the opportunity to advance their college education without sacrificing important high school experiences. Students who choose the dual enrollment option are eligible to participate in high school sports, clubs, and extracurricular activities, allowing them to enjoy the complete high school experience.

### **The Development of Dual Enrollment**

National interest in shortening the time required to earn a baccalaureate degree heightened during the early 1970s following the publication of a Carnegie Commission report: *Less Time, More Options*, which urged educators at all levels to reexamine the length of time traditionally required for the baccalaureate degree and to develop more options for students to reach their educational objectives.

In Florida, the 1972 Legislature enacted legislation which mandated that a feasibility study be conducted to determine whether the traditional four-year degree program should be shortened to three years. The Task Force appointed for this legislative study conducted surveys of acceleration mechanisms that were in use by public schools, community colleges and universities and found that four universities and nine community colleges permitted dual enrollment in high school and college and seven universities permitted dual enrollment in community colleges and the university. The 1973 Report of this Task Force identified problems resulting from different funding formulas and the fee structures used to allocate resources at the various educational levels that impeded the use of dual enrollment. The Task Force strongly recommended the expansion of dual enrollment programs, and also recommended that “credit earned by acceleration mechanisms should be incorporated in funding formulas at all levels of education.”

During the past two decades, the Legislature has amended or enhanced the statutes governing acceleration mechanisms to provide incentives to secondary and postsecondary institutions to encourage qualified students to avail themselves to the acceleration options or to remove perceived obstacles to participation for students.

The Articulation Coordinating Committee has recently developed and approved guidelines to assist institutions in the development and implementation of interinstitutional articulation agreements, vocational interinstitutional articulation agreements and the dual enrollment/articulation acceleration mechanisms. The guidelines include a detailed outline of components that should be included in dual enrollment, interinstitutional articulation agreements. Program definitions and related statutes and rules are also stated in the guidelines.

### **Florida Statutes and Rules**

According to Section 240.116, Florida Statutes, dual enrollment “shall be the enrollment of an eligible secondary student in a postsecondary course creditable toward a vocational certificate or an associate or baccalaureate degree... an eligible secondary student is defined as a student who is enrolled in a Florida public secondary school or a Florida non-public secondary school which is in compliance with s. 229.808 and conducts a secondary curriculum pursuant to s. 232.246.” Students are permitted to enroll in dual enrollment courses conducted during school hours, after school hours, and during the summers.

Section 240.116(b), F.S., states that “vocational dual enrollment shall be available for secondary students seeking a degree or certificate from a complete job-preparatory program.” This does not include enrollment in isolated vocational courses. Students can pursue courses that can be used to earn elective credits toward the high school diploma.

According to 240.1161(6), F.S., “the Department of Education shall approve any course for inclusion in the dual enrollment program that is contained within the common course designation and numbering system.” However, the Department of Education will not approve college preparatory courses or any physical education courses that focus on the physical execution of a skill rather than the intellectual attributes of the activity. “Recreation and leisure studies courses shall be evaluated on an individual basis for potential inclusion in the dual enrollment program.”

### **National Perspective**

Since no national standards exist regarding dual enrollment, it is difficult to find continuity among states. A survey of selected states conducted by Commission staff revealed that many states do not actively encourage students to pursue dual enrollment credit. For example, North Carolina has encountered problems with students who earn dual enrollment credit, but do not pass college placement exams. In addition, state representatives have expressed concern with its policy that allows both community colleges and high schools to receive funding for dual enrollment students.

Many states do not have any funding incentives for secondary or postsecondary institutions that promote participation in dual enrollment programs. In North Dakota, for example, high school student participation in college level courses may jeopardize state aid to school districts. In this situation, there are incentives *not* to participate. Dual enrollment is also discouraged in North Dakota by the state teacher certification policy. Since college faculty are rarely certified as K-12 teachers, it is difficult for them to offer a course for dual enrollment credit.

In contrast, Maryland has explored various strategies for accelerating degree achievement. According to the Maryland Higher Education Commission, “Maryland is a national leader in advanced placement. Gifted and talented high school students have been able to take advantage of dual enrollment programs, particularly at community colleges.” Maryland also relies on academic advising as a method to increase academic preparation.

Washington baccalaureate institutions encourage high school students to complete rigorous college preparatory courses in high school or to take college courses while in high school if they have had adequate preparation. The *Running Start* program was created by the 1990 Legislature to expand educational options for public school students. *Running Start* allows 11th and 12th grade high school students to take college-level courses, tuition-free, at the 32 community and technical colleges. In 1994, the program was expanded to give several public, four-year universities the option to offer the program. *Running Start* students now represent about three percent of the total number of full-time juniors and seniors in Washington public high schools.

A recent study conducted by the Virginia Department of Education revealed that 188 Virginia schools have dual enrollment programs with community colleges and an additional 82 schools have programs with senior colleges. The use of articulation agreements was reported by 56 respondents. According to a survey of all high schools and all 4-year colleges within the state of Virginia, dual enrollment practices and processes were rated outstanding by 81 schools, above average by 12, and average by 54. The majority of respondents stated that “productive communication between high schools and community and senior colleges was the norm for dual enrollment”. The Virginia study recommended that “high school, community college and senior college and university staff should communicate frequently, more clearly and regularly. Different types of communication such as workshops, seminars and meetings should be considered.”

### **State Funding**

For dual enrollment students in Florida, the school district as well as the postsecondary institution receives FTE funding for each student. Dual enrollment participation has been very sensitive to state funding formulas for students in the DE programs. The 1983 Legislature addressed the funding calculations for acceleration mechanisms and amended Section 236.081 by stating:

*In those academic programs, which are not remedial in nature, through which a student may earn credit towards both a high school diploma and an associate or baccalaureate degree, the student instruction time may be included in the count of full-time equivalent students of the high school at one-half the value of the program cost factor for grades 9 through 12. Students enrolled in such courses may be counted as full-time equivalent students by universities and community colleges offering such instruction.*

In its 1988 report: ***Funding of Acceleration Mechanisms***, the Commission found that the number of dual enrollment students dropped sharply in 1982-83 because, at the time, school districts were only receiving .5 FTE per student. The 1984 Legislature responded by restoring

full funding (1 FTE) to the school districts in order to make dual enrollment more attractive. The number of dual enrollment participants increased significantly as a result.

Section 236.081(j), Florida Statutes, specifies that “Students enrolled in community college or university dual enrollment instruction pursuant to s. 240.116 may be included in calculations of full-time equivalent student memberships for basic programs for grades 9 through 12 by a district school board. Such students may also be calculated as the proportional shares of full-time equivalent enrollments they generate for the community college or university conducting the dual enrollment instruction.”

Section 240.116(2)(a), F. S., stipulates that dual enrollment students “shall be exempt from the payment of registration, matriculation, and laboratory fees. Students enrolled in postsecondary instruction that is not creditable toward a high school diploma shall not be classified as dual enrollments.”

### **Current Participation**

Participation in dual enrollment courses at Florida community colleges has increased over the last five years. The participation of associate degree students has increased by approximately 46 percent and postsecondary adult vocational participation has increased by approximately 33 percent. See Table 6.

**TABLE 6**

#### **Community College Division Acceleration Report 1991-96**

	Associate Degree students *		Postsecondary Adult Vocational *		Early Admission (college credit)		Advanced Placement students		IB students (credit by exam)	
	Hdct	SSH	Hdct	ICH	Hdct	SSH	Hdct	SSH	Hdct	SSH
<b>1991-92</b>	16,915	123,902	1,411	319,202	213	3,465	298	1,767	0	0
<b>1992-93</b>	19,313	134,893	1,690	349,208	207	3,337	167	885	0	0
<b>1993-94</b>	20,815	152,378	1,814	380,849	148	2,943	278	1,610	0	0
<b>1994-95</b>	23,298	168,917	1,918	394,990	172	3,653	272	1,674	0	0
<b>1995-96</b>	24,738	179,367	2,120	420,441	289	5,479	162	997	8	159

\* Dual enrollment (dual credit) college and high school

Hdct. = Student Headcount

SSH = Student Semester Hours

ICH = Institutional Clock Hours

Table 7 provides information about dual enrollment participation for each community college in Florida. In 1994-95, eight of the community colleges in Florida reported that over 10 percent of their total advanced and professional (A&P) enrollment were dual enrollment students. Florida Keys Community College had the highest dual enrollment participation rate with 18.92 percent. Other community colleges with above 10 percent dual enrollment participation rates included: North Florida, St. Johns River, Pasco-Hernando, Lake-Sumter, Pensacola, South Florida, and Lake City. Seven community colleges had a dual enrollment A&P participation rate of between



5 and 10 percent. The remaining 13 community colleges reported levels of participation below 5 percent with the system total participation rate at 4.54 percent.

