# SB1278



Submit Testimony

Measure Title:	RELATING TO LIBRARIES.	
Report Title:	Board of Education; Libraries; Makerspaces; Appropriation (\$)	
Description:	Description: Appropriates funds to the board of education to establish and maintain makerspaces, including the equipment, materials, and personnel necessary for the operation of makerspaces in public libraries statewide.	
Companion:		
Package:	None	
Current Referral:	EDU, WAM	
Introducer(s):	WAKAI, CHUN OAKLAND, Espero, Galuteria, Inouye, Nishihara, Ruderman, Slom, Taniguchi	

Sort by Date		Status Text
1/29/2015	S	Introduced.
1/29/2015	S	Passed First Reading.
1/29/2015	S	Referred to EDU, WAM.
2/5/2015	S	The committee(s) on EDU has scheduled a public hearing on 02-09-15 1:15PM in conference room 229.

S = Senate | H = House | D = Data Systems | S = Appropriation measure | ConAm = Constitutional Amendment

DAVID Y. IGE GOVERNOR



STACIE KANNO INTERIM STATE LIBRARIAN

STATE OF HAWAII HAWAII STATE PUBLIC LIBRARY SYSTEM OFFICE OF THE STATE LIBRARIAN 44 MERCHANT STREET HONOLULU, HAWAII 96813

# Senate Committee on Education February 09, 2015, 1:15 p.m. State Capitol, Room 229

# SB 1278 – Relating to Libraries

The Hawaii State Public Library System (HSPLS) supports SB 1278, which would establish makerspaces in public libraries, where appropriate, and would provide funds for its establishment and maintenance.

The purpose of this bill recognizes Hawaii's public libraries as central community gathering places where personal growth and imagination are fostered and developed. Your support of this Bill would allow libraries to work with community resources to foster innovation to create safe, social spaces for our users where physical fabrication and conceptual designs can come together.

With support, libraries across the nation have worked with community partners to develop makerspaces targeted to middle school and high school teens as a way to creatively engage them in STEM (Science, Technology, Engineering and Mathematics) projects and instill within them a sense of empowerment.

Thank you for the opportunity to testify on SB 1278 and your continued support of the Hawaii State Public Library System.



# Hawaii Tech Exchange

808.495.0797 don@hitx.co 259 Haili Street, Hilo HI 96720

February 6, 2015

RE: Testimony in Support of SB 1278 Relating to Libraries

To Chair Kidani, Vice Chair Harimoto, and Members of the Senate Committee on Education:

I am Donald Kosak, founder of the Hawaii Tech Exchange. The Hawaii Tech Exchange is a community organization that fosters high impact new businesses in STEM fields on the Big Island.

I respectfully submit this testimony in <u>strong support</u> of SB 1278 and the appropriation of funds to establish and maintain makerspaces in public libraries statewide.

Libraries were hubs of the community, providing valuable research materials for students, workers, and small business owners. With these materials available now at the swipe of a finger from any cell phone or computer, many libraries are struggling to find purpose.

Makerspaces can provide that purpose, once again creating a hub for the community. I know many engineers and researchers who would be willing to donate time teaching classes or sharing knowledge in the public (non-commercial) setting of a community library. The Hawaii Tech Exchange has may such individuals among its members.

These public makerspaces will make modern, high-tech job related skills accessible for students, entrepreneurs, and job seekers. This is directly in line with the Hawaii State Public Library System's mission of nurturing lifelong learning through its programs and physical spaces.

Thank you for the opportunity to submit testimony on this bill.

Sincerely yours,

Sauld M. Kne

Donald M. Kosak Founder, Hawaii Tech Exchange http://hitx.co/

Submitted on: 2/5/2015 Testimony for EDU on Feb 9, 2015 13:15PM in Conference Room 229

Submitted By	Organization	Testifier Position	Present at Hearing
Lindsea	Individual	Support	No

Comments: This is an amazing bill and an opportunity to benefit future generations of Hawaii through access to hands on learning in STEM subjects.

Please note that testimony submitted less than 24 hours prior to the hearing, 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.

2.5.2015

Testimony for the State Legislature of Hawaii Re: Bill SB1278

Aloha, My name is Ryan Hopkins. I am a resident of the Big Island. Professionally I am a mechanical designer and manufacturing technician. I am also a volunteer at the Makery in Hilo. At the Makery, an effort has been ongoing to build a 'maker space' for schools, such as the Hilo Connections charter school.

