SCR192

Sustainability Education in Science Curriculum EDU/WTL, WAM



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

Date: 03/25/2013

Committee: Senate Education Senate Water and Land

Department:	Education
Person Testifying:	Kathryn S. Matayoshi, Superintendent of Education
Title of Resolution:	SCR 192 REQUESTING THE BOARD OF EDUCATION TO INCORPORATE SUSTAINABILITY EDUCATION INTO THE SCIENCE CURRICULUM OF PUBLIC SCHOOLS
Purpose of Resolution:	Science Curriculum; Sustainability

Department's Position:

The Department of Education (Department) does not believe this resolution is necessary. Hawaii State Board of Education Policy 6710, "Sustainability," already directs the Department as to its fundamental responsibility to educate students at the classroom level, and working with local partners to collaborate on projects, about sustainability and environmental stewardship.

The Department's sustainability education is also aligned with its Strategic Plan priorities and implementation of the Common Core State Standards.

Testimony Presented Before the Senate Committee on Education and the Senate Committee on Water and Land Monday, March 25, 2013 at 1:15 p.m. by Donald O. Straney, Ph.D. Chancellor, University of Hawai'i at Hilo

SCR192 REQUESTING THE BOARD OF EDUCATION TO INCORPORATE SUSTAINABILITY EDUCATION INTO THE SCIENCE CURRICULUM OF PUBLIC SCHOOLS.

Chairs Tokuda and Solomon, Vice Chairs Kidani and Shimabukuro and Members of the Committees:

My name is Donald Straney, Chancellor of the University of Hawai'i at Hilo. We support the intent of SCR192 requesting the Board of Education to incorporate sustainability education into the science curriculum of public schools. The integration of sustainable values, activities, and curricula in our public schools ensures that the leaders and scholars of the future will have the skills and knowledge to sustain the natural, economic and social environments of our island and state.

We support the intent of SCR192. Aloha.

William P. Kenoi Mayor



Walter K.M. Lau Managing Director

Randall M. Kurohara Deputy Managing Director

County of Hawai'i Office of the Mayor

25 Aupuni Street, Suite 2603 • Hilo, Hawai'i 96720 • (808) 961-8211 • Fax (808) 961-6553 KONA: 74-5044 Ane Keohokalole Hwy., Bldg. C • Kailua-Kona, Hawai'i 96740 (808) 323-4444 • Fax (808) 323-4440

March 23, 2013

Hawaii Legislature State Senate Committees on Education and Water and Land Chairs Jill N. Tokuda and Malama Solomon State Capitol 415 S. Beretania St. Honolulu, HI 96813

RE: SCR192 Sustainability Education in the schools

Aloha Chairs Tokuda and Solomon,

The County of Hawaii humbly requests that the committees on Education and Water and Land support Senate Concurrent Resolution 192 which seeks to incorporate sustainability education into the science curriculum of our public schools. The move toward sustainability is of vital importance to the future of Hawaii Island, a beautiful outlying island which is part of a remote and vulnerable state.

Consider that the State of Hawaii, an ideal location for the development of renewable and alternative energy, is overly dependent on fossil fuels shipped to our shores. Our islands, which have an abundance of fertile agricultural land and a long tradition of food production, presently import more than 90 percent of what our residents eat. We are continually confronted with the ominous riddle: What happens if the boats stop coming?

The challenge to resolve these disparities is one that will require many minds and solutions to conquer, and while our best and brightest are already working toward that end, we must mobilize all available resources, including the intellect and energy of our budding leaders and scholars, if we are to have a healthy and secure future in the great State of Hawaii.

The U.S. departments of Energy and Education, United Nations Decade of Education for Sustainable Development and Hawaii 2050 Sustainability Plan all call for the values, activities and principles inherently linked to sustainability to be integrated into the educational endeavors of our schools. On behalf of the people of the County of Hawaii, I join Trevor Tanaka, a senior from Konawaena High School, in asking the Hawaii Legislature to direct the Board of Education to do the same.

