# A BILL FOR AN ACT

RELATING TO EDUCATION.

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

1	PART I
2	SECTION 1. The legislature finds that the economic
3	disruption caused by the global coronavirus disease 2019
4	(COVID-19) pandemic has illustrated a need to diversify Hawaii's
5	economy beyond tourism. The pandemic has also shown the
6	importance of digital literacy, particularly as applied to
7	distance learning, telehealth appointments, and working from
8	home.
9	The legislature further finds that the economic disruption
10	has increased the focus on computer science education as a key
11	driver of both economic growth and digital literacy. A computer
12	science pipeline can help to diversify Hawaii's economy away
13	from tourism and into cybersecurity, green energy, robotics, and
14	other technology-based fields. Previously, the legislature
15	passed Act 51, Session Laws of Hawaii 2018, which prioritized
16	statewide computer science education by:

1	( 1 )	Requiring the department of education to develop and		
2		implement a statewide computer science curriculum plan		
3		for public school students in kindergarten through		
4		twelfth grade that may include design thinking as part		
5		of the curriculum; and		
6	(2)	Beginning with the 2021-2022 school year, ensuring		
7		that each public high school offers at least one		
8		computer science course during each school year.		
9	Acco	rding to a June 2020 report from the University of		
10	Hawaii at	Manoa, Act 51 was one of several initiatives that led		
11	to a rapi	d increase in computer science activities in education		
12	between 2	017 and 2020. These activities have resulted in		
13	thirty-three public high schools and eleven combination schools			
14	now offering computer science courses. The number of students			
15	who took the Advanced Placement Computer Science Principles tes			
16	and the A	dvanced Placement Computer Science A test increased		
17	89.6 per	cent and 28.7 per cent respectively, from the 2017-2018		
18	school yea	ar to the 2018-2019 school year. Further, the		
19	percentage of schools offering Advanced Placement Computer			
20	Science co	ourses have increased from 6.8 per cent during the		

1 2017-2018 school year to 22.7 per cent during the 2019-2020 2 school year. The purpose of this Act is to improve digital literacy 3 4 throughout the State by further increasing computer science 5 education offerings at public schools. 6 PART II 7 SECTION 2. Chapter 302A, Hawaii Revised Statutes, is 8 amended by adding a new section to part III, subpart C, to be 9 appropriately designated and to read as follows: 10 "§302A- Computer science education special fund; 11 established. (a) There is established the computer science 12 special fund into which shall be deposited: 13 Appropriations by the legislature to the special fund; (1) 14 and 15 Gifts, donations, and grants from public agencies and (2) 16 private persons for computer science training and 17 computer science pathways. 18 The computer science special fund shall be (b) 19 administered by the department to provide grants to eligible

20

entities to:

1	(1)	Deliver professional development programs for teachers
2		providing instruction in computer science courses and
3		computer science content; and
4	(2)	Support computer science pathways in kindergarten
5		through twelfth grade, including work-based learning
6		partnerships.
7	(c)	By December 1, 2022, and each December 1 thereafter,
8	the depar	tment shall submit to the board and the legislature a
9	report su	mmarizing the grant program, including recipients of
10	grants, u	ses of grant funds, and the amounts of each grant
11	provided	during the previous year."
12	SECT	TION 3. Section 302A-101, Hawaii Revised Statutes, is
13	amended b	y adding three new definitions to be appropriately
14	inserted	and to read as follows:
15	" <u>"Co</u>	mputer science" means the study of computers and
16	algorithm	ic processes, including their principles, their
17	hardware	and software designs, their implementation, and their
18	impact on	society.
19	"Com	puter science content" means courses of instruction
20	that prov	ide:

1	(1)	Computer science instruction that is integrated with			
2		another subject; and			
3	(2)	A final grade to each student.			
4	"Com	"Computer science courses" means courses of instruction			
5	that provide:				
6	(1)	Computer science instruction in standalone			
7		implementations; and			
8	(2)	A final grade to each student."			
9	SECT	ION 4. Section 302A-323, Hawaii Revised Statutes, is			
10	amended to read as follows:				
11	"[+]	§302A-323[] Computer science; curricula plan; public			
12	schools.	(a) The department shall:			
13	(1)	Develop and implement a statewide computer science			
14		curricula plan for public school students in			
15		kindergarten through twelfth grade that may include			
16		design thinking as part of the curricula; and			
17	(2)	Beginning with the 2021-2022 school year, ensure that			
18		each public high school offers at least one computer			
19		science course during each school year.			
20	(b)	Beginning with the 2022-2023 school year, at least one			
21	elementar	y school and one middle or intermediate school in each			