I believe that by bringing the 'maker space' concept to public libraries with computer-aided design and manufacturing technologies, this bill will help to put these tools in the hands of Hawaii's future tech entrepreneurs, scientists, engineers and technicians. This bill is a great idea that I think is deserving of all the support the Committee can give. I encourage the Committee to consider the farreaching positive impact this action will have on the Keiki of Hawaii.

Mahalo for your time and attention in this matter.

RTH 2.5.15

From:	mailinglist@capitol.hawaii.gov
To:	EDU Testimony
Cc:	bstinmaui@yahoo.com
Subject:	Submitted testimony for SB1278 on Feb 9, 2015 13:15PM
Date:	Thursday, February 05, 2015 5:40:44 PM

Submitted on: 2/5/2015 Testimony for EDU on Feb 9, 2015 13:15PM in Conference Room 229

Submitted By	Organization	Testifier Position	Present at Hearing
Brian Thomas	Individual	Support	No

Comments: I have been involved with Maui Makers for the past four+ years. The depth of smart and talented people that are involved in this organization is incredible. These are people that are hobbyists, small business people, high tech entrepreneurs, retired high-tech industry people, scientists, programmers and people who like to make things. A makerspace provides the tools/machines/expertise to do that as well as the synergy of various skillsets the people each bring. It is a very valuable effort and one that can accomplish much including 1) provide people and kids of Hawaii an outlet for their brilliance and skills that is not found ANYWHERE else 2) give the libraries much needed RELEVANCE as those of who love to learn seek to have the libraries THRIVE. This is a great investment for the State of Hawaii, if not the BEST investment the state can make in it's productive people and the kid's who will develop real world relative knowledge and skills. For more info about Maui Makers, see this video that got 21k hits in over 121 countries in two days http://vimeo.com/36098424

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.

Charlotte Mukai 3512 Akaka Place Honolulu, HI 96822

#### SB1278

#### RELATING TO LIBRARIES Senate Committee on Education Public Hearing – February 9, 2015 1:15 p.m., State Capitol, Conference Room 229 By Charlotte Mukai, Oahu Makerspace member

SB1278 makes an appropriation to the Department of Education Library System to create Makerspaces in the community libraries.

I support this bill and its efforts to bring Science, Technology, Engineering, and Math (STEM) into our community. We need to increase the ability of the community to see what can be done with your own hands using technology and then be able to try it.

I first saw how diverse the Maker communities were at the Bay Area Makerfaire in San Mateo. The BayArea Makerfaire is in its 10<sup>th</sup> year and last year attracted 130,000 people.

The Maker community in Hawaii put together a MiniMakerfaire last year at Iolani School's Sullivan Hall. There were over 700 attendees for the one day event.

This effort to put Makerspaces in the Libraries will be a great complement to the efforts of the schools to make education come alive for students.

Thank you for allowing me to comment on this bill.

From:	mailinglist@capitol.hawaii.gov
To:	EDU Testimony
Cc:	respek1980@yahoo.com
Subject:	Submitted testimony for SB1278 on Feb 9, 2015 13:15PM
Date:	Friday, February 06, 2015 10:38:23 AM

Submitted on: 2/6/2015 Testimony for EDU on Feb 9, 2015 13:15PM in Conference Room 229

Submitted By	Organization	Testifier Position	Present at Hearing
Dina Mezheritsky	Individual	Support	No

Comments: Aloha, Thank you for allowing this chance to speak about something important to Hawaii's future. I have been involved with Maui Makers for the past four+ years. The depth of smart and talented people that are involved in this organization is incredible. These are people that are hobbyists, small business people, high tech entrepreneurs, retired/working high-tech industry people, scientists, programmers: all people who like to make things. A makerspace provides the tools/machines/expertise to do that as well as the synergy of various skillsets each person brings. Having a Makerspace involved with a library is a very valuable effort and one that can accomplish much including 1) provide people and kids of Hawaii an outlet for their brilliance and skills that can not be not found ANYWHERE else 2) give the libraries much needed RELEVANCE as those of us who love to learn seek to have the libraries THRIVE. This is a great investment for the State of Hawaii, if not the BEST investment the state can make in it's productive peoples and the kid's who will develop real world, valuable and relative knowledge and skills. For more info about Maui Makers, see this video that got 21k hits in over 121 countries in two days http://vimeo.com/36098424 Sincerely, Dina Mezheritsky

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.