Mahalo

P.O

Billy Kenoi MAYOR

Cc: Trevor Tanaka



March 21, 2013 Chairs Jill Tokuda and Solomon Hawaii State Capitol Committees on Education and Higher Education 415 S. Beretania St. Honolulu, HI 96813

RE: Senate Companion Resolution, SCR192 Sustainability Education in the schools

Aloha Senate Chairs Jill Tokuda and Malama Solomon,

On behalf of the young people of Hawaii and the **Sustainable Hawaii Youth Leadership Initiative** we join with Trevor Tanaka to ask the Hawaii Legislature to direct the Board of Education to pass **HCR178**.

Why Is Sustainability Important to You, Hawaii and APEC?

What started as a simple question has become a wake up call – first for Trevor, and then for others. It's now become a catalyst for young people and Hawaii's leaders to work together to take concrete positive actions to build a more sustainable island. With this simple idea – that ALL young people must learn about sustainability – and that even one course taught in every school could make all the difference. It could become a sea change – and Hawaii could lead the way. Trevor is now inspiring young people and their leaders across the state and even the country with his Resolution.

I want to see that all high school students throughout the State of Hawaii have the opportunity to take classes in and be exposed to sustainable education in their science curriculum. This will allow Hawaii's youth to have a better understanding about sustainability and the connection it has with our way of life. It is essential that everyone understand that keeping our environment healthy, keeping our economy healthy, and keeping our people healthy are all interrelated and will ultimately allow our culture, traditions, way of life, and unique island home to not just survive but thrive for generations to come. **Trevor Tanaka, Konawaena High School**

Trevor is a very hard working young man. He has an ability to envision a more just and equitable world. He sees things as they should be and works hard to realize his dreams. Trevor has been involved with numerous community service projects. He takes initiative to develop projects and programs that can better his community. He is a passionate spokesperson for the importance of building a more sustainable Hawaii for future generations.

Many thanks for your personal support,

Marianne Larned, Executive Director cc: Trevor Tanaka

Sustainable Hawaii Youth Leadership Initiative P.O. Box 1235 • Kailua Kona, HI 96740 • P.O. Box 722, Honoka'a, HI 96727 www.shyli.org



Testimony for HCR178 March 25, 2013 Room 414 – 1:15 p.m.

Aloha Chairs Tokuda and Solomon, Vice-Chairs Kidani and Shimabukuro,

As you know, many schools struggle today under the NCLB legacy. A legacy whose mandate did not support innovation or hands-on place-based learning that are the optimal learning modes for Hawaii's youth in the 21st Century. Meaningful real-life learning, in rich settings can provide inspiration and engagement for Hawaii's youth today. Under the NCLB era, environmental education was actually removed from the Hawai'i Content and Performance Standards. What Trevor Tanaka was responding to when he created this bill a year or so ago at the State Council of High Schools was that at his public high school, Konawaena, environmental science/sustainability education was absent as it is in many of our public schools today.

At the same time, the greatest problems we face today revolve around inventing new solutions, new thinking, and new ways of innovating our basic life systems of food, water, energy, waste, and economics. Unless we create and provide our youth opportunities to understand the complex science, Ecology, Botany, Biology, Physics and Economics of Environmental Education/Sustainability Education, we are sending them the message that they are not part of the natural world. But the laws of Ecology and Sustainability contradict that notion. The laws of Ecology teach us that everything is connected and that a healthy and sustainable future is possible.

The lessons of Sustainability Education as outlined by Jaimie Cloud in the Cloud Institute's Sustainability Education document "EfS Enduring Understandings" and "Knowledge and Action" are the lessons our youth need today, in order to create a future that will sustain their children and grandchildren. Our youth need knowledge, practice, and most of all real life hands-on opportunities to participate in the development of sustainable Earth Systems.

I remember the promise of the Hawai'i 2050 plan. That plan made the word "Sustainability" mean something, but in subsequent years, the intent of that plan has been lost. All knowledge is lost of not used, improved upon, and put into practice, policy, and intention.

