

SENATE AMENDMENTS

2nd Printing

By: Bernal, Capriglione, Cortez,
King of Parker, Bohac, et al.

H.B. No. 3593

A BILL TO BE ENTITLED

1 AN ACT
2 relating to instruction in career and technology education provided
3 by public schools, including instruction in technology
4 applications, cybersecurity, and computer coding, and to
5 consideration of completed practicums and internships in school
6 accountability ratings.

7 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

8 SECTION 1. Section 28.002, Education Code, is amended by
9 amending Subsections (f) and (g-2) and adding Subsection (g-3) to
10 read as follows:

11 (f) A school district may offer courses for local credit in
12 addition to those in the required curriculum. The State Board of
13 Education shall:

14 (1) be flexible in approving a course for credit for
15 high school graduation under this subsection; and

16 (2) approve courses in cybersecurity for credit for
17 high school graduation under this subsection.

18 (g-2) Each school district shall annually report to the
19 agency the names of the courses, programs, institutions of higher
20 education, and internships in which the district's students have
21 enrolled under Subsection (g-1) and the names of the courses and
22 institutions of higher education in which the district's students
23 have enrolled under Subsection (g-3). The agency shall make
24 available information provided under this subsection to other

1 districts.

2 (g-3) A district may also offer a course in cybersecurity
3 that is approved by the board of trustees for credit without
4 obtaining State Board of Education approval if the district
5 partners with a public or private institution of higher education
6 that offers an undergraduate degree program in cybersecurity to
7 develop and provide the course.

8 SECTION 2. Section 28.025, Education Code, is amended by
9 amending Subsections (b-12) and (c-1) and adding Subsection (c-10)
10 to read as follows:

11 (b-12) In adopting rules under Subsection (b-1), the State
12 Board of Education shall adopt criteria to allow a student to comply
13 with the curriculum requirements for the two credits in a language
14 other than English required under Subsection (b-1)(5) by
15 substituting two credits in computer programming languages,
16 including computer coding.

17 (c-1) A student may earn an endorsement on the student's
18 transcript by successfully completing curriculum requirements for
19 that endorsement adopted by the State Board of Education by rule.
20 The State Board of Education by rule shall provide students with
21 multiple options for earning each endorsement, including, to the
22 greatest extent possible, coherent sequences of courses. The
23 State Board of Education by rule must permit a student to enroll in
24 courses under more than one endorsement curriculum before the
25 student's junior year. An endorsement under this subsection may be
26 earned in any of the following categories:

27 (1) science, technology, engineering, and mathematics

1 (STEM), which includes courses directly related to science,
2 including environmental science, technology, including computer
3 science, cybersecurity, and computer coding, engineering, and
4 advanced mathematics;

5 (2) business and industry, which includes courses
6 directly related to database management, information technology,
7 communications, accounting, finance, marketing, graphic design,
8 architecture, construction, welding, logistics, automotive
9 technology, agricultural science, and heating, ventilation, and
10 air conditioning;

11 (3) public services, which includes courses directly
12 related to health sciences and occupations, mental health,
13 education and training, law enforcement, and culinary arts and
14 hospitality;

15 (4) arts and humanities, which includes courses
16 directly related to political science, world languages, cultural
17 studies, English literature, history, and fine arts; and

18 (5) multidisciplinary studies, which allows a student
19 to:

20 (A) select courses from the curriculum of each
21 endorsement area described by Subdivisions (1) through (4); and

22 (B) earn credits in a variety of advanced courses
23 from multiple content areas sufficient to complete the
24 distinguished level of achievement under the foundation high school
25 program.

26 (c-10) In adopting rules under Subsection (c-1), the State
27 Board of Education shall adopt or select five technology

1 applications courses on cybersecurity to be included in a
2 cybersecurity pathway for the science, technology, engineering,
3 and mathematics endorsement.

4 SECTION 3. Section 29.190, Education Code, is amended by
5 adding Subsection (b) and amending Subsection (c) to read as
6 follows:

7 (b) A teacher is entitled to a subsidy under this section if
8 the teacher passes a certification examination related to
9 cybersecurity.

