

**The Florida Senate**  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

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

Prepared By: The Professional Staff of the Education Pre-K - 12 Committee

**BILL:** CS/SB 1844

**INTRODUCER:** Committee on Pre-K -12 Education and Senator Gaetz

**SUBJECT:** Middle School Career Academies

**DATE:** March 23, 2011      **REVISED:** \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Carrouth	Matthews	ED	<b>Fav/CS</b>
2.			BC	
3.				
4.				
5.				
6.				

**Please see Section VIII. for Additional Information:**

- |                              |                                     |   |
|------------------------------|-------------------------------------|---|
| A. COMMITTEE SUBSTITUTE..... | <input checked="" type="checkbox"/> | Statement of Substantial Changes        |
| B. AMENDMENTS.....           | <input type="checkbox"/>            | Technical amendments were recommended   |
|                              | <input type="checkbox"/>            | Amendments were recommended             |
|                              | <input type="checkbox"/>            | Significant amendments were recommended |

**I. Summary:**

The bill would encourage the expansion of the career and professional academy model (CAPE) established in 2007<sup>1</sup> by creating opportunities for middle school students to participate and earn rigorous industry certifications through a similar model in grades 6 through 8.

The bill provides incentives to implement career academies through coursework that integrates career-related content by including attention to middle grades within the currently required strategic 5-year plan. In addition, the middle school grading formula would be revised to include participation of students in career and professional academies, attainment of identified industry certifications, and student performance on statewide standardized assessments.

The bill creates a process for establishing a range of weighted funding values for industry certifications based upon the level of rigor associated with the certification, workforce demand for the occupational area, and entry-level earnings linked to the certification.

<sup>1</sup> ch. 2007-216, L.O.F., codified in ss. 1003.491-1003.493, F.S., and s. 1011.62(1)(p), F.S.

This bill substantially amends sections 1003.491, 1003.492, 1003.493, 1008.34, 1011.62, and 1012.39 and creates section 1003.4935 of the Florida Statutes.

## II. Present Situation:

The Career and Professional Education (CAPE) Act was enacted by the Florida Legislature to attract and retain targeted, high-value industries and to develop a knowledge-based workforce.<sup>2</sup> The legislation has established significant partnerships among workforce and economic development agencies and local education communities, and resulted in meaningful career and postsecondary opportunities for Florida's secondary students.<sup>3</sup> Current law requires each district school board to develop, in collaboration with the local workforce board and the area postsecondary institutions, a 5-year strategic plan to address and meet local and regional workforce demands.<sup>4</sup> A focus of the plan was the requirement for at least one operational career and professional academy per school district beginning with the 2008-09 school year.<sup>5</sup> As specified in statute, career and professional academies must integrate a rigorous academic curriculum with an industry-specific curriculum that leads to an industry certification<sup>6</sup> in high-skill, high-wage, and high-demand occupations.<sup>7</sup> Additional requirements of the act include opportunities for students to earn nationally recognized industry certifications, postsecondary credit, Bright Futures scholarships, and expanded offerings of integrated courses that combine academic content with technical skills.

The 2006-2007 SUCCEED, Florida! Career Paths Program provided start-up funds in some school districts for secondary career and professional academies.<sup>8</sup> It should be noted, however, that the CAPE model on which the 2007 legislation was established originated in Okaloosa County high schools without additional funds.

For each student enrolled in a career and professional academy who graduates with a standard high school diploma and who earns a certification included on the "Industry Certification Funding List," the district of instruction may earn 0.3 full-time equivalent (FTE) student membership for the following year's funding calculation in the Florida Education Finance

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<sup>2</sup> *Id.*

<sup>3</sup> Presentation by the Department of Education, Okaloosa County School District, and St. John's County School District to the Senate Pre-K – 12 Appropriations Committee on March 15<sup>th</sup>, 2011. The superintendent of schools in St. Johns County testified that the CAPE model is the most important and effective legislation of his 24-year career. Available at <http://www.flsenate.gov/Committees/Show/BEA/>.

<sup>4</sup> s. 1003.491(2), F.S.

<sup>5</sup> Section 1003.492(2), F.S., requires the DOE to adopt rules for implementing an industry certification process. Rule 6A-6.0573, F.A.C., provides for a collaborative two-staged process by Workforce Florida Inc. (WFI), and DOE to annually establish the Industry Certification Funding List, a subset of items included on the WFI Comprehensive Industry Certification List.