1 complex area shall offer computer science courses or computer 2 science content. 3 (c) Beginning with the 2023-2024 school year, not less 4 than fifty per cent of the elementary schools and not less than 5 fifty per cent of the middle and intermediate schools in each 6 complex area shall offer computer science courses or computer 7 science content. 8 (d) Beginning with the 2024-2025 school year, all 9 elementary, middle, and intermediate schools shall offer 10 computer science courses or computer science content. 11 (e) By June 30, 2022, and by each June 30 thereafter, the 12 superintendent shall submit a report of the computer science 13 courses and computer science content offered during the previous 14 school year at the schools in each complex area. The report 15 shall include: 16 (1) The names and course codes of the computer science 17 courses offered at each school; 18 (2) The number and percentage of students enrolled in each 19 computer science course and computer science content, 20 disaggregated by: 21 (A) Gender;

1		<u>(B)</u>	Race and ethnicity;
2		(C)	Special education status, including students
3			eligible for special education under the
4			Individuals with Disabilities Education Act, as
5			amended, or section 504 of the Rehabilitation Act
6			of 1973, as amended;
7		(D)	English language learner status;
8		<u>(E)</u>	Eligibility for the free and reduced price lunch
9			program; and
10		<u>(F)</u>	<pre>Grade level;</pre>
11		prov	ided that if a category contains one to five
12		stud	ents, or contains an amount that would allow the
13		amou	nt of another category that contains one to five
14		stud	ents to be determined, the number of students
15		shal	l be replaced with a symbol indicating that one to
16		five	students fulfilled that particular category;
17	(3)	The :	names and course codes of the courses containing
18		comp	uter science content and a description of the
19		comp	uter science standards and content that are
20		cove	red by those courses; and

1	(4)	The number of computer science instructors at each
2		school, disaggregated by:
3		(A) Any applicable certification;
4		(B) Gender;
5		(C) Race and ethnicity; and
6		(D) Highest academic degree.
7	<u>(f)</u>	The superintendent shall compile the information
8	pursuant t	o subsection (e) and, by December 1, 2022, and each
9	December 1	thereafter, shall submit a summary of the previous
10	school yea	r to the board and the legislature.
11	<u>(g)</u>	For the purposes of this section, "offer" means to
12	provide a	computer science course or computer science content
13	taught in	the English or Hawaiian language by a teacher:
14	(1)	Who is physically located at the school; or
15	(2)	Who is not physically located at the school but
16		provides instruction through virtual means with the
17		assistance of a proctor who is physically located a
18		the school."
19		PART III

## S.B. NO. 242 S.D. 1

- 1 SECTION 5. Chapter 302D, Hawaii Revised Statutes, is
- 2 amended by adding a new section to be appropriately designated
- 3 and to read as follows:
- 4 "§302D- Computer science. (a) Beginning with the 2024-
- 5 2025 school year, each public charter school that serves
- 6 elementary, middle, intermediate, or high school students shall
- 7 offer computer science courses or computer science content at a
- 8 frequency that allows a student to enroll in a computer science
- 9 course or receive computer science content at least once while
- 10 the student is at each of the elementary school, middle or
- 11 intermediate school, and high school levels.
- 12 (b) For the purpose of this section, "offer" shall have
- 13 the same meaning as in section 302A-323."
- 14 SECTION 6. Section 302D-1, Hawaii Revised Statutes, is
- 15 amended by adding three new definitions to be appropriately
- 16 inserted and to read as follows:
- ""Computer science" shall have the same meaning as in
- 18 section 302A-101.
- 19 "Computer science content" shall have the same meaning as
- 20 in section 302A-101.

6

# S.B. NO. 242 S.D. 1

"Computer science courses" shall have the same meaning as
in section 302A-101."

PART IV

SECTION 7. Statutory material to be repealed is bracketed
and stricken. New statutory material is underscored.

SECTION 8. This Act shall take effect on July 1, 2021.

2021-1066 SB242 SD1 SMA.doc

# **S.B. NO.** 242 S.D. 1

#### Report Title:

Education; Department of Education; Computer Science

#### Description:

Requires public and charter schools to offer education in computer science. Requires annual reports. (SD1)

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