10 (c) On approval by the commissioner, the agency shall pay
11 each school district an amount equal to the cost paid by the
12 district for a [the] certification examination under this
13 section. To obtain reimbursement for a subsidy paid under this
14 section, a district must:

- 15 (1) pay the fee for the examination; and
16 (2) submit to the commissioner a written application
17 on a form prescribed by the commissioner stating the amount of the
18 fee paid under Subdivision (1) for the certification examination.

19 SECTION 4. Section 39.053(c), Education Code, is amended to
20 read as follows:

21 (c) School districts and campuses must be evaluated based on
22 five domains of indicators of achievement adopted under this
23 section that include:

- 24 (1) in the first domain, the results of:
25 (A) assessment instruments required under
26 Sections 39.023(a), (c), and (l), including the results of
27 assessment instruments required for graduation retaken by a

1 student, aggregated across grade levels by subject area, including:

2 (i) for the performance standard determined
3 by the commissioner under Section 39.0241(a), the percentage of
4 students who performed satisfactorily on the assessment
5 instruments, aggregated across grade levels by subject area; and

6 (ii) for the college readiness performance
7 standard as determined under Section 39.0241, the percentage of
8 students who performed satisfactorily on the assessment
9 instruments, aggregated across grade levels by subject area; and

10 (B) assessment instruments required under
11 Section 39.023(b), aggregated across grade levels by subject area,
12 including the percentage of students who performed satisfactorily
13 on the assessment instruments, as determined by the performance
14 standard adopted by the agency, aggregated across grade levels by
15 subject area;

16 (2) in the second domain:

17 (A) for assessment instruments under Subdivision
18 (1)(A):

19 (i) for the performance standard determined
20 by the commissioner under Section 39.0241(a), the percentage of
21 students who met the standard for annual improvement on the
22 assessment instruments, as determined by the commissioner by rule
23 or by the method for measuring annual improvement under Section
24 39.034, aggregated across grade levels by subject area; and

25 (ii) for the college readiness performance
26 standard as determined under Section 39.0241, the percentage of
27 students who met the standard for annual improvement on the

1 assessment instruments, as determined by the commissioner by rule
2 or by the method for measuring annual improvement under Section
3 39.034, aggregated across grade levels by subject area; and

4 (B) for assessment instruments under Subdivision
5 (1)(B), the percentage of students who met the standard for annual
6 improvement on the assessment instruments, as determined by the
7 commissioner by rule or by the method for measuring annual
8 improvement under Section 39.034, aggregated across grade levels by
9 subject area;

10 (3) in the third domain, the student academic
11 achievement differentials among students from different racial and
12 ethnic groups and socioeconomic backgrounds;

13 (4) in the fourth domain:

14 (A) for evaluating the performance of high school
15 campuses and districts that include high school campuses:

16 (i) dropout rates, including dropout rates
17 and district completion rates for grade levels 9 through 12,
18 computed in accordance with standards and definitions adopted by
19 the National Center for Education Statistics of the United States
20 Department of Education;

21 (ii) high school graduation rates, computed
22 in accordance with standards and definitions adopted in compliance
23 with the Every Student Succeeds Act [~~No Child Left Behind Act of~~
24 ~~2001~~] (20 U.S.C. Section 6301 et seq.);

25 (iii) the percentage of students who
26 successfully completed the curriculum requirements for the
27 distinguished level of achievement under the foundation high school

1 program;

2 (iv) the percentage of students who
3 successfully completed the curriculum requirements for an
4 endorsement under Section 28.025(c-1);

5 (v) the percentage of students who
6 completed a coherent sequence of career and technical courses;

7 (vi) the percentage of students who satisfy
8 the Texas Success Initiative (TSI) college readiness benchmarks
9 prescribed by the Texas Higher Education Coordinating Board under
10 Section 51.3062(f) on an assessment instrument in reading, writing,
11 or mathematics designated by the Texas Higher Education
12 Coordinating Board under Section 51.3062(c);

13 (vii) the percentage of students who earn
14 at least 12 hours of postsecondary credit required for the
15 foundation high school program under Section 28.025 or to earn an
16 endorsement under Section 28.025(c-1);

