HOUSE OF REPRESENTATIVES
TWENTY-FOURTH LEGISLATURE, 2007
STATE OF HAWAII

H.B. NO. 1939

A BILL FOR AN ACT

RELATING TO EDUCATION.

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

SECTION 1. The Legislature finds that Hawaii's desire for economic growth that benefits all residents depends on building our state's human resources.

Realization of Hawaii's longstanding desire for economic diversification and sustainability turns on applying that high-skill human resource to the creation and adoption of innovation across the economy.

Hawaii now also faces the challenge of a globally interconnected economy. Global competition will determine where a product or service is produced, where it is sold and who captures its value.

Hawaii's continued prosperity and ability to preserve its quality of life and preferred life-style depends on the state's investment in human resource and innovation as the driver of economic development and as the State's response to the challenge of globalization.

The Vision

Hawaii's economic development policy should shift toward developing its human resources and its innovation capacity.

Hawaii's human resource potential is its greatest under-utilized economic development driver. Increasing Hawaii's innovation capacity will enable its companies and citizens to compete in a global economy. Unleashing both is the key to Hawaii's future prosperity.

The two are integrally inter-related. Without high-skilled human resource, innovation will not occur or be applied. Without innovation, there will not be the demand for that human resource.

Innovation and What it Accomplishes

Innovation is the dynamic process whereby Hawaii creates and introduces new ideas and new approaches to accomplish tasks. It is the process of nurturing ideas, turning them into products or services and into value, revenues and income.

Innovation often is the result of scientific discovery - but it's more than that. It is a process which links together Hawaii's knowledge, assets and networks of human capital to transform ideas, insights and invention into new processes, products and services that capture market share.

Innovation's measurable results are new or improved products, service or production process; the opening up of a new market; the adoption of a new technology; or an improvement to a business organization or process.

Innovation is industry-agnostic; government does not pick winner or losers. Innovation applies to Hawaii's existing and new industries.

Innovation will increase Hawaii's standard of living through steady growth in productivity. Productivity growth depends on human capital and innovation capacity. Innovation increases value and income either by reducing bottom line costs – applying technology in ways that lower costs in order to compete – or by growing top line revenues through the introduction of new or differentiated products and services that command a price premium in the market.

Innovation will lead to sustainability. We will achieve increases in our gross state output with use of fewer natural resources, including land.

Innovation will lead to economic diversification. It will lead to new innovation- and knowledge-intensive companies with higher-paying jobs in areas where Hawaii has natural competitive advantages.

Innovation will grow Hawaii's traditional industries with increased productivity and higher-paying jobs. Innovation has been part of Hawaii's history: Without innovation, our sugar and pineapple industries could not have survived facing hostile trade practices on a high-cost, isolated and distant mid-Pacific land mass.

The Policy Framework

The following are 10 key interrelated policy components of a multi-year initiative to transform Hawaii's economy toward human resource development and innovation:

(1) Graduates from Hawaii's secondary education system with analytical and problem-solving skills that come from exposure to rigorous science, technology, engineering and math (STEM) education.

(2) An environment that efficiently and transparently deploys public resources to encourage the creation of products and services that are globally competitive.

(3) Regulatory and tax policies that reward productivity.

(4) A higher education system that drives human resource development and innovation.

(5) A high-skilled workforce based on individual choice and employer needs to encourage lifetime learning and skill building.

(6) An environment that encourages risk-taking and creativity.

(7) Links to innovation and creativity centers in the Asia-Pacific region that encourage the flow of people, products and ideas.

(8) Broadened access to technology tools, including wireless broadband service on all islands.

(9) Quality assurance and accountability measures, consistent with best practices as set out by credible local and national experts.

(10) Government leading innovation by example.

The above requires a fundamental re-thinking and realignment of public resources dedicated to secondary and higher education, workforce and economic development into a comprehensive framework to encourage human resource development and innovation capacity in Hawaii's economy. The success of this realignment will be nothing short of a restructuring of Hawaii's economy.

A multiple-year strategy is necessary to achieve the "innovation economy".

