DAVID Y. IGE
GOVERNOR

CRAIG K. HIRAI
DIRECTOR

ROBERT YU
DEPUTY DIRECTOR

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

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

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

WRITTEN ONLY
TESTIMONY BY CRAIG K. HIRAI
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
TO THE HOUSE COMMITTEE ON EDUCATION
ON
SENATE BILL NO. 242, S.D. 2

March 11, 2021
2:00 p.m.
Room 309 & 430 and Videoconference

RELATING TO EDUCATION

The Department of Budget and Finance (B&F) offers these comments on Senate Bill (S.B.) No. 242, S.D. 2.

S.B. No. 242, S.D. 2, requires public and charter schools to offer education in computer science; establishes a Computer Science Special Fund; and requires annual reports.

As a matter of general policy, B&F 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. 2, it is difficult to determine whether the proposed special fund would be self-sustaining.

B&F defers to the Department of Education regarding program implementation and funding.

Thank you for your consideration of our comments.

No. 1 Capitol District Building, 250 S. Hotel Street, Honolulu, Hawaii 96813

DAVID Y. IGE
GOVERNOR

DR. CHRISTINA M. KISHIMOTO
SUPERINTENDENT

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

Date: 03/11/2021
Time: 02:00 PM
Location: 309 & 430 Via
Videoconference
Committee: House Education

Department:	Education
Person Testifying:	Dr. Christina M. Kishimoto, Superintendent of Education
Title of Bill:	SB 0242, SD2 RELATING TO EDUCATION.
Purpose of Bill:	Establishes the computer science special fund. Requires that public and charter schools offer education in computer science. Requires annual reports. (SD2)

Department's Position:
The Hawaii State Department of Education (Department) supports S.B. 0242, S.D. 2 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 S.B. 0242, S.D. 2.

The Hawai'i 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.

SB-242-SD-2
Submitted on: 3/10/2021 9:56:37 AM
Testimony for EDN on 3/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Leinaala Kealoha	Department of Education	Support	No

Comments:

I support The computer science equity bill, SB242 SD2, as it will provide students/youth the opportunity to be better prepared for a career in the area of computer science. Undoubtedly, computer science is everywhere, and plays a role in nearly every aspect of our lives. It is necessary for students to have at least a basic understanding of the technological influences that just about run our lives. The importance of this understanding is rooted in their ability to safely navigate through a virtual world, participate and be a contributor to all aspects of their career (which include the technological aspect), be able to promote, support, and defend their perspectives on the advances that take place in technology. Without the basic knowledge of computer science, our students may run the risk of "living in the dark", and fall victim to the unethical aspects of technology and computer science.

DAVID Y. IGE
GOVERNOR

JOSH GREEN
LIEUTENANT GOVERNOR

LESLIE WILKINS
CHAIRPERSON

ALLICYN C.H. TASAKA
EXECUTIVE DIRECTOR

STATE OF HAWAII
WORKFORCE DEVELOPMENT COUNCIL
830 Punchbowl Street, Suite 417, Honolulu, Hawaii 96813
Phone: (808) 586-8630 Web: http://labor.hawaii.gov/wdc/

March 11, 2021

To: The Honorable Justin H. Woodson, Chair
            The Honorable Jeanne Kapela, Vice Chair, and
            Members of the House Committee on Education

Date: Thursday, March 11, 2021
Time: 2:00 p.m.
Place: Conference Room 309 & Via Video Conference

From: Allicyn Tasaka, Executive Director
            Hawaii Workforce Development Council

RE: SB 242 SD2, Relating to Education

Good afternoon Chair Woodson, Vice Chair Kapela and members of the Committee on Education. I am Allicyn Tasaka, Executive Director of the Workforce Development Council (WDC) testifying in support of SB 242, SD2, which establishes the computer science special fund and requires that public and charter schools offer education in computer science.

