

Honolulu, Hawaii

FEB 18 2011

RE: S.B. No. 1120
S.D. 1

Honorable Shan S. Tsutsui
President of the Senate
Twenty-Sixth State Legislature
Regular Session of 2011
State of Hawaii

Sir:

Your Committees on Economic Development and Technology and Education, to which was referred S.B. No. 1120 entitled:

"A BILL FOR AN ACT RELATED TO THE ECONOMY,"

beg leave to report as follows:

The purpose and intent of this measure is to support the expansion of experiential learning initiatives in science, technology, engineering, and math (STEM) fields and creative media by appropriating monies for the following programs: Hawaii Excellence through Science and Technology Academy; Fostering Inspiration and Relevance through Science and Technology pre-academy; robotics and problem-based, applied learning; Research Experiences for Teachers; professional development for public school science and mathematics teachers; business and education internships and mentorships; teacher incentives for post baccalaureate certificates in secondary education; and Project EAST.

Your Committees received testimony in support of this measure from the Department of Business, Economic Development, and Tourism; University of Hawai'i System; Academy for Creative Media; Maui Economic Development Board, Inc.; Searider Productions, Wai'anae High School; Keaau High School; teachers and students from Maui High School, O Hina I Ka Malama Hawaiian Language Immersion at Molokai High School, Molokai Middle School, Iao Intermediate School, Dole Middle School, Wahiawa Middle School, Chiefess Kamakahahei Middle School, Waiakea Intermediate School, Kalakaua Middle School, Aiea Intermediate School, Robert Louis Stevenson



Middle School, Kealakehe Intermediate School, Waialua High and Intermediate School, Farrington High School, McKinley High School, and Haili Christian School; Challenger Center of Hawaii; Hilo Underwater ROV; Oceanit; Ralph S. Inouye Co., Ltd.; New Horizons of Hawaii; NIDON Computer Corporation; GeminiTech; Waieka Robotics; and twenty individuals. Your Committees received testimony in opposition to this measure from three individuals.

Your Committees find that expanding the number of STEM graduates is a priority for the State of Hawaii if state lawmakers are committed to producing the kind of skilled workforce that employers in emerging industries like scientific research and development, biotechnology, aquaculture, performing and creative arts, specialty health care, aerospace and defense-dual use industries, technology and computer services, and digital media require. Rather than waiting for students to demonstrate an interest in STEM subjects in Hawaii's high schools or in post-secondary higher educational arenas, early exposure to STEM experiences in elementary and middle school environments is critical.

Your Committees have reviewed the testimonies regarding the benefits of past STEM and creative media funding from educators, students, and private sector organizations involved in these initiatives. Your Committees have also heard concerns that, while the individual projects have been successful, these initiatives should be administered and reported on by the Department of Education.

Your Committees find that the pilot projects in Acts 111 and 271, Session Laws of Hawaii 2007, were developed specifically to address concerns from school level practitioners of the difficulties of piloting successful experiential learning programs against the backdrop of constrained funding, school performance requirements and penalties for below-standard testing, and the host of competing curriculum requirements that the Department of Education and individual schools grapple with. As part of the reporting requirements for the various individual projects authorized by Acts 111 and 271, the Legislature adopted H.C.R. No. 297, S.D. 1, C.D. 1 in 2010, to insure that the Department of Education, University of Hawai'i, Department of Business, Economic Development, and Tourism, Maui Economic Development Board, Economic Development Alliance of Hawaii, Robotics Organizing Committee, and other participating stakeholders fully account for their accomplishments and expenditures, while providing



recommendations for future deployment of their pilot projects to complete the first phase of the four-year experiential learning pilot program. As such, individual program reports in response to H.C.R. No. 297, S.D. 1, C.D. 1, are included as part of the testimonial record for this measure. Your Committees appreciate the commitment to students and schools that the results have demonstrated, and commend participating stakeholders for their willingness to undertake a rigorous level of STEM and creative media expansion during the past four years.

With preliminary data collected from participating STEM and creative media programs throughout the State, your Committees are confident that the Legislature is in a far stronger position this year to evaluate the best practices that have emerged from individual schools and regions, and to invest in experiential learning opportunities that produce quantifiable, solid results in growing Hawaii's workforce for high-value, high-quality STEM and creative media jobs.

Your Committees are in strong support of expanded STEM and creative media opportunities and find these concerns to have a great deal of merit.

Your Committees have amended this measure accordingly, by:

- (1) Deleting the specific program appropriations and replacing these with unspecified appropriations to the University of Hawaii for implementation of the requirements of sections 304A-1861, 304A-1862, and 304A-1863, Hawaii Revised Statutes, and requiring a report on outcome measures;
- (2) Amending the references to Project EAST to reflect the program's new focus as STEMWorks project-based learning programs;
- (3) Adding an unspecified appropriation to the Department of Education for projects demonstrating cost-effective outcomes in conjunction with improved student performance in STEM and creative media experiential learning programs;
- (4) Requiring a joint annual report to the Legislature from the University of Hawaii, Department of Education, and Economic Development Alliance of Hawaii, Inc., on the



number of participating students and outcomes for their respective STEM initiatives; and from the Department of Business, Economic Development, and Tourism on projections of workforce needs for emerging industries in defense and dual-use, astronomy, engineering, aquaculture, biotech, digital media, and related industries; and

- (5) Making technical, nonsubstantive amendments for the purposes of clarity and consistency.

As affirmed by the records of votes of the members of your Committees on Economic Development and Technology and Education that are attached to this report, your Committees are in accord with the intent and purpose of S.B. No. 1120, as amended herein, and recommend that it pass Second Reading in the form attached hereto as S.B. No. 1120, S.D. 1, and be referred to the Committee on Ways and Means.

Respectfully submitted on
behalf of the members of the
Committees on Economic
Development and Technology and
Education,



JILL TOKUDA, Chair



CAROL FUKUNAGA, Chair



The Senate
 Twenty-Sixth Legislature
 State of Hawai'i

Record of Votes
Committee on Education
EDU

Bill / Resolution No.:* SBI120	Committee Referral: EDT/EDU, WAM	Date: 2-9-11
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The committee is reconsidering its previous decision on this measure.
 If so, then the previous decision was to: _____

The Recommendation is:

Pass, unamended 2312 Pass, with amendments 2311 Hold 2310 Recommit 2313

Members	Aye	Aye (WR)	Nay	Excused
TOKUDA, Jill N. (C)	/			
KIDANI, Michelle N. (VC)	/			
CHUN OAKLAND, Suzanne	/			
NISHIHARA, Clarence K.	/			
TANIGUCHI, Brian T.	/			
SLOM, Sam				/
TOTAL	5			1

Recommendation: Adopted Not Adopted

Chair's or Designee's Signature: *Michelle N. Kidani*

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*Only one measure per Record of Votes