

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 Committee on Education

BILL: SB 790

INTRODUCER: Senator Legg

SUBJECT: Education Technology

DATE: February 17, 2014

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Graf	Klebacha	ED	Pre-meeting
2.			AED	
3.			AP	

I. Summary:

SB 790 elevates funding and policy aspects of technology-enhanced classroom teaching and learning by creating a dedicated source of funding for school districts' technology purchases and activities, and expands course substitution options for students to help equip Florida's students with skills to succeed in a competitive economy.

Specifically, the bill creates the Florida digital classrooms allocation within the Florida Education Finance Program to fund and support the use of technology enhancements in Florida's classrooms. The bill requires the Commissioner of Education to develop a Florida digital classrooms plan that establishes minimum protocols, parameters, and requirements for the state and districts to meet statutory requirements and timelines for instruction, learning, assessments, and accountability. The bill also requires school districts to develop district digital classroom plans that tie purchases and activities related to digital learning and technology infrastructure, professional development, digital tools, and online assessments to measurable student performance outcomes. An independent evaluation and validation of the reported outcomes and the districts' technology inventory and infrastructure needs must accompany the school districts' digital classrooms plan. The commissioner must work with education practitioners of this state to support implementation of district digital classrooms plans and annually report to the Legislature and the Governor a summary of each school district's use of funds, student performance outcomes, and progress toward meeting statutory requirements and timelines.

Additionally, the bill requires public schools to establish digital classrooms to provide students opportunities to improve digital literacy and competency, and creates pathways for high school students to substitute computer programming language courses of sufficient rigor, as approved by the commissioner, for some courses, to meet high school graduation requirements.

The bill takes effect on July 1, 2014.

II. Present Situation:

Technology Plan

The Bureau of Educational Technology within the Florida Department of Education (DOE or department) provides “leadership, coordination, and guidance concerning the submission, technical review, and approval of local educational technology plans as a service to school districts.”¹ *The Essential District Technology Plan Components*, developed by the department, is intended to provide a general framework for the technology plan content.² The components include the following:

- Mission and vision.
- General introduction/background.
- Needs assessment/goals.
- Funding plan.
- Technology acquisition plan.
- Access.
- User support plan.
- Staff training plan.
- Program evaluation.
- E-Rate Program Planning Criteria (E-Rate Plan Addendum).

Eligibility to participate in certain federal technology initiatives and grant programs (e.g., Enhancing Education Through Technology³ and E-Rate⁴ programs) requires that a local school district develop and maintain a long-range strategic district technology plan that adequately addresses prescribed planning criteria. Planning requirements and expectations vary from program to program, but many of the essential components of an effective technology planning process are consistent across programs.⁵ For the E-Rate program, the school districts submit a technology plan, which is required for the federal E-Rate application, to DOE for approval.⁶

While participation in federal programs is optional, a majority of school districts participate to improve learning opportunities for all students, enhance technology resources needed in conjunction with existing initiatives (e.g., reading improvement), and address, in a targeted and

¹ Florida Department of Education, *Local School District Educational Technology Planning*, http://www.fldoe.org/BII/Instruct_Tech/Planning/local.asp (last visited Feb. 16, 2014).

² Florida Department of Education, *Local School District Educational Technology Planning*, http://www.fldoe.org/BII/Instruct_Tech/Planning/local.asp (last visited Feb. 16, 2014).

³ U.S. Department of Education, *Enhancing Education Through Technology (Ed-Tech) State Program*, <http://www2.ed.gov/programs/edtech/index.html> (last visited Feb. 15, 2014).

⁴ U.S. Department of Education, *E-Rate Program – Discounted Telecommunications Services*, <http://www2.ed.gov/about/offices/list/oi/nonpublic/erate.html> (last visited Feb. 15, 2014). “The E-Rate technology plan describes the technologies and associated resources, both existing and planned, that will assist a school to provide educational services.” Email, Florida Department of Education, *2014 Agency Legislative Bill Analysis for SB 790* (Feb. 14, 2013), at 3, on file with the Committee on Education staff.

⁵ Florida Department of Education, *Local School District Educational Technology Planning*, http://www.fldoe.org/BII/Instruct_Tech/Planning/local.asp (last visited Feb. 16, 2014).

⁶ Email, Florida Department of Education, *2014 Agency Legislative Bill Analysis for SB 790* (Feb. 14, 2013), at 3, on file with the Committee on Education staff.

focused way, significant challenges associated with impoverished and disadvantaged student populations.⁷

In addition to addressing federal program participation requirements, developing a strong technology planning process can assist a district with:⁸

- Establishing appropriate guidelines, standards, and policies regarding acquisition and infusion of new and emerging technologies.
- Managing complex technology infrastructure and telecommunications upgrades at schools.
- Addressing major transformations (e.g., one-to-one computing, wireless access, intensive laptop use, Internet-based instructional content delivery, and distance learning).

