Written Testimony for the Senate Committee on Ways and Means April 4, 2017 at 9:45 a.m.

By

Risa E. Dickson, Vice President for Academic Planning and Policy University of Hawai'i System

SCR 168/SR 82 – REQUESTING THE DEPARTMENT OF EDUCATION TO DEVELOP AND IMPLEMENT A STATEWIDE PLAN FOR COMPUTER SCIENCE EDUCATION IN ALL PUBLIC SCHOOLS.

Chair Tokuda, Vice Chair Dela Cruz, and members of the committee:

Thank you for the opportunity to comment on SCR 168/SR 82 that requests the Hawai'i Department of Education to develop and implement a state plan for computer science education in all public schools and requests the University of Hawai'i, as part of its admissions process, to allow students to substitute computer science courses for other required course credits.

The University of Hawai'i (UH) does not support, as part of UH admissions, substituting computer science courses for the foundational science courses such as biology, chemistry, and physics, or math. Instead, UH encourages high school students to supplement the existing science foundation with computer science courses, particularly students intending to go into the STEM fields such as information and communications technology (ICT). Toward this end, UH will continue to work with the Department of Education on planning computer science education. At UH four-year campuses, students who have earned college level credits in a computer science course may use these credits toward one or more of their electives, or towards their degree requirements as appropriate.

Thank you very much for the opportunity to provide comments on SCR 168/SR 82.







April 3, 2017

## Re: SCR 168 / SR 82, Strongly Support

Dear Chair Tokuda, Vice-Chair Dela Cruz, and the Members of the Senate Committee on Ways and Means,

Code.org and Women in Technology (Maui Economic Development Board) strongly supports SCR 168 and SR 82. This bill requests that the department of education develop and implement a state plan for computer science education in all public schools. The plan may include requiring every public school to offer computer science courses, providing dedicated funding for rigorous computer science and professional development and course support, and establishing computer science standards across all grade levels. We believe that these policies, based on success in other states, will have immediate impact on access to high-quality computer science education.

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. Computer science is driving job growth and innovation in Hawaii and throughout the United States. More than half of projected jobs in STEM fields are in computing occupations, and computer science is one of the most in-demand degrees for new college graduates.

According to the Conference Board, there are over 1,300 open computing jobs in the State of Hawaii, and demand for these jobs is 4.7 times the state average. The average salary for a computing occupation in Hawaii is \$78,414, which is almost double the average salary in the state (\$47,740). The policies encouraged by this bill would better prepare Hawaii's students for high paying, in-demand careers.

Thank you for your efforts in providing young people in Hawaii the education they need to be successful upon leaving the K-12 system. Code.org and Women in Technology support SCR 168 and SR 82, which will position Hawaii as a national leader in K-12 computer science education.

If you have any questions, please contact Katie Hendrickson at Katie@code.org, Cameron Wilson at Cameron@code.org, or Isla Young at (808) 875-2307. Thank you for your consideration of this matter.

Sincerely,

Cameron Wilson

**VP for Government Affairs** 

Code.org

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Isla Young

Director K12-STEM Education

Women in Technology, MEDB

Kihei, Hawaii

www.medb.org

www.womenintechnology.com







# www.stemworkshawaii.com



April 3, 2017

#### RE: Support for SCR 168 and SR 82 Relating to Computer Science Education

Dear Chair Tokuda, Vice-Chair Dela Cruz, and the Members of the Senate Committee on Ways and Means,

Microsoft strongly supports SCR 168 and SR 82, which requires that the Department of Education develop a comprehensive plan that provides all students with access to computer science education. We believe the changes proposed are commendable, forward thinking, and will increase the number of students engaged with Computer Science in Hawaii.

Computer Science classes are not technical nor vocational; studying the discipline prepares students for a variety of career paths. In fact, two-thirds of computing jobs are in sectors other than information technology, including manufacturing, health care, finance, defense, and government. Studying Computer Science develops computational and critical thinking skills, allowing students to not just use technology but to create it, shaping the future of Hawaii's economy.

We also believe that encouraging more schools to adopt computer science courses effectively increases student enrollment across the State. In the thirty-two states that currently count Computer Science towards a math or science credit, the average class size is 53 percent higher than in states where Computer Science is only an elective. Research shows that when students are exposed to computer science in high school, they are far more likely to pursue it as a career. While only 12 schools in Hawaii currently offer an AP computer science course, this bill ensures every student in the state has an opportunity to learn this critical skill.

The importance of Computer Science to the economy of Hawaii and the United States cannot be overstated. There are currently over 1450 open computing jobs in Hawaii (nearly five times the state average demand rate), but only 155 qualified college graduates to fill them. The average salary of these jobs is \$78,500, significantly higher than the state's average salary. This legislation will define Hawaii as a leader in computer science education and further secure the state's growth and economic prosperity for years to come. Microsoft encourages the Senate Committee on Ways and Means to pass SCR 168 and SR 82.

Thank you for your consideration.

IL NU

Sincerely,

Jonathan Noble

Director, State and Local Government Affairs (HI & CA)

US Government Affairs Microsoft Corporation From: mailinglist@capitol.hawaii.gov

To: WAM Testimony
Cc: kaulanad@gmail.com

**Subject:** \*Submitted testimony for SR82 on Apr 4, 2017 09:45AM\*

**Date:** Friday, March 31, 2017 5:00:22 PM

## **SR82**

Submitted on: 3/31/2017

Testimony for WAM on Apr 4, 2017 09:45AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Kaulana Dameg	Individual	Support	No

### Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: <u>mailinglist@capitol.hawaii.gov</u>

To: WAM Testimony
Cc: ramizusawa@gmail.com

**Subject:** \*Submitted testimony for SR82 on Apr 4, 2017 09:45AM\*

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## **SR82**

Submitted on: 3/31/2017

Testimony for WAM on Apr 4, 2017 09:45AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Mizusawa	Individual	Support	No

### Comments:

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