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

1	for public school students in kindergarten through
2	twelfth grade that may include design thinking as part
3	of the curriculum; and
4	(2) Beginning with the 2021-2022 school year, ensuring
5	that each public high school offers at least one
6	computer science course during each school year.
7	According to a June 2020 report from the university of
8	Hawaii at Manoa, Act 51 was one of several initiatives that led
9	to a rapid increase in computer science activities in education
10	between 2017 and 2020. These activities have resulted in
11	thirty-three public high schools and eleven combination schools
12	now offering computer science courses. The number of students
13	who took the Advanced Placement Computer Science Principles test
14	and the Advanced Placement Computer Science A test increased
15	89.6 per cent and 28.7 per cent respectively, from the 2017-2018
16	school year to the 2018-2019 school year. Further, the
17	percentage of schools offering Advanced Placement Computer
18	Science courses have increased from 6.8 per cent during the
19	2017-2018 school year to 22.7 per cent during the 2019-2020
20	school year.

1	The	purpose of this Act is to improve digital literacy
2	throughou	t the State by further increasing computer science
3	education	offerings at public schools.
4		PART II
5	SECT	ION 2. Chapter 302A, Hawaii Revised Statutes, is
6	amended b	y adding a new section to part III, subpart C, to be
7	appropria	tely designated and to read as follows:
8	" <u>§</u> 30	2A- Computer science education special fund;
9	establish	ed. (a) There is established the computer science
10	special f	und into which shall be deposited:
11	(1)	Appropriations by the legislature to the special fund;
12		and
13	(2)	Gifts, donations, and grants from public agencies and
14		private persons for computer science training and
15		computer science pathways.
16	(b)	The computer science special fund shall be
17	administe	red by the department to provide grants to eligible
18	entities	to:
19	(1)	Deliver professional development programs for teachers
20		providing instruction in computer science courses and
21		computer science content; and

1	(2) Support computer science pathways in kindergarten
2	through twelfth grade, including work-based learning
3	partnerships.
4	(c) By December 1, 2022, and each December 1 thereafter,
5	the department shall submit to the board and the legislature a
6	report summarizing the grant program, including recipients of
7	grants, uses of grant funds, and the amounts of each grant
8	provided during the previous year."
9	SECTION 3. Section 302A-101, Hawaii Revised Statutes, is
10	amended by adding three new definitions to be appropriately
11	inserted and to read as follows:
12	"Computer science" means the study of computers and
13	computer algorithms, including principles, hardware and software
14	designs, implementation, and impact on society.
15	"Computer science content" means courses of instruction
16	that provide:
17	(1) Computer science instruction that is integrated with
18	another subject; and
19	(2) A final grade to each student.
20	"Computer science courses" means courses of instruction
21	that provide:

1	(1)	Computer science instruction in standalone
2		implementations; and
3	(2)	A final grade to each student."
4	SECT	ION 4. Section 302A-323, Hawaii Revised Statutes, is
5	amended t	o read as follows:
6	" [-[]	§302A-323[+] Computer science; curricula plan; public
7	schools.	(a) The department shall:
8	(1)	Develop and implement a statewide computer science
9		curricula plan for public school students in
0		kindergarten through twelfth grade that may include
1		design thinking as part of the curricula; and
2	(2)	Beginning with the 2021-2022 school year, ensure that
3		each public high school offers at least one computer
4		science course during each school year.
5	(b)	Beginning with the 2022-2023 school year, at least one
6	elementar	y school and one middle or intermediate school in each
17	complex a	rea shall offer computer science courses or computer
18	science c	content.
19	<u>(c)</u>	Beginning with the 2023-2024 school year, not less
20	than fift	y per cent of the elementary schools and not less than
2.1	fifty ner	cent of the middle and intermediate schools in each

Ţ	complex a	rea shall offer computer science courses or computer
2	science co	ontent.
3	(d)	Beginning with the 2024-2025 school year, all
4	elementar	y, middle, and intermediate schools shall offer
5	computer	science courses or computer science content.
6	(e)	By June 30, 2022, and by each June 30 thereafter, each
7	complex a	rea shall submit to the superintendent a report of the
8	computer	science courses and computer science content offered
9	during the	e previous school year at the schools in that complex
10	area. Th	e report shall include:
11	(1)	The names and course codes of the computer science
12		courses offered at each school;
13	(2)	The number and percentage of students enrolled in each
14		computer science course and computer science content,
15		disaggregated by:
16		(A) Gender;
17		(B) Race and ethnicity;
18		(C) Special education status, including students
19		eligible for special education under the
20		Individuals with Disabilities Education Act, as

1		amended, or section 504 of the Rehabilitation Act
2		of 1973, as amended;
3		(D) English language learner status;
4		(E) Eligibility for the free and reduced price lunch
5		program; and
6		(F) Grade level;
7		provided that if a category contains one to five
8		students, or contains an amount that would allow the
9		amount of another category that contains one to five
10		students to be determined, the number of students
11		shall be replaced with a symbol indicating that one to
12		five students fulfilled that particular category;
13	(3)	The names and course codes of the courses containing
14		computer science content and a description of the
15		computer science standards and content that are
16		covered by those courses; and
17	(4)	The number of computer science instructors at each
18		school, disaggregated by:
19		(A) Any applicable certification;
20		(B) Gender;
21		(C) Race and ethnicity; and

1	(D) Highest academic degree.
2	(f) The superintendent shall compile the information
3	received pursuant to subsection (e) and, by December 1, 2022,
4	and each December 1 thereafter, shall submit a summary of the
5	previous school year to the board and the legislature.
6	(g) For the purposes of this section, "offer" means to
7	provide a computer science course or computer science content
8	taught in the English or Hawaiian language by a teacher:
9	(1) Who is physically located at the school; or
10	(2) Who is not physically located at the school but
11	provides instruction through virtual means with the
12	assistance of a proctor who is physically located at
13	the school."
14	PART III
15	SECTION 5. Chapter 302D, Hawaii Revised Statutes, is
16	amended by adding a new section to be appropriately designated
17	and to read as follows:
18	"§302D- Computer science. (a) Beginning with the
19	2024-2025 school year, each public charter school that serves
20	elementary, middle, intermediate, or high school students shall
21	offer computer science courses or computer science content at a

- 1 frequency that allows a student to enroll in a computer science
- 2 course or receive computer science content at least once while
- 3 the student is at each of the elementary school, middle or
- 4 intermediate school, and high school levels.
- 5 (b) For the purpose of this section, "offer" shall have
- 6 the same meaning as in section 302A-323."
- 7 SECTION 6. Section 302D-1, Hawaii Revised Statutes, is
- 8 amended by adding three new definitions to be appropriately
- 9 inserted and to read as follows:
- 10 ""Computer science" shall have the same meaning as in
- 11 section 302A-101.
- "Computer science content" shall have the same meaning as
- 13 in section 302A-101.
- "Computer science courses" shall have the same meaning as
- 15 in section 302A-101."
- 16 PART IV
- 17 SECTION 7. Statutory material to be repealed is bracketed
- 18 and stricken. New statutory material is underscored.

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

2

INTRODUCED BY:

JAN 2 6 2021

Report Title:

Education; Department of Education; Computer Science

Description:

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

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