
A BILL FOR AN ACT

RELATED TO THE ECONOMY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

PART I

1
2 SECTION 1. The legislature finds that economic growth to
3 benefit all Hawaii residents will require enhancing the State's
4 human resources; and with respect to job creation in high-paying
5 industry sectors, it means that Hawaii must closely track key
6 growth areas within the State's economy and align its residents'
7 skill sets with the needs of businesses in these emerging
8 industries.

9 For example, the department of business, economic
10 development, and tourism's "2010 Update Report on Hawaii's
11 Targeted & Emerging Industries" identified the following areas
12 as "high-performing" in comparison with national and local
13 growth trends: scientific research and development (averaging
14 5.2 per cent job growth between 2002-2010, or nearly 3.3 per
15 cent higher than growth of the same industry group nationally),
16 medical testing, aquaculture, performing and creative arts,
17 specialty health care, business consulting, design services,
18 technology manufacturing, and computer services. These



1 high-performing jobs in emerging sectors accounted for roughly
2 69,600 jobs (nine per cent of all civilian jobs in 2010), but
3 the sectors generated twenty per cent of the total gain in jobs
4 for Hawaii's civilian economy, or about fifteen thousand new
5 jobs between 2002 and 2010. For about half of the high-
6 performing sectors, the average annual earnings exceeded \$50,000
7 in 2010. While other emerging industry sectors may not have
8 demonstrated the same degree of high-performance growth as the
9 above areas, most of the emerging industries target clusters are
10 growing at rates that are higher than other industry sectors
11 within the State.

12 Since 2007, the legislature, department of business,
13 economic development, and tourism, University of Hawaii, and
14 various educational stakeholders have undertaken a pilot
15 demonstration project to evaluate the impact of experiential
16 learning initiatives in science, technology, engineering, and
17 math (STEM) fields and creative media, pursuant to
18 appropriations in Acts 111 and 271, Session Laws of Hawaii 2007,
19 and federal American Recovery and Reinvestment Act of 2009
20 funding during 2009 and 2010. In 2010, House Concurrent
21 Resolution No. 297, S.D. 1, C.D. 1, further requested a report
22 on the economic value of expanded workforce development capacity



1 and STEM initiatives prior to the start of the 2011 legislative
2 session.

3 Hence, the purpose of this part is to:

- 4 (1) Provide a permanent funding source for STEM
5 experiential learning initiatives that have yielded
6 strong student performance outcomes and expanded the
7 reach of the program through teacher-driven efforts;
- 8 (2) Provide recommendations to maximize the benefits of
9 STEM and creative media experiential learning
10 initiatives (e.g., expanded participation throughout
11 Hawaii's public and private schools, opportunities to
12 leverage public-private resources in broadening the
13 reach of innovative experiential learning programs
14 throughout the State);
- 15 (3) Improve the quality of teaching in STEM fields at
16 Hawaii's public schools by providing professional
17 development opportunities for practicing teachers, as
18 well as attracting highly qualified individuals who
19 hold degrees in these subject areas to the teaching
20 profession; and
- 21 (4) Better align the State's workforce needs for economic
22 growth in new industry clusters through annual



1 reporting requirements for the State's emerging
2 industries in conjunction with the allocation of
3 necessary resources into experiential learning
4 initiatives within the University of Hawaii,
5 department of education, and other business
6 development and education partners.

7 SECTION 2. There is appropriated out of the general
8 revenues of the State of Hawaii the sum of \$ or so
9 much thereof as may be necessary for fiscal year 2011-2012 and
10 the same sum or so much thereof as may be necessary for fiscal
11 year 2012-2013 to:

12 (1) Implement the requirements of sections 304A-1861,
13 304A-1862, and 304A-1863, Hawaii Revised Statutes; and

14 (2) Identify where STEM and creative media experiential
15 learning programs can significantly impact student
16 performance outcomes in public high schools;

17 provided that the University of Hawaii, department of education,
18 Robotics Organizing Committee, and STEM demonstration project
19 stakeholders shall provide outcome measures for expansion of the
20 FIRST Pre-Academy approach to all public middle schools, if
21 requested.



1 The sums appropriated shall be expended by the University
2 of Hawaii for the purposes of this part.

3 **PART II**

4 SECTION 3. There is appropriated out of the general
5 revenues of the State of Hawaii the sum of \$ or so
6 much thereof as may be necessary for fiscal year 2011-2012 and
7 the same sum or so much thereof as may be necessary for fiscal
8 year 2012-2013 to be deposited into the Hawaii 3Ts school
9 technology laboratories fund established pursuant to section
10 302A-1314, Hawaii Revised Statutes.

11 SECTION 4. There is appropriated out of the Hawaii 3Ts
12 school technology laboratories fund the sum of \$ or so
13 much thereof as may be necessary for fiscal year 2011-2012 and
14 the same sum or so much thereof as may be necessary for fiscal
15 year 2012-2013 for the STEMworks project-based, service learning
16 model that combines project-based, high end software access and
17 creative and digital media, pre-engineering hardware and design
18 components; provided that the University of Hawaii, department
19 of education, and other STEMworks demonstration stakeholders
20 shall provide outcome measures to the legislature for
21 utilization of the updated STEMworks approach in additional
22 schools throughout the State, and identify where STEMworks



1 project-based learning programs can significantly impact student
2 performance outcomes in public high schools; provided further
3 that no funds shall be expended unless matching funds are
4 provided pursuant to section 302A-1314(p), Hawaii Revised
5 Statutes.

6 The sums appropriated shall be expended by the Economic
7 Development Alliance of Hawaii, Inc., in accordance with section
8 302A-1314, Hawaii Revised Statutes, and implemented in
9 partnership with county economic development boards, as
10 appropriate, for the purposes of this part.

11 **PART III**

12 SECTION 5. There is appropriated out of the general
13 revenues of the State of Hawaii the sum of \$ or so
14 much thereof as may be necessary for fiscal year 2011-2012 and
15 the same sum or so much thereof as may be necessary for fiscal
16 year 2012-2013 for projects demonstrating cost-effective
17 outcomes in conjunction with improved student performance in
18 STEM and creative media experiential learning programs.

19 The sums appropriated shall be expended by the department
20 of education for the purposes of this Act.

21 **PART IV**



1 SECTION 6. (a) The University of Hawaii, department of
2 education, and Economic Development Alliance of Hawaii, Inc.,
3 shall report on the number of participating students and
4 outcomes for their respective STEM initiatives.

5 The department of business, economic development, and
6 tourism shall compile and report the projections of workforce
7 needs for emerging industries in defense and dual-use,
8 astronomy, engineering, aquaculture, biotech, digital media, and
9 related industries.

10 (b) The agencies in subsection (a) shall issue a joint
11 report to the legislature and the governor no later than twenty
12 days prior to the convening of each regular session of the
13 legislature, with the initial report becoming due in December
14 2011.

15 SECTION 7. This Act shall take effect on July 1, 2050.



Report Title:

Workforce Development; STEM Initiatives; Appropriations

Description:

Appropriates funds to implement the requirements of sections 304A-1861, 304A-1862, and 304A-1863, Hawaii Revised Statutes; appropriates funds for the STEMworks project-based, service learning model; appropriates funds for projects demonstrating cost-effective outcomes in conjunction with improved student performance in STEM and creative media experiential learning programs; requires annual reports by the University of Hawaii, department of education, Economic Development Alliance of Hawaii, Inc., and department of business, economic development, and tourism. Effective 07/01/2050. (SD2)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