This Act is part of an initial package of initiatives focusing on innovation introduced for the 2007 Legislative Session. Together with its companion bills, this package begins to achieve -

A 21st Century workforce with science, technology, engineering, math and problem-solving skills sufficient to ensure innovation and sustainability of Hawaii's economy;

Higher education institutions as "drivers" for innovation;

Continued public investment in the state's innovation infrastructure;

Addressing the capital gap for Hawaii's emerging technology and creative industry companies;

Opportunities for incumbent workers to engage in life-long learning and skill-building;

Residents and businesses with international exposure, orientation and skills to interact with and compete in a global economy;

An innovation environment that encourages the creation of new products and services that command global market share; and

Analytical capability to assess policy performance and progress toward innovation economy objectives.

In particular, this Act addresses the concern that Hawaii's need for a workforce that is more skilled and competitive in science and technology is growing. Data show that due to the aging of the workforce, we will have increasingly more skilled jobs opening up in the coming years than we will have young people trained and ready to fill them.

A major problem is that our education system is not preparing an adequate number of high school graduates with the basic science, technology, engineering and math (STEM) skills needed to move easily into pre-engineering and science at either the four-year college level, or into the technology programs of the community colleges. In fact, high school students appear to be moving away from science and technology. For instance, enrollments in the college of engineering at the university of Hawaii are currently down roughly twenty-five per cent from the mid-1980s. Moreover, according to the national center for public policy and higher education, only eighteen per cent of Hawaii's eighth graders test proficient in math compared with thirty-eight per cent among the top states. In science only

fifteen per cent of Hawaii eighth graders test proficient compared with forty-one per cent among the top states.

However, over the last decade new approaches to generating higher participation and achievement by high school students in technical areas have emerged, in the form of technical academies run at selected high schools and effective contextual (learning in the context of practical applications) learning programs such as FIRST (fostering interest and respect for science and technology) robotics and project EAST. The academy model mixes high-quality instruction with practical, project-based contextual learning experiences that generate enthusiasm among students and show them the practical application of the academic skills.

In Hawaii, the pioneering academy efforts were CISCO academies, sponsored by computer network equipment giant CISCO to create a pool of computer network skilled high school graduates. Leveraging the success of the CISCO academy, the community colleges, with the department of education and the private sector, developed construction academies that created a pool of apprenticeship-ready high school graduates for the construction industry. There are now twenty-three CISCO academies and twenty-seven construction academies in operation

at high schools around the state. These academies provide both high school and college credit that meet DOE standards and college standards. Since 2000, nineteen hundred students have graduated from the CISCO academies. There are currently about one thousand students enrolled in construction academies. The Hawaii construction academy is recognized as a national best practice and has been presented at national forums such as the U.S. department of labor's annual workforce innovations meeting of the nation's employment and training community.

The successful CISCO and construction academy models have the advantage of supplementing the existing academic environment with high quality, project-based learning without taxing the resources of the existing schools as they struggle to meet the many mandates for improvement and change that they face. The academies utilize existing facilities and provide training and resource assets for the programs and faculty of their respective high school campuses. By providing high quality, standards-based instruction, they reduce the cost of remedial education usually needed to bring entering students up to college standards. Very importantly, they instill confidence in average students that they are capable of academic achievement beyond their expectations.

There are two major challenges. The first is the difficulty that practicing teachers face in keeping up with content changes that occur ever more rapidly. The second is that too many science and math classes are taught by teachers that are not qualified in these subjects, particularly in the elementary and middle schools. The center for the study of teaching has reported that the most consistent and powerful predictor of student achievement in science and mathematics was the presence of teachers who were fully certified and had at least a bachelor's degree in the subjects taught.

Innovative programs such as the one developed by the university of Hawaii college of engineering are helping to update the STEM skills and knowledge of middle school teachers and improving the curriculum for teaching STEM to students, but there is need for more flexible programs to reach more teachers.