**Table 7**

**Florida Community College System  
1994-95 Dual Enrollment Participation Rate**

<b>COMMUNITY COLLEGE</b>	<b>A&amp;P DUAL ENROLLMENT</b>	<b>A&amp;P ACTUAL FTE</b>	<b>A&amp;P PARTICIPATION RATE</b>
Brevard	209	3,930	5.32%
Broward	50	7,608	0.65%
Central Florida	134	1,988	6.76%
Chipola	65	748	8.73%
Daytona Beach	59	3,742	1.58%
Edison	282	3,249	8.66%
Fla. CC at Jax	179	5,938	3.01%
Florida Keys	100	530	18.92%
Gulf Coast	161	1,767	9.09%
Hillsborough	451	6,382	7.06%
Indian River	188	2,415	7.77%
Lake City	74	737	10.06%
Lake-Sumter	102	763	13.35%
Manatee	109	2,728	3.98%
Miami-Dade	390	18,739	2.08%
North Florida	72	442	16.30%
Okaloosa-Walton	97	2,005	4.82%
Palm Beach	111	5,217	2.13%
Pasco-Hernando	237	1,564	15.13%
Pensacola	507	3,895	13.02%
Polk	50	1,804	2.74%
St. Johns River	234	1,453	16.11%
St. Petersburg	163	6,323	2.58%
Santa Fe	123	4,575	2.69%
Seminole	90	2,299	3.91%
South Florida	75	628	11.99%
Tallahassee	152	4,172	3.65%
Valencia	232	7,739	3.00%
System Total	4,695	103,382	4.54%

### **Benefits of Dual Enrollment**

Dual enrollment enables students to:

- Fulfill college-level educational requirements while still in high school;
- Enter college with career goals already in mind;
- Save time because they need not duplicate coursework already completed in high school;
- Save money because college tuition is not charged for courses taken in high school;
- Receive postsecondary credit when they pursue a degree at a college or university;
- Enrich their college program with advanced courses related to their career.

An important feature of the dual enrollment program, when properly utilized, is that it can enable students to finish an undergraduate degree in less than four years. Efficiency is enhanced and acceleration occurs when students are able to enter a postsecondary institution with academic credit that can be applied to the requirements for their degree program.

Another important attraction of the dual enrollment program is that it helps to ease the financial burden of college. There are no fees for application, tuition, labs, textbooks and some instructional materials. This feature of the program may be of special interest to parents and students alike.

## **C. THE INTERNATIONAL BACCALAUREATE PROGRAM**

The International Baccalaureate Diploma program is an advanced level of high school coursework that is designed to meet various international university entrance standards. The IB program is offered through the International Baccalaureate Organization (IBO), a nonprofit educational foundation based in Switzerland. As a membership organization, the IBO provides curriculum and assessment development, teacher training and information seminars, electronic networking and other educational services to some 630 participating schools in more than 80 countries around the world. The IBO is governed by a 30-member Council of Foundation which meets annually and membership is drawn primarily from governments and member schools.

The program's primary goal is to "awaken the intelligence of young people and teach them to relate the content of the classroom to the realities of the world outside." It emphasizes multicultural perspectives, the education of the whole person, advanced studies, community service, and extensive writing. The program's desired profile of an IB student is that of a critical and compassionate thinker, an informed participant in local and world affairs, and an understanding and responsible citizen. According to the organization, the diploma model is based upon the pattern of no single country, but incorporates the best elements of many. Courses are available in English, French, and Spanish and are offered in the final two years of secondary school.

### **History of the IB Program**

The development of an International Baccalaureate program grew out of both practical and educational concerns in the international school setting. Secondary schools were confronted with the problem of preparing their university-bound students for separate national exams, requiring either a number of very small classes or one large class segregated according to the national group. In response to this inconvenience, efforts to develop a common curriculum and university entrance credential for geographically mobile students began in the early 1960s. As a result of these efforts, the International Baccalaureate Organization (IBO) was established in Geneva in 1965 as a foundation under Swiss law. An International Council of Foundation was formed and an experimental project was launched in 1967 and offered for use in twenty schools in 1970.

In Florida, the first International Baccalaureate program was established during the 1983-84 school year and the first IB graduating class completed studies in the 1986-87 school year. The original three schools were Eastside High in Alachua County, Stanton College Preparatory in Duval County, and St. Petersburg High in Pinellas County.

### **Florida Statutes and Rules**

Section 240.116, Florida Statutes, authorizes the State Board of Education to establish rules pertaining to cutoff scores and International Baccalaureate examinations which will be used to grant postsecondary credit at community colleges and universities.

According to State Board of Education Rule 6A-10.024, FAC, "the award of credit based on scores achieved on IB diploma program examinations and the transfer of such credit are

mandatory. Students who have been awarded the IB diploma shall be awarded up to thirty (30) semester credits in the subject areas in which they scored four (4) or above on IB diploma program examinations. Students who have not been awarded the IB diploma shall be awarded six (6) semester credits in the subject areas of each IB higher level examination on which they scored five (5) points or above. Three (3) semester credits shall be awarded for each IB examination on which they scored four (4).”

The rule also states that “courses for which credit is to be awarded shall be determined by the community college or university first enrolling the students and shall be specified on the students’ transcripts. No grades or grade points shall be assigned (and) standard policies of the institution prohibiting credit for overlapping courses shall apply. No credit shall be awarded or accepted in transfer that duplicates other credit being awarded or accepted in transfer.”

### **Structure of the Program**

The International Baccalaureate program is designed for those students who seek academic rigor in order to fully prepare themselves for postsecondary studies. Students participate during their junior and senior years of high school and may earn advanced placement standing. Students may opt to participate as certificate candidates or diploma candidates. The certificate option allows students to earn advanced college credit for use at the postsecondary level for all available subjects. Students who wish to earn a full IB diploma, in addition to their high school diploma, must take six examinations, write an independent research project, complete the Theory of Knowledge (TOK) course, and engage in 150 hours of community service over the course of two years. Students opting for the diploma may earn up to 30 hours of college credit.

International curriculum planners work to ensure that the educational goals of the International Baccalaureate Organization are reflected in the structure and content of the program itself. The IB curriculum consists of six subject groups:

- Language A (first language): includes World Literature;
- Language A2 or B (second modern language);
- Individuals and Societies: includes History, Geography, Economics, Philosophy, Psychology, Social Anthropology, Business and Organization, Information Technology in a Global Society;
- Experimental Sciences: includes Biology, Chemistry, Applied Chemistry, Physics, Environmental Systems, Design Technology;
- Mathematics: includes Mathematics (higher level), Mathematical Studies, Mathematical Methods, Advanced Mathematics (standard or subsidiary level);
- The Arts and Electives: includes Art/Design, Music, Theater Arts, Latin, Classical Greek, Computer Science, a third modern language, a second subject from the social studies or sciences group, or a school-based syllabus approved by the IBO.

The diploma program has three primary core elements. First, students are required to take an interdisciplinary course called the Theory of Knowledge (TOK). This course is intended to challenge students to question the bases of knowledge, to be aware of subjective and ideological biases, and to develop a personal mode of thought based on analysis of evidence expressed in

rational argument. Theory of Knowledge is the key element in the IBO's educational philosophy and is designed to stimulate critical reflection upon the knowledge and experience gained inside and outside the classroom.

The second core element is Creativity, Action, Service (CAS) and is designed to stress the importance of life outside the world of scholarship. This portion of the core is designed to act as a counterbalance to the academic self-absorption that often accompanies a demanding school program. Students participate in theater productions, sports, and community service activities, enabling them to share their special talents while developing awareness, concern and the ability to work cooperatively with others. This is compatible with the International Baccalaureate program's goal of educating the "whole person".

The third core element requires students to undertake original research and write an extended essay of 4000 words. There are currently 57 subjects in which the essay may be written, providing students with the opportunity to investigate a topic of special interest. This element also familiarizes students with the kind of independent research and writing skills expected at a university.

