
A BILL FOR AN ACT

RELATING TO TECHNOLOGY WORKFORCE AND DEVELOPMENT.

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

1 SECTION 1. In early 2007, the National Governors
2 Association made improving the nation's economic competitiveness
3 through innovation its primary focus. In a report titled, "A
4 Benchmarking of the Hawaii Educational System", Monitor Group
5 and the National Governors Association Center for Best Practices
6 profiled how Hawaii's educational system was performing relative
7 to national averages. Although Hawaii's high school graduation
8 rate is close to the national average (about seventy per cent
9 compared with seventy-five per cent), its postsecondary
10 completion rate was six points below the national average
11 (forty-seven per cent compared against fifty-three per cent),
12 and twenty points below the highest-performing states. The
13 report states, ". . . [t]his statistic measures state
14 universities' success in helping as many students through the
15 system as possible. As the importance of a college education
16 grows . . . so does the relevance of this metric in assessing a
17 state's educational performance." Similar differences were



1 found in eighth grade National Assessment of Educational
2 Progress test scores for 2004-2005, SAT scores and Advanced
3 Placement course participation rates.

4 The 2007 legislature strongly endorsed Science-Technology-
5 Engineering-Math (STEM)-related initiatives and creative media
6 education as the most practical, hands-on means of increasing
7 students' interest in pursuing math/science and technology
8 careers. All STEM proposals were evaluated against the backdrop
9 of existing, successful math/science and related initiatives.
10 Emphasizing the need to build upon solid performance outcomes,
11 the legislature adopted Act 111, Session Laws of Hawaii 2007, to
12 expand existing STEM programs like robotics (including FIRST
13 Lego League, Junior FIRST Lego League, botball, underwater ROV,
14 VEX, Micro-Robot and robotics camps) and Research Experiences
15 for Teachers - Middle School; and Act 271, Session Laws of
16 Hawaii 2007, to expand Project Environmental and Spatial
17 Technology. At the same time, Act 111 funded new programs (like
18 the Hi-EST Academy, applied learning high school academies,
19 business/education internships, and related STEM teacher
20 development) in a pilot environment to provide the department of
21 education, University of Hawaii, individual schools, and their
22 tech partners with an opportunity to work through initial set-up



1 requirements and to produce a well-tested model for future
2 expansion.

3 The initial legislative targets for 2007-2008 were to
4 double the existing forty-eight STEM, Research Experiences for
5 Teachers - Middle School, Project Environmental and Spatial
6 Technology, and robotics programs within public schools to
7 achieve a level of eighty-four school initiatives. Based on
8 strong demand from individual schools, and stellar tournament
9 results, the number of schools desiring to participate in STEM
10 initiatives funded by Act 111, Session Laws of Hawaii 2007, and
11 Act 271, Session Laws of Hawaii 2007, far exceed the 2008
12 target. At the highest level of robotics team competition, the
13 number of For Inspiration and Recognition of Science and
14 Technology (FIRST) robotics teams has grown from four
15 participating high schools in 2007 to twenty-five Hawaii high
16 school teams (including public and private schools) in 2008.
17 This year's March 2008 FIRST robotics regional tournament in
18 Honolulu, Hawaii includes thirty-eight schools competing for the
19 national FIRST championships (being held in April 2008 in
20 Georgia).

21 The legislature therefore reaffirms its initial commitment
22 to expand outstanding and new STEM-related programs in Hawaii's



1 public schools and public charter schools by providing
 2 additional funds to ensure that all schools desiring to join in
 3 providing STEM programs for their students will be able to
 4 participate between 2008-2012. The legislature also proposes to
 5 add funding support to K-12 after-school creative media
 6 education initiatives to allow for a broader range of student
 7 participation in these programs.

8 SECTION 2. Chapter 304A, part V, Hawaii Revised Statutes,
 9 is amended by adding a new section to be appropriately
 10 designated and to read as follows:

11 "§304A- Science technology and education special fund.

12 (a) There is established the science technology and education
 13 special fund, for the purposes of providing additional resources
 14 and expertise to stimulate the interest and achievement of
 15 students in science, technology, engineering, and mathematics
 16 skills, pursuant to sections 304A-1861, 304A-1862, and 304A-
 17 1863.

18 (b) The following may be deposited into the special fund:
 19 appropriations made by the legislature, private contributions,
 20 and moneys from other sources; provided that:



1 (1) Moneys on balance in the special fund at the close of
2 each fiscal year shall remain in that fund and shall
3 not lapse to the credit of the general fund;

4 (2) Any amount to be deposited into the special fund from
5 the revenues collected under this chapter that causes
6 the special fund to exceed \$ shall be
7 deposited into the general fund. No further deposits
8 from the revenues collected under this chapter shall
9 be made into the special fund until the balance of the
10 special fund drops below \$, in which event
11 two and one-half per cent of the revenues collected
12 under this chapter shall be deposited into the special
13 fund until the balance equals \$; and

14 (3) An amount from the special fund not exceeding five per
15 cent of the total amount of outstanding loans may be
16 set by the university to be used for administrative
17 expenses incurred in administering the special fund."