The WDC is responsible for the administrative oversight and implementation of a federally mandated initiative, the Workforce Innovation and Opportunity Act of 2014 (WIOA). Additionally, the WDC assists the Administration develop and update statewide comprehensive, strategic workforce development plans and actions to align and streamline the public workforce development system for continuous improvement and accountability. It supports employment opportunities for employers and employees through direct services at the American Job Centers throughout the State.

The WDC is working on a Workforce Resiliency Initiative (WRI) to help Hawaii's workforce to be digitally literate and equipped with the professional skills necessary for success in the 21st Century job environment. The WDC is currently conducting a statewide digital literacy and readiness survey to establish a baseline of computer-related competency, which will indicate the level of digital readiness among the civilian labor force ages between 18 to 65 years.

Nationally and internationally, the fast-paced growth of artificial intelligence, automation, machine learning, and the internet of things is transforming jobs, tasks, and skills in the

modern work environment. Computers and machines are fundamentally, and rapidly changing how the world works. Research by the World Economic Forum suggests that 42% of jobs are expected to have completely different core skill sets by 2022.

Other predictions include:
- Artificial Intelligence machines will be part of companies' boards of directors by 2026;
- Office work is being automated at a rate of 12% per year; and
- 27% of jobs will be newly created in the next 2 years.

The United Kingdom estimates that low digital and poor computer skills cost them 63 billion pounds. With 67 million people in their country that comes out to 940 pounds, or roughly $1200 USD per person. If 30% of Hawaii's population of 1.4 million has a similarly low level of digital skills, or 420,000 people, low digital literacy in our state could be costing us over $504,000,000.

The COVID-19 pandemic directly accelerated the digital revolution requiring new skills, knowledge, and attitudes to be successful in the marketplace. High on the list of skills is a new baseline of digital literacy. We do not know for certain what the jobs of the future will be. In fact, the Word Economic Forum's "Future of Jobs" in 2016 highlighted this when they reported that "65% of children entering primary school today will hold jobs that don't exist yet." While it is difficult to predict what those jobs will be, it we can with a high level of confidence that the path to success will begin with a base of digital knowledge and literacy.

Thank you for the opportunity to submit testimony in support of this measure.

Hawaiʻi Society for Technology in Education

March 11, 2021

Committee on Education
Rep. Justin H. Woodson, Chair
Rep. Jeanne Kapela, Vice Chair

Aloha Chair Woodson, Vice Chair Kapela, and Members of the Committee,

  We are HSTE - the Hawaiʻi Society for Technology in Education. Our organization has over 500 members in education hailing from public, private, and charter schools around the state, most of whom are teachers. Today we rise in proud support of SB 242 SD 2.

  We live in a digital age in which computers are everywhere and have become an essential part of our lives, especially during this COVID19 pandemic. Every student should have access to technology, whether it be computers, smartphones, or tablets because almost everything we do requires some form of programming.

  Coding or computer programming is writing a set of instructions that a computer understands so it will perform a task. There are several advantages of learning to code in elementary school. First, learning programming empowers kids. Coding puts children in control of the computer and through experimentation builds mastery in sequencing skills, counting, problem solving, logical thinking, cause and effect, and critical thinking. Additionally, children can express themselves through code and find it enthralling to create games, apps, and to even control robots.

  The younger children are when we introduce them to coding, the more comfortable they will become with computers and technology. They will be more successful when presented with challenging learning opportunities. Developing the basics provides students with computer skills they will need for any career they choose in the future.

  HSTE supported 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, SB 242 SD 2 is focused

on these foundational grades. Having students entering high school already having a computer science background means a more skilled workforce for the future of our state.

  SB 242 SD 2 promotes equity and access by providing better data on which students are included or excluded in computer science courses. Quality work-based learning and career readiness experiences are critical for ensuring students actually can and want to enter computer science fields. SB 242 SD 2 makes it easier for industry partners to support our students and schools financially growing opportunities for the expansion of the study of computer science. For these reasons and more, please join us in supporting SB 242 SD 2.

