DAVID Y. IGE
GOVERNOR

EMPLOYEES' RETIREMENT SYSTEM
HAWAI'I EMPLOYER-UNION HEALTH BENEFITS TRUST FUND
OFFICE OF THE PUBLIC DEFENDER

CRAIG K. HIRAI
DIRECTOR

ROBERT YU
DEPUTY DIRECTOR

ADMINISTRATIVE AND RESEARCH OFFICE
BUDGET, PROGRAM PLANNING AND
    MANAGEMENT DIVISION
FINANCIAL ADMINISTRATION DIVISION
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

STATE OF HAWAI'I
DEPARTMENT OF BUDGET AND FINANCE
P.O. BOX 150
HONOLULU, HAWAI'I 96810-0150

WRITTEN ONLY
TESTIMONY BY CRAIG K. HIRAI
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
TO THE SENATE COMMITTEE ON WAYS AND MEANS
ON
SENATE BILL NO. 242, S.D. 1

February 12, 2021
10:05 a.m.
Room 211 and Videoconference

RELATING TO EDUCATION

The Department of Budget and Finance offers comments on Senate Bill (S.B.)

No. 242, S.D. 1.

S.B. No. 242, S.D. 1, requires public and charter schools to offer education in

computer science; establishes a Computer Science Education Special Fund; and

requires annual reports.

As a matter of general policy, the department does not support the creation of

any special fund which does not meet the requirements of Section 37-52.3, HRS.

Special funds should: 1) serve a need as demonstrated by the purpose, scope of work

and an explanation why the program cannot be implemented successfully under the

general fund appropriation process; 2) reflect a clear nexus between the benefits sought

and charges made upon the users or beneficiaries or a clear link between the program

and the sources of revenue; 3) provide an appropriate means of financing for the

program or activity; and 4) demonstrate the capacity to be financially self-sustaining.

Regarding S.B. No. 242, S.D. 1, it is difficult to determine whether the proposed special

fund would be self-sustaining.

The department defers to the Department of Education regarding program implementation and funding.

Thank you for your consideration of our comments.

STATE OF HAWAIʻI
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI`I 96804

Date: 02/12/2021
Time: 10:05 AM
Location: CR211 & Videoconference
Committee: Senate Ways and Means

Department: Education

Person Testifying: Dr. Christina M. Kishimoto, Superintendent of Education

Title of Bill: SB 0242, SD1 RELATING TO EDUCATION.

Purpose of Bill: Requires public and charter schools to offer education in computer science. Requires annual reports. (SD1)
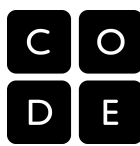
Department's Position:

The Hawaii State Department of Education (Department) supports SB 242, SD 1 and will be prepared to submit the respective summary reports for the Board of Education and the legislature by the respective deadlines as requested.

For the 2020-2021 school year, the Department has continued to collaboratively address the Computer Science Action Plan deliverables with the fifteen complex area computer science support teams to develop a comprehensive School Design for K-12 Computer Science Education Curricula and Implementation Plan. This planning effort includes the K-12 Computer Science curriculum and learning opportunities alignment with a focus on rigorous Computer Science instruction in grades K-12 and high-quality professional opportunities that are essential to expanding the Computer Science teacher pipeline.

Thank you for this opportunity to provide testimony on SB 242 SD 1.

The Hawaiʻi State Department of Education is committed to delivering on our promises to students, providing an equitable, excellent, and innovative learning environment in every school to engage and elevate our communities. This is achieved through targeted work around three impact strategies: school design, student voice, and teacher collaboration. Detailed information is available at www.hawaiipublicschools.org.

February 10, 2021

Re: SB 242 SD 1; Support

Dear Members of the Senate Education Committee,

Code.org enthusiastically supports SB 242 S.D.1, which would: a) ensure that all elementary and middle schools offer computer science courses or content by the 2024-2025 school; b) ensure that each public charter school offers computer science courses or content such that students can study the content at the elementary, middle, and high school levels; and c) create a fund for gifts, donations, or future appropriations to expand K-12 computer science pathways and support teachers.

Hawaii has made incredible progress in ensuring that every DOE high school provides students with access to computer science courses. However, to build student interest, it is crucial that all students have opportunities to learn the fundamentals in elementary and middle school. Studies show that by middle school, students have already decided whether computer science is for them or not. Early access and exposure can help students see how the subject can enable them to explore their passions.

Computing is a foundational skill for K-12 students. It develops students' computational and critical thinking skills and teaches them how to create—not just use—new technologies. And Hawaii has averaged over 1,400 open computing jobs each month over the past year. Businesses in every industry are in need of students graduating with computing knowledge. There is incredible interest in supporting K-12 computer science education right now, and this bill furthers the DOE's existing initiatives and leverages the public support for K-12 computer science.