I have had the privilege of working with Networks and organizations all across Hawai'i for the past 8 years that have been responding to a strong interest from Principals, teachers, parents and community to grow a school garden movement. In 2012 we received permission from the Hawai'i Department of Education to conduct a baseline survey statewide. That survey revealed that 168 schools, 21,577 students, 830 teachers were using place-based, hands-on experiential



education and were growing school learning gardens on 30 acres of land across Hawai'i. There is a deep interest to reconnect our youth with the land, the source of all wealth and health for Hawaii's communities. I ask you to be an advocate for Sustainability Education by asking the Hawai'i Department of Education to support this growing movement sprouting like spring grass across the state and create the pathways for incorporating and supporting sustainability education into the science curriculum of all Hawaii's public and charter schools. Our future depends on it.

Sincerely,

Nancy Redfeather -Member Hawai'i Farm to School and School Garden Hui <u>www.hawaiischoolgardenhui.org</u> Member Hawai'i School Garden Task Force – Policy and Advocacy Committee Director Hawai'i Island School Garden Network <u>www.kohalacenter.org/HISGN/about.html</u> Director Hawai'i FoodCorps – Class of 2013-2014 <u>www.foodcorps.org</u> Trevor M. Tanaka P.O. Box 315 Kealakekua, HI 96750 tanakatmt@gmail.com

March 23, 2013

Hawaii Legislature Senate Committees on Education and Higher Education Chairman Jill Tokuda and Chairman Malama Solomon State Capitol 415 S. Beretania St. Honolulu, HI 96813

RE: SCR 192 Incorporating Sustainability Education into the Science Curriculum of Public Schools

Aloha Senators Tokuda and Solomon,

My name is Trevor Tanaka and I am a Senior attending Konawaena High School. I am speaking on behalf of myself.

An idea that started approximately a year and a half ago is now the resolution that is before you. I had the honor of presenting a similar form of this resolution to a group of my peers at the 2011 Secondary Student Conference held at the Hawaii State Capitol. When it was presented, it garnered support from over 75% of the delegation. My hope is that it will receive similar support from the Hawaii State Legislature in the current legislative session.

The importance of educating everyone, especially our youth, about sustainability is critical to our future. Efforts are underway locally, nationally, and globally to "bring about changes in values, attitudes and lifestyles to ensure a sustainable future and the evolution of just societies" (The United Nations Decade of Education for Sustainable Developments, DESD 2005-2014).

I believe the resolution is a big step in the right direction for Hawaii's public school students. ALL of Hawaii's youth need to be exposed to sustainable education, not just those who attend private, charter or some of the larger schools.

I understand that Hawaii is adopting national standards on sustainability. Hawaii can now take the leap by making sure that its students are exposed to this vital information sooner rather than later. It will give us the knowledge we need to make informed decisions and choices about our quality of life, our environment, future job opportunities and what it will take to make sure Hawaii thrives for generations to come.

While doing research on sustainable education, I ran across a quote that has stuck with me and speaks volumes about the importance of sustainable education:

Perhaps never before have the needs of human society and the objectives of education been so closely linked, nor has education ever had so compelling a rationale and so urgent a responsibility to contribute to the societal change needed to ensure the survival of the planet and a sustainable future. (Jean Perrar, Learning for a Sustainable Future, Canadian Schoolnet, 1998.)

This quote epitomizes how I feel and the difference that I hope this resolution will make.

Thank you,

Trevor Tanaka

Good afternoon,

My name is Anna and I am a freshman at Assets High School. I am testifying on SCR No. 192, Requesting The Board Of Education To Incorporate Sustainability Education Into The Science Curriculum Of Public Schools. I strongly support this resolution because...

Hawaii is distanced geographically from the rest of the world. We are a unique place, with unique culture. We should teach our youth the importance of taking care of this land and our surrounding waters.

We should have awareness of how our actions affect our future and our land.

If we incorporate sustainability education into the science curriculum of public schools, we give awareness of our environment to our youth who will grow with knowledge that will help Hawaii all together.