Mahalo,

Hawaiʻi Society for Technology in Education

March 11, 2021

Committee on Education
Rep. Justin H. Woodson, Chair
Rep. Jeanne Kapela, Vice Chair

State Capitol
415 South Beretania Street
Honolulu, HI 96813

Aloha Chair Woodson, Vice Chair Kapela, and Members of the Committee,

HawaiiKidsCAN strongly supports SB242 SD2, 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 SD2 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 SD2 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 SD2 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 SD2 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.
- Quality work-based learning and career readiness experiences are critical for ensuring students actually can and want to enter computer science fields. SB242 SD2 makes it easier for industry partners to support our students and schools financially. Successful model public-private grant programs include Washington State's, which requires a 1:1 private match for the release of the public funds. The fund has successfully secured $1 million per year for six years in direct support to computer science education.

Mahalo for your consideration,

David Miyashiro
Founding Executive Director
HawaiiKidsCAN

Co-signed:
Alvin Sato
Burt Lum
Curtis Kropar
Ken Farm
Lisa Chau
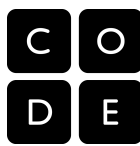
March 10, 2021

Re: SB 242 SD 2; Support

Dear Members of the House Education Committee,

Code.org enthusiastically supports SB 242 S.D.2, 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. 2 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
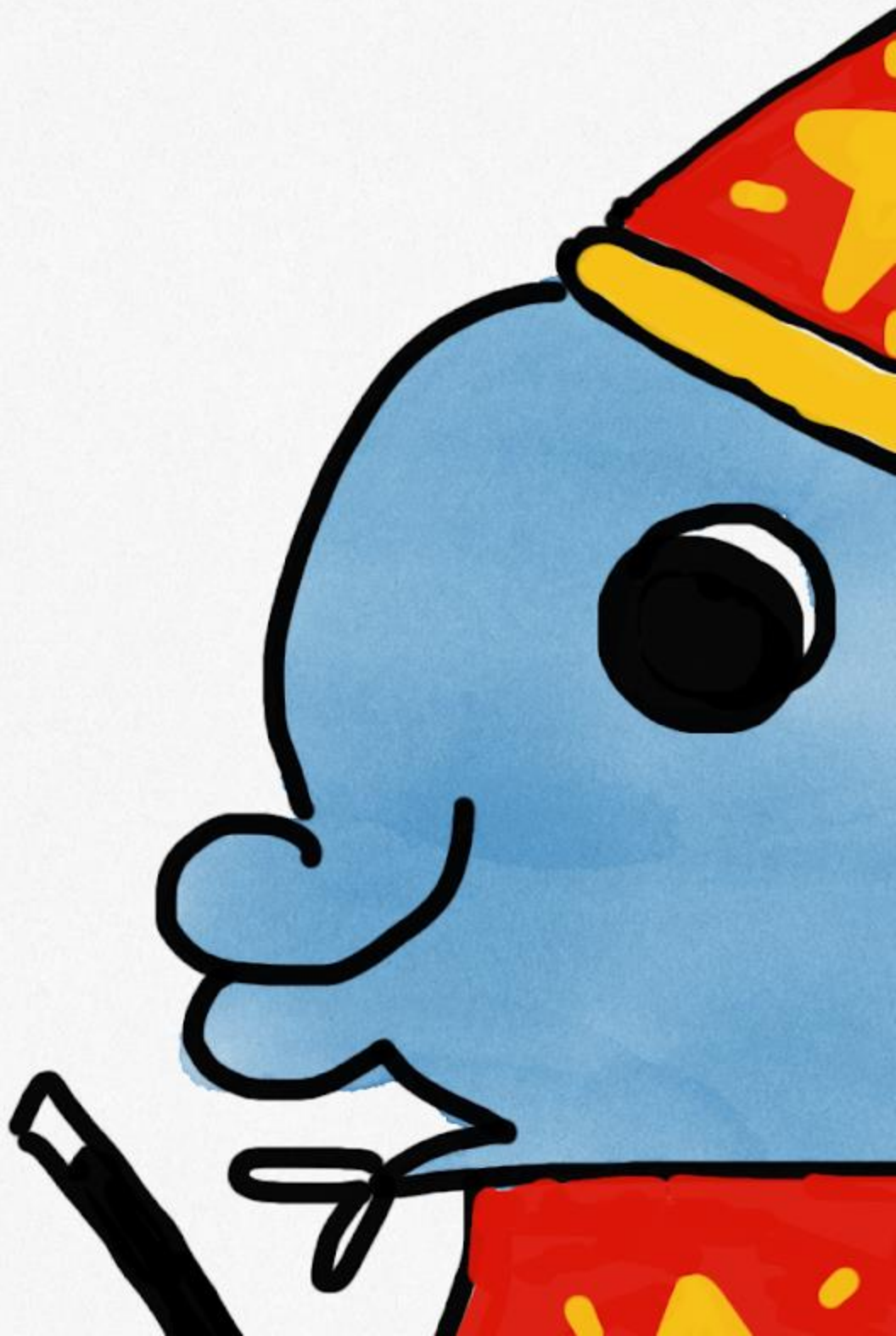Director of State Government Affairs
Code.org
www.code.org