17 (viii) the percentage of students who have
18 completed an advanced placement course;

19 (ix) the percentage of students who enlist
20 in the armed forces of the United States; ~~and~~

21 (x) the percentage of students who earn an
22 industry certification; and

23 (xi) the percentage of students who
24 successfully completed a practicum or internship approved by the
25 State Board of Education;

26 (B) for evaluating the performance of middle and
27 junior high school and elementary school campuses and districts

1 that include those campuses:

2 (i) student attendance; and

3 (ii) for middle and junior high school
4 campuses:

5 (a) dropout rates, computed in the
6 manner described by Paragraph (A)(i); and

7 (b) the percentage of students in
8 grades seven and eight who receive instruction in preparing for
9 high school, college, and a career that includes information
10 regarding the creation of a high school personal graduation plan
11 under Section 28.02121, the distinguished level of achievement
12 described by Section 28.025(b-15), each endorsement described by
13 Section 28.025(c-1), college readiness standards, and potential
14 career choices and the education needed to enter those careers; and

15 (C) any additional indicators of student
16 achievement not associated with performance on standardized
17 assessment instruments determined appropriate for consideration by
18 the commissioner in consultation with educators, parents, business
19 and industry representatives, and employers; and

20 (5) in the fifth domain, three programs or specific
21 categories of performance related to community and student
22 engagement locally selected and evaluated as provided by Section
23 39.0546.

24 SECTION 5. Section 42.154(b), Education Code, is amended to
25 read as follows:

26 (b) In this section:

27 (1) "Career and technology education class" and

1 "career and technology education program" include a technology
2 applications course on cybersecurity adopted or selected by the
3 State Board of Education under Section 28.025(c-10).

4 (2) "Full-time [~~,"full-time~~] equivalent student"
5 means 30 hours of contact a week between a student and career and
6 technology education program personnel.

7 SECTION 6. Section 42.158, Education Code, is amended by
8 adding Subsection (a-1) to read as follows:

9 (a-1) A school district entitled to an allotment under this
10 section may use funds from the district's allotment to renovate an
11 existing instructional facility to serve as a dedicated
12 cybersecurity computer laboratory.

13 SECTION 7. Section 135.04, Education Code, is amended by
14 adding Subsection (d) to read as follows:

15 (d) A cybersecurity program provided by a campus or
16 extension center in partnership with a school district to students
17 enrolled in the district is not subject to the approval of the
18 coordinating board under this section.

19 SECTION 8. This Act applies beginning with the 2017-2018
20 school year.

21 SECTION 9. This Act takes effect immediately if it receives
22 a vote of two-thirds of all the members elected to each house, as
23 provided by Section 39, Article III, Texas Constitution. If this
24 Act does not receive the vote necessary for immediate effect, this
25 Act takes effect September 1, 2017.

COMMITTEE AMENDMENT NO. 1

BY: Paul Bellercont

- 1 Amend H.B. No. 3593 by striking SECTION 7 of the bill and
2 renumbering the subsequent SECTIONS of the bill accordingly.

ADOPTED

MAY 24 2017

Lotay Spaw
Secretary of the Senate

LEGISLATIVE BUDGET BOARD
Austin, Texas

FISCAL NOTE, 85TH LEGISLATIVE REGULAR SESSION

May 25, 2017

TO: Honorable Joe Straus, Speaker of the House, House of Representatives

FROM: Ursula Parks, Director, Legislative Budget Board

IN RE: HB3593 by Bernal (Relating to instruction in career and technology education provided by public schools, including instruction in technology applications, cybersecurity, and computer coding, and to consideration of completed practicums and internships in school accountability ratings.), **As Passed 2nd House**

No significant fiscal implication to the State is anticipated.

The bill would amend the Education Code to include a technology applications course on cybersecurity adopted or selected by the State Board of Education (SBOE) as part of career and technical education (CTE) in the enrichment curriculum for kindergarten through Grade 12 and require the State Board of Education (SBOE) to take associated action. The bill would allow districts to offer a course in cybersecurity that is approved by the local board of trustees without approval by the SBOE if the district partners with a public or private institution of higher education (IHE) that offers an undergraduate degree program in cybersecurity to develop and provide the course.