Another important component in developing strong STEM skills is the opportunity for students to participate in an internship program at either the high school or college level. This experience greatly enhances their educational preparation and provides a clearer understanding of career possibilities. In addition to technical knowledge and skills, students acquire

experience in a professional setting and a better understanding of the expectations they will face on the job.

The final link in the education pipeline, universally recognized as critical to the success of a knowledge-based economy, is a vibrant postsecondary education system that meets not only the traditional education expectations of its citizens, but becomes a true partner in addressing the needs of the state to have a highly skilled workforce, create knowledge-based products and services, and provide the global orientation and entrepreneurial skills required to succeed in today's world. One proven way to enhance that strength is by retaining and recruiting distinguished faculty through the endowment of faculty chairs.

Recruiting more prestigious faculty will result in an improved academic and research reputation, which will further enhance the university's ability to attract top talent. Other impacts should include: increased research funding; supporting additional students and technical support staff; and, increased development of innovations and inventions that can be transferred to the private sector for commercialization.

The Legislature finds that it is crucial to address these needs. The purposes of this Act are to:

(1) Develop a manageable, expandable, comprehensive system of STEM academies and pre-academies, based on the successful CISCO and construction academy models that will focus on developing STEM skills in Hawaii's school children from middle school through high school;

(2) Increase the quality STEM teaching in Hawaii's schools through providing enhanced professional development opportunities for practicing teachers and attracting highly qualified people with STEM degrees to the teaching profession;

(3) Increase opportunities for high school and college students to gain experience through internships;

(4) Increase the number of Hawaii high school graduates seeking degrees or certificates in STEM disciplines by providing scholarships to accredited institutions of higher education in Hawaii; and

(5) Increase the quality of STEM education in Hawaii's postsecondary education institutions through the creation of endowed chairs in STEM disciplines.

SECTION 2. There is established within the university of Hawaii community college system, the statewide Hawaii excellence

through science and technology (HiEST) academy program. The program will be headed by a director and staffed by one support specialist, one secretary and a fiscal/records support position.

The purpose of the HiEST academy program shall be to increase the readiness and motivation of Hawaii high school graduates to pursue post secondary training and career options in science, technology, engineering, and math (STEM) disciplines.

The HiEST academy program shall partner with the department of education, interested high schools, and appropriate public, non-profit and private agencies, to establish individual HiEST academies at up to fourteen selected high schools throughout the state. School participation in the HiEST program shall be voluntary.

The selected high schools shall provide space on or adjacent to their campus for the academy program. All instructors in the high school academies shall be certified to teach to both department of education and community college standards and courses taught through the academies shall provide students with both high school and university of Hawaii academic credit to the maximum extent possible.

The HiEST academy program shall place priority on engaging students who are not involved in advanced placement programs, international baccalaureate programs and advanced science and mathematics programs. It is anticipated that the project will lead to better-prepared graduates, able to transfer to the colleges of their choice without the need for remediation.

The HiEST academy shall support the partnership of the university of Hawaii and the department of education in the American diploma project, which establishes a dialogue and joint curriculum assessment between teachers from high school and college. This dialogue helps ensure a smooth transition from high schools to college and improves the abilities of students to meet their educational and career objectives.

Each HiEST academy shall have a lead instructor employed by the community college system. Additional qualified instructors may be hired by the community colleges. Teachers, including those with the department of education, may also teach within the academy program after appropriate certification training by the community college system.

Each of the seven community colleges of the university of Hawaii shall endeavor to partner with two high schools on their respective islands to establish the fourteen HiEST academies statewide. Each community college shall also consult regularly with the respective county economic development boards, workforce investment boards and other stakeholders to advise them of plans and progress on development of the HiEST academies and invite input.

HiEST academies shall work with the host high school to implement the required academic programs as well as project-based, contextual learning programs designed to use and expand students' academic skills. The programs shall be designed primarily for grades eleven and twelve for math, science and technology, coupled with math development for grades nine and ten.

Each high school academy program will strive to enroll at least twenty-five per cent of the high school student body in academy programs within two years of its inception. The statewide fourteen HiEST academies shall strive to serve four thousand high school students by the end of its second year of

operation with one thousand graduating from high school and the HiEST academies per year.