SB-242-SD-2
Submitted on: 3/10/2021 2:00:48 PM
Testimony for EDN on 3/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Celeste Endo	Hawaiâ€˜i Society for Technology in Education (HSTE)	Support	No

Comments:

March 10, 2021

Committee on Education
Representative Justin H. Woodson, Chair
Representative Jeanne Kapela, Vice Chair

State Capitol
415 South Beretania Street
Honolulu, HI 96813

Aloha Chair Woodson, Vice Chair Kapela, and Members of the Committee,

I teach Computer Science (CS) at Queen Kaʻahumanu School (QKS), where I gratefully get to inspire Preschool through 5th graders. I'm proud to support SB242 SD2 because I have witnessed how CS grows imagination and a zest for learning discoveries in our youth. CS opens opportunities for students to think creatively and dream of new possibilities. At my school, we are all learning to be Technology Wizards in Training. Kindergarteners may get confused and think we are "Lizards in Training", but that is another story.

During one of my first years as a technology teacher at QKS, I surveyed my students to ask them what they wanted to learn in technology classes. A 5th grader gifted me an answer that has shaped my teaching since. She wrote that she wanted to learn how to get a good job. Whoa I thought, a 5th grader who was already thinking of working! Later, I heard from her teacher that her family was living out of their car. Every night, her father would worry when she had to use the park bathroom. The daughter was deeply concerned for her family and seriously wanted to help.

Soon after, I ran into my friend Chad, owner of a job placement company. I asked him what he thought would be the best type of job for our students to shoot for. He said that without a doubt, Hawaiʻi needs computer programmers. High pay partnered with high demand makes CS skilled workers totally marketable. Since then, I have bravely embarked on a quest to find invigorating ways to teach coding.

FREE magnificent code.org lessons teach students how to troubleshoot and create innovative solutions to diverse problems. Our youngest children fully love Code Yo' Choreo, when we learn about coding concepts through dance. Early childhood coding has strengthened CS in our upper grades. When we track code.org student progress, upper grade students who have been learning coding since kindergarten, far surpass code.org levels completed and lines of code written, compared to peers without earlier CS experiences.

Mahalo piha for your consideration of SB242 SD2,

Celeste Yukiko Endo

Microsoft

HAWAII HOUSE OF REPRESENTATIVES
THE THIRTY-FIRST LEGISLATURE
REGULAR SESSION OF 2021
Committee on Education
March 11, 2021

Microsoft's written and public testimony for SB242 SD2.

Chair Woodson, Vice Chair Kapela, and members 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 SD2.

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.