The bill would allow a teacher and a school district to qualify for a subsidy for certification examination if the teacher passes an examination related to cybersecurity. The bill would amend the fourth domain of the accountability system to include the percentage of students who successfully completed a practicum or internship approved by the SBOE as a measure of performance for high school campuses and districts that include high school campuses. The bill would take effect immediately if passed with necessary voting margins, or September 1, 2017, and would apply beginning in school year 2017-18.

The Texas Education Agency (TEA) estimates initial development costs to implement the legislation. In addition, TEA estimates additional state cost for the Foundation School Program related to the inclusion of cybersecurity courses as a component of the CTE allotment. However, this analysis assumes the TEA can absorb these costs within existing resources and that based on available data will not be significant. The THECB and IHEs indicate the provisions of the bill can be implemented within existing resources.

Local Government Impact

TEA estimates that school districts voluntarily implementing cybersecurity or coding courses would incur costs for additional staff, facilities, and training required for implementation. However, these costs would vary from district to district depending on a district's existing staff and resources.

Source Agencies: 701 Texas Education Agency, 781 Higher Education Coordinating Board, 710 Texas A&M University System Administrative and General Offices, 720 The University of Texas System Administration, 758 Texas State University System, 768 Texas Tech University System Administration, 769 University of North Texas System Administration, 783 University of Houston System Administration

LBB Staff: UP, SD, AW, THo, AM, AG

LEGISLATIVE BUDGET BOARD
Austin, Texas

FISCAL NOTE, 85TH LEGISLATIVE REGULAR SESSION

May 21, 2017

TO: Honorable Larry Taylor, Chair, Senate Committee on Education

FROM: Ursula Parks, Director, Legislative Budget Board

IN RE: HB3593 by Bernal (Relating to instruction in career and technology education provided by public schools, including instruction in technology applications, cybersecurity, and computer coding, and to consideration of completed practicums and internships in school accountability ratings.), **Committee Report 2nd House, As Amended**

<p>No significant fiscal implication to the State is anticipated.</p>
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The bill would amend the Education Code to include a technology applications course on cybersecurity adopted or selected by the State Board of Education (SBOE) as part of career and technical education (CTE) in the enrichment curriculum for kindergarten through Grade 12 and require the State Board of Education (SBOE) to take associated action. The bill would allow districts to offer a course in cybersecurity that is approved by the local board of trustees without approval by the SBOE if the district partners with a public or private institution of higher education (IHE) that offers an undergraduate degree program in cybersecurity to develop and provide the course.

The bill would allow a teacher and a school district to qualify for a subsidy for certification examination if the teacher passes an examination related to cybersecurity. The bill would amend the fourth domain of the accountability system to include the percentage of students who successfully completed a practicum or internship approved by the SBOE as a measure of performance for high school campuses and districts that include high school campuses. The bill would take effect immediately if passed with necessary voting margins, or September 1, 2017, and would apply beginning in school year 2017-18.

The Texas Education Agency (TEA) estimates initial development costs to implement the legislation. In addition, TEA estimates additional state cost for the Foundation School Program related to the inclusion of cybersecurity courses as a component of the CTE allotment. However, this analysis assumes the TEA can absorb these costs within existing resources and that based on available data will not be significant. The THECB and IHEs indicate the provisions of the bill can be implemented within existing resources.

Local Government Impact

TEA estimates that school districts voluntarily implementing cybersecurity or coding courses would incur costs for additional staff, facilities, and training required for implementation. However, these costs would vary from district to district depending on a district's existing staff and resources.