To be eligible for the award of the IB diploma, students must earn a total of 24 points (each examined subject is graded on a scale of 1 to 7). All candidates must take one course from each of the six subject groups. At least three and not more than four of the six subjects must be taken at the higher level and the others at the subsidiary level. Candidates must also complete the three core requirements described above.

The IBO authorizes qualified secondary schools to offer the curriculum and to administer the examinations. A student must be enrolled at an authorized school to sit for IB examinations. Admission to the IB diploma program is based upon the standards of the particular school district in which students are participating. Criteria may include a base GPA coming out of eighth grade and a certain percentage on standardized tests. Districts are advised to have an enrollment and faculty group reflective of the racial composition of the district.

Schools interested in joining the program conduct a self-study and receive counseling through the appropriate regional office. The formal application includes an on-site inspection visit and the submission of written documentation to IBO Headquarters in Switzerland.

### **State Funding**

The Legislature provides for additional funding to schools with IB diploma programs. The district receives an additional .24 FTE for each IB examination grade of four (4) or higher and an additional .3 FTE for every student who earns a IB diploma (Section 236.081(n), F.S.). Exams are taken in May, results come back in July, and additional funding to the district occurs in the Fall. The additional funding "shall be added to the total full-time equivalent student membership in basic programs for grades 9 through 12 in the subsequent fiscal year." The majority of additional funding is primarily used for faculty training.

### **Current Participation**

In Florida, with the recent addition of three new programs in Polk, Marion and Dade counties, there are currently 28 IB programs. IB programs are located at schools in Alachua, Broward, Bay, Dade, Duval, Escambia, Hillsborough, Indian River, Lee, Leon, Marion, Martin, Polk, Okaloosa, Orange, Palm Beach, Pinellas, St. Johns, St. Lucie, and Volusia counties. The majority of the programs are designated by the school board as magnet programs which allows any qualified student in the school district to participate in the special program.

As of January 1996, Florida ranked second in the nation, behind California, for the number of IB-authorized schools. For the number of candidates taking exams and the number of IB diplomas awarded, Florida is the top state in the nation (May 1995). The most recent data collected shows Florida with six of the top 15 schools in the world for number of candidates taking IB examinations. Among the Florida schools consistently listed in the top ten are Suncoast High School in Riviera Beach, Eastside High School in Gainesville, St. Petersburg High School in St. Petersburg, Coral Gables High School in Coral Gables, and Pensacola High School in Pensacola. In all, Florida has eight of the top 25 largest IB programs in the world. (See Tables 8, 9 and 10)

**TABLE 8**

#### **Number of IB Authorized Schools by State**

<b>SEPTEMBER 1993</b>		<b>SEPTEMBER 1994</b>		<b>JANUARY 1995</b>		<b>JANUARY 1996</b>	
California	27	California	27	California	28	California	34
Florida	17	Florida	21	Florida	21	Florida	25
Texas	14	Texas	14	Texas	14	Texas	16
Minnesota	10	Minnesota	11	Minnesota	10	Virginia	13
Maryland	6	Virginia	9	Virginia	10	Minnesota	9
New York	6	Maryland	6	Colorado	6	Colorado	8
Virginia	5	New York	6	Maryland	6	Maryland	8
Arizona	4	Washington	5	New York	6	N. Carolina	7
Colorado	4	Arizona	4	N. Carolina	5	Washington	7
N. Carolina	4	Colorado	4	Washington	5	New York	6
Ohio	4	N. Carolina	4				
		Oregon	4				
		Pennsylvania	4				

**TABLE 9****Number of Candidates Taking IB Exams by State**

<b>MAY 1992</b>		<b>MAY 1993</b>		<b>MAY 1994</b>		<b>MAY 1995</b>	
Florida	1259	Florida	1502	Florida	1780	Florida	2105
California	1153	California	1232	California	1333	California	1501
Texas	469	Texas	526	Texas	547	Minnesota	652
Minnesota	395	Minnesota	399	Minnesota	525	Texas	612
New York	389	New York	310	Maryland	326	Virginia	437

**TABLE 10****Number of IB Diplomas Awarded by State**

<b>MAY 1992</b>		<b>MAY 1993</b>		<b>MAY 1994</b>		<b>MAY 1995</b>	
Florida	295	Florida	368	Florida	428	Florida	569
California	155	California	170	California	182	California	193
Maryland	73	Maryland	67	Maryland	89	Colorado	126
New York	51	Texas	47	Colorado	76	Maryland	113
Texas	43	New York	64	New York	64	New York	85

Data compiled by the Department of Education reveals that the greatest participation in International Baccalaureate courses in Florida schools is found in the following courses: Theory of Knowledge, English III, English IV and Biology II. See Table 11 below.

**TABLE 11****1995-96 Top 10 IB Courses (Plus Pre-IB Courses) By Enrollment**

<b>IB COURSE</b>	<b># OF STUDENTS</b>	<b># OF DISTRICTS</b>
Theory of Knowledge - IB	1339	13
English III - IB	1210	13
English IV - IB	778	11
Biology II - IB	720	12
Spanish IV B - IB	683	13
History of Americas - IB	603	10
Math Studies - IB	522	12
American History - IB	494	6
Trigonometry - IB	475	9
Biology III - IB	468	11
<b>Pre-IB Course</b>	<b># of Students</b>	<b># of Districts</b>
English I - Pre-IB	2340	18
Biology I - Pre-IB	2150	18
English II - Pre-IB	1864	17
Chemistry II - Pre-IB	1748	15
Spanish II - Pre-IB	1598	17
Spanish I - Pre-IB	1576	17

### **Benefits of the IB Diploma Program**

The International Baccalaureate Organization believes that, although colleges and universities award credit for IB higher level courses, the full IB diploma offers more than the sum of its parts. According to the IBO, the IB diploma insures “all the elements of breadth, coherence, basic writing, research and analytical skills, as well as, in most cases, some practical or community service”. The IBO reports that participating students experience increased self-confidence, a sharing of intellectual activities with the best students of the school, and better time management. College admissions personnel also look favorably upon students who are willing to undertake educational challenges.

In Florida, students who earn an IB diploma meet one of the eligibility criteria to receive the Florida Undergraduate Scholars’ Fund provided they have submitted a timely application. This provides students with financial assistance above and beyond the credits that they have earned through the IB program.



### III. ISSUES AND RECOMMENDATIONS

The Postsecondary Education Planning Commission has received considerable testimony on acceleration mechanisms and has focused on issues of student and school participation, program effectiveness and funding. Issues are identified and recommendations are proposed in each of the three areas.

#### A. PARTICIPATION IN ACCELERATION PROGRAMS

##### 1. Interinstitutional Articulation Agreements

Acceleration mechanisms are vehicles through which students are able to exercise individual options in curricular planning to advance their educational experience. Acceleration programs and courses are developed and offered in Florida public and private schools as a result of articulation agreements that are approved locally by specific high school districts, community colleges and universities. Effective acceleration requires a specific, comprehensive and coherent articulation agreement between the participating educational entities, with the student being the focal point of the agreement.

The Articulation Coordinating Committee (ACC) was established in 1971, as part of the State Articulation Agreement, to adjudicate student or institutional conflicts regarding student transfer and admissions, to interpret and recommend amendments to the articulation agreement and to develop procedures to facilitate articulation. The ACC membership includes representatives of the state university system, community college system, vocational education, public schools and students.

A Standing Committee on Alternative Ways of Earning Credit was established as a subcommittee of the ACC and exists to review programs that provide students with non-traditional ways of earning college credit and to make recommendations to the ACC concerning the guarantee of the transfer of credit awarded through these programs by the terms of the Articulation Agreement. The Standing Committee consists of representatives of Florida's universities, community colleges and public schools.

In early 1996, the Standing Committee developed and recommended *Dual Enrollment Interinstitutional Articulation Agreement Guidelines* to clarify and provide guidance when developing and implementing interinstitutional articulation agreements. The document contains statutory definitions of articulated acceleration programs, articulation agreement components, faculty qualification requirements and student eligibility standards, as well as designation of institutional responsibilities, academic advising recommendations and suggested articulation activities. See Appendix B. Following approval by the ACC, the guidelines were distributed to all state university and community college presidents and public school superintendents.

While most articulation agreements focus on the dual enrollment responsibilities of the participating school districts and the local community college, universities in the region should be participants as well. Universities have a vested interest in the development of such

agreements because, as receiving institutions, the universities will be responsible for awarding credit to students who meet the requirements for acceleration.

