



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

**Date:** 04/02/2014

**Committee:** House Finance

**Department:** Education

**Person Testifying:** Kathryn S. Matayoshi, Superintendent of Education

**Title of Bill:** SB 2424,SD2(hscr997-14) RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL FACILITIES.

**Purpose of Bill:** Requires the department of education and department of accounting and general services, in consultation with the Hawaii state energy office of the department of business, economic development, and tourism and the Hawaii natural energy institute of the University of Hawaii, to develop a cooling master strategy and comprehensive study for the public schools and to report findings to the 2015 regular session of the legislature. Authorizes general obligation bonds and appropriates funds for efficient air conditioned classroom demonstration projects. (SD2)

**Department's Position:**

The Department of Education (Department) supports this bill. This bill provides the Department greater flexibility in developing a strategy for the cooling of classrooms. The Department understands the very strong desire to have a comfortable learning environment, as well as the importance of addressing all facility needs. To achieve a balance, the Department is looking into a variety of energy efficient cooling alternatives. One initiative is the Energy Efficiency and Sustainability Master Plan which will develop sustainability guidelines to address issues as this one.

Thank you for the opportunity to provide testimony on this bill.



STATE OF HAWAII  
DEPARTMENT OF ACCOUNTING  
AND GENERAL SERVICES  
P.O. BOX 119  
HONOLULU, HAWAII 96810-0119

WRITTEN TESTIMONY  
OF  
DEAN H. SEKI, COMPTROLLER  
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES  
TO THE  
HOUSE COMMITTEE  
ON  
FINANCE  
ON  
April 2, 2014

S.B. 2424, S.D. 2

RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL FACILITIES

Chair Luke and members of the Committee, thank you for the opportunity to submit written testimony on S.B. 2424, S.D. 2.

The Department of Accounting and General Services (DAGS) supports the intent of S.B. 2424, S.D. 2 and will assist the Department of Education (DOE) in developing a master strategy for cooling all public school facilities and conducting a comprehensive study if requested to do so.

However, we would like the Committee to note that:

1. DAGS is not involved in the operations of any DOE school facilities; and
2. Pursuant to Act 51, Session Laws of Hawaii 2004, DAGS is not involved in the management of any planning or design phases for any DOE school facility projects.

Thank you for the opportunity to submit written testimony on this matter.



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

**NEIL ABERCROMBIE**  
GOVERNOR

**RICHARD C. LIM**  
DIRECTOR

**MARY ALICE EVANS**  
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804  
Web site: [www.hawaii.gov/dbedt](http://www.hawaii.gov/dbedt)

Telephone: (808) 586-2355  
Fax: (808) 586-2377

Statement of  
**RICHARD C. LIM**  
Director  
Department of Business, Economic Development, and Tourism  
before the  
**HOUSE COMMITTEE ON FINANCE**

Wednesday, April 2, 2014  
2:00 p.m.

State Capitol, Conference Room 308

in consideration of  
**SB 2424, SD2**

**RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL FACILITIES.**

Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports S.B. 2424, SD2 requiring the Department of Education and Department of Accounting and General Services, in consultation with DBEDT and the Hawaii Natural Energy Institute of the University of Hawaii, to develop a cooling master strategy and comprehensive study for the public schools and to report findings to the 2015 regular session of the legislature assuming an adequate level of funding is provided and that its passage does not replace or adversely impact priorities indicated in our Executive Budget.

We estimate that this effort will require additional funds to carry out this measure. We believe that considerable work has already been done, including but not limited to, examining building baselines, identifying energy efficiency measures implemented and additional measures possible, benchmarking and auditing buildings and facilities, and identifying financing and repayment options given the energy savings to be achieved.

Thank you for the opportunity to provide this testimony.



# UNIVERSITY OF HAWAII SYSTEM

## Legislative Testimony

---

Written Testimony Presented Before the  
House Committee on Finance  
Wednesday, April 2, 2014 at 2:00 p.m.

by

Richard Rocheleau, Director  
Hawai'i Natural Energy Institute  
School of Ocean and Earth Science and Technology  
University of Hawai'i at Mānoa

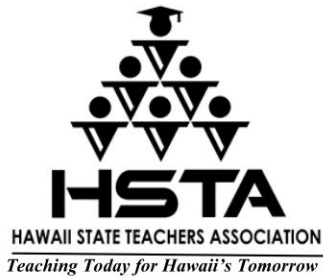
### SB 2424 SD2 – RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL FACILITIES

Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee:

My name is Richard Rocheleau, Director of the Hawai'i Natural Energy Institute at the University of Hawai'i at Mānoa (HNEI). I support the intent of SB 2424 SD2, which requires the Department of Education (DOE) and the Department of Accounting and General Services, in consultation with the Department of Business Economic Development and Tourism and HNEI, to develop a master strategy for cooling all public school facilities, conduct a comprehensive study and report their findings and recommendations to the 2015 Legislature.