SB-242-SD-2

Submitted on: 3/9/2021 6:34:12 PM
Testimony for EDN on 3/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Samantha Kimsey	Computational Thinkers	Support	No

Comments:

As an online and offline teacher of Computer Science,I have had the opportunity to compare and contrast computer science students from varies schools, backgrounds, ages and experience levels.   It is always clear to me which students have patents that can afford outside school assistance and those that don't. Public schools are clearly struggling to prepare children properly for the necessary CS education our K-12 need before entering university. As a student of CS, I quickly realized that a degree in computer science has an unspoken prerequisite of understanding at least one programming language even before enter your freshman year. Whether we like it or not, if we want students to NOT drop out of CS, they have to go into university with a high level of confidence so that freshman years are easy and low stress.   The only way to do this is to increase students CS exposure and experience in the K-12 years.

March 11, 2021

Committee on Education
Rep. Justin H. Woodson, Chair
Rep. Jeanne Kapela, Vice Chair

Aloha Chair Woodson, Vice Chair Kapela, and Members of the Committee,

  My name is Sarah "Mili" Milianta-Laffin, and I teach Computer Science at Ilima Intermediate School in Ewa Beach. I'm also a board member for the Hawaii Society for Technology in Education, an organization of over 500 public, private, and charter school teachers in our state. **I'm writing today in strong favor of SB242 SD2 to expand Computer Science education in elementary and middle schools.**

  I know that HSTE, and other organizations have submitted testimony on this issue, so I'm going to focus on the experience of being a Computer Science (CS) teacher in Hawaii. My initial teacher training was as a Science teacher. When you have a department like Science at a school, you work together with other Science teachers to make lessons, refine the curriculum, and reflect on data.

  As the only teacher at my school who teaches CS, it's tough. I can't go to my department and ask questions. My "department" is mostly teachers I connect with on social media to talk about teaching CS in the #808Educate community on Twitter and Instagram, but even there, there aren't that many who teach what I teach. My hope is that SB242 SD2 would expand the number

of CS teachers who have training in the content in elementary and middle schools like mine, so that we can be a resource to each other and our students.

I was chosen to be part of the inaugural Hawaii Code.org cohort for CS through STEMworks in 2017. I was sent to Atlanta, Georgia for a week of training with teachers from around the country. We had about 30 teachers from Hawaii, but in the giant ballrooms there were hundreds of teachers present from multiple states.

I remember thinking 1) how awesome it would be to work with that many teachers passionate about CS, and 2) if this many teachers are taking CS back to their communities, will my Ewa Beach students fall behind their peers? The expanding of CS education with this bill would put those fears to rest. As President Obama said, "In the new economy, Computer Science isn't an optional skill -- it's a basic skill!"

My favorite Vice Principal would say, "In god we trust; all others bring data." We don't have data on CS in Hawaii, and we need quality data in education to make decisions. SB242 SD2 would help us understand how our students are doing in CS, and what our students need. Using that data, teachers can then work together with local groups and industry to make a robust CS education in Hawaii a reality for all of our keiki.

Finally, CS education is an issue of equity. CS instruction has been happening for well over a decade at our state's elite and exclusive private schools. My public school is Title 1, meaning that we serve students who don't always have access to resources that their private school peers use daily. Public school students deserve to have an excellent and complete education, even if their families can't pay for it. My testimony today carries with me the weight of the 170 students I have this semester, who deserve the same access to CS education as their wealthy peers. Even if students like mine aren't present in today's Zoom hearing room, please keep them in your hearts and mind also, as you move through this legislative session; they're counting on you too.

Mahalo for reading, and supporting Computer Science students like mine at Ilima Intermediate School by moving SB242 SD2 forward.

Respectfully,

Sarah "Mili" Milianta-Laffin
2020 Hawaii State Finalist for the Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST)
2020 ISTE "Making IT Happen" Award Winner
2020 Hawaii State Teachers Association "Pono Award" Winner for Social Justice Advocacy in Education

PS: You are welcome to visit my CS classroom at Ilima Intermediate. Please email Sarah.Milianta-laffin@k12.hi.us if you'd like me to coordinate a virtual visit.

