

MAR 08 2019

SENATE RESOLUTION

REQUESTING THE DEPARTMENT OF EDUCATION TO CONVENE A WORKING
GROUP TO IDENTIFY THE MOST RELEVANT FACTORS THAT HINDER
PUBLIC SCHOOLS IN THEIR DEVELOPMENT OF ROBOTICS PROGRAMS.

1 WHEREAS, robots and robotic technologies represent a
2 practical application of physics, computer science, engineering,
3 and mathematics and provide a very powerful and flexible
4 approach to demonstrate a variety of engineering concepts; and
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6 WHEREAS, robotics appeals to a broad range of interests and
7 allows multiple points of access to science, technology,
8 engineering, and mathematics for many types of learners; and
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10 WHEREAS, robotics technology and robots are being used by
11 an increasing number of educators at the college level to
12 reinforce computer science and engineering theory and to teach
13 basic software and mechanical engineering at the elementary,
14 middle, and high school levels; and
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16 WHEREAS, robots and robotic technology catalyze an interest
17 in science and increase self-esteem, as well as teach basic life
18 skills such as problem solving, decision making, goal setting
19 and logical thinking; and
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21 WHEREAS, Hawaii can serve as a model of coordination of a
22 full range of robotics education opportunities from elementary
23 through college and provide templates for initiating such
24 efforts elsewhere; and
25

26 WHEREAS, many Hawaii schools have robotics teams, but there
27 are still many constraints on funding, resources, and
28 instructors that prevent some schools from building robotics
29 programs and recruiting students; and
30

31 WHEREAS, in order to improve science education in the State
32 and increase opportunities for students to participate in
33 robotics, it is necessary to identify the most relevant factors
34 that hinder public schools from developing successful and
35 thriving robotics programs; now, therefore,



1
2 BE IT RESOLVED by the Senate of the Thirtieth Legislature
3 of the State of Hawaii, Regular Session of 2019, that the
4 Department of Education is requested to convene a working group
5 to identify the most relevant factors that hinder public schools
6 in their development of robotics programs; and
7

8 BE IT FURTHER RESOLVED that the working group is requested
9 to evaluate the following:

- 10
11 (1) The current state of robotics in Hawaii from
12 kindergarten to post-secondary education;
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14 (2) The feasibility of offering robotics within school
15 curricula;
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17 (3) The feasibility of creating science, technology,
18 engineering, and math (STEM) grant-writer positions in
19 public schools; and
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21 (4) Other relevant issues as determined by the working
22 group; and
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24 BE IT FURTHER RESOLVED that the working group is requested
25 to include the following members:

- 26
27 (1) A STEM specialist from the Department of Education;
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29 (2) Assistant Dean of the College of Engineering at the
30 University of Hawaii at Manoa;
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32 (3) A representative from Project Lead the Way;
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34 (4) The Statewide Coordinator for VEX Robotics, or the
35 Coordinator's designee;
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37 (5) The Statewide Coordinator for First Robotics, or the
38 Coordinator's designee;
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40 (6) The Statewide Coordinator for MATE ROV, or the
41 Coordinator's designee; and
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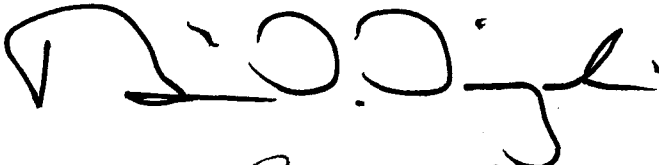
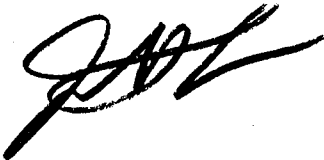


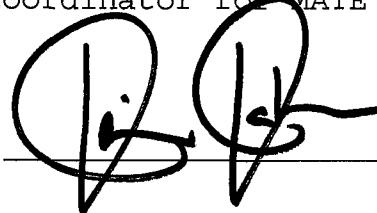
1 (7) A School Robotics Coordinator from the islands of
 2 Kauai, Lanai, Maui, Molokai, Oahu, and Hawaii Island;
 3 and
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5 BE IT FURTHER RESOLVED that the working group is requested
 6 to submit a report of its findings and recommendations,
 7 including any proposed legislation, to the Legislature no later
 8 than twenty days prior to the convening of the Regular Session
 9 of 2020; and
 10

11 BE IT FURTHER RESOLVED that certified copies of this
 12 Resolution be transmitted to the Chairperson of the Board of
 13 Education, Superintendent of Education, Assistant Dean of the
 14 College of Engineering at the University of Hawaii at Manoa,
 15 President and Chief Executive Officer of Project Lead the Way,
 16 Statewide Coordinator for VEX Robotics, Statewide Coordinator
 17 for First Robotics, and Statewide Coordinator for MATE ROV.
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 20

OFFERED BY:


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