HNEI is currently partnering with the DOE to develop a facility assessment protocol to guide the design of comfortable learning environments with reduced energy consumption, with the ultimate objective of producing design guidelines that would be applicable to DOE facilities statewide. This project is funded by the DOE, barrel tax funds and federal funds.

Thank you for the opportunity to testify.



1200 Ala Kapuna Street ♦ Honolulu, Hawaii 96819  
Tel: (808) 833-2711 ♦ Fax: (808) 839-7106 ♦ Web: www.hsta.org

TESTIMONY BEFORE THE HOUSE COMMITTEE  
ON FINANCE

Wil Okabe  
President  
Joan Kamila Lewis  
Vice President  
Colleen Pasco  
Secretary-Treasurer  
Alvin Nagasako  
Executive Director

DATE: WEDNESDAY, APRIL 2, 2014

RE: S.B. 2424, SD2 - RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL FACILITIES

PERSON TESTIFYING: WIL OKABE  
HAWAII STATE TEACHERS ASSOCIATION

The Honorable Chair Sylvia Luke and Members of the Committee:

HSTA is the exclusive representative of more than 13,500 public and charter school teachers statewide. As the state affiliate, of the 3.2 million members of the National Education Association, HSTA believes that air conditioned schools improve the health, safety, and performance of students and staff members.

Hawaii's public school classrooms are hot, at times exceeding 100 degrees. When students and teachers try to keep cool without the benefit of air conditioning, classroom environments become unbearable. Teachers must resort to turning off lights, installing noisy fans (often with their own money), and granting frequent water breaks--assuming there is a water fountain available on campus. Some schools are rotating students into air conditioned libraries or computer labs to cool off, with others changing the day's lessons to avoid heat fatigue.

Studies show that the achievement gap between air conditioned and non-air-conditioned environments is greater than 10 points on achievement tests. In his longitudinal analysis, "Effects of the Physical Environment on Student Learning," 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, when compared with peers from schools that lack AC. Moreover, Earthman demonstrated that the longer and more consistently students are exposed to air conditioning, the better and more stable their performance gains tend to be. Conversely, students exposed to air conditioning for only short or intermittent periods of time demonstrated lower achievement levels compared to their peers. According to the U.S. Department of Education, proper thermal conditioning systems lead to better attitudes toward learning, fewer disciplinary problems, and sustained achievement. Previous DOE estimates of the cost to provide air conditioning at all schools currently lacking such systems have soared past \$1.5 billion. Thus, if

policymakers' goal is to improve air conditioning facilities system wide, crafting a long-term fiscal plan of action is imperative.

HSTA further contends that the community, students, and education employees must be involved in the development of plans to modernize and manage academic environments. Put simply, if we want our children to believe that school is cool, we must make that their classrooms are, too.

Thank you for the opportunity to testify in **support of SB 2424, SD2**.

**finance1**

---

**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, April 01, 2014 9:51 AM  
**To:** FINTestimony  
**Cc:** jennifer\_whitted@notes.k12.hi.us  
**Subject:** Submitted testimony for SB2424 on Apr 2, 2014 14:00PM  
**Attachments:** photo (9).JPG

**SB2424**

Submitted on: 4/1/2014

Testimony for FIN on Apr 2, 2014 14:00PM in Conference Room 308

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jennifer Whitted	Kaunakakai Elementary School	Support	No

Comments: Hundreds of students are expected to learn in classrooms where temperatures soar into the upper 80's and 90's on a regular basis while a handful of administrative staff work in cool offices. Priorities need to be re-evaluated, how can we expect students to be focused on their education when all they can think about is how hot they are? Thousands of dollars have been spent on new curriculums, Danielson & Edison trainings, etc to help make Hawaii Schools better, why not start by giving everyone the appropriate environment to learn in.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email [webmaster@capitol.hawaii.gov](mailto:webmaster@capitol.hawaii.gov)

841 Bishop St., Suite 301  
Honolulu, Hawaii 96813



Telephone: 808 926-1530  
Contact@HEECoalition.org

Committee on Finance  
Representative Sylvia Luke, Chair  
Representative Scott Nishimoto, Vice Chair  
Representative Aaron Johanson, Vice Chair

April 2, 2014

Dear Chair Luke Vice Chairs Nishimoto and Johanson, and Committee Members:

This testimony is submitted in support for SB2424 SD2, which requires the development of a cooling master strategy and comprehensive study for the public schools.