Many high schools, school districts and postsecondary institutions in Florida are delivering dual enrollment courses through well-planned, articulation agreements. Operations manuals are often used, with comprehensive policies and clear procedures, that provide detailed information to students, faculty and staff. The *Dual Enrollment Policies and Procedures* Manual developed by Pensacola Junior College and the Brevard County School District's *Technical Acceleration Programs* Manual are model documents that can be useful for institutions around the State.

***Recommendation 1:***

***The Dual Enrollment Interinstitutional Articulation Agreement Guidelines, developed by the Articulation Coordinating Committee, should be implemented by all educational sectors for use in the establishment of interinstitutional articulation agreements. Following its statewide review of the use of the guidelines in articulation agreements, the Articulation Coordinating Committee should determine whether the guidelines are being consistently implemented throughout the State.***

**2. Student Eligibility for Dual Enrollment**

Through existing local agreements, qualified public high school students are able to enroll in postsecondary courses for credit. Eligibility requirements for dual enrollment participation are jointly determined by the local school district and the postsecondary institution. The only state-level requirement for participation in dual enrollment is the passage of a common placement examination that is designed to assess precollegiate preparation in basic computation and communication skills (Section 240.117(5), F.S.). Appropriate standardized test scores (ACT or SAT) may substitute for the placement examination requirement.

The standardized placement examination, however, is not used to determine student eligibility for participation in advanced placement (AP) and in International Baccalaureate (IB) programs. Participation in AP and IB programs is determined by teacher and guidance staff recommendations only. Schools that offer these two programs are dependent on student achievement on national standardized examinations in order to receive state supplemental funding.

Unlike advanced placement and International Baccalaureate instruction, state dual enrollment funding is not based on a student outcome, i.e., a specific score on a standardized examination. It is calculated based on program enrollment only, and the dual enrollments typically are counted and tallied prior to completion of the course.

For dual enrollment participation, in addition to teacher recommendations, there are school districts that require a particular grade point average (GPA) in addition to the common placement examination. There are also interinstitutional agreements that do not specify a grade point average for participation. The Commission received testimony that the required grade point

averages range from 2.0 to 3.5 at high schools across the state, as determined as part of the local agreement.

The Articulation Coordinating Committee's *Dual Enrollment Interinstitutional Articulation Agreement Guidelines* include a section on **Student Eligibility** which states that "*it is recommended that a (certain) GPA be achieved before acceptance into both academic and vocational dual enrollment programs.*"

**Recommendation 2:**

*The following unweighted student grade point averages (GPA) should serve as guidelines for participation in dual enrollment, in addition to the common placement examination:*

*3.0 GPA for college credit dual enrollment courses, and  
2.0 GPA for vocational certificate dual enrollment courses.*

*If the need for an exception policy to these prerequisites is identified by the local education entities, the terms should be specified in the dual enrollment interinstitutional articulation agreement.*

**3. Course Selection for Dual Enrollment**

The Florida Statutes state that any academic course within the Department of Education's common course numbering system, with the exception of precollegiate instruction and physical education courses, may be approved for inclusion in a dual enrollment program (Section 240.1161(6), F.S.). As a result, a large variety of courses in many disciplines have been approved as dual enrollment courses by interinstitutional agreements.

Students are able to accumulate a broad range of college credit prior to high school graduation and enrollment in a postsecondary institution. The Commission received testimony, however, that all dual enrollment credits may not be applicable to satisfy the requirements for a particular undergraduate degree. When students enter a specific postsecondary degree program, dual enrollment courses, if not applicable to core curriculum requirements, are assigned as elective credits that may accumulate as excess hours in the degree program.

The state university system and the community college system have each designated academic core curriculum areas, consisting of courses in Communication, Mathematics, Natural Science, Social Science and Humanities, as academic areas which best prepare students to do postsecondary level work. These courses are used to satisfy the 36 credit hour general education requirement for both the associate of arts degree and the baccalaureate degree.

Both the state university and community college systems have worked diligently to respond to 1995 legislation designed to reduce the time required for completion of a baccalaureate degree. The *1995 Higher Education Access 2000 Act* mandated that associate in arts degree programs require no more than 60 semester hours of college credit and that baccalaureate degree programs

require no more than 120 hours of college credit. As a result of this process, a list of general education courses was approved that will comply with the 36 credit hour general education requirement and common course prerequisites were approved for all degree programs within each discipline area.

The Oversight Committee of the Articulation Coordinating Committee (ACC) has produced a report that identifies courses from within the five broad subject areas that satisfy the general education core requirements as reported by each community college and university. The report was approved by the ACC and forwarded to the State Board of Education.

The 1996 General Appropriations Act directed each state university to “develop a plan for the implementation of an increased matriculation charge to students for credit hours taken in excess of baccalaureate degree requirements.” In their review of the systemwide plans, the Board of Regents staff provided a systemwide understanding of what hours are eligible to be counted as excess hours. As was permitted in the legislative proviso, all ten of the state universities agreed that credit hours earned through acceleration programs, such as advanced placement and dual enrollment courses, that do not contribute toward the completion of a student’s degree, will not be included in the calculation of excess hours at the university level. A memorandum of understanding regarding this policy was distributed to all universities and community colleges.

The Commission recognizes that high school students may want to enroll in college courses related to their interests and career aspirations, and encourages school districts and colleges to offer a broad variety of dual enrollment courses to meet the needs of their local population. However, to promote greater efficiency and productivity, the current state funding formula for dual enrollment should be applied only to courses that will directly apply to the student’s postsecondary degree/certificate.

***Recommendation 3:***

***Academic courses that are designated as dual enrollment courses for the purposes of receiving state funding, as stated in Section 236.081, F.S., should be limited to general education core courses and appropriate electives that will directly apply to the dual enrolled student’s postsecondary degree/certificate.***

**4. Joint Dual Enrollment and Advanced Placement Instruction**

Section 240.1163, Florida Statutes, enables school districts and postsecondary institutions to implement articulation agreements in which advanced placement courses are offered within dual enrollment courses. The law stipulates that the enrollment be funded either as a dual enrollment or an advanced placement course, but that “no student shall be funded through both programs.” Further, the law specifies that the student may determine whether he will receive postsecondary credit, either as dual enrollment or advanced placement credit, but that “no student shall claim double credit based on completion of a single joint dual enrollment and advanced placement course.” It was reported that the original legislation was intended to provide broader and accelerated academic opportunities for students located in small, rural school districts.

Student eligibility rules and policies for enrollment in advanced placement and dual enrollment courses, however, are distinctive. Participation in AP and IB programs is determined by teacher and guidance staff recommendations, while students must pass a placement exam to enroll in a dual enrollment course. In addition, for advanced placement, unlike dual enrollment, the receipt of postsecondary credit is contingent upon a minimum score on the AP examination and no college credit is generated through the successful completion of the AP instruction.

The Commission received testimony that there are school districts that, under the guise of this statute, are moving students into and out of courses in order to maximize state funding possibilities for acceleration credit. For dual enrollment students, the state funding for acceleration is based solely on enrollment in the program and not on a student outcome. Dual enrollments, typically, are counted during a specified period in mid-semester. State supplemental funding for AP students and for IB students occurs following a student's attainment of a score of 3 or higher on a national, standardized examination. Typically, the AP examinations are offered at the end of Spring Semester and test scores are sent by the College Board to the school district in July. It was reported that school districts are able to reclassify, for funding purposes, students in AP courses as dual enrollment students if they fail to successfully pass the AP examination.

Additional testimony verified that joint acceleration programs continue to allow for advanced courses to be offered to academically-qualified students, particularly in small and/or rural school districts. Clearly, the two acceleration mechanisms are complimentary and should be made available to all qualified students. Since students in joint dual enrollment and advanced placement courses are unable to receive credit for both programs, however, the value of the joint program arrangement continues to be questioned. The Commission believes that each student should be advised individually by counselors, teachers and parents to select and enroll in the specific acceleration courses that will best meet the individual student's academic needs.

It is noteworthy that there are certain school districts that have structured a sequence in a specific discipline whereby a dual enrollment course is followed by an advanced placement course. In such a sequence, the dual enrollment course acts as a prerequisite course for the AP course.

The Commission believes that the issues raised in this section warrant a further examination of Section 240.1163, F.S. to clarify the intent of the statute and to review the current practices for school districts and colleges who are offering joint dual enrollment and advanced placement programs.

