

SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

BILL: SB 2004

SPONSOR: Senator Horne

SUBJECT: Education

DATE: April 16, 2001 REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>White</u>	<u>O'Farrell</u>	<u>ED</u>	<u>Favorable</u>
2.	<u>Gillespie</u>	<u>Maclure</u>	<u>CM</u>	<u>Favorable</u>
3.	_____	_____	<u>AED</u>	_____
4.	_____	_____	<u>AP</u>	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____

I. Summary:

Senate Bill 2004 phases in changes to high school vocational education programs. These changes will be implemented statewide and require:

- Certification or endorsement of the technical portions by business and industry;
- A strong academic component with all required academic courses above level two;
- A core course, experience in the workplace, and a final project conducted with assistance by a guidance counselor and a business partner;
- A passing score on the College Entry Level Placement Test; and
- Articulation with postsecondary education.

By 2006, all vocational programs in high schools must meet these requirements as further specified in rules of the State Board of Education.¹ The bill has no effect on high school programs other than vocational or technical programs, nor does it require a high school to have a vocational or technical component. Technical programs that meet the requirements will be funded at 1.5 times the base student allocation for grades 9 to 12. Beginning in 2006, any technical education course that is not part of such a program will be funded at the base student allocation.

A student who completes the program receives an endorsement that assures an employer of the student's experience with workplace skills and academic competence. The certificate also assures admission without qualification into postsecondary education.

¹ Exploratory, orientation, and practical arts courses are exempted from these requirements.

The bill also requires additional qualifications for the school personnel who will coordinate with the business partners and assist the students through the program. The program requires certification of each vocational area by the relevant business or industry and also requires students to have clinical experience in the workplace.

This bill substantially amends the following sections of the Florida Statutes: 228.041, 229.601, 229.602, 236.081, 239.121, and 239.229. The bill also creates unnumbered sections of the Florida Statutes.

II. Present Situation:

Pathways Between Academic College-Preparatory Programs and Vocational Job-Preparatory Programs

In current law, the Legislature has found that “a student who pursues an academic college-preparatory program in secondary school should also be prepared for employment, and that a student who pursues a vocational job-preparatory program should also be prepared for postsecondary education.”² During the 1999-2000 school year, Florida high schools reported almost 62,000 full-time-equivalent (FTE) students for funding in the vocational job-preparatory program category, or 11.5 percent of all high school FTEs. This is among the highest participation rates in the nation.

Since at least 1988, reform efforts in Florida have sought to improve the outcomes of high school vocational education and remove the stigma of the “vocational track.” Based on studies initiated by the Rand Corporation and the Southern Regional Education Board, the goal of these reform efforts has been to prepare all students for postsecondary education *and* work. This approach emphasizes “two parallel, more equal pathways through high school – a Tech Prep pathway for career and community college-bound students and a parallel pathway for four-year college and university preparatory students. Both pathways should contain the same basic curriculum of demanding college preparatory level courses and should be flexible enough for students to move from one pathway to another.”³ These reforms have as their main effort the integration of vocational and academic education, with the following common components:

- Revise and develop *vocational courses* to teach communication, mathematics, and science.
- Revise and develop *academic courses* to teach concepts from the college preparatory curriculum through functional and applied strategies.
- Recognize that high school vocational education alone does not result in self-sufficiency, and develop *two-plus-two programs* that guarantee a smooth transition to postsecondary education or include part of a postsecondary education during the high school years.

² Section 233.068(1), F.S.

³ Gene Bottoms et al., Southern Regional Education Board, *Making High Schools Work Through Integration of Academic and Vocational Education* 7 (1992).

Florida's major efforts can be divided into four categories. Each category describes a school design that emphasizes one of these components more than the others. But each type of school includes all three components:

- ***Blueprint for Career Preparation:*** These “Blueprint Schools” were originally funded by the Legislature in 1988 and were designed around the Southern Regional Education Board’s (board) original “Ten Steps to Improve High School Vocational Education Programs.” Each Florida school district now operates its vocational education programs around those concepts. However, when the board evaluated several states, it found that Florida’s programs still lacked the academic rigor that was associated with success. The board’s report recommended stronger efforts to increase academic proficiency among vocational students, especially to encourage students to take higher-level courses.
- ***Tech Prep:*** This program, also called two-plus-two, requires an articulation agreement with postsecondary education institutions. Almost all of Florida’s high schools (296 of 298) have at least one tech prep program, and all 28 community colleges and five four-year universities participate. However, students who complete the secondary portion of a program seldom continue the postsecondary education path as planned. The popular Gold Seal Vocational Scholarship requires completion of the high school component, and many students enroll in these programs as a way to earn a scholarship for a university education. Fewer than 3 percent of Gold Seal Scholars enroll in a technical program in postsecondary education.
- ***Career Academies:*** These schools, created in 1992,⁴ are open-enrollment schools-within-schools that prepare students for a common occupational “cluster” – a group of related occupations that require varying levels of postsecondary education. The 30 academies originally funded by the Legislature have been increased to 46, with the additional 16 funded by the federal School-to-Work program.
- ***High Schools That Work:*** These schools are the “second generation” of the Blueprint Schools, designed around the findings of the Rand Corporation and the Southern Regional Education Board. Each program must agree to an evaluation based on testing by the National Education Assessment Program. The main focus of these schools is the integration of academic and career education, a four-year career plan, and continuation in postsecondary education. Currently, 41 high schools are designated High Schools That Work, and they serve more than 93,000 students.