Feb. 6, 2015

Ryan Kawailani Ozawa 95-595 Kanamee St., #326 Mililani, HI 96789-1431 ryanozawa@gmail.com

Dear Sen. Michelle N. Kidani, Chair; Sen. Breene Harimoto, Vice Chair; honorable Senators on the Committee on Education:

#### I am writing to support SB1278 relating to library makerspaces.

Hawaii state libraries already have excellent Internet connectivity, and have adapted to a world beyond books. I believe adding accessible tools like 3-D printers or hosting workshops on Arduino electronics could greatly expand the educational opportunities in places that are already committed to a neighborhood's access to knowledge.

The value that makerspaces and the maker movement brings to the community range from accessible, cutting-edge educational opportunities for kids to fostering entrepreneurs in creating agile, innovative companies.

The American Library Association supports the hosting of makerspaces in libraries, and many forward-looking libraries across the country have already embarked down this path.

Thank you for your consideration.

Malama pono,

Ryan Ozawa HawaiiWeblog.com

Submitted on: 2/6/2015 Testimony for EDU on Feb 9, 2015 13:15PM in Conference Room 229

Submitted By	Organization	Testifier Position	Present at Hearing
Apollo Grace	Individual	Support	No

Comments: This is one of the most important things we can do to enable residents of Hawaii to participate in emerging economic opportunities. It gives children and adults alike the ability to become creators, to learn and practice turning ideas into real products and opportunities. It also allows us to generate technologies and materials for other important local industries, such as aquaponics. This is the simplest possible way to make Hawaii a state known for its inventors and entrepreneurs!

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Submitted on: 2/5/2015 Testimony for EDU on Feb 9, 2015 13:15PM in Conference Room 229

Submitted By	Organization	Testifier Position	Present at Hearing
John Fitzpatrick	Individual	Support	No

Comments: Aloha Kakou, SB 1278 is a fabulous bill that would make makers spaces in public libraries across the state. I see what Maui Makers here on Maui does and what they teach our children and I could online imagine the possibilities if every child and even adult throughout the state has it right in there public library. Please set up Makers Spaces in Public Libraries! Mahalo, Fitz

Please note that testimony submitted less than 24 hours prior to the hearing, 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.

#### Testimony on SB1278: RELATING TO LIBRARIES. Appropriates funds to the board of education to establish and maintain makerspaces, including the equipment, materials, and personnel necessary for the operation of makerspaces in public libraries statewide.

At issue is how well Hawaii is prepared for a paradigm change in manufacturing that is sweeping both developing and industrialized nations. At issue is a technology trend that benefits Hawaii more than any state, in that for the first time we're approaching a period where manufacturing no longer requires huge investments in power, transportation and labor. On-demand manufacturing where residents can download, print and customize finished goods is now possible.

What is missing is education, similar to when word processing and spreadsheets changed the office of the last century; the maker movement will change light manufacturing. It's already happening for jewelry, automotive, electronics, medicine, and aerospace. NASA has started using 3D printing to radically reduce the cost of bringing payloads to orbit by using advanced manufacturing technologies to create rocket nozzles stronger and for a fraction of the cost. What Hawaii needs is a neutral place where we can learn the skills for this emerging market. While traditional education needs to embrace this technology, we also need the home hobbyist to follow along. Hawaii has long been a haven for creative small businesses. Combined with community tinkering areas we can rejuvenate the Honolulu home craftsman with the tools and knowledge to keep Hawaii competitive in a world that is becoming able to create and sell highly customized products, cheaply enough that our small business can compete in the global market.

#### Brian Chee

Founder of the Advanced Network Computing Laboratory, UHM Senior Contributing Editor, InfoWorld Magazine Co-host of This Week in Enterprise Technology (http://www.twit.tv/twiet) Gerald Isdale testimony for SB1278 Pertaining to Libraries

I am very pleased and excited to see SB1278 being discussed in the Hawai'i Legislature.