<sup>6</sup> Industry certifications are based on assessment of skills by an independent, third-party certifying entity using predetermined standards for knowledge, skills and competencies. Successful completion of the assessment results in the award of a time-limited credential that is nationally recognized and applicable to an occupation included in the workforce system's targeted occupation list or otherwise determined to be an occupation that is critical, emerging or addresses a local need. See the *CAPE Enrollment and Performance Report for 2009-2010*, pg. 3, on file with the committee.

<sup>7</sup> s. 1003.493(4), F.S.

<sup>8</sup> 2006-2007 Succeed, Florida Career Paths, \$7.66 million

Program (FEFP).<sup>9</sup> In 2009-10, 1,237 students generated 371.1 additional FTE in the K-12 funding formula. Because the funding is awarded retroactively, the data reported for 2008-09 is used for the 2009-10 FEFP calculation.

*Profile of Career and Professional Academies*

In the 2009-10 academic year, 838 career and professional academies were registered in Florida high schools, and 806 (96.2 percent) of these academies reported student enrollments in 2009-10.<sup>10</sup>

2008-09 Academies Registered	2009-10 Academies Registered	2008-09 CAPE Academy Enrollment	2009-10 CAPE Academy Enrollment
490	838	53,324	102,430

The most prevalent career areas represented by academies registered in 2009-10 were A/V technology and communication, health sciences, and information technology (IT).

*Performance of Career and Professional Academy Students*

Among the 102,430 students enrolled in career and professional academies, 8,629 or 8.4 percent were reported as earning one or more approved industry certifications during the 2009-10 academic year. A total of 16,035 assessments were attempted by academy students, of which 9,564 were passed, resulting in a pass rate of 59.6 percent. Forty percent of industry certifications earned by career and professional academy students were awarded to 12<sup>th</sup> graders and among ninth graders, 1,138 certifications were earned, representing 11.9 percent of total certifications reported.<sup>11</sup>

**2009-2010 Industry Certifications Earned by Grade Level**

Grade Level	Certifications Earned	Percent
9	1,138	11.9%
10	1,827	19.1%
11	2,783	29.1%
12	3,816	39.9%
Total	9,564	100.0%

<sup>9</sup> Section 1011.62(1)(p), F.S. Certifications earned through dual enrollment are not eligible for additional FTE. The additional FTE may not exceed 0.3 per student (i.e., no repeat allocations for additional certifications).

<sup>10</sup> All of Florida's 67 school districts registered at least one career and professional academy with the DOE.

<sup>11</sup> The progression in the number of certifications as grade level increases is expected given the time and training required to earn industry certifications.

**Highlights of Performance Comparisons  
Among Non-Academy, Academy, and Industry Certified Academy Students, 2009-10<sup>12</sup>**

- Career and professional academy students in 2009-10 had an average cumulative GPA of 2.67 compared to 2.56 among the non-academy high school population.
- Academy students were less likely to be chronically absent than non-academy high school students. Among academy students, 19 percent were chronically absent compared to 23.3 percent among non-academy students. Chronic absenteeism was more likely among non-academy students across all four grade levels, but, as was the case with GPA, the difference diminished in the higher the grade levels.
- Academy students were less likely to have been reported as having disciplinary action taken against them than non-academy high school students. Among academy students, 20.0 percent had at least one disciplinary action on record compared to 21.3 percent among non-academy students. In examining the data by grade level, 9<sup>th</sup> – 11<sup>th</sup> grade academy students had a lower percentage of disciplined students than their non-academy peers, but the balance shifts in 12<sup>th</sup> grade.
- Academy students were less likely to drop out than non-academy students, and academy seniors were more likely to graduate with a standard diploma than non-academy seniors. Among academy 12<sup>th</sup> graders, 89.5 percent graduated with a standard diploma compared to 78.6 percent among non-academy 12<sup>th</sup> graders. Among career and professional academy 12<sup>th</sup> graders who earned an industry certification, 97.4 percent graduated with a standard diploma compared to 88.3 percent among academy students who did not earn a certification.
- An important goal of career and professional academies is to prepare students for postsecondary education by preparing them for the academic and technical work and giving them opportunities to earn postsecondary credit while in high school. One indicator of readiness for success in postsecondary education is eligibility for the Florida Bright Futures Scholarship. Among the academy seniors in 2009-10, 28.3 percent were eligible for one of the three levels of the Bright Futures scholarship. In comparison, 27.9 percent of non-academy seniors were eligible for the Bright Futures scholarship. Academy seniors earning certifications were much more likely to be Bright Futures scholarship eligible than their peers.<sup>13</sup>

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<sup>12</sup> DOE presentation to the Senate Budget Committee on Pre-K -12 Appropriations, March 15, 2011, available at <http://www.flsenate.gov/Committees/Show/BEA/>.