Another example of blending the education and career preparation courses and programs in secondary education settings is what is referred to as school-to-work programs developed in Florida and in many states as a result of the federal School-to-Work Opportunities Act of 1994 (federal act).⁵ These programs are intended to facilitate the education and career preparation of young people during their secondary school years by expanding and providing pathways to

⁴ See s. 233.068, F.S.

⁵ Pub. L. No. 103-239, 108 Stat. 568 (codified at 20 U.S.C. s. 6101 et seq.) (1994).

postsecondary education opportunities, productive work experiences, and, eventually, self-sufficiency.

The federal act specifies three kinds of school-to-work opportunities: school-based learning oriented to high academic standards; work-based learning leading to industry-recognized credentials; and connections between school-based and work-based learning, through career majors and applied or experiential learning.

The federal act called for the creation of systems, not merely the development and implementation of new programs. A revised education structure was expected that linked opportunities beginning in middle school, taking root in high school, and continuing through postsecondary education and vocational training.

Florida was one of the states that received federal funding under the federal act. Florida received \$54.6 million over five years (1995-2000), which was essentially “venture capital” to develop an integrated system of workforce education. The mission of Florida’s school-to-work system is to enable each person to achieve economic independence and to attain the quality of life to which he or she aspires; and to work in full partnership with business and industry to prepare a workforce that will allow Florida’s employers to remain competitive in the global economy. Goals of the school-to-work system are to create higher academic standards, improve career opportunities for all persons, lower the school dropout rate, and produce a more highly skilled workforce.

The Institute for Workforce Competitiveness (institute) at Florida International University is an approved national school-to-work technical assistance provider and has conducted numerous evaluations on Florida’s and other states’ school-to-work initiatives. A 1999 report by the institute showed that Florida achieved significant progress in implementing school-to-work initiatives and principles in the state’s secondary education system.⁶ For example, career awareness activities were widely used in Florida’s elementary and middle schools such as one-time career awareness events, introducing career information in curriculum, and career exploration. School-based school-to-work activities also included the enhancement of the academic curriculum with references to the world of work, the integration of academic and work-related curriculum, and work-based learning experiences connected to an integrated curriculum.

The institute also conducted a study in 1998 of 13 states that implemented school-to-work initiatives.⁷ A finding from the report was that the majority of state school-to-work directors cited the reluctance, misconceptions, or lack of acceptance of key stakeholder groups or individuals as a major barrier to school-to-work implementation and sustainability. The report found that state and local stakeholders participation, including the participation of the business community, enhances the success of the initiatives.

⁶ Mary Haley & Nancy Scheel, Institute for Workforce Competitiveness at Florida Int’l Univ., *State of Florida High Schools That Work 1998 State Assessment Results* (Apr. 1999).

⁷ Frank T. Hammons et al., Institute for Workforce Competitiveness at Florida Int’l Univ., *Sustaining School-to-Work Systems: A Report on Selected States* (June 1998).

A recent report entitled *School-to-Work: Making a Difference in Education* performed a meta-analysis on numerous school-to-work evaluations and studies to determine what impact the school-to-work initiatives have had.⁸ Some of the findings include the following:

- Students in school-to-work initiatives earn grade point averages that are at least as high as comparable other students.
- Students in school-to-work programs stay in school and complete their diploma.
- School-to-work students are prepared for college.
- School-to-work students are able to define their career interests and goals for the future.
- Graduates of school-to-work programs have better labor market outcomes than do other high school graduates.
- Surveys of employers find that vast majorities support the school-to-work vision and initiative.

Outcome Information

According to data from the Florida Education and Training Placement Information Program, vocational students are not likely to use their training to work in an occupation related to their program – only 22 percent are found in training-related placements. Rather, they are continuing their education. Of graduates who completed a vocational program, 57 percent are found in postsecondary education and 36 percent are found both employed and continuing their education. This is a higher rate than that of non-vocational high school students, a category that mixes college-preparatory students and so-called “general track” students. Forty-nine percent of non-vocational graduates were found in postsecondary education, and 29 percent were found both working and continuing their education. (See Table 1 below.)