Submitted on: 3/22/2013 Testimony for EDU/WTL on Mar 25, 2013 13:15PM in Conference Room 414

Submitted By	Organization	Testifier Position	Present at Hearing
Lisa Galloway, PhD	Individual	Support	No

Comments: I strongly urge the committee to support this bill. Although the Hawaii Content & Performance Standards version 2 included a sustainability standard for science education to be taught at every grade level, HCPS III does not. While the DOE is moving towards use of the Common Core State Standards in science, this will take many years. These years of waiting mean most teachers will not teach sustainability, and thousands of our graduating students will simply not learn how vital their understanding of sustainability issues is to everyone's future. If we continue to teach students to do nothing about environmental issues (which we are doing by default) then little to nothing will be done to protect our environment and ourselves in the future. Every student who graduates will simply contribute to the problems which threaten us, ignorantly assuming that someone else will work to solve them. Resurrecting the HCPS II sustainability standard in science will allow educators to teach students that all of us, regardless of career path, must change our behavior at work, at home and in all other pursuits to reverse the damage we have done to the environment we live in and to begin to solve the problems for our own benefit and that of future generations.

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.

Submitted on: 3/22/2013 Testimony for EDU/WTL on Mar 25, 2013 13:15PM in Conference Room 414

Submitted By	Organization	Testifier Position	Present at Hearing
Robin Kaye	Individual	Support	No

Comments: This is important for our children -- they need to learn about sustainability ; understanding and protecting our environment. Please support this resolution.

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.

Submitted on: 3/22/2013 Testimony for EDU/WTL on Mar 25, 2013 13:15PM in Conference Room 414

Submitted By		Organization	Testifier Position	Present at Hearing
r	margaret dehning	Individual	Support	No

Comments: An understanding of respect and responsibility for our earth and its dynamic cycles and processes is necessary for the well-being of our community and our planet. As a science educator, I believe that sustainability education should be a mandatory component of science education for all Hawai'i students.

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.

Submitted on: 3/22/2013 Testimony for EDU/WTL on Mar 25, 2013 13:15PM in Conference Room 414

Submitted By	Organization	Testifier Position	Present at Hearing
lan Kitajima	Individual	Support	Yes

Comments: In January 2013, I met Trevor Tanaka for the first time - on the Big Island in Waimea at the Sustainable Hawaii Youth Leadership Initiative (www.shyli.org) Summit. His resolution to incorporate sustainability education into the science curriculum attempts to harness the hands-on excitement of aquaponics, wind and solar energy projects, school gardens, and even robotics to engage and inspire young people. But he doesn't want sustainability to be just extracurricular. Have you noticed that what is engaging our students is mostly extracurricular after school programs like robotics but none of these innovative programs are fully incorporated into the education curriculum? We want to engage, inspire, and educate our students, and the answer is right in front of us in after school extracurricular activities like aquaponics and robotics. I full support Trevor Tanaka's vision that sustainability is in our local DNA, it's what engages and inspires the next generation, and will help students connect with their education. I am in full support of SCR192. Go Trevor!

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.

This is to serve as testimony in support of the resolution for sustainability in Hawaii public schools.

I urge you to do what we cannot do in California and are suffering raid declines in the quality of our workforce as a result.

Thank you,

Dr Margaret Takeda CSUSB

Sent from my iPhone

Submitted on: 3/24/2013 Testimony for EDU/WTL on Mar 25, 2013 13:15PM in Conference Room 414

Submitted By	Organization	Testifier Position	Present at Hearing	
Karen Eoff	Individual	Comments Only	No	

Comments: I strongly believe that including sustainability education in science courses within public schools curriculum will have long-term cultural, social and economic benefits to our island lifestyle, especially in rural communities, and will foster and perpetuate self sufficiency education through empowering our future young leaders with the knowledge and science of "sustainability."

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.