The Hui for Excellence in Education (HE'E) is a diverse coalition of over 40 parent and community organizations dedicated to improving student achievement by increasing family and community engagement and partnerships in our schools. Our member list is attached.

Our members agree that students learn best in environments that are comfortable. We have heard that at some schools, the heat is so distracting that students and teachers are not able to concentrate. We have also heard from DOE personnel that air-conditioning schools is a complex and expensive task, particularly because our school facilities are aging and were not originally designed to have air-conditioning. Therefore, we support the coordinated effort of DOE and DAGS working collaboratively with other state agencies to identify the costs and recommend a financial plan for implementation.

Thank you for the opportunity to testify and for your consideration. Our support of this bill represents a 75% consensus or more of our membership.

Sincerely,

Cheri Nakamura  
HE'E Coalition Director



HE'E Member List

Academy 21  
After-School All-Stars Hawaii  
Alliance for Place Based Learning  
\*Castle Complex Community Council  
Center for Civic Education  
Coalition for Children with Special Needs  
\*DOE Windward District  
\*Faith Action for Community Equity  
Fresh Leadership LLC  
Girl Scouts Hawaii  
\*Good Beginnings Alliance  
Harold K.L. Castle Foundation  
\*Hawaii Appleseed Center for Law and Economic Justice  
Hawai'i Athletic League of Scholars  
\*Hawai'i Charter School Network  
\*Hawai'i Nutrition and Physical Activity Coalition  
\*Hawaii State PTSA  
Hawai'i State Student Council  
Hawai'i State Teachers Association  
Hawai'i P-20  
Hawai'i 3Rs  
Head Start Collaboration Office  
It's All About Kids  
\*INPEACE  
Joint Venture Education Forum  
Junior Achievement of Hawaii  
Kamehameha Schools  
Kanu Hawai'i  
Keiki to Career  
Kupu A'e  
\*Leaders for the Next Generation  
Learning First  
McREL's Pacific Center for Changing the Odds

Our Public School  
\*Pacific Resources for Education and Learning  
\*Parents and Children Together  
\*Parents for Public Schools Hawai'i  
Punahou School PUEO Program  
Teach for America  
The Learning Coalition  
US PACOM  
University of Hawai'i College of Education  
YMCA of Honolulu  
Voting Members (\*)

April 1, 2014

Dear Chair Luke, Vice Chair Johanson, Vice Chair Nishimoto, and honorable members of the House Finance Committee,

My name is Mark Adato, and I have spent the last several years teaching at James Campbell High School in Ewa Beach, and I would start each day sweating before the first bell rang. The temperatures in my classroom were staggering – on the worst of days, it would register into the 90's. Trying to teach a classroom full of 30-40 ancy teenagers, especially in a challenging community where there are more than enough obstacles to future success, is difficult enough. Setting up a learning environment for students that doesn't even meet basic human needs is counterintuitive and wrong, and there are many teachers who have this problem.

No other group of people would be expected to work in these sorts of conditions. In Guam, a country much less developed than us, they have passed a law that any classroom above 72 degrees must be air-conditioned. Surely we can set similar standards here in the United States. There is much data surrounding the drop in student performance associated with exhaustive temperatures, but it is truly a matter of common sense to see the need.

I understand that there are always challenges to finding the money to initiate any project at the state government level. There are many buckets to fill, and everyone's need is their top priority. The money does end up getting distributed, though, and the way it is distributed in the end is reflective of the priorities of the Legislature. I ask you to please prioritize the basic needs of nearly 200,000 students in the state of Hawai'i in their work to become successful and productive people just as I and many, many other educators have done. SB2424 has unilateral support from the Department of Education, the Hawaii State Teachers Association, and teachers on the ground alike. Please support this common sense measure to improve the quality of education in Hawai'i.