(Table 1) Comparison of Graduates of Vocational and Non-Vocational High School Programs⁹				
	Total Number	Continuing Education	Employed	Employed & Contin. Educ.
Non-vocational Completers	71,204	49 percent	56 percent	29 percent
Vocational Completers	18,646	57 percent	62 percent	36 percent

This data provides evidence that Florida’s decade-long reform effort has increased student achievement. Additional information, however, indicates a need to continue the reform effort. Data provided by the Florida Chamber of Commerce shows that members of the business community are not satisfied with the quality of Florida’s workforce. Workforce development is the top issue facing these businesses, and many executives say high school graduates do not possess the basic skills needed to function at work. When surveyed about specific employees who have completed vocational programs, employers are generally satisfied with their technical skills but less satisfied with their academic skills.

⁸ Katherine L. Hughes et al., Institute on Educ. & the Economy, Teachers College, Columbia University, *School-to-Work: Making a Difference in Education* (2001).

⁹ Source: Florida Education and Training Placement Information Program.

Pilot Projects

The Florida Department of Education and local school districts historically have piloted and evaluated strategies that assist students in preparing for a career while they also prepare for entry to a postsecondary educational institution to continue their education. In 1998, the Legislature directed the department, in cooperation with a task force, to design a comprehensive vocational program that would guarantee academic competency and workforce readiness of all vocational high school graduates. The task force also developed recommendations on ways students can best be prepared to meet the occupational demands and needs of the 21st century and the new economy. In 1999 and 2000, the Legislature provided \$2 million each year for implementation of 10 technical programs per year in comprehensive high schools as the task force recommended. Moreover, Senate Bill 2004 is designed to implement the task force’s recommendations.

Funding for High School Vocational Programs

The Florida Education Finance Program (FEFP) is the funding formula adopted by the Legislature in 1973 to allocate funds appropriated by the Legislature for public school operations.¹⁰ In order to ensure equalized funding, the FEFP takes into account the local property tax base, costs of education programs, costs of living (cost differential), and sparsity of student population.

The basic unit of measurement in the FEFP is the full-time-equivalent student (FTE). One FTE equals 900 hours or one school year of instruction provided to a student. Twice a year, students are counted to determine the number of students enrolled in each of the seven programs. The programs are associated with a cost factor that is used to “weight” the FTE for funding. The total FTE funding generated by a student is the program weight multiplied by the base student allocation, which each Legislature establishes in the General Appropriations Act. The programs and their weights are:

Kindergarten to grade 3	1.036	Exceptional student level four	3.948
Grades 4-8	1.000	Exceptional student level five	5.591
Grades 9-12	1.096	Vocational education, grades 6-12	1.211
Intensive English	1.0226		

High school vocational programs are funded through the FEFP formula. Conversely, postsecondary-level workforce education programs are funded through the Workforce Development Education Fund.

III. Effect of Proposed Changes:

The bill phases in changes to high school vocational education programs. These changes will be implemented statewide and will require:

- Certification or endorsement of the technical portions by business and industry;

¹⁰ See s. 236.081, F.S.

- A strong academic component with all required academic courses above level two;
- A core course, experience in the workplace, and a final project conducted with assistance by a guidance counselor and a business partner;
- A passing score on the College Entry Level Placement Test; and
- Articulation with postsecondary education.

By 2006, all high school vocational programs must meet these requirements as further specified in rules of the State Board of Education (currently the Governor and Cabinet). The bill has no effect on high school programs other than vocational or technical programs, nor does it require a high school to have a vocational or technical component. Technical programs that meet the requirements will be funded at 1.5 times the base student allocation for grades 9 to 12. Beginning in 2006, any technical education course that is not part of such a program will be funded at the base student allocation.

A student who completes the program receives an endorsement that assures an employer of the student's experience with workplace skills and academic competence. The certificate also assures admission without qualification into postsecondary education.

The bill also requires additional qualifications for the school personnel who will coordinate with the business partners and assist the students through the program. The program requires certification or endorsement of each vocational area by the relevant business or industry and also requires students to have clinical experience in the workplace.

Legislative Intent (Section 1)

The bill provides the intent of the Legislature that high school programs include comprehensive programs of study which meet the needs of all students. The bill lists three key components of these high school programs: individual educational goals to guide selection of program type, parental involvement, and transition to postsecondary education.

Industry Certification or Endorsement (Section 2)

The bill requires each technical program to be industry-certified effective July 1, 2006. The bill specifies that these technical programs will generate 1.5 times the base student allocation for grades 9 to 12 in the Florida Education Finance Program. The Department of Education will adopt rules for obtaining business partners and requirements for business and industry involvement in curriculum oversight and equipment procurement.

