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SENATE RESOLUTION

REQUESTING THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION AND LEEWARD COMMUNITY COLLEGE TO STUDY THE FEASIBILITY OF ESTABLISHING TECHNOLOGY ACADEMY PROGRAMS AT AIEA HIGH SCHOOL AND PEARL CITY HIGH SCHOOL.

WHEREAS, the economic disruption caused by the coronavirus disease 2019 pandemic has illustrated a need to diversify Hawaii's economy beyond tourism; and

WHEREAS, despite the federal government continuing to provide billions of dollars to individual states for the purpose of developing economic diversity, Hawaii has failed to lobby sufficiently for such funds even with the current dire state of the economy; and

WHEREAS, significant progress has been made in the past years through programs supported by federal and state initiatives, administered by the Hawaii Technology Development Corporation, however, more is required to move Hawaii's technology industry to achieve local technology commercialization; and

WHEREAS, innovation in science and technology fields will support the State's sustainable economic development goals to include a viable and vibrant technology labor force; and

WHEREAS, economic growth that benefits all Hawaii residents depends on enhancing the State's human resources, and providing students with the necessary knowledge, skills, and experience to enter an industry they wish to be a part of is an integral part of developing these human resources; and

WHEREAS, over the last two decades, approaches to generate higher participation and achievement by high school students in the area of technology have emerged in Hawaii and throughout the United States in the form of technical academies run at selected high schools; and

WHEREAS, the technical academies offer effective contextual learning, learning in the context of practical applications, and programs such as project EAST (environmental and spatial technology) and the foster interest and respect for science and technology (FIRST) robotics; and

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WHEREAS, the applied learning academy model mixes highquality instruction with practical, project-based contextual learning experiences that generate enthusiasm among students and show them the practical application of academic skills; and

WHEREAS, to further ensure the success of Hawaii's students in the area of technology and to decrease the State's dependence on tourism, the State must continue to provide its students with appropriate educational opportunities and organizational environments in which innovative educational programs, particularly in the fields of science, technology, and engineering are offered to develop the necessary skills, knowledge, and experience, as well as nurture the students' growth; now, therefore,

BE IT RESOLVED by the Senate of the Thirty-first Legislature of the State of Hawaii, Regular Session of 2021, that the Hawaii Technology Development Corporation and Leeward Community College are requested to study the feasibility of establishing technology academy programs at Aiea High School and Pearl City High School to be administered by Leeward Community College in partnership with the Department of Education; and

BE IT FURTHER RESOLVED that the purpose of the technology academy programs should be to:

(1) Motivate and engage students in the fields of science, technology, and engineering;

(2) Provide the students with effective contextual learning, learning in the context of practical applications, and programs, with focus on the most indemand knowledge, skills, and experience in the fields of science, technology, and engineering, that would enable them to pursue post-secondary training and career options in science, technology, and engineering

disciplines, including but not limited to knowledge, skills, and experience in alternative energy; dual use technology, which refers to technology that can be used for both peaceful and military aims; artificial intelligence; machine learning; data science and analytics; data engineering; data visualization; network and information security (cybersecurity); cloud computing; extended reality including virtual reality and augmented reality; internet of things; user interface and user experience design; mobile development; blockchain; quantum computing; and various programming languages; and

(3) Offer early college credits designed to be accepted at colleges and universities in the United States, including the University of Hawaii system; and

BE IT FURTHER RESOLVED that the Hawaii Technology Development Corporation and Leeward Community College, in collaboration with the Department of Education, are requested to submit a report of their findings and recommendations, including any proposed legislation, to the Legislature no later than twenty days prior to the convening of the Regular Session of 2022, including discussion of the following:

- (1) The technology academy programs' admissions process and student qualifications;
- (2) The technology academy programs' programs and curriculum;
- (3) The estimated costs and personnel necessary to establish, implement, and maintain the technology academy programs;
- (4) The structure by which the technology academy programs could offer early college credits acceptable at colleges and universities in the United States, including the University of Hawaii system; and
- (5) Any other matters the Hawaii Technology Development Corporation, Leeward Community College, and the

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Department of Education deem appropriate for the successful establishment, implementation, and operation of the technology academy programs at Aiea High School and Pearl City High School; and

BE IT FURTHER RESOLVED that certified copies of this Resolution be transmitted to the Director of Business, Economic Development, and Tourism; Executive Director of the Hawaii Technology Development Corporation; President of the University of Hawaii System; Chancellor of Leeward Community College; Chairperson of the Board of Education; and Superintendent of Education.

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