A BILL FOR AN ACT

RELATING TO COMPUTER SCIENCE EDUCATION.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

- 1 SECTION 1. The legislature finds that the importance of
- 2 computer science cannot be overstated. Computers have evolved
- 3 to become a part of everyday life, and an introduction to
- 4 computer science helps students better understand their digital
- 5 world and become problem solvers of the future.
- 6 The legislature further finds that, according to the Bureau
- 7 of Labor Statistics, the United States will continue to be
- 8 transformed by technological advancements rooted in computer
- 9 programs and applications over the next ten years.
- 10 Consequently, computing-based occupations now make up more than
- 11 half of all projected new jobs in the science, technology,
- 12 engineering, and mathematics fields, commonly known as STEM
- 13 fields. In the prior decade between 2010 and 2020, the number
- 14 of computer science bachelor's degrees conferred more than
- 15 doubled from 39,600 to 97,000, respectively, an increase of one
- 16 hundred forty-five per cent. This means that college graduates

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- 1 with computer science degrees have been, and will continue to
- 2 be, in high demand among employers across the nation.
- 3 Notwithstanding, national survey and research results show
- 4 a disparity between the demand for computer science education
- 5 and its availability. Although ninety per cent of parents want
- 6 their children's schools to teach computer science, only fifty-
- 7 three per cent of schools offer computer science courses.
- 8 Further, disparities in access and representation remain present
- 9 among traditionally underrepresented groups. For example, women
- 10 make up just one-third of high school computer science students
- 11 nationally.
- In 2018, the legislature found a similar disparity at the
- 13 state level. To address this, the legislature passed Act 51,
- 14 Session Laws of Hawaii 2018, which mandated that all public high
- 15 schools offer at least one computer science course by the 2021-
- 16 2022 school year. In 2021, the legislature further expanded
- 17 those computer science course requirements to elementary,
- 18 middle, and intermediate schools by enacting Act 158, Session
- 19 Laws of Hawaii 2021. As a result, excluding "combo" schools,
- 20 which are schools with combined grade bands, such as Lanai high
- 21 and elementary school, one hundred per cent of public high

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2	exceeding the national average, and forty-two per cent of all		
3	public schools offered a computer science course.		
4	However, despite the success in expanding access to		
5	computer science courses since 2018, the State has still fallen		
6	short on its enrollment goals for these courses. According to		
7	the department of education's Annual Report on Computer Science		
8	Courses and Computer Science Content, published in November		
9	2022, just fourteen per cent of unique students were enrolled in		
10	a computer science course, with sixteen per cent of those		
11	students comprising those in high school. Notably, data		
12	isolating the percentage of high school students enrolled out of		
13	total high school students in the State was not provided by the		
14	report. In sum, the legislature finds that promoting computer		
15	science education remains a statewide necessity.		
16	Accordingly, the purpose of this Act is to:		
17	(1) Require the board of education to:		
18	(A) Work with the department of education to conduct		
19	an analysis on the need, impact, and feasibility		
20	of making computer science a graduation		
21	requirement;		

1 schools now offer a foundational computer science course,

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1	(B)	Based on its analysis, make a determination on	
2		whether making computer science a graduation	
3		requirement would be in the best interests of	
4		public school students and the public; and	
5	(C)	Report to the legislature on its findings and	
6		recommendations; and	
7	(2) Appr	copriate funds to the department of education for	
8	tead	cher professional development in computer science.	
9	SECTION 2	(a) The board of education shall work with the	
10	department of education to analyze the need, impact, and		
11	feasibility of	making computer science a graduation requirement.	
12	(b) The	board of education shall determine whether making	
13	computer scier	nce a graduation requirement would be in the best	
14	interests of p	public school students and the public, based on the	
15	analysis condu	acted pursuant to subsection (a).	
16	(c) The	board of education shall submit a report of its	
17	findings and a	ecommendations, including proposed legislation, to	
18	the legislatur	e no later than twenty days prior to the convening	
19	of the regular	session of 2024.	
20	SECTION 3	3. There is appropriated out of the general	
21	rowonues of th	so State of Havaii the sum of \$600,000 on so much	

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- 1 thereof as may be necessary for fiscal year 2023-2024 and the
- 2 same sum or so much thereof as may be necessary for fiscal year
- 3 2024-2025 for teacher professional development in computer
- 4 science.
- 5 The sums appropriated shall be expended by the department
- 6 of education for the purposes of this Act.
- 7 SECTION 4. This Act shall take effect on July 1, 3000.

Report Title:

Computer Science; Board of Education; Department of Education; Graduation Requirements; Analysis; Report; Teacher Development; Appropriation

Description:

Requires the board of education to work with the department of education to conduct an analysis on the need, impact, and feasibility of making computer science a graduation requirement. Requires the board to make a determination on whether making computer science a graduation requirement would be in the best interests of public school students and the public. Requires a report to the legislature. Appropriates funds for teacher professional development in computer science. Effective 7/1/3000. (HD1)

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