***Recommendation 4:***

***Section 240.1163, Florida Statutes that addresses joint dual enrollment and advanced placement instruction should be reviewed by the Legislature, in conjunction with the Department of Education, for clarity and intent. As a part of this review, the funding methodologies used by the school districts and community colleges for the joint courses should be examined.***

## **5. Alternative Delivery Methods**

The Commission received testimony that students who attend small high schools that are located in rural areas at a considerable distance from the nearest postsecondary institution may not have the opportunity to enroll in acceleration programs (DE, AP, IB) to receive college credit. College administrators report that to plan and implement dual enrollment experiences, as well as advanced placement and International Baccalaureate programs, to a small number of students in such locations requires considerable effort and expense in terms of faculty and administrative resources.

Instructional technology issues are now being actively debated among Florida policymakers and educators. The 1994 Legislature established a State Telecommunications Task Force to develop a plan for improved coordination of telecommunications technology and education. Further, the Florida Distance Learning Network is now working to coordinate telecommunications and distance learning in public education delivery systems. At the request of the 1996 Legislature, the Postsecondary Education Planning Commission is now conducting a study to address a number of policy issues arising from the implementation of expanded educational use of technology and distance learning. The goal of all of these efforts is to: (1) increase student access to education; (2) reduce time needed to obtain a degree by allowing students to take required classes that would normally not be available via distance learning; and (3) reduce the demand to build additional postsecondary education classrooms.

A number of colleges and school districts have collaborated to provide dual enrollment classes to students in locations described above. As an example, Pensacola Junior College, through a separate letter of agreement, has established Collaborative Teaching Projects with adjacent school districts to deliver instruction of selected dual enrollment courses. In these programs, qualified high school teachers and SACS-certified college instructors work as a team with supplementary instructional materials, including instructional technology support via a national telecourse and video format designed specifically for alternative delivery systems.

The College Board reports that, although there is no national plan to deliver advanced placement programs via distance learning, a few states have attempted pilot projects for this purpose. The Board has developed a set of standards for the delivery of AP programs via distance learning. Kentucky is working to expand AP programs and is reviewing distance learning possibilities and South Carolina has funded efforts to deliver AP programs to targeted areas of the State. The College Board's AP program is now producing satellite video conferences for teachers, coordinators and administrators of AP programs on timely topics relating to the delivery of AP programs.

Representatives of the International Baccalaureate Organization report that planning has begun to develop standards for the use of distance learning to deliver IB programs. At this point, the organization is identifying school systems in rural areas that are fully equipped technologically in order to begin planning for IB program delivery.

***Recommendation 5:***

***The delivery of acceleration courses (dual enrollment, advanced placement, International Baccalaureate) to rural and/or remote high schools that request such courses should be a priority of the distance learning initiatives of the state's public schools, community colleges and universities.***

## **B. EFFECTIVENESS OF ACCELERATION MECHANISMS**

Acceleration mechanisms, such as advanced placement (AP), dual enrollment (DE), and International Baccalaureate instruction (IB), have been widely used in Florida public education since the 1970s. Their purpose as stated in Section 240.116(1), Florida Statutes, is to:

*serve to shorten the time necessary for a student to complete the requirements associated with the conference of a degree, broaden the scope of curricular options available to students, or increase the depth of study available for a particular subject.*

Through acceleration courses, high school students are able to accrue academic credit that will apply toward the requirements for a postsecondary degree/certificate. When the college credit gained fulfills such requirements, students accelerate toward the completion of a degree/certificate with reduced time and cost. Bright, directed and motivated students may accumulate college credit that will significantly reduce the number of courses required for a postsecondary degree at a postsecondary institution. Since current Florida law allows high school students to be exempt from payment of acceleration courses, considerable cost savings are available to students and families through these efforts.

The acceleration of a student through his/her postsecondary degree/certificate program, however, is not assured. An effective plan whereby a high school student gains college credit through acceleration mechanisms requires two components: (1) a motivated student who is academically and emotionally prepared for college work, and (2) individualized, accurate academic advising regarding the most efficient path for completion of a postsecondary degree/certificate.

### **1. Coordination of the Use of Acceleration Mechanisms in Florida**

Advanced Placement - The College Board is a national membership organization of colleges and schools that works to facilitate student transition to higher education. The organization has become a recognized source of programs, services and information in the areas of assessment, guidance, admission, placement, financial aid, curriculum and research. Among its services is to provide national, regional and state coordination of the advanced placement (AP) program. In 1996, a Florida Office of the College Board was established to provide better program coordination and support to Florida members and constituents. advanced placement courses and tests are now delivered to over 370 schools in Florida, with over 32,000 students taking 55,000 AP examinations in 1996.

International Baccalaureate Instruction - There are currently 28 International Baccalaureate programs in Florida schools. The majority of the programs are designated by the school board as magnet programs which allows any qualified student in the school district to participate in the special program. Florida now ranks second in the nation, behind California, in the number of IB-authorized schools.



The Department of Education's Office of Non-public Schools and Program Support employs a staff person who, as a small part of her job responsibilities, provides program support and acts as a resource for schools who either have IB programs or are planning to establish a program.

Dual Enrollment Programs - Dual enrollment programs are offered through interinstitutional agreements that are typically developed and carried out locally by a school district and area college and/or university. These dual enrollment agreements exist throughout Florida and are designed to allow high school students to enroll in high school and college credit courses simultaneously.

All 28 community colleges participate in dual enrollment and a number of state universities have dual enrollment agreements with specific school districts in their service area. Data from the 1994-95 year show that eight of the community colleges reported that over 10 percent of their advanced & professional (A&P) enrollment was dual enrollment students. The Division of Community Colleges' Office of Accountability and Articulation provides assistance to college personnel regarding student articulation from high school and through the postsecondary system. The Office has compiled the colleges' interinstitutional articulation agreements and will be working with the colleges to make the agreements more closely follow the guidelines that are recommended by the Articulation Coordinating Committee. See Appendix B.

The Commission received testimony from school district and high school personnel that there is no identified resource at the state level in the Department of Education to provide assistance in the development and coordination of interinstitutional articulation agreements, particularly dual enrollment programs, as defined by Florida law. Although department staff were assigned these responsibilities in the past, state-level coordination and support for acceleration mechanisms no longer are occurring for public school personnel.

***Recommendation 6:***

***The Department of Education should designate personnel to assist school district and high school administrators in the development and coordination of articulation agreements and acceleration mechanisms, as prescribed by Florida law.***

**2. Student Performance and Time to Degree Analysis**

The Commission was directed by the Legislature to "examine the effectiveness of advanced placement, dual enrollment and international baccalaureate instruction and address factors such as cost, average number of hours earned and impact on time to degree...." While a number of colleges periodically conduct comparative analyses of their dual enrollment students and certain universities analyze the acceleration credit that enrollees bring to the university, there have been few studies that have longitudinally tracked students who earn acceleration credit through the system, from high school through a postsecondary program to completion of a degree/certificate.

The Commission received testimony that many students who actively pursue acceleration credit are highly motivated and desire to enrich their educational experience. College Board personnel report that students who have accumulated advanced placement credit, most likely, do not

accelerate through an undergraduate program and choose to broaden and enrich their program of study by taking courses in a variety of disciplines based on their interests. Such students may take more than the standard number of hours to complete their degree over an extended period of time.

The Division of Community Colleges has conducted a study of former dual enrollment students in the State University System. The purposes of the system level study included an evaluation of the success of the program, as well as the success of individual students. The cohort for the study was all students in 1991-92 who were identified as being dual enrolled in a course that was applicable to an associate degree or to a vocational certificate. Using both the community college Student Data Base and the university Student Data Course File, the cohort of approximately 18,000 students was matched for the years 1991-92 through 1994-95. While analysis is continuing on the cohort regarding course taking patterns and grades earned in sequenced courses at the postsecondary level, the Division reports the following findings:

- While there were some individuals who had earned “excessive credits,” approximately 75 percent of the students took three or fewer dual enrollment courses.
- In an comparative analysis of the entry level placement test results of dual enrolled students and entering college freshmen, the passing rate was higher for dual enrollment students.
- A very small number of students in the cohort had to retake, at the university level, the exact same course they had taken as a dual enrollment student.

