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

S.B. NO. 242

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   throughout the State by further increasing computer science

3   education offerings at public schools.

4   PART II

5   SECTION 2. Chapter 302A, Hawaii Revised Statutes, is

6   amended by adding a new section to part III, subpart C, to be

7   appropriately designated and to read as follows:

8   "§302A-   **Computer science education special fund;**

9   **established.** (a) There is established the computer science

10   special fund 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   administered 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   SECTION 4. Section 302A-323, Hawaii Revised Statutes, is

5 amended to 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

10   kindergarten through twelfth grade that may include

11   design thinking as part of the curricula; and

12   (2)   Beginning with the 2021-2022 school year, ensure that

13   each public high school offers at least one computer

14   science course during each school year.

15   (b) Beginning with the 2022-2023 school year, at least one

16 elementary school and one middle or intermediate school in each

17 complex area shall offer computer science courses or computer

18 science content.

19   (c) Beginning with the 2023-2024 school year, not less

20 than fifty per cent of the elementary schools and not less than

21 fifty per cent of the middle and intermediate schools in each

1 complex area shall offer computer science courses or computer

2 science content.

3   (d) Beginning with the 2024-2025 school year, all

4 elementary, 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 area shall submit to the superintendent a report of the

8 computer science courses and computer science content offered

9 during the previous school year at the schools in that complex

10 area. The 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._

12   _"Computer science content" shall have the same meaning as_

13   _in section 302A-101._

14   _"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.

S.B. NO. **242**

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

2

INTRODUCED BY: _____

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.