DOE requests district school superintendents to encourage school principals and school district personnel to participate in the Florida Innovates Technology Resources Inventory which is used to gather school-level and school district-level data annually regarding technology resources inventory.⁹ Schools and school districts report to DOE, technology data regarding devices, bandwidth, wireless infrastructure, professional development, and computer-based assessment readiness.¹⁰ DOE uses the technology resources inventory data to prepare annual legislative budget requests.¹¹ In 2013, the Legislature appropriated \$11.3 million for district bandwidth support and \$6 million for Technology transformation grants for rural districts.¹²

Requirements for Standard High School Diploma

Beginning with students entering grade 9 in the 2013-2014 school year, receipt of standard high school diploma requires successful completion of 24 credits, an International Baccalaureate curriculum, or an Advanced International Certificate of Education curriculum.¹³ Credit requirements for standard high school diploma are as follows:¹⁴

- Four credits in English Language Arts (ELA) I, II, III, and IV.
- Four credits in mathematics, which must include Algebra I and geometry.
- Three credits in science including Biology I.
- Three credits in social studies, which must include one credit each in United States History and World History; and 0.5 credit each in Economics, which must include financial literacy, and United States Government.
- One credit in fine or performing arts, speech and debate, or practical arts.

⁷ Florida Department of Education, *Local School District Educational Technology Planning*, http://www.fldoe.org/BII/Instruct_Tech/Planning/local.asp (last visited Feb. 16, 2014).

⁸ Florida Department of Education, *Local School District Educational Technology Planning*, http://www.fldoe.org/BII/Instruct_Tech/Planning/local.asp (last visited Feb. 16, 2014).

⁹ Florida Department of Education, *Memorandum: School Technology Resources Inventory* (Oct. 11, 2013), on file with the Committee on Education staff.

¹⁰ Email, Florida Department of Education, *2014 Agency Legislative Bill Analysis for SB 790* (Feb. 14, 2013), at 3, on file with the Committee on Education staff.

¹¹ Florida Department of Education, *Memorandum: School Technology Resources Inventory* (Oct. 11, 2013), on file with the Committee on Education staff.

¹² Specific Appropriation 102A, ch. 2013-40, L.O.F.

¹³ Section 1003.4282(1)(a), F.S.

¹⁴ Section 1003.4282(3), F.S.

- One credit in physical education.
- Eight credits in electives¹⁵.

Requirements regarding Foreign Language

In addition to the general requirements for high school graduation¹⁶ and standard high school diploma¹⁷, current law provides criteria for students to earn either a Scholar designation or a Merit designation on the standard high school diploma.¹⁸ The criteria for earning the Scholar designation includes, but is not limited to, earning two credits in the same foreign language.¹⁹

Additionally, beginning with students initially entering a Florida College System institution or a state university in 2014-2015, coursework for an associate in arts degree must include demonstration of competency in foreign language pursuant to Florida law^{20, 21}.

III. Effect of Proposed Changes:

SB 790 creates the Florida digital classrooms allocation to establish a targeted and purposeful approach to technology enhancements in Florida's classrooms to improve student performance outcomes. The bill ties technology-enhanced classroom teaching and learning to measurable student performance outcomes and requires an independent evaluation of the school districts' outcomes and technology inventory and infrastructure needs, which the districts must report to the Florida Department of Education (DOE or department). Consequently, the school districts must document how technology enhancements effect performance of students. In addition, the bill requires public schools to promote digital literacy and competency in Florida's schools, which will help equip Florida's students with skills to succeed in a competitive economy.

Florida Digital Classrooms Plan

The bill requires the Commissioner of Education (Commissioner) to adopt a targeted and purposeful Florida digital classrooms plan, which must establish the minimum protocols, parameters, and requirements, pursuant to Florida law, for district-level infrastructure, school-level infrastructure, and digital tools that accommodates statutory requirements and timelines for instruction, learning, assessments, and accountability. The Florida digital classrooms plan, which must be updated annually, must include the plan for current school year and the subsequent five school years. The Florida digital classrooms plan must also specify the criteria for annual approval of the districts' digital classrooms plan, thus providing the school districts long-term goals and expectations within statewide technology and accountability frameworks and timelines.