***Recommendation 7:***

***The Board of Regents and the State Board of Community Colleges should conduct an analysis of the acceleration credit (advanced placement, dual enrollment, International Baccalaureate) of graduates of their institutions to determine the impact of the acceleration credit on time-to-degree and on degree/certificate completion.***

The Postsecondary Education Planning Commission has begun a longitudinal study to track the progression of 1993-94 public high school graduates of similar ability levels for six years as they enroll in, progress through, and graduate from the state’s postsecondary education delivery system. In addition to the compilation of specific demographic data on the cohort of graduates, a number of questions have been identified that will describe the cohort in terms of academic preparation and degree program, path and completion. The goal of the study is to identify factors that influence a student’s completion of a postsecondary degree. In the study outline, an extensive list of factors has been suggested, including the use of acceleration mechanisms.

***Recommendation 8:***

***The Postsecondary Education Planning Commission, through its Student Progression Study, should analyze the impact of the acceleration credit (advanced placement, dual enrollment, International Baccalaureate) that each high school graduate in the cohort brings to the postsecondary system on the students’ postsecondary degree completion***

*rate and the time required to complete the degree. An analysis of these indicators will provide valuable information on the extent to which college credit earned in high school through acceleration mechanisms enhance the likelihood and efficiency of degree completion.*

### **3. Student Advising and Counseling**

The early and accurate advising of high school students is crucial to ensure the effective use of acceleration credit at the postsecondary level. It is the responsibility of academic advisors, counselors and teachers to help students and parents understand that acceleration mechanisms are available to all students, but may not be appropriate for all students.

There are direct and serious implications for high school students who earn college credit from AP, IB and/or dual enrollment programs. The implications are primarily positive ones, as many motivated, directed students are able to accumulate college credit in high school and accelerate the completion of a postsecondary degree upon entrance at a college or university. There are students, however, for which the college credit earned in high school creates conflicts at the postsecondary level that may actually stall progress toward completion of a degree program. The following examples were identified through Commission testimony:

- (a) High school students are often strongly encouraged by parents, teachers and counselors to enroll in accelerated courses, although the student may not be prepared.
- (b) Students accumulate acceleration credit that does not satisfy postsecondary degree requirements specified by the academic department and the institution, which may result in excess credit hours in the student's degree program.
- (c) Certain baccalaureate degree majors are highly sequenced programs that require students to proceed in a lock-step curriculum. Students with acceleration credit may be required to retake courses at the university if the credit/course does not fit the academic discipline's required course sequence, which may result in excess credit hours in the student's degree program.
- (d) Students with acceleration credit often must declare an academic major and enroll in a specific degree program early in, and occasionally at the onset of, their university career.

The Commission also received testimony that research at a state university on the performance of its freshman students on entry placement examinations identified students who failed examinations in disciplines for which college credit was gained through acceleration mechanisms. In such cases, the acceleration credit brought to the university does not accelerate the student's progression toward degree completion, as the university typically will require the student to retake the course that represents the subject area of the failed placement examination.

In light of the above concerns, it is important that public school counselors and teachers, parents and students view acceleration mechanisms in two contexts:

1. *The Student* - As was stated, advanced placement, International Baccalaureate and dual enrollment courses can assist high school students in the acceleration of their postsecondary degree program, but these programs are not appropriate for all students. Acceleration credit programs are rigorous, time consuming and can cause high levels of stress for students who are not academically and emotionally prepared or have not made the necessary commitment to perform at a high level. Counselors, teachers and parents should be involved in the screening of each student prior to enrollment in an acceleration course and in the ongoing monitoring of the student's progress in the course and program.
2. *Academic Degree Requirements* - The postsecondary institution awards the degree and maintains the responsibility for awarding credit to students who meet the requirements for acceleration. Each college and university has adopted individual policies regarding the acceptance of acceleration credit, which are expressed in the institution's catalog. In addition, each institution recalculates the high school grade point average using weights assigned to honors, advanced placement, international baccalaureate and other advanced courses. It is crucial that public school personnel have accurate information in order to advise students on the specific requirements of individual institutions and on the transferability of specific courses.

A number of states have directed their public colleges and universities to clarify policies regarding the acceptance of acceleration credit from high schools and make this information available to all public schools. In Florida, the 1995 Legislature directed the Articulation Coordinating Committee to implement and oversee legislation that called for the identification of general education courses acceptable at each college and university, single level course designations for each course in the common course numbering system and common prerequisite courses for degree programs across all institutions.

Regarding the use of acceleration mechanisms, the ACC recently proposed an amendment to State Board of Education Rule 6A-10.024, *Articulation Between Universities, Community Colleges and School Districts*. The amendment, which was approved by the State Board of Education, updated state policy governing the transfer of academic credit awarded on the basis of scores achieved on national examinations designed for the award of college credit. For this amendment, the Standing Committee on Alternative Ways of Earning Credit of the ACC equated the advanced placement examinations to courses in the statewide course numbering system and designated a course number for each examination. In addition, the amendment establishes a minimum score and a maximum amount of credit guaranteed to transfer for each AP examination.

The individual institution's academic catalog remains the primary tool used by school counselors and teachers to advise students on the current policies regarding postsecondary institution admissions standards, degree requirements and specific academic policies and procedures. A brief review of a sampling of state college and university catalogs found a wide range of information on acceleration mechanisms.

All community college catalogs include information on dual enrollment agreements. A few colleges provide specific policies and procedures for participation in the program, but a majority

of the college catalogs refer prospective students to high school counselors and college admissions personnel for specific information. Most university catalogs provide little specific information on dual enrollment. The University of Florida catalog, however, states the institution's policies for dual enrollment participation and includes a rather detailed discussion of acceleration mechanisms.

A number of catalogs provide information, often in chart form, regarding levels of advanced placement and International Baccalaureate examination scores for which college credit will be given. Certain catalogs, like the University of Central Florida and Broward Community College, provide detailed charts that relate examination scores to specific courses for which credit will be given, and discuss the impact of acceleration credit on general education and Gordon Rule requirements.

***Recommendation 9:***

***The Board of Regents and the State Board of Community Colleges should direct that each institution conduct a review of its academic course catalog to ensure that policies and procedures regarding college credit gained from acceleration mechanisms (advanced placement, dual enrollment, International Baccalaureate) are accurate, comprehensive and comply with Florida law. Each catalog should include the recent amendment to State Board of Education Rule 6A-10.024 regarding acceleration mechanisms and should link specific acceleration credit to the common course numbering system.***

The Department of Education's Counseling For Future Education Handbook, updated annually, also provides useful information for counselors, parents and students on individual postsecondary institution admissions standards, degree requirements, financial aid and career planning. A brief reference to acceleration mechanisms is included in the state university system chapter, along with a chart that displays the grade point average weighting that each university assigns honors, advanced placement, international baccalaureate and other advanced courses in the academic core curriculum.

***Recommendation 10:***

***As an important advising tool used by school counselors, teachers, parents and students, the Department of Education's Counseling For Future Education Handbook should include all current policies on acceleration mechanisms, including the grade point average weighting policies of each state university for college credit earned through all acceleration mechanisms.***

The Board of Regents and State Board of Community Colleges are now planning for the implementation of a single, statewide computer-assisted student advising system which will become an integral part of the process of advising, registering and certifying students for graduation. Plans call for the system to provide information relating to student enrollment patterns and course demands to plans for corresponding course offerings to be used in the student registration process. The computerized advising system will have implications for students with

acceleration credit, as the students will be able to gain information on the impact of this credit on particular degree requirements. However, the Commission believes that the importance of student-staff interaction in the advising process should not be diminished by the implementation of the computerized system. The effectiveness of the system will be a function of its use in concert with the knowledge, experience and personal interaction of the school/college student services staff..

#### ***Recommendation 11:***

***The computer-assisted student advising system should provide access for students and counselors to the policies and procedures of each postsecondary institution regarding the use of college credit gained from acceleration mechanisms (advanced placement, dual enrollment, International Baccalaureate), including each institution's general education core requirements, policies for the application of credit toward specific degree requirements and the weighting procedures used to apply acceleration credit for grade point average calculations. The system should be user-friendly and enable a student to easily apply the information to a specific degree path.***

#### **Career Planning and Counseling**

Career planning and counseling should be integrated with the academic advising process throughout the education system. Career planning involves the counseling, guidance and advising of students that begin during the freshman year and continues through graduation. It is a developmental process that includes a comprehensive program of counseling for students, including counseling students to know themselves, their interests, abilities, values and needs; guiding them to a determination of their vocational goals and life-long objectives; and advising them of educational and training requirements, job market trends and employment supply and demand. A campus career counseling program is effective when it helps students to identify and transfer career interests to a plan of action, relates student's interests and goals to opportunities in the workplace, relates their career plans to overall life goals, and evaluates progress toward career goals throughout the student's academic life.