The academy system shall also strive to reduce the need for math and English remediation among its graduated academy members attending post secondary training to no more than twenty per cent.

The academy shall develop performance measures to ensure that the programs conducted are contributing substantially and directly to an increase in high school graduates ultimately entering post secondary STEM programs and pursuing STEM related occupations.

SECTION 3. There is established within the university of Hawaii, the statewide fostering inspiration and relevance through science and technology (FIRST) pre-academy program. The pre-academy program shall be headed by a director and staffed by six field staff (two for Oahu, two for the island of Hawaii and one each in Kauai and Maui counties) and a secretary. When appropriate, the functions of the field staff may be contracted to qualified private or nonprofit providers.

The pre-academy program shall partner with the HiEST academies, other relevant programs within the university of Hawaii system, the department of education, interested schools in areas served by HiEST academies, and appropriate public and private agencies, to establish a program of contextual learning for middle school students in science, technology engineering and math. The program shall also provide contextual learning programs for students enrolled in the HiEST academies in cooperation with the HiEST academy staff.

The mission of the FIRST pre-academy program with respect to middle schools shall be to stimulate the interest and achievement of students in STEM skills and help prepare those students for entry into the HiEST academy program beginning in ninth grade. The mission of the pre-academy program with respect to students enrolled in the HiEST academies shall be to support and complement the HiEST academy's academic programs with contextual learning projects.

The goal of the pre-academy shall be to serve at least sixteen thousand students statewide, between sixth and twelfth grades, with contextual learning experiences in STEM-related skills. The pre-academy shall also strive to motivate and

prepare a pool of at least one thousand students per year to enter the HiEST academy program.

School participation in the FIRST pre-academy programs shall be voluntary. Selected schools shall be responsible for providing space and necessary logistical support to pre-academy programs serving the school. The staff and affiliated contextual learning and teacher training specialists of the pre-academy shall strive to tailor the mix and nature of the contextual learning projects and training for teachers to the needs of each individual school served.

To achieve its mission, the FIRST pre-academy program shall house and provide direction for a statewide robotics and space contextual learning program and a program of research experiences for teachers (RET).

The robotics and space contextual learning program shall be headed by a state coordinator and staffed by two field staff. The mission of the robotics and space contextual learning program shall be to develop STEM skills among students in FIRST pre-academy and HiEST academy programs through robotics- and space-technology-based, contextual projects and competitions.

The robotics and space contextual learning program shall work with existing programs to expand and deepen activities such as, but not limited to, NASA explorer schools, FIRST robotics, FIRST lego league, FIRST vex, botball and underwater robotics challenge.

The director and staff of the robotics and space contextual learning program shall coordinate and cooperate with the director and staff of the FIRST pre-academy and HiEST academy programs in establishing a well integrated system of STEM related, contextual learning programs under the administration of the pre-academy. The robotics and space contextual learning program shall enlist, encourage, train and support volunteer teachers and other mentors to conduct robotics and space-related programs at the school level.

The goal of the robotics and space contextual learning program shall be to involve three thousand students.

The research experiences for teachers (RET) program shall be administered by the university of Hawaii college of engineering in cooperation and coordination with the FIRST pre-academy. The purpose of the RET program shall be to support the

development of middle school teacher skills, knowledge and development of middle school curriculum materials in STEM subject areas, with a particular focus on wireless communications.

In particular, the RET program shall: educate teachers in the advances in technology in wireless communications and engineering; enhance teacher research skills through the use of software and innovative uses of equipment; provide teacher participants with hands on research experiences; support teachers in developing classroom lessons and program activities which meet their course objectives and student performance standards; and provide opportunities to share and collaborate with other teacher participants to ensure successful implementation of curricula and programs.