I have been working with the DIY Maker community for nearly 10 years. I founded the first makerspace in Hawaii (Maui Makers) and have had a hand or at least encouraging voice getting several more going across our islands. I am the instigator of a national coalition of library, museum and independent makerspaces that is creating a National Forum on Makerspace Education. Support for library makerspaces in my home state would be wonder full.

Makerspaces are a wonderful new way to share the joys of making things, and the fantastic emerging technologies that allow us to make (almost) anything locally. Libraries have been innovators in education outside and along side traditional schools. The legendary Library of Alexandria was not just a place to store knowledge. It was a vibrant community of innovators and builders sharing knowledge and creating. The emergence of makerspaces in libraries is renewing this vibrancy across the country. The innovation sparked by collaborations of people from disparate backgrounds (artists, story tellers, machinists, crafters, computer tech, etc) has spawned a multitude of businesses and public service projects.

This visionary measure will provide the BEST investment possible for the future of Hawaii's innovation, economy and citizens. The whole spectrum of our people (kids of all ages) can learn, develop and share valuable and relevant skills and understanding. They can learn collaboration across our state and around the world, as designs can be shared and developed globally, adapted and built locally. The measure would put Hawaii well out in the forefront of this emerging educational movement, and make it an example for others. Perhaps future national and global forums could be hosted here in Hawai'i. For more info about Maui Makers, see this (somewhat dated) Self Made in Hawaii' video that got 21,000 hits from over 121 countries in two days: http://vimeo.com/36098424

I sincerely and enthusiastically support this bill.

Gerald B. Isdale 180 Kapuai Rd Haiku, HI 96708

Design Global, Build Local

February 6, 2015

Senator Michelle Kidani, Chair (EDU) Senator Breene Harimoto, Vice Chair

Committee: Testimony to the Senate Committee on Education

Bill No. & Title: SB1278, Relating to Libraries

Date, Time:Monday, February 9, 2015, 1:15 p.m.Place:State Capitol, Conference Room 229

Chair Michelle Kidani, Vice Chair Breene Harimoto and Members of the Committee on Education:

I am Burt Lum, Founder of Bytemarks, a technology consultancy, co-host of Bytemarks Cafe, a weekly science and technology show on Hawaii Public Radio and have reported on Hawaii's tech scene for many years.

I **strongly support SB1278, Relating to Libraries**. There is growing environment in Hawaii for entrepreneurship, startup formation and tech innovation, and makerspaces are fertile ground for idea sharing, capacity building and peer support.

In an effort to build an innovation ecosystem, there needs to be places where people gather to share resources and knowledge, work on projects, network, and build. Makerspaces fill a void for people who have a great idea but need the support structure to help see that idea become a reality. A makerspace functions as a physical space where technological experimentation, hardware development, and idea prototyping can take place.

You often find makerspace in academic environments. Local high schools like Kalani and lolani have makerspaces for students to build projects. But once a student leaves school facilities like these are rare. Oahu has two notable makerspace, Oahu Makerspace in Kakaako and HiCapacity in Manoa.

The libraries offer an opportunity to spread this capability to areas not currently served by existing commercial makerspaces. It also serves as a place where subject matter expertise from the community can participate in mentoring budding entrepreneurs and makers. Libraries seem a perfect place for makerspaces since they are already places for self-directed learning and knowledge sharing.

Thank you for the opportunity to submit testimony on this bill.

Burt Lum

Testimony in regards to SB 1278

I have been a teacher for 43 years and I am also a certified librarian currently serving as the President of the Hawaii Association of School Librarians. I have taught students from preschool through graduate school in college. Any time there is an opportunity to encourage creativity and collaboration in an intergenerational setting is a positive that benefits all of the participants and our larger community as well.

This bill supports the development of makerspaces in our public libraries. The concept, which encourages both independent and collaborative, creative projects, is not a new one. In fact, makerspaces have been formed and thrive in libraries all across the country. Indeed we have some excellent examples right here in Hawai'i including at Iolani and Kaimuki Middle School.

Makerspaces in public libraries will support our mission, which is to make the quality of life better for our population. Creating makerspaces to support our community by fostering innovation and creativity is brilliant. An accessible space that supports innovation across the age groups is definitely a positive for all our citizens here.

Thank you for your consideration and please support SB 1278.