



February 13, 2011

RE: House Bill HB1338, Strong Support

The EAST program has been the progressive learning environment, which models a 21st Century technology workplace for the past 11 years within the Hawaii Department of Education. To date, 15 Hawaii DOE schools are participating in the program. The schools include Maui High, Baldwin High, King Kekaulike, Lahainaluna, Kihei Charter, Molokai Middle and High (Immersion/Non-Immersion), Chiefess Middle, Kauai High, Kealakehe High, Kea'au High, Farrington High, McKinley High, Mililani High, and Roosevelt High. The program continues to build capacity through professional development training, providing software and technical training, internships, career shadowing, equity based and inquiry-led pedagogue skills and invaluable connections to industry. The students that have enrolled in the EAST programs have shown a marked increase in STEM career interest and intent.

The EAST project-based, service learning national model provided a strong framework to build upon, however the homegrown Hawaii network provided in partnership with the Women In Technology (WIT), has exceeded what the national affiliation with EAST can provide. A strategic planning team has developed a new model entitled **STEMworks**, which will launch this Fall 2011 replacing EAST. It will continue the successful project-based, high end software access and service learning elements from EAST, but will bring in new technologies in gaming, creative/digital media, pre-engineering hardware and design. These new additions are in response to the growing and projected industry skill demand, with a particular interest in clean energy and sustainability solutions.

The **STEMworks** program will entail STEM/Service Learning curriculum, an online STEM portal (through a partnership with the University of Hawaii Manoa, College of Engineering & Referentia), Industry community partners, and the continued partnership with other project-based STEM programs like robotics, Creative Academies (CA), career-shadowing and internships.

MEDB's Women In Technology (WIT), in partnership with our sister Economic Development Boards, have been honored to facilitate the County, State, Federal, and private sector investment in STEM/Service Learning, including contributions to upgrade hardware, software and training opportunities. We ask for your continued investment in this tested model to sustain and expand its reach to more students in our public school system.

Thank you for your time and consideration.

Mahalo,

Isla Young
Project Manager, MEDB's Women In Technology

LATE TESTIMONY

February 14, 2011

RE: House Bill HB1338, Strong Support

E ke hoa, Aloha Aina. O wau no o Kumu Gandharva Mahina Hou Ross, ke kumu alakai ma O Hina I Ka Malama, ke kula kaiapuni olelo Hawaii ma ke kula kiekie o Molokai He leka kakoo keia no ka papahana EAST/STEMworks. Greetings friend, love the land. I am Kumu Gandharva Mahina Hou Ross, the lead teacher at O Hina I Ka Malama, Hawaiian Language Immersion Program at Molokai High School. This is a letter in support of the EAST/STEMworks program. The EAST program has been the progressive learning environment, which models a 21st Century technology workplace for the past 11 years within the Hawaii Department of Education. The program continues to build capacity through professional development training, providing software and technical training, internships, career shadowing, equity based and inquiry-led pedagogue skills and invaluable connections to industry. The students that have enrolled in the EAST programs have shown a marked increase in STEM career interest and intent.

At O Hina I Ka Malama, our curriculum focuses on doing place based, culture based scientific inquiry. We use technology as a way to connect traditional practices of resource management with the students enrolled in our program. The EAST project has provided us with many opportunities to put the latest technology on our students hands and allows them to make connections with traditional resource management practices and the world we live in today. We use underwater cameras, GPS, Vernier Lab probes, and video cameras to document our resources in different marine environments around the island of Molokai. With this information students make multimedia presentations that they use to present their findings to the Molokai community, as well as present at different conferences in Hawaii. Last year all of our 19 students attended the 1st annual Hawaii EAST conference. We are very thankful to MEDB's Women In Technology for all of their support and training. We ask for your continued investment in this tested model to sustain and expand its reach to more students in our public school system.

Thank you for your time and consideration.

Mahalo

Gandharva Mahina Hou Ross

Kumu

O Hina I Ka Malama Hawaiian Language Immersion at Molokai High School

LATE TESTIMONY

To whom it may concern:

I am writing in behalf of STEMworks, a unique program that has been nurtured and further developed by Women in Technology, a branch of the Maui Economic Development Board (MEDB). As a second year facilitator of the STEMworks program here at McKinley High School, i have witnessed remarkable progress by my students in the areas of confidence, communication, teamwork and, mostly, follow-through.

The projects that they work on benefit either the school or community in some way or another. How are these projects different from others? Students take ownership in their projects, and find satisfaction in not only completing and turning in their projects, but taking it a step further. They follow through to see their projects take root and become a valuable and contributing part of the school and community.

Currently, my students are working on green technology. One group is working on a solar powered radio, another on designing a passive solar house. A third group is working on improving the efficiency of a solar oven, and another is working on developing a solar-powered USB charger. A fifth group is designing a hand-powered dynamo that can charge your cel phone and other small devices.

As you can see, my students are doing things in this class that seem far removed from a "normal" classroom setting. More importantly, they are learning by hypothesizing, testing and experimenting, evaluating, and re-hypothesizing. They are learning by thinking!

I encourage you to continue to support the STEMworks programs presently in many high schools throughout Hawaii. I am confident that you will see that funds appropriated to this program are well used and worthwhile.

Sincerely,

Alan H. Sekiguchi

McKinley High School

LATE TESTIMONY

February 14, 2011

RE: House Bill HB1338, Strong Support

Being a part of the program Project EAST, which is supported by the MEDB and WIT, has been a true eye opener for myself as a teacher and for the students who have been involved. We, at Farrington High School, consider it an honor and privilege as this unique and well sculpted program provides resources for students at all levels, with diverse interests and backgrounds.

Project EAST/STEMworks allows students to landscape their passions through the venue of community service while using the high end technology as a tool, and permits students to marry basic skills of science and math with today's fast pace movement of technology.

When students are given permission to make a difference and solve problems in their community/world, when students are have opportunities to explore various hardware and software that is used in the real world and industry, when students are allowed to stimulate their senses, to inquire and be curious, the results are tremendous growth in each individual student which can't be measured by test scores and rubrics.

I have witnessed the shyest ELL student stand in front of an audience to give a power point presentation with confidence, I've watched students step out of their comfort zone and gleefully share their findings, I've listened to conversations of pride that a student accomplished a task that they would have never tackled, I've chuckled at students who ask permission to do a project and are speechless when I reply "of course!"

To be in a classroom with students fully engaged in what they are doing, problem solving among themselves, working collaboratively as a group, and sharing laughter and excitement is what teachers pine for in today's system. But this is what the model of EAST/STEMworks is about. And it works.

Given the resources that have been provided, it is with hope that there will be continued support and investments in STEMworks for our students to be positive contributors to their community while riding the wave of today's dynamic trends.

Thank you for your consideration.
With Appreciation,

Diane Tom-Ogata
Farrington High School
Project EAST Facilitator