Sincerely

Mark Adato  
STEM Resource Teacher  
Hawai'i Department of Education

**finance1**

---

**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, April 01, 2014 9:15 AM  
**To:** FINTestimony  
**Cc:** burgharc@gmail.com  
**Subject:** Submitted testimony for SB2424 on Apr 2, 2014 14:00PM

**SB2424**

Submitted on: 4/1/2014

Testimony for FIN on Apr 2, 2014 14:00PM in Conference Room 308

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
cheryl	Individual	Support	No

Comments: As an individual taxpayer and teacher of students in a DOE school, I strongly support this bill. Students and the people who work with them are entitled to work in a safe and healthy environment.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email [webmaster@capitol.hawaii.gov](mailto:webmaster@capitol.hawaii.gov)

My name is Chanelle Tolentino and I am a public school teacher at Ilima Intermediate in Ewa Beach. My students will be attending Campbell High School in 2 years, and I am writing in support of SB2424 because I believe air conditioning will help create a learning environment that will help them learn.

Many of my students walk to school and back home every day at least half a mile each way. They come to school already sweaty and tired from the walk before school has even begun. Coming to school and sitting in an often crowded classroom (most Campbell class sizes are at least 30 students, some class sizes are up to or above 40 students) with the west side heat makes it difficult for students to feel comfortable and refreshed to do the demanding work they have. If we want our students to perform well as a state, it is important to give them the best learning environment for them to succeed. This year, students have been bombarded with testing, new Common Core standards requiring them to read complex texts and write in every content area. Given all the new initiatives and expectations our students have to abide by this and in the upcoming years, we should invest in helping them at least enjoy their working environment.

Students will also be in class longer since instructional hours are increasing. Students will be spending a lot of their time indoors doing more rigorous writing and thinking. Requiring them to stay in class longer is difficult as it is. If we could make the learning environment just a little easier for them, it would help. If students can enjoy their classroom environment more, it will help them think clearly instead of feeling irritated from the heat. We need every opportunity for our students to think clearly and stay focused because of the amount of work they have to do, and the standards we want them to meet. Air conditioning will ameliorate at least one of the barriers that make it difficult for them to focus in class.

Of all the other many reasons why air conditioning will help student achievement, here are the two I believe are worth considering. Please think about the resources we can use to help our students succeed in addition to raising the expectations for their success. They should go hand in hand.

Thank you for all you do,

“Mrs. Tolentino”

**finance1**

---

**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, April 01, 2014 8:05 AM  
**To:** FINTestimony  
**Cc:** denis2654@hawaiiantel.net  
**Subject:** Submitted testimony for SB2424 on Apr 2, 2014 14:00PM

**SB2424**

Submitted on: 4/1/2014

Testimony for FIN on Apr 2, 2014 14:00PM in Conference Room 308

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lawrence Denis III	Individual	Support	No

Comments: Aloha from Waikoloa. I have been a Public School teacher for the past 10 years. I have taught in very hot classrooms that no legislator or politician would want to work in. Why do we subject our students to this kind of environment? I urge you to SUPPORT SB2424 and do what is right for our Keiki. Mahalo!

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.

Do not reply to this email. This inbox is not monitored. For assistance please email [webmaster@capitol.hawaii.gov](mailto:webmaster@capitol.hawaii.gov)

**finance1**

---

**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, April 01, 2014 8:35 AM  
**To:** FINTestimony  
**Cc:** robynfaumuina@yahoo.com  
**Subject:** Submitted testimony for SB2424 on Apr 2, 2014 14:00PM

**SB2424**

Submitted on: 4/1/2014  
Testimony for FIN on Apr 2, 2014 14:00PM in Conference Room 308

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Robyn Faumuina	Individual	Support	No

Comments: As a teacher at Nanakuli High and Intermediate School, I, on behalf of the teachers here, are in support of this bill. As you know, the Leeward coast is a dry environment and this makes for very uncomfortable conditions in the classroom. The inside of the classroom can often get up to 96 degrees or more, on humid days, it is even more intense. Our students deserve to have a learning environment that makes it easy for them to succeed; the students here struggle enough with academic and personal problems that make learning and achieving a challenge, factor in the unbearable classroom conditions and this becomes an even bigger task! Finally, as a teacher with a disability that is affected by the heat, having air conditioning in the classrooms would lessen my symptoms and help me work to my full capacity on a daily basis, oftentimes when it is very hot, I end up missing work because of the nature of my illness (Multiple Sclerosis). I thoroughly enjoy working in this community as it is my community of origin, and I would like to continue here for as long as it remains possible. The students in the area deserve to have comfortable climates within the classroom so that they are able to work to the best of their ability everyday, not just on cool, breezy days, which out here, are few and far between. Thank you for your consideration.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email [webmaster@capitol.hawaii.gov](mailto:webmaster@capitol.hawaii.gov)