SB-242-SD-2
Submitted on: 3/9/2021 8:45:15 PM
Testimony for EDN on 3/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
chelsea pang	Individual	Support	No

Comments:

I support

- SB242 SD2 promotes equity and access by providing better data on which students are included or excluded in computer science courses.
- Quality work-based learning and career readiness experiences are critical for ensuring students actually can and want to enter computer science fields. SB242 SD2 makes it easier for industry partners to support our students and schools financially.
- Successful model public-private grant programs include Washington State's, which requires a 1:1 private match for the release of the public funds. The fund has successfully secured $1 million per year for 6 years in direct support to computer science education.

Submitted By	Organization	Testifier Position	Present at Hearing
Doreen Tabe	Individual	Support	No

Comments:

March 11, 2021

Committee on Education
Rep. Justin H. Woodson, Chair
Rep. Jeanne Kapela, Vice Chair

State Capitol
415 South Beretania Street
Honolulu, HI 96813

Aloha Chair Woodson, Vice Chair Kapela, and Members of the Committee,

I am a teacher at Waimalu Elementary School, and I'm proud to support SB242 SD2.

The COVID-19 pandemic has shown the need to diversify Hawaii's economy and ensure students are equipped with skills to thrive in high-wage, high-growth industries here in the state.

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 SD2 is laser-focused on these foundational grades.

SB242 SD2 promotes equity and access by providing better data on which students are included or excluded in computer science courses.

Quality work-based learning and career readiness experiences are critical for ensuring students actually can and want to enter computer science fields. SB242 SD2 makes it easier for industry partners to support our students and schools financially. Successful model public-private grant programs include Washington State's, which requires a 1:1 private match for the release of the public funds. The fund has successfully secured $1 million per year for 6 years in direct support to computer science education.

Mahalo,

Doreen Tabe

March 10, 2021

Committee on Education
Rep. Justin H. Woodson, Chair
Rep. Jeanne Kapela, Vice Chair

Hawaii State Capitol
415 South Beretania St
Honolulu, HI 96813

Aloha Chair Woodson, Vice Chair Kapela, and Members of the Committee,

I am a computer science teacher from Kaiser High School and I'm writing to you to support SB 242. I previously wrote testimony in support of the companion bill, HB 1222.

Hawaii has made great strides since the passage of Act 51 in 2018 which expanded computer science at the high school level. My high school easily met the requirements of Act 51 which required the offering of one computer science course, we currently offer six different courses across class periods. Now is a perfect time to further expand opportunities to learn about computer science and focus on the elementary and middle school levels, and this is what SB 242 does.

As a former student at Kaiser, I had one computer science course in my senior year of high school in 2002, which represented the sum of my computer science education. High school should not be the first time a student is exposed to computer science and design thinking. High school should build upon a student's previous knowledge and experience and channel that into college and/or career readiness. Early exposure to computer science allows students to decide at an early age if they want to pursue further interests in this field. Students who choose to specialize in computer science now will have a full array of career options available to them, including those that do not exist yet in today's world, including those who keep us safe in an increasingly interconnected and online world.

As a teacher, I am fortunate to work for a principal (Honolulu, Farrington-Kaiser-Kalani Complex Area) that understands the value of computer science and the need to prepare both our students and teachers. I am part of the complex area and state level work groups to define what computer science education looks like for our students, and where it needs to be now, five, and ten years from now. This bill streamlines these efforts to build a unified PK-12 computer science pathway, much like how other core subjects have.

For all of these reasons, I am writing to state my support for SB 242 and hope that this legislation continues to build upon the transformation being done to provide equitable and high quality computer science education for all students in Hawaii. Computer science is not the way of the future, it is the present, here and now. Think about what our future in Hawaii will look like five and ten years from now, and you'll see that computer science will have had a large and profound impact on it, and it will be our students who shape it.

Mahalo,

Garrett Hatakenaka
Kaiser High School - Teacher
Hawaii Department of Education - State Workgroup Participant
Hawaii Society for Technology in Education - Member
University of Hawaii - Maui College - CSP4HI - Mentor

RYAN
KAWAILANI
OZAWA

95-595 Kanamee Street, #326
Mililani, Hawaii 96789-1431
(815) 310-0808
hawaii@outlook.com
www.ryanozawa.com

@hawaii

March 10, 2021

Aloha e Rep. Justin H. Woodson, Chair; Rep. Jeanne Kapela, Vice Chair; members of the Committee on Education; and Rep. David A. Tarnas, Chair Rep. Patrick Pihana Branco, Vice Chair; members of the Committee on Water & Land:

I am writing to express my **support** of SB242 SD2 (HB1222 HD1) as it relates to computer science.

