

California Department of Education

Executive Office

SBE-003(REV. 11/2017)

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# California State Board of EducationSeptember 2018 AgendaItem #07

## Subject

*Computer Science Standards for California Public Schools, Kindergarten Through Grade Twelve, 2018*: Adoption.

## Type of Action

Action, Information

## Summary of the Issue(s)

California *Education Code (EC)* Section 60605.4 directs the Instructional Quality Commission (IQC) to consider developing and recommending to the State Board of Education (SBE) computer science content standards for kindergarten and grades one to twelve, inclusive, on or before July 31, 2019. At the IQC meeting on July 26, 2018, the IQC considered public comments submitted during the public review process, approved edits to the draft *Computer Science Standards for California Public Schools, Kindergarten Through Grade Twelve (CA Computer Science Standards),* and recommended the standards to the SBE.

## Recommendation

The California Department of Education (CDE) and the IQC recommend that the SBE adopt the draft *CA Computer Science Standards.* The draft *CA Computer Science Standards* are available on the CDE Computer Science web page.

## Brief History of Key Issues

The development of the *CA Computer Science Standards* was a multi-step process. It involved educators, content experts, and other stakeholders participating in the focus group meetings and as members of the Computer Science Standards Advisory Committee (CSSAC). Throughout the development process, there were opportunities for public input at focus group, CSSAC, IQC, and SBE meetings and during one public review period.

### Standards Development Process

The CA *Computer Science Standards* are based on computer science core concepts and core practices aligned to the K–12 Computer Science Framework at <https://k12cs.org/>. The standards were developed by educators (members of the SBE-appointed CSSAC), utilizing work done by the Computer Science Teachers Association. The standards are designed to be accessible to each and every student in California. The standards inform teachers, curriculum developers, and educational leaders to ensure all students receive quality computer science instruction.

On May 18, 2017, the IQC acted to recommend to the SBE guidelines to direct the work of the CSSAC. These guidelines were based on current *Education Code* requirements, oral comments from the three focus group meetings held in November 2016, as well as written comments received during the same timeframe. In July 2017, the SBE voted to approve the Guidelines for the Development of *Computer Science Standards for California Public Schools, Kindergarten Through Grade Twelve*, 2018, and approved the 21-member CSSAC. The guidelines are available on the CDE Computer Science Standards Guidelines web page at <https://www.cde.ca.gov/be/st/ss/compsciguidelines.asp>. The CSSAC met four times from September 2017 through January 2018 and developed an initial draft *CA Computer Science Standards*.

In May 2018, the IQC reviewed and edited the CSSAC’s initial draft *CA Computer Science Standards* and approved it for posting and distribution for the public review and comment period. The draft *CA Computer Science Standards* was posted from April 27 through June 20, 2018, with an online survey to facilitate public comment.

During the field review, the CDE received 14 responses to the online survey and numerous letters commenting on the draft *CA Computer Science Standards.* On July 26, 2018, the IQC reviewed the comments submitted during the public review period, approved edits to the standards, and made recommendations for the SBE to consider adopting the standards at the September 2018 SBE meeting.

The IQC is formally recommending that the SBE adopt the draft *CA Computer Science Standards*. The SBE may make additional edits to the draft *CA Computer Science Standards* that will be incorporated into the document by CDE staff before it is published. Once the SBE takes action, the SBE and CDE staff will make necessary editorial changes as the document is professionally edited and prepared for publication.

## Summary of Previous State Board of Education Discussion and Action

**July 2017:** The SBE approved the Guidelines for the Development of *Computer Science Standards for California Public Schools, Kindergarten Through Grade Twelve,* and appointed 21 members to the CSSAC.

**January 2017:** The SBE approved the Schedule of Significant Events for the *Computer Science Standards for California Public Schools, Kindergarten Through Grade Twelve*, 2018 and the Application for Appointment to the Computer Science Standards Advisory Committee.

## Fiscal Analysis (as appropriate)

The estimated cost of the development of the *CA Computer Science Standards* is $344,200. This estimate includes the costs for the contracted writers, travel for the CSSAC members, production of materials for CSSAC meetings, editing and graphic design services, technology services, and IQC meetings related to the standards development.

## Attachment(s)

Attachment 1: Copy of the draft *CA Computer Science Standards* that was approved by the IQC on July 26, 2018 (354 pages). This attachment is available on the CDE Computer Science web page at <https://www.cde.ca.gov/be/st/ss/computerscicontentstds.asp>. A copy of the draft *CA Computer Science Standards* is also available for viewing at the State Board of Education office.

Attachment 2: Chart of Public Input on draft *CA Computer Science Standards* (organized by section) with noted approved action by the IQC on July 26, 2018 (36 pages). This attachment is available on the CDE Computer Science web page at <https://www.cde.ca.gov/be/st/ss/computerscicontentstds.asp>.