To: Chairperson Sylvia Luke  
Members of the House Committee on Finance  
From: Corey Rosenlee

Subject: Support for SB2424, RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL FACILITIES

My name is Corey Rosenlee and I am a teacher at Campbell High School. I strongly support SB2424. A hundred years ago during the industrial revolution children as young as five worked in hot and crowded conditions known as sweatshops. And legislators a hundred years ago decided that putting children into those kind of conditions were morally wrong and created laws to stop these practices. Now here we are a hundred years later, and our children, some as young as five still have to learn in hot and crowded conditions and it is time to stop sweatshop learning in Hawaii. Across the state these are our learning conditions. At Campbell this year we recorded a room reaching 95 degrees, add to the humidity in the room the heat index was a 120 degrees. If you were a parent and in Hawaii you left your child in a car at those temperatures they would arrest you, but in Hawaii dropping off your child to learn in that environment is not only not illegal it is normal. But this is wrong. This year we have tried to bring to this legislature our conditions. We have had two massive rallies with over a 1000 students, teachers, parents and community members. This past fall students and teachers from across the state wrote hundreds of letters to share with you our conditions. Please don't ignore us anymore. How many students and children will it take before we do something? How bad do the conditions need to get? How hot? How dangerous? Across the US this year from Illinois, to Wisconsin, to Colorado, schools were being closed when they reached the high 80's. Now I have heard it is only hot in Hawaii part of the time, but in Hawaii, a place that also gets colder during the winter they raised taxes to put ac in all of their classrooms. In Hawaii we air condition this legislature, our major private schools, even our prisons. Don't our children deserve a quality learning environment.

Many education experts and legislators would agree that our classrooms need air conditioning, and because of this all new schools in Hawaii are built with ac. The question is what to do with the approximately 240 schools that do not have ac, while we may agree that ac is important the cost has always been prohibitive with price ranges of 1 billion to 1.7 billion to ac all of Hawaii's classrooms, or \$115,000-\$250,000 per classroom. Much of the expense is to upgrade the electrical system at our schools which on average are 65 years old, and to insulate the rooms to avoid high electrical bills. After much research I believe we can bring down the cost of air conditioning Hawaii's classrooms by 90% by installing photovoltaic air conditioning. The pv ac works by installing pv on the roof of the classroom which then goes to a battery pack which powers the ac unit. Putting two ac units in a classrooms would cost between \$15,000-\$25,000. This is new technology and I hope this bill will test this technology out and if it works, as I believe it will, to implement in Hawaii's classrooms.

Please pass SB2424 and give our students a quality learning environment. Thank you.

**finance1**

---

**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Tuesday, April 01, 2014 12:29 PM  
**To:** FINTestimony  
**Cc:** sm.yamauchi@gmail.com  
**Subject:** Submitted testimony for SB2424 on Apr 2, 2014 14:00PM

**SB2424**

Submitted on: 4/1/2014

Testimony for FIN on Apr 2, 2014 14:00PM in Conference Room 308

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
SHIRLEY YAMAUCHI	Individual	Support	Yes

Comments: My name is Shirley Yamauchi and I am a teacher at Kapolei Middle School, Leeward District. I strongly support SB2424. When I was hired at Kapolei Middle School, back on August 11, 2000, many congratulated me and commented with, "that school is air conditioned." Kapolei Middle had just entered it's second year of operation and was still considered to be very new. I had spent one semester of student teaching at W.R. Farrington High School, in Honolulu, Hawaii, previous to my hiring date. I will not forget my Japanese language class there, next to the freeway, windows closed. The rain gutters to my building were stolen and we were forced to keep the windows closed, to keep out the rain and the traffic noise. The conditions there were very dismal, compared to the previous semester that I had spent at the Kamehameha Schools, Kapalama Campus. Fourteen years later, I am still at Kapolei Middle School. One of the main reasons why I have chosen not to transfer from this work location is due to the air conditioned classrooms. Students have shared with me that they enjoy the nice breeze from the air conditioning, learning is easier. Many of my students came from feeder schools where there was no air conditioning. They felt hot, could not focus, exhausted, tired, sweaty, sticky, stressed, and thirsty. When I asked them if they would like to transfer back to schools with no air conditioning, I received a very loud and clear "NO." In previous quarters on campus, we have had some classrooms where the air conditioning had malfunctioned, parts were being ordered, and windows were opened. I overheard students advising others, not to sign up for certain elective classes, since the air conditioning wasn't working in those specific rooms. I have seen my students, what they look like and how they act, on days when my classroom air conditioning malfunctions. I imagine this is what it must be like at other Leeward District schools on Oahu, as well as schools on the western side of our state. Public school students deserve air conditioning similar to Kapolei Middle School. Please pass SB2424. Thank you.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email [webmaster@capitol.hawaii.gov](mailto:webmaster@capitol.hawaii.gov)