I commend lawmakers on taking a broader approach than "everyone can code" initiative, which are laudable but too narrow in today's technology landscape.

Overall digital literacy is immensely important, with massive adoption of distance learning tools and platforms on one hand, and the increasing prevalence of disinformation campaigns and malicious online actors on the other. Computer science not simply a matter of knowing how to join a Zoom class or open a Google Docs document. Beyond providing basic access, school curriculums need to keep pace with what constitutes work, careers, and even creative expression today.

Computer science includes a multitude of critical skills and practices: logic, problem solving, design, documentation, peer coaching, developing theories and rigorous testing, user discovery, project-based learning and data-driven decision making.

I believe the fundamentals of computer science can be taught without access to the latest and greatest technologies. Nonetheless, providing adequate funding to supply our students with the basic tools they need to learn and grow is important.

Thank you for your consideration.

Submitted By	Organization	Testifier Position	Present at Hearing
Michael Fricano II	Individual	Support	No

Comments:

March 11, 2021

Committee on Education
Rep. Justin H. Woodson, Chair
Rep. Jeanne Kapela, Vice Chair
State Capitol
415 South Beretania Street
Honolulu, HI 96813

Aloha Chair Woodson, Vice Chair Kapela, and Members of the Committee,

I am an educator in Hawaii and I provide Computer Science professional development to Hawaii DOE teachers. I'm proud to support SB242 SD2.

The COVID-19 pandemic has shown the need to diversify Hawaii's economy and ensure students are equipped with skills to thrive in high-wage, high-growth industries here in the state.

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 SD2 is laser-focused on these foundational grades.
SB242 SD2 promotes equity and access by providing better data on which students are included or excluded in computer science courses.
Quality work-based learning and career readiness experiences are critical for ensuring students actually can and want to enter computer science fields.
SB242 SD2 makes it easier for industry partners to support our students and schools financially. Successful model public-private grant programs include Washington State's, which requires a 1:1 private match for the release of the public funds. The fund has successfully secured $1 million per year for 6 years in direct support to computer science education.

Mahalo,

Michael Fricano II

SB-242-SD-2
Submitted on: 3/10/2021 10:32:20 AM
Testimony for EDN on 3/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Carin Shotliff	Individual	Support	No

Comments:

Testimony:

I support The computer science equity bill, SB242 SD2, as it will provide students/youth the opportunity to be better prepared for a career in the area of computer science. Undoubtedly, computer science is everywhere, and plays a role in nearly every aspect of our lives. It is necessary for students to have at least a basic understanding of the technological influences that just about run our lives. The importance of this understanding is rooted in their ability to safely navigate through a virtual world, participate and be a contributor to all aspects of their career (which include the technological aspect), be able to promote, support, and defend their perspectives on the advances that take place in technology. Without the basic knowledge of computer science, our students may run the risk of "living in the dark", and fall victim to the unethical aspects of technology and computer science.

SB-242-SD-2
Submitted on: 3/10/2021 10:41:26 AM
Testimony for EDN on 3/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Elena Kealoha	Individual	Support	No

Comments:

I support The computer science equity bill, SB242 SD2, as it will provide students/youth the opportunity to be better prepared for a career in the area of computer science. Undoubtedly, computer science is everywhere, and plays a role in nearly every aspect of our lives. It is necessary for students to have at least a basic understanding of the technological influences that just about run our lives. The importance of this understanding is rooted in their ability to safely navigate through a virtual world, participate and be a contributor to all aspects of their career (which include the technological aspect), be able to promote, support, and defend their perspectives on the advances that take place in technology. Without the basic knowledge of computer science, our students may run the risk of "living in the dark", and fall victim to the unethical aspects of technology and computer science.