Source Agencies: 701 Texas Education Agency, 781 Higher Education Coordinating Board, 710 Texas A&M University System Administrative and General Offices, 720 The University of Texas System Administration, 758 Texas State University System, 768 Texas Tech University System Administration, 769 University of North Texas System Administration, 783 University of Houston System Administration

LBB Staff: UP, AW, THo, AM, AG

LEGISLATIVE BUDGET BOARD
Austin, Texas

FISCAL NOTE, 85TH LEGISLATIVE REGULAR SESSION

May 15, 2017

TO: Honorable Larry Taylor, Chair, Senate Committee on Education

FROM: Ursula Parks, Director, Legislative Budget Board

IN RE: HB3593 by Bernal (Relating to instruction in career and technology education provided by public schools, including instruction in technology applications, cybersecurity, and computer coding, and to consideration of completed practicums and internships in school accountability ratings.), **As Engrossed**

No significant fiscal implication to the State is anticipated.

The bill would require the State Board of Education (SBOE) to approve local cybersecurity courses for high school credit; add computer coding as a component of computer programming language substitute for the curriculum requirements in a language other than English; add courses in cybersecurity and computer coding to the description of a science, technology, engineering, and mathematics (STEM) endorsement; and adopt or select five technology applications courses on cybersecurity for inclusion in a cybersecurity pathway for the STEM endorsement. The bill would allow districts to offer a course in cybersecurity that is approved by the local board of trustees without approval by the SBOE and the Texas Higher Education Coordinating Board (THECB) if the district partners with a public or private institution of higher education (IHE) that offers an undergraduate degree program in cybersecurity to develop and provide the course and would require school districts to annually report the names of the courses and IHEs in which students have enrolled.

The bill would allow a teacher and a school district to qualify for a subsidy for certification examination if the teacher passes an examination related to cybersecurity. The bill would amend the fourth domain of the accountability system to include the percentage of students who successfully completed a practicum or internship approved by the SBOE as a measure of performance for high school campuses and districts that include high school campuses. The bill would take effect immediately if passed with necessary voting margins, or September 1, 2017, and would apply beginning in school year 2017-18.

The Texas Education Agency (TEA) estimates initial development costs to convene committees to approve courses in cybersecurity for credit in high school, develop additional courses that include computer coding to be used by students as substitutes for language graduation requirements, and to modify the Texas Student Data System (TSDS) Public Education Information Management System (PEIMS) related to the requirement to collect the names of the cybersecurity courses. However, this analysis assumes the TEA can absorb those costs within existing resources. The THECB and IHEs indicate the provisions of the bill can be implemented within existing resources.

Local Government Impact

TEA estimates that school districts voluntarily implementing cybersecurity or coding courses would incur costs for additional staff, facilities, and training required for implementation. However, these costs would vary from district to district depending on a district's existing staff and resources.

Source Agencies: 701 Texas Education Agency, 710 Texas A&M University System Administrative and General Offices, 720 The University of Texas System Administration, 758 Texas State University System, 768 Texas Tech University System Administration, 781 Higher Education Coordinating Board, 783 University of Houston System Administration, 769 University of North Texas System Administration

LBB Staff: UP, AW, THo, AM, AG

LEGISLATIVE BUDGET BOARD
Austin, Texas

FISCAL NOTE, 85TH LEGISLATIVE REGULAR SESSION

April 18, 2017

TO: Honorable Dan Huberty, Chair, House Committee on Public Education

FROM: Ursula Parks, Director, Legislative Budget Board

IN RE: HB3593 by Bernal (Relating to instruction in career and technology education provided by public schools, including instruction in technology applications, cybersecurity, and computer coding, and to consideration of completed practicums and internships in school accountability ratings.), **Committee Report 1st House, Substituted**

Estimated Two-year Net Impact to General Revenue Related Funds for HB3593, Committee Report 1st House, Substituted: a negative impact of (\$45,022,978) through the biennium ending August 31, 2019.

The bill would make no appropriation but could provide the legal basis for an appropriation of funds to implement the provisions of the bill.