Requirements for Students (Section 3)

The bill requires that industry-certified technical programs must enable students to graduate from high school prepared for postsecondary education and employment. These assurances incur the following requirements of students:

- Completion of a core course of one credit. This course will meet the graduation requirement for practical or performing arts. The course competencies will be adopted in rule by the Department of Education.

- Attainment of at least one occupational completion point for industry-certified technical programs, or completion of at least three courses in a technology education program.
- Participation in a work-based learning experience that includes a capstone activity involving a student project planned in consultation with a guidance counselor and a business partner. The Department of Education will specify any additional requirements.
- An articulation agreement for continuing the program into postsecondary education.
- Completion of the academic courses required for graduation at level two or above (no basic courses).
- Earning a passing score on the College Entry Level Placement Test.

A student who completes the technical program earns an endorsement upon graduation. If the Legislature appropriates funds, the endorsement may generate an incentive for the school district, in a manner similar to how Advance Placement (AP) students and International Baccalaureate (IB) students generate funds for their school district by successfully passing an AP or IB examination.

Guidance Counselors (Section 4)

To address the need for guidance counselors to assist in the implementation of the industry-certified technical programs, the bill requires guidance counselors in each high school with such a program to complete three credit hours or 12 in-service points in technical education or career development. The instruction must emphasize labor-market trends and projections and include a practicum on career awareness. The State Board of Education must revise its rules for certification and re-certification of guidance counselors so that they may substitute personal work-based experience for the required classroom instruction. The bill encourages colleges of education not to increase the total number of credit hours required for guidance counselors to complete a program, but to infuse the content of required ethics courses into that of other courses.

Florida Education Finance Program (Section 8)

The bill changes the manner in which high school vocational programs are funded through the Florida Education Finance Program (FEFP) funding formula:

- Enhanced weighted funding would be provided for programs certified or endorsed.
- Programs that are not industry certified would receive no funding unless they meet one of the exclusions.
- The Department of Education would conduct a study of cost factors to determine if differential funding for certified or endorsed programs is needed.
- Effective in 2006, an additional funding category would be established for the certified or endorsed programs.
- Funding in the FEFP for career and technical education certified courses would be 1.5 times the basic grades 9 to 12 weight.
- Substitution of vocational courses for required courses would be permitted to allow a course-to-course substitution, rather than requiring students to complete a program before a substitution occurs.

- References for vocational courses would be changed from grades 7 to 12 to grades 6 to 12.

Responsibilities of School Boards and Superintendents (Section 10)

The bill requires each school board and superintendent to direct the smooth transition of high school vocational programs to industry-certified programs.

Career Specialists (Sections 5, 6, 7, and 9)

The bill changes the title of occupational specialist to career specialist, to conform to changes made by the Legislature during the 2000 Regular Session.

Effective date (Section 11)

The bill provides an effective date of July 1, 2001.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The Department of Education calculated the following annual cost through the Florida Education Finance Program for funding all high school vocational education through 2006:

FTE in the FEFP (Projected)	2001-2002	2002-2003	2003-2004
FTE in Industry Certified Programs	5,000	10,000	20,000
Increase Weighting Factor	0.4635	0.4635	0.4635
Weighted FTE Increase over Prior Year	2,318	4,635	9,270
Proposed Base Student Allocation	\$3,416.73	\$3,519.23	\$3,624.81
Total Impact from FTE	(\$7,918,272)	(\$16,311,640)	(\$33,601,978)
Performance Incentives for Endorsements			
Anticipated Number of Endorsements	2,000	4,000	8,000
Amount Per Endorsement	\$200	\$200	\$200
Incentives for Student Endorsements*	\$400,000	\$800,000	\$1,600,000
TOTAL IMPACT	(\$8,318,272)	(\$17,111,640)	(\$35,201,978)

*Each year the Legislature may appropriate a sum of money to be allocated based on the number of students who successfully complete a tech-prep pathway and earn an endorsement upon graduation.

The following assumptions were used in completing this analysis:

- The basic 9 to 12 weight for 2001-2002 is 1.113.
- When multiplied times 1.5 (the weight for programs certified or endorsed by industry), the funding weight is 1.6695.
- All career and technical education programs are in the current FEFP projections at a weight of 1.206.
- Therefore, the difference between the funding weight and the projected weight for career and technical education programs is 0.4635. These calculations indicate the increased amount of weighted FTE needed to implement the committee substitute.
- The bill will phase in the emphasis to industry-certified or endorsed programs over five years.
- For 2001-2002, only a small number of programs will be certified and a small number of students will receive the endorsements.
- The numbers provided will vary based on the impact of the district cost differential.
- The 2000-2001 base student allocation was used. For future years, an increase of 3 percent was built into the calculation.
- The impact totals represent an aggregate of the impact over the three-year period.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Amendments:

None.