Submitted By	Organization	Testifier Position	Present at Hearing
James Crum	Geeks for Good	Support	No

Comments:

March 10, 2021

Committee on Education
Rep. Justin H. Woodson, Chair
Rep. Jeanne Kapela, Vice Chair

State Capitol
415 South Beretania Street
Honolulu, HI 96813

Dear Chair Woodson, Vice Chair Kapela, and Members of the Committee,

I am a life-long student; past Hawaii Middle and High School (well, hopefully life-long as a mentor) teacher; IT and technology integrator for schools around the country since 1999, and concerned community member from the Hamakua Coast on the Big Island, and I'm proud to support SB242 SD2.

The COVID-19 pandemic has shined an even brighter spotlight on the need to diversify Hawaii's economy while ensuring that our students are equipped with skills to not just survive, but thrive in the high-wage, high-growth industries we are starting to see more of here in the state.

Hawaii has made great progress since the passage of Act 51 in 2018 with expanding computer science at the high school level, so thank you for that. However, given that early exposure at the elementary (maybe even before!) and middle schools levels to these skills is incredibly important, especially for underrepresented (rural and poor) students, SB242 SD2 is laser-focused on these foundational skills in foundational grades.

SB242 SD2 stives to promote equity and access by providing better data on which students are included or excluded in computer science courses. Quality work-based learning and career readiness experiences are critical for ensuring students actually can and want to enter computer science fields. Indeed, technology has become as essential as food and water to survival in 2021 and especially post-COVID!

SB242 SD2 makes it easier for industry partners to support our students and schools financially. Successful model public-private grant programs include Washington State's, which requires a 1:1 private match for the release of the public funds. The fund has successfully secured $1 million per year for 6 years in direct support to computer science education.

Please vote to pass this bill and help level the playing field for all Hawaii students, and "raise all boats" and get us to a place of less reliance on tourism and therefore greater self-reliance as a result. If I can help with additional information, please let me know.

All the best,

Jim Crum, Owner
[Geeks for Good®](#)
Paauilo, HI 96776

SB-242-SD-2
Submitted on: 3/10/2021 12:37:51 PM
Testimony for EDN on 3/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Kaala Souza	Individual	Support	No

Comments:

For Hawaii to be competitive in the future of work we need a workforce with a strong digital literacy baseline of skills. I fully support SB242 as a way to ensure that Hawaii's future workforce is being trained and provided what they need for success in their career.

March 10, 2021

Committee on Education
Representative Justin H. Woodson, Chair
Representative Jeanne Kapela, Vice Chair

State Capitol
415 South Beretania Street
Honolulu, Hawaii, 96813

Aloha Chair Woodson, Vice Chair Kapela, and Members of the Committee:

As a computer science teacher at Kalani High School, I wholeheartedly support SB242 SD2 and respectfully ask you to join me in doing so.

While the need to diversity Hawaii's economy predates the current COVID crisis, it has been brought to the forefront by the strain placed on our community with the abrupt shifts in the structure of the workplace and the importance of technology necessitated by our pandemic response. The need for not only computer literacy, but computational thinking skills has never been greater, and we cannot relegate the acquisition of them to a small privileged minority. All students need these skills, and our community needs workers with these skills if we are to thrive and compete in the coming decades.

As Kalani's computer science program has blossomed from just a couple of sections five years ago to a full slate of offerings spanning introductory to Advanced Placement classes, I have seen firsthand how a computer science education can broaden horizons, provide opportunities, and change lives. Students who would not have considered college have gone on to major in computer science because of their experiences in our program, and those students want to be able to have futures in Hawaii.

By promoting equity and access at all levels of our K-12 system, SB242 SD2 will establish a consistent and seamless pipeline for all of our keiki to gain the skills that will allow them (and our community by extension) to flourish in an increasingly unpredictable world.

Mahalo for your time and attention.

Respectfully,

Michael P. Ida, PhD