

CONCURRENCE IN SENATE AMENDMENTS

AB 2298 (Irwin)

As Amended August 20, 2026

Majority vote

SUMMARY

Requires the Instructional Quality Commission (IQC) to consider incorporating cybersecurity skills the next time it revises the content standards in computer science.

Senate Amendments

- 1) Remove the requirement that the IQC, the next time the instructional materials in computer science are adopted by State Board of Education (SBE) after January 1, 2027, to consider including cybersecurity skills in its criteria for evaluating instructional materials.

COMMENTS

Cybersecurity in current computer science standards. This bill would require the IQC to consider including content on cybersecurity in the next revision of the computer science standards and the criteria for the evaluation of instructional materials for adoption by the SBE.

California's current computer science standards, adopted by the SBE in 2018, include content on cybersecurity under the Networks and the Internet concept through the grades. Topics covered include data protection, security threats, and mitigation strategies, with specialized, in-depth standards for high school courses.

Instruction in cybersecurity. A national survey of more than 900 K-12 teachers, principals, and district leaders conducted by cyber.org in 2020 examined the prevalence, forms, and perceptions of cybersecurity education. The results indicated that students and educators have limited knowledge of cybersecurity, and that less than half of respondents reported that their districts or schools offer cybersecurity education. It also found uneven access, with cybersecurity education less likely to be provided in small and high-poverty districts or in areas that lack cybersecurity companies or universities that study or offer coursework on the subject. When cybersecurity education is offered in K-12, it is typically infused into the existing, broader curriculum rather than taught as a standalone course. Educators reported that most students are not well-informed about the educational and career requirements associated with cybersecurity jobs.

According to the Author

"Recent years have seen a stark increase in the number and sophistication of cyber threats posed to the students in our state, underscoring the need for modernized cybersecurity education. Existing computer science content standards, last updated in 2018, include cybersecurity content, but they focus primarily on protecting information rather than identifying and preventing threats. While this foundation has value, it reflects an outdated generation of cyber risks.

Since 2018, cyberattacks have grown increasingly complex, particularly with the growth of artificial intelligence, enabling more advanced phishing schemes, social engineering, and automated attacks. As a result, our existing standards no longer align with the current cyber threat landscape. Modern cybersecurity education standards must emphasize the skills needed to identify, prevent, and respond to these increasingly sophisticated attacks.

AB 2298 addresses this gap by requiring the Instructional Quality Commission to consider including updated, more robust cybersecurity skills content focused on identifying and responding to threats into the state's computer science standards. This will ensure that, as cyber threats continue to evolve, students are equipped with the knowledge and skills needed to protect themselves and respond effectively to the modern cyber threats they face today."

Arguments in Support

Alameda County Office of Education writes, "As students spend an increasing amount of time online, their exposure to sophisticated digital threats has reached an all-time high. By integrating cybersecurity training into the curriculum, schools can equip students with the essential skills to navigate and respond to these risks. Furthermore, embedding cybersecurity within content standards can inspire many students to pursue high-demand careers in the field."

ACOE strongly supports this bill's approach of asking the IQC and SBE to consider integrating cybersecurity skills into the computer science content standards. By utilizing the existing framework revision process, the state can ensure this instruction is consistent, age-appropriate, and keeps pace with rapidly evolving digital threats without overburdening the current curriculum."

Arguments in Opposition

None on file

FISCAL COMMENTS

According to the Senate Appropriations Committee, pursuant to Senate Rule 28.8, negligible state costs.

VOTES:

ASM EDUCATION: 9-0-0

YES: Patel, Hoover, Alvarez, Bonta, Castillo, Garcia, Lowenthal, Pellerin, Zbur

ASM APPROPRIATIONS: 15-0-0

YES: Wicks, Hoover, Bauer-Kahan, Calderon, Caloza, Ellis, Fong, Mark González, Krell, Pacheco, Pellerin, Sharp-Collins, Solache, Ta, Tangipa

ASSEMBLY FLOOR: 68-0-12

YES: Addis, Aguiar-Curry, Ahrens, Alanis, Alvarez, Ávila Farías, Bains, Bauer-Kahan, Bennett, Berman, Boerner, Bonta, Bryan, Calderon, Caloza, Carrillo, Castillo, Connolly, Davies, DeMaio, Dixon, Elhawary, Ellis, Flora, Fong, Gallagher, Gipson, Jeff Gonzalez, Mark González, Hadwick, Haney, Harabedian, Hart, Irwin, Jackson, Johnson, Kalra, Krell, Lee, Macedo, McKinnor, Muratsuchi, Nguyen, Ortega, Pacheco, Papan, Patel, Patterson, Pellerin, Petrie-Norris, Quirk-Silva, Ransom, Michelle Rodriguez, Rogers, Blanca Rubio, Sanchez, Schiavo, Sharp-Collins, Solache, Soria, Stefani, Ta, Tangipa, Valencia, Wallis, Ward, Zbur, Rivas

ABS, ABST OR NV: Arambula, Chen, Gabriel, Garcia, Hoover, Lackey, Lowenthal, Ramos, Celeste Rodriguez, Schultz, Wicks, Wilson

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