April 1, 2014

To: Chairperson Sylvia Luke  
Vice Chairperson Aaron Ling Johanson  
Vice Chairperson Scott Y. Nishimoto  
Members of the Finance Committee

From: Jessica Dickerson

Subject: Support of Senate Bill 2424, Relating to air conditioning in public school facilities

Aloha, I am Jessica Dickerson and I am an eleventh grader at Kalaheo High School on Oahu. It has been recognized by Huff Post Education that the top education system is in Finland and America is rated 17th. It has also been discovered that in places like Latvia, Chile and Bravil are on average learning three times faster than American students. In the Hawaii Reporter then states that Hawaii is ranked as the 45th out of all the states, with Hawaii's state test scores at 29 percent in math and 39 percent in reading. These ranks were all measured in different topics but compared to Finland the difference in Hawaii public school is funding. Hawaii often have budget cuts leaving students in a uncomfortable surroundings and conditions. Where as students in Finland have extra periods and flexibly schedules, they have air conditioning.

In Kid Count Policy Report it has been studied that students in comfortable surrounding work better. The average temperature in Hawaii is mid-seventies and in the classroom it raises to an average of eighty degrees, which is not a comfortable situation. With the rising heat student often feel drowsy and sickly. If each school was properly given fans and, or air conditioning it would decrease the amount of sick days and transform the uncomfortable surroundings to peaceful environment. The best part about this bill is that there will not being any wasted money because each school will have a guild lines whether the room needs air conditioning or fans or neither.

Thank you for your time and consideration, I hope you will support Senate Bill 2424

4/1/14

**LATE**

Regarding SB2424

Our schools should have air conditioning in all classrooms where the interior temperatures reach above 80. My daughter was in Kindergarten at Kaunakakai Elementary on Molokai for the 2012-2013 school year. The classroom of 24 5-6 year olds was in the high 80's most of the year. Her teacher took temperature readings in the classroom with the lights on and with the lights off. The temperatures varied by about 5 degrees (higher with the lights on). The teacher decided to keep the lights off in the classroom for most of the year to try to keep the heat down. The students would be so hot after lunch recess that they would be sweating even after they had been in the classroom sitting down for a half an hour. It was difficult to get the children motivated to do their work when the classroom environment was so uncomfortable. I aided in the classroom once a week. Teachers shouldn't have to turn the lights off in the classroom in order to keep it cooler. The temperatures in Kaunakakai are in the high 80's to 90's during the summer months and during mid day hours the classrooms become intolerable for learning without air conditioning.

Patti Guay

**LATE**

Good afternoon. My name is Kelly Owens and I am an English teacher at James Campbell High School in Ewa Beach. I am here today to support SB2424, as I see the effect that heat has on my students' ability to cognitively process and analyze information on a daily basis.

I teach a very fragile population in Ewa Beach; my students are in an inclusion setting, meaning that they are a combination of general and special education students. A large majority of my students have difficulty focusing as a result of ADD/ADHD or struggle to process language as a result of dyslexia or an auditory processing disorder. My kids already have the cards stacked against them and it is my job to help them find a way to get around those cards and succeed regardless of whatever stands in their way.

As you can imagine, my kids suffer from an inability to find value in themselves as a result of their troubled home situations and/or learning disabilities. It doesn't help when they discover that students at private schools or recently built high schools are worthy of a quality learning environment, but they are not.

My classroom is far from a quality learning environment and more like an oven. In the hottest months, it has reached upwards of 93 degrees, with all of us drenched in sweat. This is a great opportunity to make a cake – not a future entrepreneur, lawyer, doctor, teacher, or any other future economic contributor. My students come into my class with sweat dripping from everywhere and put their heads down on their desk or argue over who gets to sit near one of the six fans blowing hot air. It is disheartening for me to see them wilt before me, knowing that it is not only affecting their physical self, but their mental and emotional self.

