
SENATE COMMITTEE ON EDUCATION

Senator Connie Leyva, Chair

2019 - 2020 Regular

Bill No: SB 675 **Hearing Date:** April 3, 2019
Author: Chang
Version: February 22, 2019
Urgency: No **Fiscal:** Yes
Consultant: Ian Johnson

Subject: Education finance: Computer Occupations and Developing Education Act: State Lottery Fund.

NOTE: This bill has been referred to the Committees on Education and Governmental Organization. A "do pass" motion should include referral to the Committee on Governmental Organization.

SUMMARY

This bill would establish the Computer Occupations and Developing Education (CODE) Act, a grant program for local educational agencies offering computer science courses funded with up to \$100 million of State Lottery Funds.

BACKGROUND

Existing law:

- 1) Required the Superintendent of Public Instruction (SPI) to convene a computer science strategic implementation advisory panel by March 1, 2018, to develop recommendations for a computer science strategic implementation plan.
- 2) Requires the computer science strategic implementation advisory panel to hold public meetings, post the location and time of the meetings, and post agendas online, and requires members of the advisory panel to possess expertise in computer science.
- 3) Requires the computer science strategic implementation advisory panel to submit recommendations for a computer science strategic implementation plan to the SPI, the State Board of Education, and the Legislature by January 15, 2019.
- 4) Requires the recommendations for a computer science strategic implementation plan to include recommendations on at least all of the following:
 - a) Broadening the pool of computer science teachers.
 - b) Defining computer science education principles that meet the needs of pupils in kindergarten and grades 1 to 12, inclusive.
 - c) Ensuring that all pupils have access to quality computer science courses.

- 5) Requires the Superintendent of Public Instruction (SPI) to receive the recommendations submitted by the computer science strategic implementation advisory panel, and requires the SPI to develop, and the State Board of Education (SBE) to consider adopting, a computer science strategic implementation plan by July 15, 2019.
- 6) Requires the SPI to submit the computer science strategic implementation plan, if adopted by the SBE, to the Legislature by July 15, 2019.
- 7) Requires the Instructional Quality Commission (IQC), by July 31, 2019, to consider developing and recommending to the SBE computer science content standards for kindergarten and grades 1 to 12, inclusive, pursuant to recommendations developed by a group of computer science experts.
- 8) Requires the IQC to consider existing computer science content standards, which include, but are not limited to, the national K–12 computer science content standards developed by the Computer Science Teachers Association, and consider content standards that include, but are not necessarily limited to, standards for teaching coding.

ANALYSIS

This bill:

- 1) Establishes the Computer Occupations and Developing Education (CODE) Act, administered by the SBE as a grant program promoting the teaching of computer science courses.
- 2) Specifies that grants allocated may be used for purposes including, but not necessarily limited to, obtaining resources for the offering of computer science courses and related teacher professional development.
- 3) Specifies that computer science courses funded under this program shall comply, to the extent practicable, with computer science content standards recommended by the IQC and adopted by the state board.
- 4) Requires the SBE to adopt forms, standards, and procedures for the solicitation and evaluation of applications from local educational agencies (LEAs) for the grants awarded.
- 5) Authorizes the SBE to award grants for use by recipient LEAs for the 2020–21, 2021–22, and 2022–23 school years, or any combination of those school years.
- 6) Specifies that on or before August 31 of any school year, each LEA that received a grant for the preceding school year shall submit a written report to the SBE specifying the courses and other activities that were funded by the grant. This report shall include, but not be limited to, the number of pupils, faculty, and staff of the LEA that participated in these courses and activities.

- 7) Specifies that on or before September 30, 2023, the State Board of Education (SBE) shall submit a written report to the Legislature and the Governor that includes the state board's findings and recommendations relating to the grant program. This report shall also include, but not be limited to, a complete listing of grant recipients and the amount of the grant received by those recipients, and a summary of the information provided by the grant recipients in their reports.
- 8) Raises the minimum level of State Lottery funding allocated to public education to at least the amount allocated on average in the prior five fiscal years, or at least as much as was allocated for the 2018-19 fiscal year, whichever is greater.
- 9) Requires, from the 2020-21 fiscal year to the 2022-23 fiscal year, moneys to be transferred from the State Lottery Fund to the SBE as follows:
 - a) The SBE must certify that the funds are to be used to award grants under the CODE Act.
 - b) The total amount transferred shall be between \$50 million and \$100 million.
 - c) The money transferred shall come from State Lottery Fund moneys that would otherwise be allocated to local educational agencies (LEAs).
 - d) Any moneys transferred to the SBE that have not been encumbered by July 1, 2023, shall return to the State Lottery Fund.

STAFF COMMENTS

- 1) ***Need for the bill.*** According to the author, "It is critical that all pupils learn computing skills and move beyond consumers of technology to understanding how technology works. Unfortunately, California is behind the curve on delivering computer science to students in public schools even though it is in high demand. Only 12 percent of California high schools offer computer science courses yet over 90 percent of parents want their child to learn computer science in school."

"According to the Federal Bureau of Labor Statistics, California is home to over 500,000 jobs earning a mean wage of \$102,970. In the coming years, another 74,000 positions would be available in the computing field.

Unfortunately, California does not provide dedicated funding for rigorous computer science professional development and course support.

Meanwhile, the California State Lottery – a significant source of revenue for public education -- has grown revenues at record rates, while the funding they are required to allocate to schools remains flat. This is the case despite a string of controversies related to alleged misallocation of prize winnings, questionable promotional expenditures, and lawsuits. Currently, the California State Lottery is enduring an audit by the State Controller's Office and an investigation by the Attorney General's Office.

Senate Bill 675 recognizes the State Lottery is not living up to its mission to adequately fund education by beginning the process to repair the lottery school funding formula.