Research on student retention conducted during the past two decades has confirmed that *a change in career goals* is often reported by students as a primary reason for not continuing at their postsecondary institution. Evidence indicates that students with higher educational goals and well-established career goals are less likely to drop out, and more likely to persist to graduation. These findings should cause each postsecondary institution to carefully examine the characteristics of its students and of its campus in order to develop the best approach to serve its students. Greater integration of career planning into both the classroom and the curriculum is a strategy for institutions that can positively influence student retention.

#### **4. Performance of Floridians on Advanced Placement Examinations**

Participation in advanced placement courses benefit both students and postsecondary institutions. Students have the opportunity to become better prepared academically for college course work,

grading and examinations. Colleges and universities who enroll students with AP credit find that these students are highly motivated and have been successful in rigorous college-level work.

According to Section 240.116(4), Florida Statutes, "... Postsecondary credit for an advanced placement course shall be limited to students who score a minimum of 3, on a 5 point scale, on the corresponding Advanced Placement Examination." In 1996, a total of 24,728 exams taken by Florida public school students (52 percent) received a grade of 3 or higher. Analysis of College Board data on the performance of Florida residents on AP examinations found that, although Florida ranked third in the number of tests taken in 1996, in a comparison of the ten most populous states, Florida ranked tenth in the percentage of successful exams taken. Accordingly, 48 percent of AP testtakers failed in their attempt to attain postsecondary credit.

The AP participation rate is significantly higher for Florida than for the nation as a whole. In the US, the number of 12th grade candidates represents 11 percent of the high school graduates, while in Florida the number of 12th grade candidates represents 29 percent of that year's graduates. Analysis by the Department of Education's Office of Strategy Planning suggests that Florida's significant increase in participation during the past two decades has had a negative effect on the percentage of students scoring 3 or higher. In 1980, when the number of exams taken by Florida AP students as a percentage of high school graduates was only 4.6 percent, 64 percent of the exams received a score of 3 or higher. By 1986, when the number of exams represented 25 percent of the graduates, exams receiving a qualifying score had dropped to 54 percent. Between 1986 and 1996, the percentage of qualifying scores has varied from 52.5 percent to 56.4 percent.

Florida educators at all levels should be commended for their support of the AP program and for the significant increase in student participation during the past two decades. Educators involved in planning for, administering and teaching AP courses, however, should continue to strive to improve the performance of Florida students on the AP examinations.

***Recommendation 12:***

***The Department of Education should work with the College Board Southern Regional Office and the College Board's Florida Office to assist schools that offer advanced placement programs to develop and implement methods to improve the performance of Florida residents on the Advanced Placement examinations.***

**5. Technical Issues Related to Acceleration Credit**

The Commission gained valuable insight from school counselors, college faculty and university administrators during its deliberations and a number of technical issues relating to the functioning of acceleration mechanisms were identified. Due to the technical nature of the issues that are summarized below, and others that relate to how acceleration credit is earned, weighted, counted and funded, the Commission believes that such issues should be reviewed and acted upon by front-line practitioners of the three education sectors.

As discussed earlier, a Standing Committee on Alternative Ways of Earning Credit was established by the Articulation Coordinating Committee to respond to requests to review acceleration mechanisms and/or other mechanisms for earning credit. The Standing Committee includes representatives of the state universities, community colleges and public schools who were appointed by the ACC. This Committee should be convened to consider these issues, and others that are forwarded to it by the ACC, and to propose solutions to the problems that are identified.

***Recommendation 13:***

***The Articulation Coordinating Committee's Standing Committee on Alternative Ways of Earning Credit should be convened to consider technical issues on how acceleration credit is earned, weighted, counted and funded. Proposals to remedy problems should be forwarded to the Articulation Coordinating Committee for appropriate action. The Standing Committee should include an equitable number of representatives of the public school system, the applied technology and adult education system, the state community college system, and the state university system.***

**Technical Issue A: Dual Enrollment Course Values**

Currently, the Department of Education Course Code Directory includes academic courses that are designated as an advanced placement (AP), International Baccalaureate (IB) or honors course. The state directory, however, does not designate dual enrollment courses and does not assign grade point average weighting to honors courses. These determinations are made at the local level and are the prerogative of the school district and the designations are often expressed in the interinstitutional articulation agreement.

In many school districts, high school students who elect to enroll in a college dual enrollment course receive no additional grade point average weighting, while students enrolled in an honors class receive honors weighting for the class. Due to these policies, qualified students may be reluctant to enroll in dual enrollment courses and choose to enroll in an honors class in the same discipline in order to achieve a higher grade point average calculation.

**Technical Issue B: Advanced Placement Examination Fees**

Students enrolled in an advanced placement course may receive postsecondary credit if they score a minimum of 3, on a 5 point scale, on the corresponding advanced placement examination. Section 240.116(4), Florida Statutes, states that students enrolled in an advanced placement course "shall be exempt from the payment of any fees for administration of the examination."

Although Florida law does not require that school districts use state funding that is gained from students in acceleration programs for specific purposes, the law allows the supplemental funding to be used by districts to cover all student fees for the program. The Commission received testimony that there are school districts that do not pay the examination fees for students and divert state funding from the AP program at the local level. The College Board has corroborated



this situation as a result of a customer service program that provides course and test preparation materials at no charge to districts that are covering the examination fees of their AP students.

#### **Technical Issue C: Funding for Instructional Materials**

As stated in Section 240.116(2)(a), F.S., dual enrollment students “shall be exempt from the payment of registration, matriculation and laboratory fees.” There are no state policies, however, that specify the responsibilities of each participating entity in the provision of instructional materials, including textbooks and class supplies. In many school districts, these determinations are made and expressed in the interinstitution articulation agreement. The *Dual Enrollment Guidelines* that were adopted by the Articulation Coordinating Committee (see page 24) include “Procedures for providing students with instructional materials” in the list of *Necessary Components* of articulation agreements. Most often, expenses incurred for the dual enrollment course offering are equally shared among the participating entities.

Agreements exist, however, that do not adequately specify the responsibilities for the purchase of instructional materials and for the management of textbooks and materials that are obtained. School district instructional materials personnel may not be involved in the development of the agreement and the payment of materials often becomes random and/or inequitable. It has also been reported that there are high school students enrolled in postsecondary courses for which no agreement exists to delineate policies and procedures for instructional materials for the students.

#### **Technical Issue D: Credit for Vocational Dual Enrollments**

Secondary-level vocational instruction is offered both at high schools and area vocational-technical centers, some of which are community colleges. Postsecondary vocational instruction is offered at area vocational-technical centers and community colleges, and vocational degree programs are limited to community colleges. The use of vocational dual enrollment at the secondary level was originally intended to provide job preparatory instruction for students at schools at which such instruction is not available. It continues to broaden the availability of learning opportunities and career paths, and can provide alternatives to students who may otherwise leave high school prior to receipt of the diploma. At the postsecondary level, both articulation and acceleration are important for vocational students, as career advancement is often directly contingent upon educational attainment. Increasingly, vocational programs are being articulated from the entry-level certificate to the associate’s degree and to the baccalaureate degree. Underlying the concept of vocational dual enrollment is the desire to coordinate secondary and postsecondary occupational training programs to eliminate unnecessary duplication of course work and streamline the educational process. Vocational dual enrollments are an important program strategy associated with school-to-work and other workforce development initiatives.

The category of program under which full-time equivalent (FTE) students are allocated is critical to the viability of any educational program. It was reported that students who are enrolled in vocational dual enrollment courses on the high school campus are not being recognized as vocational enrollments in the funding calculations for the school district. Further, these students are not appearing in the statewide data base as vocational technical students, which has resulted

in inaccurate and incomplete accountability reporting of the students. A procedure for including high school vocational dual enrollment in the statewide data base is needed to produce accurate funding and to provide for a total accountability of dual enrolled vocational students in all settings.