Several studies have confirmed that the optimal learning environment is 72 degrees. Throughout the studies, students have been assessed at varying temperatures from 62 degrees to 81 degrees. Time and time again, students have performed with upwards of 90% or better on assessments given in a room with a temperature of 72 degrees. If we add another 20 to 25 degrees to that optimal average, we can determine the cognitive functioning of a student at Campbell High School or any other school in Hawaii without air conditioning.

In Louisiana, Judge Brian A. Jackson ruled that it is cruel and unusual punishment for death row inmates to be subjected to temperatures of 88 degrees or more. When the warden stated that it was a fiscal issue for the prison to provide climate control, Judge Jackson responded with, "[the] Defendants' purported financial hardships 'can never be an adequate justification for depriving any person of his constitutional rights.'"

As I leave you today, I would like these last two questions to resonate: are students not persons? Have they not the same constitutional rights as death row inmates?

Thank you so much for taking the time to hear my testimony and I look forward to seeing the future successful students that you are creating by moving this bill forward to its final stages. Have a wonderful day.

From: mailinglist@capitol.hawaii.gov  
Sent: Wednesday, April 02, 2014 11:18 AM  
To: FINTestimony  
Cc: desyy314@gmail.com  
Subject: Submitted testimony for SB2424 on Apr 2, 2014 14:00PM



**SB2424**

Submitted on: 4/2/2014

Testimony for FIN on Apr 2, 2014 14:00PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
desiree takahama	Individual	Comments Only	No

Comments: To: Finance Committee From: Desiree Takahama Kalaheo High School, Grade 12 Subject: Opposing of SB2424 Hi, my name is Desiree Takahama and I'm currently a senior at Kalaheo High school and I am a member of the student council (ASK). I don't believe that air conditioning is something worth investing in during this time for all public schools. At Kalaheo High School we can barley afford toilet paper in our bathrooms. I believe AC would be a luxury because "Without air-conditioning, classroom temperatures can reach up to 95 degrees," said Brandy Davis, a French teacher at Campbell High School but we also have to look at the big picture. If the appropriate funds are being handed to us to pay for the Cooling units why can't we put that money to different use. As my fourth year at Kalaheo many classes have run down equipment and broken fans. If we do get the appropriate funds I think it should be used in that regard rather than installing AC units in every class room. According to Civil Beat, "Around 55 percent of new-arriving teachers in Hawaii leave the district within their first five years on the job — a problem that has made national headlines in recent weeks." Supposedly this is regarding the lack of coolness in the classrooms but if you invested in a few good fans per classroom on top of the ceiling fans already provided I think that should suffice. Thank you so much for your time. I hope you will take time to oppose SB2424.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email [webmaster@capitol.hawaii.gov](mailto:webmaster@capitol.hawaii.gov)

# LATE

My name is Andy Jones. I am a 48-year-old Language Arts teacher at Radford High School. This is my 20<sup>th</sup> year of teaching; I have taught in the Hawaii DOE for 7 years; previously, I taught English as a Foreign Language in Taiwan from the mid-1990s until 2006.

I am writing today to convey my thoughts on the lack of air-conditioning in Hawaii public schools. In the past 2-3 years, I have been approaching what is commonly referred to as “teacher burnout.” I say that I have been *approaching* burnout, although thankfully I have not yet in fact *reached* it. According to most descriptions of “teacher burnout,” if I *had* reached it, I would by now have ceased to enjoy both the *activity* of teaching itself, as well as the *objects* of that activity – namely, my students. I can genuinely say, in contrast, that I still have uniquely pleasurable moments each day of the school-year, carrying out instruction and interacting with my students.

However, despite the fact that I have not (or not yet) reached this unfortunate point of no return known as burnout, I have been subject to an increasing dissatisfaction with my line of work – a dissatisfaction that has frequently mounted to mild-to-moderate depression. There are many factors contributing to the lack of satisfaction that public school teachers are currently experiencing on a nationwide basis. These would include: the prolonged teacher furloughs and paycuts characteristic of the past decade; the ever-mounting pressures of standards-based education, in particular the annual testing that has accompanied it, with very questionable results to our educational culture; subtle school-level changes that have resulted in increased rosters and decreased preparation time; and, finally (at least in Race to the Top states such as Hawaii), a new teacher evaluation system which is tremendously time-consuming and which deprives teachers of yet more time – time that they need to carry out the fundamental day-to-day work that they do with students and that defines their lives as teachers.