<sup>13</sup> Among academy seniors who earned at least one industry certification, 43.7 percent were eligible for Bright Futures compared to 25.9 percent among academy seniors who did not earn a certification. See DOE presentation to the Senate Budget Committee on Pre-K -12 Appropriations, March 15, 2011, available at <http://www.flsenate.gov/Committees/Show/BEA/>.

Performance Indicator	Non-CAPE	CAPE, No Certification	CAPE and Certification
Average GPA	2.56	2.60	3.00
Chronically Absent	16.7%	19.7%	11.4%
At Least One Disciplinary Action	21.3%	20.8%	11.0%
Dropout Rate	2.2%	1.2%	0.2%
12th Graders Earning Standard Diploma	78.6%	88.3%	97.4%
At Least One Accelerated Course	22.2%	22.0%	32.9%
Bright Futures Eligible Seniors	27.9%	25.9%	43.7%

#### *Factors Included in the Calculation of High School Grades*

The 2008 Legislature enacted significant changes to the high school grading formula.<sup>14</sup> Beginning with the 2009-10 school year, in addition to the statewide assessment results in grades 9, 10, and 11, the law requires an equal focus be placed on access to and performance in rigorous, accelerated coursework, college readiness,<sup>15</sup> and graduation rates for all students including those who are academically at-risk.

In order to prepare students for success in high school, the state's middle schools must better prepare students for a more rigorous high school experience and encourage more middle school students to enroll and succeed in high school level courses. The success of Florida's high school CAPE academies suggests that this can effectively be accomplished through relevant and engaging career-related coursework.<sup>16</sup>

#### *The Middle Grades – A Precursor to Disengagement at the High School Level*

Students most likely to drop out before completing the ninth grade are those who have had attendance, discipline, and academic problems in the past, possibly from the beginning of their school careers. Research indicates that students who continue on to the tenth grade and beyond are more likely to drop out before graduation if they had an unsuccessful ninth grade year.<sup>17</sup>

<sup>14</sup> ch. 2008-235, L.O.F.

<sup>15</sup> In 2007, 54 percent of high school graduates who enrolled in community college required remediation in at least one subject.

<sup>16</sup> The Harvard Graduate School lists the 2007 CAPE Act as one of five *Models of 21<sup>st</sup> Century Career and Technical Education*. See Pathways to Prosperity, February 2011, available at [http://www.gse.harvard.edu/blog/news\\_features\\_releases/2010/02/pathways-to-prosperity-seeks-to-redefine-american-education-system.html](http://www.gse.harvard.edu/blog/news_features_releases/2010/02/pathways-to-prosperity-seeks-to-redefine-american-education-system.html).

<sup>17</sup> *The Ninth Grade--A Precarious Time for the Potential Dropout*. ERIC Digest No. 34, available at <http://www.ericdigests.org/pre-926/ninth.htm>. See also <http://www.edweek.org/rc/articles/2007/10/03/sow1003.h27.html>.

Schools can help retain at-risk ninth graders through various strategies and practices. Most of these strategies can be implemented without requiring vast changes in the basic structure of the high school. The following components have been successfully implemented in school districts around the country, all of which ease the transition from middle school to ninth grade.

- Improving articulation between the earlier years of schooling and high school, including counseling efforts, curriculum planning, and visits among elementary, middle, and high school personnel.
- Engaging ninth grade students in coursework in which they are most likely to do well. This strategy also ensures success in subsequent challenging courses.
- Decreasing alienation by creating clusters (academies) of students who remain together for several classes and thus can more easily offer each other support.
- Creating smaller schools within schools that offer integrated coursework and opportunities for credit recovery and academic acceleration.
- Eliminating retention, through relevant coursework, before the ninth grade so students do not begin high school with waning motivation, low self-esteem, and the stigma of being overage. Effective alternatives include allowing students in earlier grades to be engaged in relevant coursework with career and postsecondary opportunities in mind.<sup>18</sup>

#### *Middle School Model*

There is currently no formal model established for middle school career academies and little opportunity for students to earn rigorous industry certifications while in the middle grades.