SB 675 simultaneously commits a modest amount of that additional funding to a long overdue computer science grant program.”

- 2) ***Recently adopted computer science content standards.*** The California Department of Education (CDE), Instructional Quality Commission (IQC), and State Board of Education (SBE) commenced the process for developing new California computer science content standards in September 2016. Per existing law, "on or before July 31, 2019, the Instructional Quality Commission shall consider developing and recommending to the SBE computer science content standards for kindergarten and grades 1 to 12, inclusive, pursuant to recommendations developed by a group of computer science experts."

The IQC approved and recommended the draft computer science standards to the SBE on July 26, 2018. The SBE approved the IQC recommendation and adopted the computer science standards on September 6, 2018. The standards, while not mandatory, are expected to increase the number of computer science classes taught in California classrooms. Further, these standards are not expected to be implemented in the same way as math, English or science. Rather, they are more likely to be woven into instruction in other subject areas, akin to visual and performing arts.

- 3) ***Status of the Computer Science Strategic Implementation Plan.*** As discussed above, existing law calls for the Superintendent of Public Instruction (SPI) to convene a computer science strategic implementation advisory panel to develop recommendations for a computer science strategic implementation plan. The panel's recommendations must be submitted to the SPI, the SBE, and the Legislature on or before January 15, 2019. Lastly, the SPI must develop, and the SBE must consider adopting, the implementation plan on or before July 15, 2019.

The SPI's Computer Science Strategic Implementation Plan was presented to the SBE at its March 2019 meeting. Included in the plan are recommended strategies for K-12 computer science course offerings, improving access to computer science education for all, supporting educators to teach computer science, and making systematic improvements in computer science education. Among these strategies are the following state-level recommendations:

- a) Develop a web page to house materials that represent best practices in computer science education with an emphasis on recruiting and serving historically underrepresented groups, including females in computer science education.
- b) Design accountability systems to evaluate the progress of implementation efforts, provide evaluation criteria to adopt computer science instructional materials and develop an online curriculum and instruction steering committee for computer science, and recognize successful early adopters

as a model for other teachers, schools, and local educational agencies (LEAs).

- c) Pass legislation to authorize the Commission on Teacher Credentialing to develop a single subject credential in computer science and develop a California Subject Examinations for Teachers for computer science.
- d) Provide sustained, dedicated funding and staff at the state and local level to support computer science education efforts, help teachers complete coursework towards computer science authorization, and help teachers working in low-income and underserved school districts.
- e) Build awareness of computer science standards and the implementation plan through roll-out workshops and computer science foundation toolkits.

The State Board of Education (SBE) has not yet taken action on the plan, and will review it again at its May 2018 meeting.

- 4) ***Lottery funds for public education.*** In November 1984, California voters passed Proposition 37, now known as Non-Prop 20, to benefit public education. Since the California State Lottery began in 1985, the state has distributed about half of lottery sales revenue back to the public in the form of prizes. Of the remaining revenues, public education has received more than the statutorily required 34 percent minimum, with the state using less than the maximum 16 percent legally allowed to administer the games. In 2010, legislation was passed that modified the allocation formula for the lottery in order to maximize the amount of funding allocated to public education. The legislation reduced the maximum percent to administer the games to 13 percent and allows the State Lottery Commission to increase the percentage of lottery revenues for prizes to more than 50 percent and to establish the percentage to be allocated to public education. If the change in law does not provide more revenues for public education than the year prior to the law's enactment, the prior revenue-allocation law will be restored.

School districts and charter schools are required to use lottery funds “exclusively for the education of pupils and students” and “no funds shall be spent for acquisition of real property, construction of facilities, financing of research, or any other non-instructional purpose.” The lottery provides about one percent of total K–12 education funding.

This bill would increase the amount of State Lottery Funds that must be made available to public schools to at least the amount allocated on average in the prior five fiscal years, or at least as much as was allocated for the 2018-19 fiscal year, whichever is greater. While this change to the allocation of State Lottery Fund disbursements could make people less likely to play, the Committee on Governmental Organization is better suited to evaluate that portion of the bill.

- 5) ***Amendment to the grant program.*** Given that the Computer Science Strategic Implementation Plan recommends the state to provide dedicated funding to support computer science education efforts, the grant program that this bill would

create may have merit. However, as currently drafted the bill would task the State Board of Education (SBE), the Governor's education policy-making body, with administering the program. If it is the desire of the Committee to pass this measure, **staff recommends** tasking the California Department of Education, in consultation with the SBE, with administering the grant program. The Committee may also wish to consider whether the program should be designed in some way to ensure that the funding is targeted in a way that would have the biggest impact on students. For example, applicants could be prioritized based on their lack of existing computer science course offerings, their commitment to newly offering computer science courses to the greatest number of students possible, or the extent to which they serve students that are English-learners, low-income, or foster youth.

- 6) **Previous legislation.** AB 2329 (Bonilla, Chapter 693, Statutes of 2016) requires the Superintendent of Public Instruction (SPI) to convene a computer science strategic implementation advisory panel to develop recommendations for a computer science strategic implementation plan.

AB 1539 (Hagman, Chapter 876, Statutes of 2014) requires Instructional Quality Commission (IQC) and the SBE to consider developing computer science content standards.

AB 1530 (Chau, 2014) required the SPI to consider identifying, developing or revising model curriculum on computer science for kindergarten - 6th grade. AB 1530 was held in the Senate Appropriations Committee.

AB 2110 (Ting, 2014) required the IQC to consider incorporating computer science curriculum content into the mathematics, science, history-social science, and English language arts/English language development frameworks. AB 2110 was held in the Senate Appropriations Committee.

SUPPORT

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OPPOSITION

None received

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