**Technical Issue E:    Calculation of Acceleration Funding for AP and IB Students**

According to Florida law, school districts receive extra funding (.24 FTE) for every advanced placement examination grade of three or higher, and .24 FTE for each International Baccalaureate examination grade of four or higher. The supplemental funding is provided for the high school student although the acceleration course (AP or IB) represents a portion of the student's total course load, typically a three hour or a five hour course within a 25 hour course load.

The question has arisen as to whether the acceleration funding should be calculated as a percentage of the total semester course load of the student. If such a policy were applied, the supplemental funding for one AP examination score of 3 in a five hour AP course, within a total course load of 25 hours, would be calculated as one-fifth of the student's workload multiplied by the .24 FTE figure. A review by the Standing Committee of the current funding policy, as well as the impact of such a policy change on public school funding, is warranted.

**Technical Issue F:    Funding Dual Enrollment Programs Offered via Distance Learning**

A number of state committees and task forces are now working on policies for the delivery of academic courses via distance learning technology. Primary issues will be financial issues, including the determination of methods to allocate state funds to distance learning programs and the establishment of student fees for participation in these programs. The impact of state-level distance learning policies on local interinstitution articulation agreements, particularly on the financing of new delivery methods for dual enrollment courses, should become a part of the discussion.

## C. FUNDING

National interest in shortening the time required to earn a baccalaureate degree heightened during the 1970s following the publication of a Carnegie Commission report: *Less Time, More Options*, which urged educators at all levels to reexamine the length of time traditionally required for the baccalaureate degree and to develop more options for students to reach their educational objectives.

In Florida, the 1972 Legislature enacted legislation which mandated that a feasibility study be conducted to determine whether the traditional four-year degree program should be shortened to three years. The 1973 Report of this Task Force identified problems resulting from different funding formulas and the fee structures used to allocate resources at the various educational levels that impeded the use of dual enrollment. The Task Force strongly recommended the expansion of dual enrollment programs, and also recommended that “credit earned by acceleration mechanisms should be incorporated in funding formulas at all levels of education.” At the time, policymakers believed that funding formulas for acceleration mechanisms must be consistent long enough that entities will have confidence about using them, and that the specific formula should generate sufficient funding to fully offset the cost of institutional participation in the program.

During the past two decades, the Legislature has amended or enhanced the statutes governing acceleration mechanisms to provide incentives to secondary and postsecondary institutions to encourage qualified students to avail themselves to the acceleration options or to remove perceived obstacles to participation for students. The most compelling statement of the value of acceleration mechanisms is that the Legislature continues to provide funding for both the secondary and postsecondary sectors for students enrolled in dual enrollment programs and provides enhanced funding for successful participation in the advanced placement and international baccalaureate programs.

Advanced Placement - In 1984, the state of Florida passed legislation to provide additional financial support for school systems (.3 FTE) that offer advanced placement (as well as International Baccalaureate and dual enrollment) courses. Following a 1987 cost survey of advanced placement and International Baccalaureate programs as part of the Commission’s study of *Funding of Acceleration Mechanisms*, the funding level was adjusted downward. According to Section 236.081(q), Florida Statutes, school districts now receive extra funding (.24 FTE) for every advanced placement exam grade of three or higher, which districts use to pay examination fees for students, provide in-service training of teachers, or purchase additional classroom materials. Since the legislation was enacted, school and student participation has grown significantly.

The Commission received testimony that confirmed that school districts have discretionary authority to allocate the supplemental state funding that is received for AP examination scores of 3 or higher. As a result, there are school districts that forward all AP state funding out to the schools where the students completed the AP course and examination to support AP instruction, and there are districts that utilize these funds at the district level based on local priorities and

needs. The 1997 Legislature will be considering ways to provide statewide consistency to this allocation process.

**Recommendation 14:**

***At least 80 percent of the state funds that are appropriated to school districts for passing scores on advanced placement examinations should be allocated for advanced placement instruction.***

Dual Enrollment -In the mid 1970s, state funding formulas initially provided FTE funding for dual enrollment students in the school district as well as the postsecondary institution. Since that time, dual enrollment participation has been very sensitive to state funding formulas for students in the DE programs. The 1983 Legislature addressed the funding calculations for acceleration mechanisms and amended Section 236.081 by stating:

*In those academic programs, which are not remedial in nature, through which a student may earn credit towards both a high school diploma and an associate or baccalaureate degree, the student instruction time may be included in the count of full-time equivalent students of the high school at one-half the value of the program cost factor for grades 9 through 12. Students enrolled in such courses may be counted as full-time equivalent students by universities and community colleges offering such instruction.*

In its 1988 report: ***Funding of Acceleration Mechanisms***, the Commission found that the number of dual enrollment students had dropped in recent years because, at the time, school districts were only receiving .5 FTE per student. The 1989 Legislature restored full funding (1 FTE) to the school districts in order to make dual enrollment more attractive. The number of dual enrollment participants increased significantly as a result.

In 1991, Section 236.081(j), Florida Statutes, was revised to specify that:

*Students enrolled in community college or university dual enrollment instruction pursuant to s. 240.116 may be included in calculations of full-time equivalent student memberships for basic programs for grades 9 through 12 by a district school board. Such students may also be calculated as the proportional shares of full-time equivalent enrollments they generate for the community college or university conducting the dual enrollment instruction.... Students enrolled in dual enrollment instruction provided by a vocational-technical center located in the same district as the district in which the student attends secondary school and operated by the school board of that district shall be calculated by the school board as one-full-time equivalent enrollment within the basic secondary program for state funding purposes; however, a district school board may also report such students as the proportional shares of full-time equivalent enrollments each student generates within the vocational program.... Students enrolled in vocational dual enrollment instruction conducted by a community college on a high school campus may be calculated by the school board as the proportional*

*shares of full-time equivalent enrollments they generate in the basic program for grades 9 through 12 and the proportional shares of full-time equivalent enrollments they generate in the vocational programs.*

Section 240.116(2)(a), F. S., stipulates that dual enrollment students “shall be exempt from the payment of registration, matriculation, and laboratory fees. Students enrolled in postsecondary instruction that is not creditable toward a high school diploma shall not be classified as dual enrollments.”

**International Baccalaureate Instruction** - The 1989 Legislature also implemented additional funding to schools with IB diploma programs. The district receives an additional .24 FTE for each IB examination grade of four (4) or higher and an additional .3 FTE for every student who earns an IB diploma (Section 236.081(n), F.S.). Exams are taken in May, results come back in July, and additional funding to the district occurs in the Fall. The additional funding “shall be added to the total full-time equivalent student membership in basic programs for grades 9 through 12 in the subsequent fiscal year.” The majority of additional funding is used for extensive faculty training.

### **Performance Based Budgeting**

Florida government is continuing its dramatic reform of how state dollars are allocated to its entities through the implementation of a performance-based budgeting system. Under this system, the traditional line item budgeting approach is being phased out for many agencies, and state resources will be allocated based on expected levels of program outcomes. Each agency will develop performance standards for programs that represent their major activities, and detailed measures that will link agency performance to funding. The choice of the number and type of performance indicators is crucial in this process. The Division of Community Colleges was the first education agency to implement performance-based measures for distribution of a portion of its state budget. Plans call for the state university system to implement a performance-based system this coming year, and the Division of Public Schools the following year.

For the community college system, \$12 million was appropriated by the 1996 Legislature for allocation to the 28 colleges according to a set of performance measures that were identified by the system. One of the measures is as follows: the number of associate in arts completers who graduated with fewer than 72 total attempted hours. In calculating hours attempted, the policy includes: “Any advanced placement, dual enrollment, International Baccalaureate, CLEP, departmental credit, or life experience credit which is counted toward the AA degree.”

Performance budget incentive funding is now dictating the major policy decisions regarding future funding for the state’s community colleges. Budget issues for the 1997-98 Community College System Budget Request emphasize performance based incentive funding for the colleges.

The Division of Community Colleges has expressed concern that dual enrollment was created by the Legislature to provide acceleration for high school students and is not an integral part of a

community college degree program. Since the current performance budgeting process focuses on completers as the primary outcome measure, the fact that most dual enrollment students do not seek a degree at a community college has a negative impact on state appropriations to the System. This situation is exacerbated by the lack of enrollment workload funding in the new community college funding process.

***Recommendation 15:***

***Dual enrollment should be funded as a separate calculation within the Community College Program Fund. The calculation should be based upon the annual change in dual enrollment FTE multiplied by direct instructional costs.***