Although the DOE does not currently collect data with regard to operational middle school career academies, the DOE estimates that at least 15 school districts are currently operating some version of the CAPE model at the middle school level.<sup>19</sup>

For example, the DOE reports that Palm Beach County school district has incorporated a middle school academy model into middle schools that “feed” to high schools with Medical Sciences Academies. The hallmark of the model is that students can earn high school credit in the 8<sup>th</sup> grade and students are prepared for entry into high school medical sciences programs or related fields of study. Each middle school academy has an advisory council and business partners representing community private medical practices, public and private schools, research facilities and institutions of higher learning. At the present time, middle school students may earn Basic Life Support (BLS) certifications. Students also receive training in HIPAA (Health Insurance Portability and Accountability Act) and HIV/AIDS and blood borne pathogens training in which they receive a certificate of completion. Once students transition to high school medical science academies, they may also earn increasingly higher level certifications or licensure related to the specific occupation.

The current middle school program includes Orientation to Health Occupations, a full-year course taken in 6<sup>th</sup> grade that introduces the students to health occupations and career options available in health care. Seventh graders are enrolled in Exploration of Health Occupation and

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<sup>18</sup>*The Ninth Grade--A Precarious Time for the Potential Dropout. ERIC Digest No. 34*, available at:

<http://www.ericdigests.org/pre-926/ninth.htm>. See also <http://www.edweek.org/rc/articles/2007/10/03/sow1003.h27.html>.

<sup>19</sup> Information provided by the DOE Chancellor for Workforce Education, March 21, 2011, on file with the committee

Career Planning, a full-year course that employs problem solving and critical-thinking skills in hands-on laboratory activities, including dissections and advanced problem solving projects. Eighth graders begin actual high school course work by taking the Medical Skills and Services course, where students are required to create a medical internship handbook, compile a portfolio of their work, and complete a supervised clinical internship in an approved medical facility.<sup>20</sup>

#### *Middle School Grades*

Middle school grades are determined by the statewide assessment program without additional incentives to encourage more rigorous and engaging coursework.

### **III. Effect of Proposed Changes:**

#### *Middle School CAPE Academies*

In an effort to engage students at an earlier age, prepare them for increasingly demanding coursework, and attain higher level industry certifications, the bill would expand CAPE opportunities to students in middle grades and establish funding for middle school students who earn industry certifications. Under the bill, the strategic 5-year plan developed and approved by school districts, workforce boards and agencies, and postsecondary institutions must include plans to implement career and professional academies at the middle grades.

#### *Award of Funds for Attainment of Industry Certifications*

Current law provides that high school students who earn identified industry certifications are eligible for retroactively awarded funding, provided that the student graduates from high school with a standard diploma. Consistent with these requirements, middle school students who earn industry certifications would generate the additional funding following graduation from high school with a standard diploma. Although there would be a considerable lapse in time before these students would generate bonus funding, these students will most likely be enrolled in higher level courses and be academically engaged, thus less likely to drop out. High school students who begin their career academy exposure in the middle grades would be prepared to earn additional and more demanding certifications at the high school level.

School districts that offer industry-certified career and professional academies in the middle grades would receive a prorated portion of the additional bonus weight in the FEFP for students who receive industry certification in middle school and who subsequently earn a standard high school diploma. Funds would be provided in the General Appropriations Act in the year following the student's graduation from high school and attainment of the industry certification. If the middle school student were to earn additional industry certifications at the high school level, the bonus weight associated with the highest industry certification would be prorated and shared with the appropriate middle school.

The bill also establishes weights for industry certifications based on the level of rigor for the certification, entry-level earnings, and workforce demand in the industry. The formula used to determine these weights would be established through rulemaking.<sup>21</sup> The bill also specifies that a

<sup>20</sup> Information provided by the DOE Chancellor for Workforce Education, March 18, 2011, on file with the committee.

<sup>21</sup> The DOE and AWI are currently collaborating in establishing the weighting process for inclusion in rule. Factors would include the number of instructional hours, including work experience hours, required to earn the certification, award of college credit for academy courses based on statewide articulation agreements with postsecondary institutions, entry-level

secondary school must discontinue enrollment for the CAPE academy the following year if the passage rate falls below 50 percent on the academy-related industry certification.