Maile P. David 86-4310 Mamalahoa Highway Captain Cook, Hawaii 96704 Email: mailedavid@msn.com

March 23, 2013

Hawai'i State Capitol The Senate Committee on Education

Re: Testimony in Support of SCR 192 Requesting the Board of Education to Incorporate Sustainability Education into the Science Curriculum of Public Schools

Honorable Chair Tokuda and the Committee on Education:

I respectfully urge your Committee to support Senate Concurrent Resolution 192. I also ask that you acknowledge Trevor Tanaka's insight, from the perspective of a high school senior from Konawaena High School, of the importance of having access to sustainability science in our public schools science curriculum. SCR 192 recognizes that sustainability education is a necessary and critical educational component of learning and understanding how to utilize island resources to sustain our island communities while protecting and preserving our unique environment.

I strongly believe that including sustainability education in science courses within public schools curriculum will have long-term cultural, social and economic benefits to our island lifestyle, especially in rural communities, and will foster and perpetuate self sufficiency education through empowering our future young leaders with the knowledge and science of "sustainability."

I humbly ask that the Committee on Education concur with the above and favorably adopt SCR 192. Mahalo a nui loa.

Very truly yours,

Maile P. David

mpd/

SCR192

Submitted on: 3/24/2013

Testimony for EDU/WTL on Mar 25, 2013 13:15PM in Conference Room 414

Submitted By	Organization	Testifier Position	Present at Hearing
Malia Tanaka	Individual	Support	No

Comments: Aloha,

My name is Malia Tanaka and I graduated from Konawaena High School in May 2009. I am now graduating with political science and communication studies degrees from Chapman University in Orange, California. Attending Chapman University in the continental United States and studying abroad on a program called Semester at Sea has given me a shocking perspective on just how badly our world needs to practice becoming more sustainable.

By visiting different countries around the world through Semester at Sea, I was able to see firsthand how many different countries are failing to recognize how important it is to incorporate more sustainable practices in their daily lives. Unfortunately, the same holds true for California. The only visible attempts I see of my university becoming more sustainable lies within the effort of two clubs on campus and a small division of our student government.

I do not believe that the majority of students do not care about saving our world, but I do believe that not enough students realize just how important it is. Hawai'l could be a trendsetter for sustainable education programs. There is no better place than a state that is so incredibly diverse and grounded to its aina. There is something unique and special about the people of Hawai'i. They genuinely care about their land, preserving their culture, and appreciate how beautiful their state is.

Please understand the magnitude of this resolution and what it can do for our students, the residents of Hawai'I, the state, our country, and our world.

Sincerely, Malia Tanaka

Written Testimony to Senate Committee on Education and the Senate Committee on Water and Land

Re: SCR192 REQUESTING THE BOARD OF EDUCATION TO INCORPORATE SUSTAINABILITY EDUCATION INTO THE SCIENCE CURRICULUM OF PUBLIC SCHOOLS

Dear Chairs Tokuda and Solomon, Vice Chairs Kidani and Shimabukuro and Members of the Committees:

Thank you for this opportunity to provide testimony in support of SCR192, which requests the Board of Education to incorporate sustainability education into the science curriculum of public schools. Although I am an employee of the University of Hawai'i at Hilo, I submit this testimony as a lifelong resident of Hawai'i and parent of a young child.

Hawai'i is much too dependent on resources outside of our island state. While we cannot control all of the factors that influence this situation, we have the opportunity to recognize and take action about the factors that we can control. One of the factors that we have the ability to make impact on is provision of sustainability education.

The leaders of tomorrow are in our classrooms today. Not educating the current generation about sustainability is dangerous because that sends a message that we are okay with the direction that we are headed. This resolution is a proactive measure with long-term benefits that have the potential of offsetting any associated costs. It is important to remember that once certain resources are depleted, there is nothing we will be able to do to bring them back. There is some level of urgency here. Some things are irreversible and we should not wait to find out what those are.

Being from the field of education, I not only know the value of education, but I also know the power that education can have. Trevor Tanaka is a great example of the power of education. He should be commended for taking the lead on this initiative for his generation.

To this end, I commend Trevor for his leadership efforts. With leaders like Trevor at the helm, we have hope for our future on the issue of sustainability. I ask for your support on this resolution as well.

Thank you for this opportunity to support this resolution.

Mahalo,

Fanah-Mani Amis

Farrah-Marie Gomes 64-5212 lokua Place Kamuela, HI 96743