General Revenue-Related Funds, Five-Year Impact:

Fiscal Year	Probable Net Positive/(Negative) Impact to General Revenue Related Funds
2018	(\$21,198,103)
2019	(\$23,824,875)
2020	(\$26,876,274)
2021	(\$29,779,928)
2022	(\$35,085,364)

All Funds, Five-Year Impact:

Fiscal Year	Probable Savings/(Cost) from <i>Foundation School Fund</i> 193	Probable Savings/(Cost) from <i>General Revenue Fund</i> 1
2018	(\$20,965,391)	(\$232,712)
2019	(\$23,690,710)	(\$134,165)
2020	(\$26,761,899)	(\$114,375)
2021	(\$29,665,553)	(\$114,375)
2022	(\$34,970,989)	(\$114,375)

Fiscal Year	Change in Number of State Employees from FY 2017
2018	1.0
2019	1.0
2020	1.0
2021	1.0
2022	1.0

Fiscal Analysis

The bill would amend the Education Code to include technology applications as part of career and technical education (CTE) in the enrichment curriculum for kindergarten through Grade 12.

The bill would require the State Board of Education (SBOE) to approve local cybersecurity courses for high school credit; add computer coding as a component of computer programming language substitute for the curriculum requirements in a language other than English; add computer coding as a component of the computer programming language substitute for the foreign language curriculum requirements; and add courses in cybersecurity and computer coding to the description of a science, technology, engineering, and mathematics (STEM) endorsement. The bill would allow districts to offer a course in cybersecurity that is approved by the local board of trustees without SBOE approval if the district partners with a public or private institution of higher education (IHE) that offers an undergraduate degree program in cybersecurity to develop and provide the course and would require school districts to annually report the names of the courses and IHEs in which students have enrolled.

The bill would allow a teacher and a school district to qualify for a subsidy for certification examination if the teacher passes an examination related to cybersecurity. The bill would require the assessment instruments adopted related to the technology literacy assessment pilot program be aligned with the relevant essential knowledge and skills requirements for career and technology education relating to technology applications.

The bill would amend the fourth domain of the accountability system to include the percentage of students who successfully completed a practicum or internship approved by the SBOE as a measure of performance for high school campuses and districts that include high school campuses.

The bill would take effect immediately if passed with necessary voting margins, or September 1, 2017, and would apply beginning in school year 2017-18.

Methodology

Costs to the Foundation School Program

The Texas Education Agency assumes that proposed changes to Education Code Section 28.002 designating technology applications part of career and technology education within the foundation curriculum would form the basis for making technology applications courses eligible for weighted funding under the Foundation School Program (FSP) career and technology education allotment.

Using student course completion data for the 2015-16 school year, the Texas Education Agency estimates approximately 6,754.25 FTE students that would have been funded under the FSP career

and technology allotment if the technology applications courses were eligible for weighted funding. The Agency further assumes that a portion of these FTEs completing higher level courses would also have generated funding under the advanced career and technology allotment. Growth in participation was assumed to be 12 percent annually, consistent with the observed rate of growth in technology applications course completions since 2014. Under these assumptions, the Agency estimates additional state cost for the Foundation School Program of \$21.0 million beginning in fiscal year 2018 and \$23.7 in fiscal year 2019. Assuming a similar trajectory of continuing growth, costs would be anticipated to grow to nearly \$35.0 million by fiscal year 2022. If the proposed changes to Section 28.002, Education Code were interpreted not to authorize the designation of affected courses for weighted funding there would be no significant increase in state cost for the Foundation School Program.

Costs Resulting from TEKS and Curriculum Review

Related to the operations of the Texas Education Agency (TEA), the agency estimates initial development costs to convene three committees to approve courses in cybersecurity for credit in high school, develop additional courses that include computer coding to be used by students as substitutes for language graduation requirements, and revise the Texas Essential Knowledge and Skills (TEKS) to incorporate technology applications resulting in total costs of \$90,001 in fiscal year 2018.

For the first committee, TEA estimates making recommendation for new cybersecurity courses would cost an estimated \$12,174 in fiscal year 2018, with additional estimated costs of \$6,266 to review instructional materials for the new courses. For the second committee, TEA estimates developing additional courses that include computer coding to be used by students as substitutes for language graduation requirements would cost an estimated \$12,174 in fiscal year 2018, with additional estimated costs of \$6,266 to review instructional materials for the new courses. For the third committee, TEA estimates revising the TEKS to incorporate technology application into career and technical education would cost an estimated \$34,322 in fiscal year 2018. Since the SBOE recently adopted new instructional materials for CTE and technology applications, TEA anticipates the agency would convene review panels to review existing materials in both subject areas to determine alignment with revised, integrated courses resulting in a cost of \$18,799 in fiscal year 2018.