Specific activities of the RET programs shall include: providing on site lectures, demonstrations, and laboratory tours at the university of Hawaii and middle schools; reviewing wireless communication concepts, methods, history, and applications; reviewing engineering and relevant science concepts, research methodology, and real-world applications; reviewing key components of inquire-based teaching materials;

providing teachers with technical content support; assisting teachers in adapting state-of-the-art engineering research into a meaningful classroom experience for students; providing semi-annual video conference/seminar to transfer relevant information and experiences among teacher participants and sponsors; providing summer engineering workshop for teachers; and maintaining a website for content and program dissemination.

The director and staff of the FIRST pre-academy program shall develop additional contextual learning projects and summer STEM training programs for elementary, middle school and high school teachers. For additional contextual learning projects priority shall be given to the areas of global positioning system technology, ocean science, astronomy, earth science and wireless communications technology, and other STEM-skills stimulating subjects as appropriate.

The FIRST pre-academy shall develop performance measures to ensure that all programs conducted under the pre-academy are contributing substantially and directly to an increase in student performance in STEM academics and matriculation into the HiEST academy.

SECTION 4. There is established within the university of Hawaii, a professional development program to provide practicing elementary, middle and high school teachers of science and mathematics with opportunities to increase their knowledge and understanding of recent developments in science, technology and mathematics. The program shall be open to both certificated and non-certificated teachers. Design of the program shall include evaluation of best practices in other school jurisdictions. In recognition that the year-round public school calendar has shortened the summer period, that not all schools are on the same academic calendar, and that programs throughout the year, offered in a variety of formats, would facilitate immediate implementation in the classroom, the program shall have the following attributes:

(1) Flexibility. The program shall provide a variety of options designed to meet the specific needs of Hawaii's teachers, which may include summer institutes, a combination of summer, after school or weekend institutes, distance learning through video conferencing or other mechanisms, Neighbor Island locations, or other options.

(2) Accountability. The program shall provide a method to track the student outcomes derived from participation in the program.

The goal of the professional development program for practicing teachers is to provide training for two thousand six hundred teachers during the biennium.

SECTION 5. There is provided funding to support a successful recruitment program currently funded under the U.S. department of education transition to teaching (TTT) program that has resulted in ninety new qualified mathematics and science teachers since it began four-and-a-half years ago. The TTT program provides stipends as recruitment incentives for people who hold degrees in STEM subjects to get their teaching certificates through the university of Hawaii's post baccalaureate certificate in secondary education (PBCSE) program. The university's TTT grant will expire in 2008. There is a chronic shortage of science and mathematics teachers and the PBSCE program is an effective method to address the problem, however recruitment for potential STEM teachers is difficult and the incentive of stipends has proven effective. The goal of the program is to produce twenty new science or mathematics teachers each year.

SECTION 6. There is established within the department of business, economic development and tourism, the business/education internship and mentorship program. The purpose of this program is to establish, with the cooperation of educational institutions, intern, mentorship and other experiential learning arrangements within the business community, nonprofit sector and government, for Hawaii high school students and Hawaii high school graduates attending college in Hawaii or elsewhere. The goals of this program are to provide Hawaii students with experience in the world of work to improve their career choices, and to provide an opportunity for Hawaii employers to establish relationships with students who represent an essential source of skills for Hawaii's future economic growth and prosperity. The department may contract with appropriate government, non-profit or for-profit entities to accomplish the purpose and goals of this program.

Section 7. There is established, within the high technology development corporation, a STEM scholarship program to provide graduates of HiEST academies with scholarships to pursue STEM degrees or certificates in approved STEM disciplines. Chapter 206M, Hawaii revised statutes, is amended

by adding a new section to part I to be appropriately designated and to read as follows:

"Section 206M- STEM scholarship special fund. (a) There is established in the state treasury a fund, to be known as the STEM scholarship special fund, into which shall be deposited appropriations made by the state legislature and any funds received from other sources to support the intent of the fund.