All of these factors have led to a profound and constant sense of dissatisfaction. However, in themselves they have not led to the *physical* exhaustion I have felt more and more in the past several years. It has taken an extra factor – namely, a work environment which is quite uncomfortable due to temperatures in the 80s and 90s for at least half of the school-year – to lead me, after two decades of teaching, to thoughts of leaving the profession altogether and seeking a new career in mid-life.

I have only worked in Hawai'i schools for eight years. I entered my Radford classroom in 2006 after having spent twelve years teaching in air-conditioned classrooms in Taiwan. It was a very challenging adjustment. I looked in amazement on many of my elder colleagues at Radford who had been working in un-air-conditioned classrooms for decades. I told myself that I would probably get used to it over time. Did I “get used to it over time”? Not really. Not enough, at least, to get beyond the real physical discomfort that is the day-to-day result.

Different people have different levels of tolerance for air temperatures that are not optimal. Perhaps mine is only average, perhaps a bit lower than average. However, regardless of individual differences, I believe that most of my colleagues working in un-

air-conditioned classrooms throughout the state would attest to the experience I have on dozens of days throughout each school-year – most notably from August through Thanksgiving roughly, and then again beginning after Spring Break in March: that is, arriving home after a long school day at 4:00 PM, capable of doing nothing for the rest of the day except lying on one's bed in utter exhaustion, engaging in limited and painfully fatigued conversation with one's spouse and children, and occasionally succumbing to the debilitating wish that one had pursued a degree in medicine or law and could thus enjoy the benefits of working in the climate-controlled environments that professionals in most other fields requiring years of post-secondary education enjoy.

In this testimony, I have spoken of my experience as a teacher, rather than from the point of view of the students. I will not reiterate what others have said on behalf of Hawai'i students. They, of course, are the *primary* reason we need air-conditioning in our schools. However, it is also important to take into account the teacher's perspective. I *do not want* to discontinue teaching; however, I have reached the point in life at which I am no longer willing to compromise my health and, potentially, my longevity. I have no alternative at this point but to seek other employment options outside of my un-air-conditioned high school classroom. I am proud of my work, and I know that I am a good teacher. Potentially, I have another two decades to offer the students of Hawai'i before I will retire. I don't believe that I am the only strong teacher that Hawai'i students will fail to benefit from if statewide classroom air-conditioning is not approved soon.

Andy Jones  
Radford High School

March 13, 2014



To: Chairperson Sylvia Luke  
Vice Chairperson Aaron Ling Johanson  
Vice Chairperson Scott Y. Nishimoto  
Members of the Finance Committee

From: Matthew Darrah  
Kailua, Hawaii

Subject: Support of Senate Bill 2424, Relating to Funding of Air Conditioning in Public Schools

Aloha! My name is Matthew Darrah, I'm a freshman at Kalaheo High School in Kailua, Oahu. I strongly believe in SB2424, and would like to ask for your support. Living in Hawaii, and attending a public school that lacks air-conditioning, I am able to give a first-hand experience of just how uncomfortable classrooms can get. Some classrooms do have fans, but rarely do they all function properly. Adding a classroom full of students into a small, unreasonably hot classroom just increases the heat and leads to a decline in academic achievement. According to Huffington Post News in 2013, around 55 percent of new teachers in Hawaii leave the district within their first five years of teaching. Supporting creating a master cooling strategy for air-conditioning would be beneficial to students, teachers, and staff alike.

Studies show that "both concentration and cognitive abilities decline immensely after a room reaches above 70 degrees Fahrenheit", according to a New York Times article written last year. Hawaii public school classrooms can reach anywhere to being in 90's on certain days. It's unfair to make students suffer through heat while trying to excel in their learning. Air-conditioning will make students more productive in their academics because their attention will be sharpened. One University of Oregon Study discovered that students working in three different temperature settings had strikingly different results on exams. These results suggest that sweating really can undermine performance, lowering test scores.

Students at Campbell high school in Eva Beach experience the worst of it. The students of this school are sitting in a melting pot, with temperatures exceeding 100 degrees on some days. The school where built for 900 students and now has over 2,400. The students and staff here are in desperate need of a solution to better enhance their learning learning experience.

Let students focus on what's being taught rather than how hot they are. With that in mind, I humbly request a hearing for your committee to push SB2424 forward. Thank you for your time and consideration.