While the state has difficult budget decisions to make this fiscal year, it is important to continue to support computer science teachers. The fund described in SB 242 S.D. 1 will enable donations from business and industry to support opportunities for students, as well as create an opportunity for future state appropriations. Other states have successfully developed public-private funds to receive donations from private industry to support the state computer science grant programs.

Thank you for your efforts in providing students in Hawaii with opportunities to pursue computer science education. If you have any questions, please contact Katie Hendrickson at Katie@code.org. Thank you for your consideration of this matter.

Sincerely,

Dr. Katie Hendrickson
Director of State Government Affairs
Code.org
www.code.org

david.miyashiro@hawaiikidscan.org
hawaiikidscan.org

David Miyashiro
Executive Director

February 12, 2021

Committee on Ways and Means
Senator Donovan M. Dela Cruz, Chair
Senator Gilbert S.C. Keith-Agaran, Vice Chair

State Capitol
415 South Beretania Street
Honolulu, HI 96813

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee,

HawaiiKidsCAN strongly supports SB242 SD1, which requires public and charter schools to offer education in computer science, and requires annual reports.

Founded in 2017, HawaiiKidsCAN is a local nonprofit organization committed to ensuring that Hawaii has an excellent and equitable education system that reflects the true voices of our communities and, in turn, has a transformational impact on our children and our state. We strongly believe that all students should have access to excellent educational opportunities, regardless of family income levels and circumstances.

As an organization that was proud to advocate in support of the legislation that was signed by Governor Ige as Act 51, HawaiiKidsCAN believes it is critical to build on this strong foundation in our state's efforts to expand access and equity in computer science education and increase our high-tech workforce. We supported the initial legislation after our *State of Computer Science Education in Hawaii 2018* report (accessible at https://tinyurl.com/CShawaii2018) found that less than half of Hawaii public schools offered computer science courses, only 14 high schools offered Advanced Placement Computer Science (AP CS) courses, and only 32 percent of the 290 AP CS test takers in 2017 were female and only 4 percent—just 12 students statewide—identified as Native Hawaiian/Pacific Islander.

As disruptions by COVID-19 have demonstrated, Hawaii needs innovative learning experiences and a diversified economy, particularly where residents with computer

science skills can earn high incomes while working remotely for local, national, and global companies. Research continues to overwhelmingly show that jobs in Hawaii requiring computer science skills will grow twice as fast and pay twice as much versus the state average over the next ten years. An investment in computer science education is an investment in Hawaii's future resilience.

Early exposure
- Hawaii has made great progress since the passage of Act 51 in 2018 with expanding computer science at the high school level. Given that early exposure at the elementary and middle schools levels to these skills is incredibly important, especially for underrepresented students, SB242 SD1 is laser-focused on these foundational grades.
- [Research](#) has shown that early exposure to STEM initiatives and activities positively impacts elementary students' perceptions and dispositions. By capturing students' interest in STEM content at an earlier age, a proactive approach can ensure that students are on track through middle and high school to complete the needed coursework for adequate preparation to enter STEM degree programs at institutions of higher learning. As a result, programs focusing on STEM initiatives and content are a growing priority in American schools with aims to provide early exposure for elementary students
- The goals set forward by SB242 SD1 for all schools to offer computer science are ambitious but achievable. The bill recognizes this must be a multi-year process, driven by a clear and inspirational north star.

Better data
- SB242 SD1 promotes equity and access by providing better data on which students are included or excluded in computer science courses. This reporting is incredibly important as the state builds its computer science pipeline, given the gender and ethic gaps that exist in STEM industries. According to the University of Hawaii's [landscape report](#), for example, Native Hawaiian and Micronesian students represented just 9% and 0.4% of advanced placement computer science test takers in the 2019-2020 school year, respectively. These gaps must be carefully tracked and addressed long before students reach these advanced courses.

Stronger partnerships
- Quality work-based learning and career readiness experiences are critical for ensuring students actually can and want to enter computer science fields. SB242 SD1 makes it easier for industry partners to support our students and schools financially.

- Given the difficult financial situation facing Hawaii's state revenues, private support is a powerful tool to ensure students' academic and career opportunities do not suffer due to program cuts. As a co-convener of the local CSforHI coalition with Code.org, HawaiiKidsCAN has already engaged a number of promising industry partners around supporting the special fund.
- Programs like IBM's P-TECH offer a strong example of students graduating from high school immediately ready to launch careers in high-wage, high-growth sectors. The special grant fund would enable employers to more effectively strengthen career and technical education partnerships with schools so that students have a clear pathway to a job.
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Mahalo for your consideration,

David Miyashiro
Founding Executive Director
HawaiiKidsCAN

Co-signed:
Alvin Sato
Burt Lum
Curtis Kropar

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI'I 96804

Date: 02/12/2021
Time: 10:05 AM
Location: CR211 & Videoconference
Committee: Senate Ways and Means