¹⁵ "School districts must develop and offer coordinated electives so that a student may develop knowledge and skills in his or her area of interest, such as electives with a STEM or liberal arts focus. Such electives must include opportunities for students to earn college credit, including industry-certified career education programs or series of career-themed courses that result in industry certification or articulate into the award of college credit, or career education courses for which there is a statewide or local articulation agreement which lead to college credit." Section 1003.4282(3)(g), F.S.

¹⁶ Section 1003.428

¹⁷ Section 1003.4282, F.S.

¹⁸ Section 1003.4285(1), F.S.

¹⁹ Section 1003.4285(1)(a)5., F.S.

²⁰ Section 1007.262, F.S.

²¹ Section 1007.25(7), F.S.

District Digital Classrooms Plan

The bill requires each district school board to use the general parameters established in the Florida digital classrooms plan to adopt a district digital classrooms plan that may include unique components specific to the needs of individual schools and school districts. By permitting the customization of district digital classrooms plan to local needs, the bill promotes local control of targeted and purposeful technology enhancements in Florida's classrooms. However, to receive the Florida digital classrooms allocation funds, each school district must fulfill certain requirements. Each school district must:

- Attach to the district's digital classrooms plan, an independent evaluation of the district's student performance outcomes and technology inventory and infrastructure needs.
- Submit to DOE, the district digital classrooms plan in a format prescribed by the department, by October 1, 2014 (for implementation of the 2014-2015 fiscal year budget) and by March 1 (prior to legislative session) of each year thereafter, for approval. At a minimum, the district digital classrooms plan must be updated annually to include the following:
 - Measurable student performance outcomes which must be tied to improving student performance outcomes, including outcomes for students with disabilities, through the implementation of the district's digital classrooms plan for the current school year and subsequent three years. Results of the outcomes must be verified by an independent evaluation and reported at least annually.
 - Digital learning and technology infrastructure purchases and operational activities which must be tied to the measurable student performance outcomes. The purchases and activities, which must include, but not be limited to, connectivity, broadband access, wireless capacity, Internet speed, and data security, must meet the minimum requirements and protocols established by DOE. If a school district uses Florida digital classrooms allocation funds for infrastructure, the district's technology inventory and infrastructure must be verified by an independent evaluation annually and submitted to the department along with the district's digital classrooms plan.
 - Professional development purchases and operational activities which must be tied to the measurable student performance outcomes. The purchases and activities must include, but not be limited to, using technology in the classroom and improving digital literacy and competency.
 - Digital tool purchases and operational activities which must be tied to the measurable student performance outcomes. The purchases and activities, which must include, but not be limited to:
 - Competency-based credentials, which must measure and demonstrate digital competency and certifications;
 - Third-party assessments, which demonstrate acquired knowledge and use of digital applications; and
 - Devices that meet or exceed the minimum requirements and protocols established by DOE.
 - Online assessment-related purchases and operational activities which must be tied to measurable student performance outcomes. The purchases and activities, which must include, but not be limited to, expanding capacity to administer assessments

and compatibility with the minimum requirements and protocols established by DOE.

Florida Digital Classrooms Allocation Funding

The bill creates a new categorical funding allocation in the Florida Education Finance program as a dedicated source of funding for the implementation of digital classrooms plans. The new Florida digital classrooms allocation must be annually provided in the General Appropriations Act (GAA) in an amount up to 1 percent of the base student allocation multiplied by the total K-12 full-time equivalent student enrollment or as provided in the GAA. From the Florida digital classrooms allocation, a minimum of \$100,000 must be provided to each school district and the remaining balance must be distributed based on each school district's proportion of the total K-12 full-time equivalent student enrollment. This dedicated allocation, including minimum appropriation, intends to provide state and district planners, some level of predictable funding and support for technology.

Distribution of Florida digital classrooms allocation funds to a school district is contingent upon approval of the district's digital classrooms plan by DOE. The district digital classrooms plan must include a formal verification of the district superintendent's approval of the digital classrooms plan of each charter school within the district. District allocations must be recalculated during the fiscal year consistent with the periodic recalculation of the Florida Education Finance Program. School districts must provide a proportionate share of the Florida digital classrooms allocation to each charter school in the district as required for categorical programs under Florida law²². While district digital classrooms plan will vary across districts based on each district's unique needs, the bill further promotes local control by authorizing each school district to use a competitive process to distribute the Florida digital classrooms allocation funds to the schools within the district.

The bill also requires each school district to report to DOE, beginning with the 2015-2016 fiscal year, student performance outcomes and the district's use of the Florida digital classrooms allocation funds in accordance with the DOE-approved district digital classrooms plan. By October 1, beginning with the 2015-2016 fiscal year (to capture outcomes of 2014-2015 implementation activities), the Commissioner must provide to the Governor, the President of the Senate, and the Speaker of the House of Representatives, a summary of each district's use of the Florida digital classrooms allocation funds, student performance outcomes, and progress toward meeting the statutory requirements and timelines. The content and timing of the annual report is intended as a tool to help monitor program performance and inform necessary legislative policy discussions and funding adjustments.