(b) The board shall administer the fund with the advice of the Hawaii innovation council;

(c) The expenses of administering the fund shall be paid from the money in the fund;

(d) At the discretion of the board, administration of the fund may be accomplished by contracting with a qualified person, as provided in §206M-3(3), or appointing employees as provided in §206M-3(6), or a combination thereof;

(e) The treasurer of the state shall invest the money in the fund not currently needed to meet the obligations of the fund in the same manner as other public funds may be invested;

(f) Money in the fund at the end of a state fiscal year shall not revert to the state general fund;

(g) The fund shall be used to provide scholarships (up to eight semesters at an accredited institution of higher education in Hawaii) for Hawaii high school graduates who meet the following requirements:

(1) Is a resident of Hawaii;

(2) Prior to the tenth grade, agreed in writing, together with the student's custodial parents or guardian, that the student would:

(A) Graduate from a public or accredited nonpublic secondary school located in Hawaii that meets the admission criteria of an accredited institution of higher learning;

(B) Complete the STEM curriculum offered by a HiEST (Hawaii excellence through science & technology) academy;

(C) Not illegally use controlled substances (as defined in Chapter 329, Hawaii revised statutes;

(D) Not commit a crime or infraction (as defined in Chapters 329, Hawaii revised statutes; and

(E) Apply for admission and be accepted to attend an accredited institution of higher learning in the

state of Hawaii to pursue a degree or certificate in a STEM discipline; and

(3) Certifies in writing that the conditions of the written agreement as described in §206M- -(g)(2) have been met.

(h) The maximum amount of the scholarship shall be set at the tuition equivalent of a full-time student enrolled at the university of Hawaii at Manoa;

(j) The board shall adopt rules pursuant to chapter 91 to implement this section, including, but not limited to:

(1) Rules to create the agreement signed by the student and the student's custodial parents or guardian, as described in Section 206M- -(g)(2) and the certification as described in Section 206M- -(g)(3);

(2) Rules to determine which accredited institutions of higher education are included in the scholarship program;

(3) Rules to determine which degrees or certificates qualify as being defined as STEM disciplines;

(4) Rules to establish the application process to obtain the scholarship; and

(5) Rules to establish criteria for disqualification as a recipient of a STEM scholarship, including appeals procedures.

(k) The board shall include in its annual budget request sufficient funds to implement the purpose of this section."

SECTION 8. There is established, within the high technology development corporation, an eminent scholars program to be funded by the state akamai investment matching special fund to enable accredited universities in Hawaii to provide donors with an incentive in the form of matching grants for donations to establish permanently endowed faculty positions in science, technology, engineering and mathematics at any accredited university in Hawaii.

Currently, the university of Hawaii has a little over two dozen endowed chairs and distinguished professorships, with only five in non-health related STEM disciplines. There are no STEM chairs in Hawaii's other universities. All funds appropriated for the akamai investment matching program shall be deposited into the special fund and invested until the board of directors of the high technology development corporation allocates the funds to a university to match private donations on a dollar for

dollar basis. The goal is to create up to five endowed STEM chairs.

SECTION 9: Chapter 206M, Hawaii revised statutes, is amended by adding a new section to part I to be appropriately designated and to read as follows:

"Section 206M- State akamai investment matching special fund. (a) There is established in the state treasury a fund, to be known as the akamai investment matching special fund, into which shall be deposited appropriations made by the state legislature and matching private donations.

(b) The board shall administer the fund with the advice of the Hawaii innovation council;

(c) The expenses of administering the fund shall be paid from the money in the fund;

(d) At the discretion of the board, administration of the fund may be accomplished by contracting with a qualified person, as provided in §206M-3(3), or appointing employees as provided in §206M-3(6), or a combination thereof;

(e) The treasurer of the state shall invest the money in the fund not currently needed to meet the obligations of the fund in the same manner as other public funds may be invested;

(f) Money in the fund at the end of a state fiscal year shall not revert to the state general fund;

(g) The fund shall be used as a funding mechanism to create new endowed faculty chairs in science, technology, engineering and mathematics at accredited universities in Hawaii;

(h) No state appropriations deposited into the fund shall be expended unless matched by private funds on a dollar-for-dollar basis;

(i) The board shall adopt rules pursuant to chapter 91 to implement this section, including, but not limited to:

(1) Rules to determine which accredited institutions of higher education are to be included in the eminent scholars program;

(2) Rules to determine which university departments qualify as being defined as STEM disciplines;

(3) Rules to establish the application process for universities to request funding to support an endowed chair. The board shall take into consideration the following criteria before approving state matching funds to establish a position:

(A) The ability for the position to contribute to Hawaii's economic development;

(B) The ability for the position to make a significant contribution to the university's academic quality;

(C) The ability for the position to obtain significant amounts of annual research from highly competitive grant sources; and

(D) The field of the proposed position and its potential funding sources, relationship to existing research at the applying university and in the State of Hawaii, size and scope of related industries, and other relevant factors."

SECTION 10. Chapter 206M, Hawaii revised statutes, is amended by adding two new subsections to Section 206M-3.5 on annual reports to read as follows:

"Section 206M-3.5 **Annual reports.** The development corporation shall report annually to the legislature twenty days prior to the convening of the session on the impact of the program on:

(1) Increasing the awareness of the federal small business innovation research program and the number of companies submitted proposals to federal agencies;

(2) Increasing the number of phase I awards received by Hawaii businesses under the small business innovation research program; [~~and~~]

(3) Increasing the number of phase I to phase II conversions by Hawaii businesses [~~.~~];

(4) Providing STEM scholarships to graduates of HiEST academies; and

(5) Funding endowed STEM chairs at Hawaii's universities."

SECTION 11. There is appropriated from general funds the sum of $3,100,000, or so much thereof as may be necessary for FY 2007-2008 and the amount of $1,600,000 or so much thereof as may be necessary for FY 2008-2009, for establishing the HiEST academy program. The sums appropriated shall be expended by the university of Hawaii for the purposes of this Act.

SECTION 12. There is appropriated from general funds the sum of $1,115,000 or so much thereof as may be necessary for FY 2007-2008 and the amount of $1,450,000or so much thereof as may be necessary for FY 2008-2009, for establishing the FIRST academy program. Of the sums appropriated, $310,000 for FY 2007-2008 and $415,000 for FY 2008-2009, shall be expended for the robotics and space contextual learning program. Of the sums appropriated, $180,000 for FY 2007-2008 and $225,000 for FY

2008-2009, shall be expended for the research experiences for teachers (RET) program. The sums appropriated shall be expended by the university of Hawaii for the purposes of this Act.

SECTION 13. There is appropriated from general funds the sum of $325,000 or so much thereof as may be necessary for FY 2007-2008 and the amount of $650,000 or so much thereof as may be necessary for FY 2008-2009, for developing programs for professional development in STEM for practicing teachers. The sums appropriated shall be expended by the university of Hawaii for the purposes of this Act.

SECTION 14. There is appropriated from general funds the sum of $300,000 or so much thereof as may be necessary for FY 2007-2008 and the amount of $300,000 or so much thereof as may be necessary for FY 2008-2009, for providing stipends to attract STEM graduates to the university of Hawaii post baccalaureate certificate in secondary education program. The sums appropriated shall be expended by the university of Hawaii for the purposes of this Act.

SECTION 15. There is appropriated from general funds the sum of $100,000 or so much thereof as may be necessary for fiscal year 2007-2008, and $100,000 or so much thereof as may be necessary for fiscal year 2008-2009, for the business and

education internship and mentorship program. The sums appropriated shall be expended by the department of business, economic development, and tourism for the purposes of this Act.

SECTION 16. There is appropriated from general funds the sum of $1,850,000 or so much thereof as may be necessary for fiscal year 2007-2008, and $2,750,000 or so much thereof as may be necessary for fiscal year 2008-2009, for the state akamai investment matching special fund. The sums appropriated shall be expended by the university of Hawaii for the purposes of this Act.

SECTION 17. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 18. This Act shall take effect on July 1, 2007.

INTRODUCED BY: _____

JAN 24 2007

Report Title:
Innovative Education Programs

Description:
Establishes new and innovative education programs to take advantage of the human resources of the state.