Costs Related to Full-Time Equivalent (FTEs)

TEA estimates a cost related to an FTE to implement the provisions of the bill. The estimated cost of the FTE, including salary, benefits, and other operating expenses, would be \$122,375 in fiscal year 2018 and \$114,375 in subsequent years. According to TEA, the FTE would assist the SBOE in approving practicum and internships and incorporating them into the accountability system. In addition, the FTE would assist with SBOE with rule adoption under the bills various provisions.

Technology

TEA estimates a cost of \$19,790 in fiscal years 2018 and 2019 for initial development related to modify the Texas Student Data System (TSDS) Public Education Information Management System (PEIMS) related to the requirement to collect the names of the cybersecurity courses, the IHEs in which students have enrolled under the provisions of the bill, and data regarding the percentage of students who successfully completed an SBOE approved practicum or internship.

Local Government Impact

School districts and charter schools would generate additional entitlement for students enrolled in the technology applications courses that are determined to be eligible for weighted funding under

the FSP career and technology education allotment.

Source Agencies: 701 Texas Education Agency, 710 Texas A&M University System Administrative and General Offices, 720 The University of Texas System Administration, 758 Texas State University System, 768 Texas Tech University System Administration, 769 University of North Texas System Administration, 781 Higher Education Coordinating Board, 783 University of Houston System Administration

LBB Staff: UP, AW, THo, AM, AG

LEGISLATIVE BUDGET BOARD
Austin, Texas

FISCAL NOTE, 85TH LEGISLATIVE REGULAR SESSION

April 10, 2017

TO: Honorable Dan Huberty, Chair, House Committee on Public Education

FROM: Ursula Parks, Director, Legislative Budget Board

IN RE: HB3593 by Bernal (Relating to instruction in career and technology education provided by public schools, including instruction in technology applications, cybersecurity, and computer coding, and to consideration of completed practicums and internships in school accountability ratings.), **As Introduced**

Estimated Two-year Net Impact to General Revenue Related Funds for HB3593, As Introduced: a negative impact of (\$45,022,978) through the biennium ending August 31, 2019.

The bill would make no appropriation but could provide the legal basis for an appropriation of funds to implement the provisions of the bill.

General Revenue-Related Funds, Five-Year Impact:

Fiscal Year	Probable Net Positive/(Negative) Impact to General Revenue Related Funds
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2019	(\$23,690,710)	(\$134,165)
2020	(\$26,761,899)	(\$114,375)
2021	(\$29,665,553)	(\$114,375)
2022	(\$34,970,989)	(\$114,375)

Fiscal Year	Change in Number of State Employees from FY 2017
2018	1.0
2019	1.0
2020	1.0
2021	1.0
2022	1.0

Fiscal Analysis

The bill would amend the Education Code to include technology applications as part of career and technical education (CTE) in the enrichment curriculum for kindergarten through Grade 12.

The bill would require the State Board of Education (SBOE) to approve local cybersecurity courses for high school credit; add computer coding as a component of computer programming language substitute for the curriculum requirements in a language other than English; add computer coding as a component of the computer programming language substitute for the foreign language curriculum requirements; and add courses in cybersecurity and computer coding to the description of a science, technology, engineering, and mathematics (STEM) endorsement. The bill would allow districts to offer a course that is approved by the local board of trustees without SBOE approval if the district partners with a public or private institution of higher education (IHE) that offers an undergraduate degree program in cybersecurity to develop and provide the course and would require school districts to annually report the names of the courses and IHEs in which students have enrolled.

The bill would allow a teacher and a school district to qualify for a subsidy for certification examination if the teacher passes an examination related to cybersecurity. The bill would require the assessment instruments adopted related to the technology literacy assessment pilot program be aligned with the relevant essential knowledge and skills requirements for career and technology education relating to technology applications.

