



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

Date: 03/23/2016
Time: 02:00 PM
Location: 309
Committee: House Education

Department: Education

Person Testifying: Kathryn S. Matayoshi, Superintendent of Education

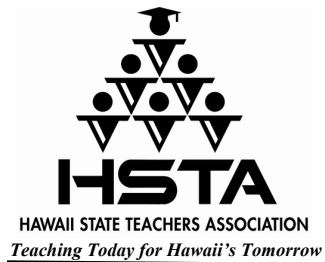
Title of Resolution: HCR 074 URGING THE DEPARTMENT OF EDUCATION TO INCLUDE NEIGHBOR ISLAND SCHOOL COMPLEXES IN HEAT ABATEMENT STUDIES, USE SCIENTIFIC DATA AND METHODS TO DETERMINE HEAT ABATEMENT PRIORITY RANKINGS OF SCHOOLS, AND INCREASE TRANSPARENCY IN THE METHODOLOGY USED TO DETERMINE PRIORITY RANKINGS.

**Purpose of
Resolution:**

Department's Position:

The Department of Education (DOE) supports this concurrent resolution and would like to assure members of the House of Representatives that it currently is using scientific data and methods to address the highest priority schools throughout the state. The DOE uses internal and external temperature data, including national weather station data, for its analysis and planning. The DOE is currently engaging experts and using standards developed both at the local and national level.

Thank you for the opportunity to provide testimony.



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Corey Rosenlee
President
Justin Hughey
Vice President
Amy Perruso
Secretary-Treasurer
Wilbert Holck
Executive Director

TESTIMONY BEFORE THE HOUSE COMMITTEE ON EDUCATION

RE: HCR 74/HR 37 - URGING THE DEPARTMENT OF EDUCATION TO INCLUDE NEIGHBOR ISLAND SCHOOL COMPLEXES IN HEAT ABATEMENT STUDIES, USE SCIENTIFIC DATA AND METHODS TO DETERMINE HEAT ABATEMENT PRIORITY RANKINGS OF SCHOOLS, AND INCREASE TRANSPARENCY IN THE METHODOLOGY USED TO DETERMINE PRIORITY RANKINGS.

WEDNESDAY, MARCH 23, 2016

COREY ROSENLEE, PRESIDENT
HAWAII STATE TEACHERS ASSOCIATION

Chair Takumi and Members of the Committee:

The Hawaii State Teachers Association **strongly supports HCR 74/HR 37**, urging the Department of Education to include neighbor island school complexes in heat abatement studies, used scientific data and methods to determine heat abatement priority rankings of schools, and increase transparency in the methodology used to determine priority rankings.

It's getting hot in Hawai'i. According to the National Weather Service, our state set over 50 high temperature records this summer, with the heat and humidity lingering well into the start of fall. In our schools, children and teachers alike became ill from the blistering conditions. Kalaheo High School science teacher Micah Pregitzer recorded temperatures as high as 108 degrees inside his classroom last August, telling reporters, "You're dripping in sweat when you're just sitting there grading papers by yourself with no students in the room. You get the room packed with 36, 38, sometimes 40 students, and it just boosts that temperature up even higher."

A recent study conducted by University of California at Los Angeles researchers showed that the percentile gap between students learning in air conditioned and



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non-air-conditioned environments can reach as much as 17 percent on achievement tests, clearly evincing the impact of a comfortable classroom environment on student success. In a longitudinal analysis contained in “Effects of the Physical Environment on Student Learning,” moreover, Glen I. Earthman of Virginia Polytechnic Institute and State University found that students between 4th and 9th grade at demographically similar schools showed increased gains in reading vocabulary, total math, problem solving, math procedures, pre-writing, and editing at schools with air conditioning, as compared with peers from non-cooled schools. Earthman demonstrated that the longer and more consistently students are exposed to classroom cooling, the better and more stable their performance gains tend to be. Conversely, students exposed to thermal conditioning for only short or intermittent periods of time achieved less than their peers. These findings are supported by U.S. Department of Education sponsored research, which claims that proper cooling systems lead to better attitudes toward learning, fewer disciplinary problems, and sustained achievement.

We applaud Gov. David Ige’s call to cool 1,000 classrooms within the next two years. While previous department of education estimates put the cost of comprehensive air conditioning at \$1.5 billion, that figure has been fallen as investments in experiments with renewable energy technology have proven fruitful. Furthermore, in conversations with photovoltaic companies, advocates for cool schools have learned that employing off-grid DC-powered air conditioners, operated entirely from photovoltaic modules that store energy in power-saving batteries, could cost between \$15,000 to \$30,000 per classroom, a savings of approximately 70 percent from earlier departmental projections (discounting a monthly lease per-classroom payment that could be offset by the department's ongoing and all-encompassing renewable energy savings).

Yet, a number of questions remain about comprehensive classroom cooling, including: how are school rankings determined and using what technology, and to what extent are neighbor island schools represented in heat abatement disbursements? These questions deserve answers. To improve heat abatement implementation and, in turn, boost student learning, the Hawaii State Teachers Association asks your committee to **support** this resolution.

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, March 23, 2016 1:09 PM
To: EDNtestimony
Cc: waiukahenutz@gmail.com
Subject: Submitted testimony for HCR74 on Mar 23, 2016 14:00PM

LATE

HCR74

Submitted on: 3/23/2016

Testimony for EDN on Mar 23, 2016 14:00PM in Conference Room 309

Submitted By	Organization	Testifier Position	Present at Hearing
Carol Yurth	Individual	Support	No

Comments: I work for the DOE on Hawaii Island and my job takes me to 8 schools. The outer islands are so often left out of the consideration. The heat was Statewide and Hawaii Island had students that suffered from heat stroke, fainting and headaches. Please make sure to consider having all islands be a part of any study. Carol W. Yurth

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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