H.B. NO. ⁵⁰³ H.D. ²

A BILL FOR AN ACT

RELATING TO COMPUTER SCIENCE EDUCATION.

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

SECTION 1. The legislature finds that the importance of
 computer science cannot be overstated. Computers have evolved
 to become a part of everyday life, and an introduction to
 computer science helps students better understand their digital
 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 last decade between 2010 and 2020, the number of 14 computer science bachelor's degrees conferred more than doubled 15 from 39,600 to 97,000, respectively, an increase of one hundred 16 forty-five per cent. This means that college graduates with

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computer science degrees have been, and will continue to be, in
 high demand among employers across the nation.

3 Despite this trend, national survey and research results 4 show a disparity between the demand for computer science 5 education and its availability. Although ninety per cent of 6 parents want their children's schools to teach computer science, 7 only fifty-three per cent of schools offer computer science 8 courses. Further, disparities in access and representation are 9 pronounced among traditionally underrepresented groups. For 10 example, women make up just one third of high school computer 11 science students nationally.

12 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 2021-2022 school year. In 2021, the legislature further expanded 16 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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schools now offer a foundational computer science course,
 exceeding the national average, and forty-two per cent of all
 public schools offer a computer science course.

4 Despite the success in expanding access to computer science 5 courses since 2018, the State has still fallen short on its 6 enrollment goals for these courses. According to the department 7 of education's Annual Report on Computer Science Courses and 8 Computer Science Content, published in November 2022, just 9 fourteen per cent of unique students were enrolled in a computer 10 science course, with sixteen per cent of those students 11 comprising those in high school. Notably, data isolating the 12 percentage of high school students enrolled out of total high 13 school students in the State was not provided by the report. In 14 sum, the legislature finds that promoting computer science 15 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;

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1		(B)	Based c	n its	analys	is, 🤇	determ	ine wł	nether	mał	king	ſ
2			compute	r sci	ence a d	gradı	uation	requi	iremen	t wo	ould	ł
3			be in t	he be:	st inte	rest	s of p	ublic	schoo	1		
4			student	s and	the pu	blic	; and					
5		(C)	Report	to the	e legis	latu	re on	its f	inding	is ar	nd	
6			recomme	ndati	ons; an	d						
7	(2) Appropriate funds to the department of education for											
8		teac	her prof	essio	nal dev	elop	ment i	n com	puter	scie	ence	÷.
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.											nt.
12	(b) The board of education shall determine whether making											ıg
13	computer science a graduation requirement would be in the best											2
14	interests of public school students and the public, based on the											he
15	analysis conducted pursuant to subsection (a).											
16	(c)	The	board of	educ	ation s	hall	submi	tare	eport	of :	its	
17	findings	and r	ecommenc	lation	s, incl	udin	g prop	osed 1	legisl	atio	on,	to
18	the legislature no later than twenty days prior to the convening											
19	of the regular session of 2024.											
20	SECTION 3. There is appropriated out of the general											
21	revenues	of th	e State	of Ha	waii th	e su	m of \$			or	so	

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much thereof as may be necessary for fiscal year 2023-2024 and
 the same sum or so much thereof as may be necessary for fiscal
 year 2024-2025 for teacher professional development in computer
 science.
 The sums appropriated shall be expended by the department

 ${f 6}$ of education for the purposes of this Act.

7 SECTION 4. This Act shall take effect on July 1, 3000.

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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 determine 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. (HD2)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.