The bill would amend the fourth domain of the accountability system to include the percentage of students who successfully completed a practicum or internship approved by the SBOE as a measure of performance for high school campuses and districts that include high school campuses.

The bill would take effect immediately if passed with necessary voting margins, or September 1, 2017, and would apply beginning in school year 2017-18.

Methodology

Costs to the Foundation School Program

The Texas Education Agency assumes that proposed changes to Education Code Section 28.002 designating technology applications part of career and technology education within the foundation curriculum would form the basis for making technology applications courses eligible for weighted funding under the Foundation School Program (FSP) career and technology education allotment.

Using student course completion data for the 2015-16 school year, the Texas Education Agency estimates approximately 6,754.25 FTE students that would have been funded under the FSP career

and technology allotment if the technology applications courses were eligible for weighted funding. The Agency further assumes that a portion of these FTEs completing higher level courses would also have generated funding under the advanced career and technology allotment. Growth in participation was assumed to be 12 percent annually, consistent with the observed rate of growth in technology applications course completions since 2014. Under these assumptions, the Agency estimates additional state cost for the Foundation School Program of \$21.0 million beginning in fiscal year 2018 and \$23.7 in fiscal year 2019. Assuming a similar trajectory of continuing growth, costs would be anticipated to grow to nearly \$35.0 million by fiscal year 2022. If the proposed changes to Section 28.002, Education Code were interpreted not to authorize the designation of affected courses for weighted funding there would be no significant increase in state cost for the Foundation School Program.

Costs Resulting from TEKS and Curriculum Review

Related to the operations of the Texas Education Agency (TEA), the agency estimates initial development costs to convene three committees to approve courses in cybersecurity for credit in high school, develop additional courses that include computer coding to be used by students as substitutes for language graduation requirements, and revise the Texas Essential Knowledge and Skills (TEKS) to incorporate technology applications resulting in total costs of \$90,001 in fiscal year 2018.

For the first committee, TEA estimates making recommendation for new cybersecurity courses would cost an estimated \$12,174 in fiscal year 2018, with additional estimated costs of \$6,266 to review instructional materials for the new courses. For the second committee, TEA estimates developing additional courses that include computer coding to be used by students as substitutes for language graduation requirements would cost an estimated \$12,174 in fiscal year 2018, with additional estimated costs of \$6,266 to review instructional materials for the new courses. For the third committee, TEA estimates revising the TEKS to incorporate technology application into career and technical education would cost an estimated \$34,322 in fiscal year 2018. Since the SBOE recently adopted new instructional materials for CTE and technology applications, TEA anticipates the agency would convene review panels to review existing materials in both subject areas to determine alignment with revised, integrated courses resulting in a cost of \$18,799 in fiscal year 2018.

Costs Related to Full-Time Equivalent (FTEs)

TEA estimates a cost related to an FTE to implement the provisions of the bill. The estimated cost of the FTE, including salary, benefits, and other operating expenses, would be \$122,375 in fiscal year 2018 and \$114,375 in subsequent years. According to TEA, the FTE would assist the SBOE in approving practicum and internships and incorporating them into the accountability system. In addition, the FTE would assist with SBOE with rule adoption under the bills various provisions.

Technology

TEA estimates a cost of \$19,790 in fiscal years 2018 and 2019 for initial development related to modify the Texas Student Data System (TSDS) Public Education Information Management System (PEIMS) related to the requirement to collect the names of the cybersecurity courses, the IHEs in which students have enrolled under the provisions of the bill, and data regarding the percentage of students who successfully completed an SBOE approved practicum or internship.

Local Government Impact

School districts and charter schools would generate additional entitlement for students enrolled in the technology applications courses that are determined to be eligible for weighted funding under

the FSP career and technology education allotment.

Source Agencies: 701 Texas Education Agency, 710 Texas A&M University System Administrative and General Offices, 720 The University of Texas System Administration, 758 Texas State University System, 768 Texas Tech University System Administration, 769 University of North Texas System Administration, 781 Higher Education Coordinating Board, 783 University of Houston System Administration

LBB Staff: UP, THo, AM, AW, AG