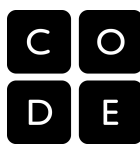|	
Department:	Education
Person Testifying:	Dr. Christina M. Kishimoto, Superintendent of Education
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Code.org
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February 12, 2021

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Senator Donovan M. Dela Cruz, Chair
Senator Gilbert S.C. Keith-Agaran, Vice Chair

State Capitol
415 South Beretania Street
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Mahalo for your consideration,

David Miyashiro
Founding Executive Director
HawaiiKidsCAN

Co-signed:
Alvin Sato
Burt Lum
Curtis Kropar

Microsoft

HAWAII STATE SENATE
THE THIRTY-FIRST LEGISLATURE
REGULAR SESSION OF 2021
Committee on Ways and Means
February 12, 2021

Microsoft's written and public testimony for SB242 SD1.

Chair Dela Cruz, Vice Chair Keith-Agaran, and member of the committee, my name is Allyson Knox and I serve as senior director of education policy at Microsoft. I am based in Washington, DC and have worked closely with Code.org and Hawaii Kids Can to help expand access to computer science education for all students. Ensuring that all students in Hawaii have access to computer science education is a key strategy to helping Hawaii achieve digital equity and promote economic growth. That is why Microsoft **supports the intent** SB242 SD1.

Right now – our schools, students, teachers, and families are struggling with COVID-19 crises and we know that America is not prepared for the digital transformation that is taking place across the country and around the globe. The COVID-19 pandemic, which has rapidly accelerated this *__transformation__* has brought to light that despite progress, millions of students and families continue to lack access to broadband; millions of workers lack the digital skills being demanded in today's jobs; millions of adults lack even basic digital literacy skills to navigate social services (including how to sign up for a vaccination, or to be able to access on-line job postings, career counseling or e-learning opportunities).

To benefit from this digital transformation, our nation must embrace "digital equity." Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital Equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services. Hawaii has made great progress since the passage of Act 51 in 2018 with expanding computer science education at the high school level. Providing early exposure at the elementary and middle school levels will further these outcomes. Computer science education for all students is a key component for achieving digital equity.

Computer science drives job growth and innovation throughout our economy and society. Computing occupations are the number 1 source of all new wages in the U.S. and make up over half of all projected new jobs in STEM fields, making Computer Science one of the most in-demand college degrees. And computing is used all around us and in virtually every field. It's foundational knowledge that all students need. We need to improve access for all students, including groups who have traditionally been underrepresented.

Thank you for the opportunity to provide this testimony. If you have any questions, please feel free to contact me at allyknox@microsoft.com or my colleague, Jonathan Noble, Director of State Government Affairs for Hawaii, at jnoble@microsoft.com.

TechNet California and the Southwest | Telephone 916.903-8070
915 L Street, Suite 1270, Sacramento, CA 95814
www.technet.org | @TechNetUpdate

February 11, 2021

Senator Donovan Dela Cruz
Hawaii State Capitol
415 S Beretania St, Room 208
Honolulu, HI 96813

RE: SB 242 (Dela Cruz) Computer Science Access and Fund - <u>Support</u>

Dear Representative Woodson,

TechNet is the national, bipartisan network of innovation economy CEOs and senior executives. Our diverse membership includes dynamic American businesses ranging from revolutionary start-ups to some of the most recognizable companies in the world. TechNet represents over three million employees and countless customers in the fields of information technology, e-commerce, sharing and gig economies, advanced energy, cybersecurity, venture capital, and finance.

TechNet respectfully submits this letter in strong support of SB 242 (Dela Cruz) which makes a series of important computer science related proposals to enhance access and opportunity for Hawaiian K-12 students. The bill does the following: ensures that all elementary and middle schools offer computer science courses or content by the 2024-2025 school; ensures that each public charter school offers computer science courses or content such that students can study the content at the elementary, middle, and high school levels; and creates a fund for gifts, donations, or future appropriations to expand K-12 computer science pathways and support teachers.

Increased access and resources to computer science education for students and teachers is critical in preparing the next generation of Hawaiians. Computing is the fastest-growing, highest-paying, and largest sector of new jobs in the U.S.A. In every industry, and in every state. Every 21st century student should have a chance to learn about coding, how to build their own apps, or just more clearly understand how the internet works. Students should have the opportunity to learn about these things for potential careers, but even if a student chooses not to go into a CS career, having access to CS education can ensure students are responsible users of technology.

Thank you for your consideration. If you have any questions regarding our support to SB 242 please contact Cameron Demetre, Executive Director, at cdemetre@technet.org or 916-903-8070.

Sincerely,

Cameron Demetre
Deputy Executive Director, California and the Southwest
TechNet