18 SECTION 3. Act 111, Session Laws of Hawaii 2007, is
19 amended by amending part V, section 12 to read as follows:

20 "SECTION 12. There is appropriated out of the general
21 revenues of the State of Hawaii the sum of \$1,402,230 or so much
22 thereof as may be necessary for fiscal year 2007-2008 and the



1 [same] sum of \$ _____ or so much thereof as may be necessary
2 for fiscal year 2008-2009 to establish the fostering inspiration
3 and relevance through science and technology pre-academy
4 program, including nine full-time equivalent (9.00 FTE)
5 positions in the University of Hawaii college of engineering;
6 provided that the appropriation for fiscal year 2008-2009 shall
7 be deposited into the science and technology and education
8 special fund established under section 304A- , Hawaii Revised
9 Statutes, pursuant to Act , Session Laws of Hawaii 2008, and
10 the same sum or so much thereof as may be necessary shall be
11 appropriated out of the science technology and education special
12 fund for the purposes of this section; provided that the sums
13 appropriated shall be allocated as follows:

- 14 (1) \$314,925 for fiscal year 2007-2008 and the [same] sum
15 of \$ _____ for fiscal year 2008-2009 for the
16 robotics and problem-based, applied learning program;
17 and
18 (2) \$734,805 for fiscal year 2007-2008 and the [same] sum
19 of \$ _____ for fiscal year 2008-2009 for the
20 research experiences for teachers program.

21 The sums appropriated shall be expended by the University
22 of Hawaii for the purposes of this part."



1 SECTION 4. Act 271, Session Laws of Hawaii 2007, is
2 amended by amending sections 2 and 3 to read as follows:

3 "SECTION 2. There is appropriated out of the general
4 revenues of the State of Hawaii the sum of \$1,100,000 or so much
5 thereof as may be necessary for fiscal year 2007-2008, and the
6 sum of \$ _____ or so much thereof as may be necessary for
7 fiscal year 2008-2009 to be deposited into the Hawaii 3Ts school
8 technology laboratories fund established pursuant to section
9 302A-1314, Hawaii Revised Statutes.

10 SECTION 3. There is appropriated out of the Hawaii 3Ts
11 school technology laboratories fund the sum of \$1,100,000 or so
12 much thereof as may be necessary for fiscal year 2007-2008, and
13 the sum of \$ _____ or so much thereof as may be necessary
14 for fiscal year 2008-2009 to maintain the project EAST program
15 in existing schools and to expand the program to schools
16 statewide; provided that no funds shall be expended unless
17 matching funds are provided pursuant to section 302A-1314(p),
18 Hawaii Revised Statutes.

19 The [~~sum~~] sums appropriated shall be expended by the
20 Economic Development Alliance of Hawaii, Inc., in accordance
21 with section 302A-1314, Hawaii Revised Statutes, and implemented



1 in partnership with county economic development boards, as
2 appropriate, for the purposes of this Act."

3 SECTION 5. There is appropriated or authorized from the
4 federal temporary assistance for needy families program funds
5 the sum of \$ or so much thereof as may be necessary
6 for fiscal year 2008-2009 for the department of human services,
7 to augment, not replace, funding for STEM programs and K-12
8 creative media education programs.

9 The sum appropriated shall be expended by the department of
10 human services for the purposes of this Act.

11 SECTION 6. There is appropriated out of the general
12 revenues of the State of Hawaii the sum of \$ or so
13 much thereof as may be necessary for fiscal year 2008-2009 for
14 K-12 creative media programs.

15 The sum appropriated shall be expended by the department of
16 education for the purposes of this Act.

17 SECTION 7. The revisor of statutes shall insert the number
18 of this Act in Section 3 of this Act.

19 SECTION 8. Statutory material to be repealed is bracketed
20 and stricken. New statutory material is underscored.

21 SECTION 9. This Act shall take effect on July 1, 2008.



Report Title:

Robotics; RET; Project EAST; TANF Funds; Appropriations

Description:

Establishes the science, technology, and education special fund. Amends Act 111, SLH 2007, to redirect deposit of the fiscal year 2008-2009 appropriation into the science, technology, and education special fund. Amends Act 111 and 271, SLH 2007 by appropriating additional funds in fiscal year 2008-2009 for the support and expansion of existing STEM-related programs such as robotics, research experiences for teachers, and project EAST programs. Appropriates moneys from the federal temporary assistance for needy families program funds and from general funds for STEM programs and K-12 creative media education programs. (SB2480 SD2)