Statewide Partnerships

The bill promotes statewide partnerships among this state's education practitioners to implement the digital classrooms plans by requiring the Commissioner to support the efforts of education practitioners (e.g., superintendents, principals, and teachers) to identify and share best practices, corrective actions, and other needs.

²² Section 1002.33(17)(b), F.S.

Digital Literacy and Competency

The bill requires public schools to promote digital literacy and competency in Florida's schools, which will help equip Florida's students with skills to succeed in a competitive economy. Public schools must provide students the opportunities for learning computer coding and programming. Such opportunities must include:

- Instruction regarding computer coding in elementary and middle school,
- Instruction to develop computer usage and digital literacy skills in middle school, and
- Courses in computer coding and programming in high school, including opportunities to earn industry certifications related to such courses.

The bill also requires:

- Elementary and middle schools to establish digital classrooms to help students improve digital literacy and competency, learn digital skills (e.g., coding, multiple media presentation, and the manipulation of multiple digital graphic images), and earn digital tools (e.g., recognitions and certifications pursuant to Florida law²³) and grade-appropriate, technology-related industry certifications.
- High schools to provide courses in computer programming to satisfy high school graduation requirements including, but not limited to:
 - Computer programming courses of sufficient rigor, as identified by the Commissioner, such that one credit in computer programming language and earning of related industry certifications satisfies one credit of mathematics requirement for high school graduation. Such computer programming language courses and related industry certifications must be listed in the Course Code Directory (CCD)²⁴.
 - Levels of competency, as identified by the Commissioner, in a computer programming language, such that the levels of competency in a computer programming language and earning of related industry certifications equals to the successful completion of two years of sequential instruction in foreign language in high school. Courses tied to the levels of competency in computer programming language courses and related industry certifications must be listed in the CCD.
 - Computer technology courses in 3D rapid prototype printing of sufficient rigor, as identified by the Commissioner, such that one or more credits in such courses and earning of related industry certifications may satisfy up to two credits of mathematics requirement for high school graduation. Such computer technology courses and related industry certifications must be listed in the CCD.
 - Computer programming language courses, at the discretion of the local district school board, such that 1 credit in a computer programming language may satisfy one credit in physical education requirement for high school graduation.

²³ Section 1003.4203, F.S.

²⁴ The Course Code Directory is the listing of all public preK-12 courses available for use by school districts. Programs and courses which are funded through the Florida Education Finance Program and courses or programs for which students may earn credit toward high school graduation must be listed in the CCD. The CCD maintains course listings for administration and service assignments, K-12 education, exceptional student education, career and technical education, and adult education, with details regarding appropriate teacher certification levels. The CCD provides for course information to schools, districts, and the state. Rule 6A-1.09441, F.A.C.

The bill requires Florida College System (FCS) institutions to offer students the option of completing two years of instruction in the same computer programming language in lieu of completing two years of foreign language instruction if the computer programming language is appropriate for the student's major. Such courses must be listed in the Statewide Course Numbering System²⁵. The bill authorizes, but does not require, state universities to provide to their students the same option for substituting foreign language instruction. The bill also does not require a preeminent state research university²⁶ to accept computer programming language credits in lieu of the foreign language credits.

The bill authorizes the State Board of Education to adopt rules to implement the bill provisions regarding promoting digital literacy and competency in Florida's schools.

The bill takes effect on July 1, 2014.

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:

None.

²⁵ Current law requires the DOE, in conjunction with the Board of Governors of the State University System of Florida (BOG), to develop, coordinate, and maintain a statewide course numbering system (SCNS) to improve program planning, increase communication among all delivery systems, facilitate student acceleration, and transfer of students and credits between public school districts, public postsecondary educational institutions, and participating nonpublic postsecondary institutions. Faculty committees representing school districts, public postsecondary educational institutions, and participating nonpublic postsecondary educational institutions assist in maintaining the SCNS. The faculty committees, appointed by the Commissioner of Education and the Chancellor of the State University System, recommend a single level for each course in the SCNS. The commissioner recommends the level for each course to the State Board of Education (SBE). The SBE, with input from the BOG, approves the level for each course. Section 1007.24, F.S.

²⁶ Section 1001.7065, F.S.

C. Government Sector Impact:

None.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 1011.62 and 1002.33.

This bill creates section 1007.2616 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Changes:

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

None.

B. Amendments:

None.