#### *Middle School Grades*

The middle school grading formula would be revised to include student participation in middle school CAPE academies, student attainment of identified industry certifications, and student performance on statewide standardized end of course assessments. These factors would count towards 50 percent of the middle school grade, while the statewide standardized assessment program, including but not limited to, FCAT and statewide standardized end-of-course assessments in Algebra I, geometry, and biology would count the remaining 50 percent of the middle school grade. This provision would create an incentive to create middle school career and professional academies. It is likely that students engaged in rigorous and relevant academies at the middle grades would be more likely to succeed in high school, have reduced dropout rates, and have increased preparation for postsecondary work and demanding careers.

#### **Other Provisions**

##### *Strategic 5-Year Plan*

The bill requires that the strategic five-year plan developed by the school district, local workforce board, and local postsecondary institutions, be collaboratively reviewed, revised and approved every five years. The revised plans must now include strategies to implement CAPE academies at the middle grades and within Department of Juvenile Justice education facilities. Regional economic development agencies are also included to ensure partnership with the local chambers of commerce and other strategic economic development principals. All of Florida's geographic regions are served by local economic development agencies, either through an economic development council or a local chamber of commerce. These organizations are heavily involved in employer recruitment activities to attract jobs to their regions or counties. These organizations would be an asset in the identification of priority needs for Florida's career and professional academy programs.<sup>22</sup>

##### *Virtual Courses*

The bill expands the requirement to include access to virtual courses for CAPE students through any virtual provider, contingent upon alignment of the course to state adopted curriculum standards. This provision would encourage CAPE academies to consider a broader range of virtual offerings, thus allowing students to complete additional content and matriculate more quickly.

##### *Newly Proposed Courses*

The bill requires the DOE to review and adopt newly proposed courses to be offered in the middle grades. This provision serves to encourage school districts to consider more relevant courses that integrate content from multiple academic areas and to offer student opportunities for applied learning.

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wages, growth rate in employment for each occupational category, and average annual openings for the primary occupation linked to the industry certification.

<sup>22</sup> Email correspondence from the DOE Chancellor for Workforce Education, March 16, 2011, on file with the committee.



*Consolidation of CAPE Evaluation and Reporting of Outcomes*

The bill repeals the requirement for the DOE to jointly develop with the local workforce boards an evaluation plan and assessment tool to measure CAPE program outcomes. The DOE annually collects, analyzes, and reports student achievement and performance data for CAPE students.<sup>23</sup> This provision consolidates the accountability provisions for the CAPE program, eliminates duplication of effort, and streamlines the process to focus specifically on student outcomes.

*Non-degreed Teachers*

The bill requires that qualifications be established for nondegreed teachers of career and technical education courses for occupational program clusters that are recognized in Florida.<sup>24</sup> The district may also establish alternative qualifications for those teachers who hold industry certification in the areas in which they teach. These provisions ensure instruction in CAPE academies from highly effective teachers with extensive background in the content areas in which they teach.

**IV. Constitutional Issues:****A. Municipality/County Mandates Restrictions:**

None.

**B. Public Records/Open Meetings Issues:**

None.

**C. Trust Funds Restrictions:**

None.

**V. Fiscal Impact Statement:****A. Tax/Fee Issues:**

None.

**B. Private Sector Impact:**

The regional workforce boards, economic development agencies, and postsecondary institutions would partner with local school districts to revise strategic plans to address implementation of career and professional academies in earlier grades, thus preparing these students for more rigorous coursework in high school and postsecondary. The partnering local, regional, and state business communities would benefit from a more highly-skilled workforce.

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<sup>23</sup> <http://www.fldoe.org/workforce/research.asp>

<sup>24</sup> <http://www.fldoe.org/workforce/dwdframe/>

C. Government Sector Impact:

None.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Additional Information:**

A. Committee Substitute – Statement of Substantial Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

**CS by Education Pre-K – 12 Committee on March 23, 2011:**

The committee substitute:

- Removes the requirement for school districts to have at least one middle school CAPE academy at the beginning of the 2012-2013 school year.
- Revises the middle school grading formula to include only performance on statewide standardized assessments and participation in and performance on national industry certifications.

B. Amendments:

None.