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Statement of

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813

RICHARD C. LIM

Director

Department of Business, Economic Development, and Tourism before the

SENATE COMMITTEE ON WAYS AND MEANS

Thursday, February 27, 2014 9 a.m. State Capitol, Conference Room 211 in consideration of

SB 2424, SD1 RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL FACILITIES.

Chair Ige, Vice Chair Kidani, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports S.B. 2424 S.D. 1 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.

Dean H. Seki Comptroller

Maria E. Zielinski Deputy Comptroller

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

TESTIMONY
OF
DEAN H. SEKI, COMPTROLLER
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
TO THE
SENATE COMMITTEE
ON
EDUCATION
ON
JANUARY 27, 2014

S.B. 2424

RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL FACILITIES

Chair Tokuda and members of the Committee, thank you for the opportunity to testify on S.B. 2424.

The Department of Accounting and General Services (DAGS) supports the intent of S.B. 2424 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, Sessions Laws of Hawaii 2004, DAGS is not involved in the management of any design or construction projects for any DOE school facilities.

Thank you for the opportunity to testify on this matter.



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

> Wil Okabe President Joan Kamila Lewis Vice President Colleen Pasco Secretary-Treasurer

TESTIMONY BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

DATE: WEDNESDAY, FEBRUARY 26, 2014

Alvin Nagasako Executive Director

RE: S.B. 2424, SD1 - RELATING TO AIR CONDITIONING IN PUBLIC SCHOOL

FACILITIES

PERSON TESTIFYING: WIL OKABE

HAWAII STATE TEACHERS ASSOCIATION

The Honorable Chair David Ige, The Honorable Vice-Chair Michelle Kidani 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 schools need air conditioning and that the condition of the schools physical plant impacts the health, safety, and welfare of students and staff members.

Our public school classroom temperatures are hot. At times, the heat index inches close to 100 degrees during the summer, fall, and spring. Students and teachers who work in these schools try to keep cool without the benefit of air conditioning in their classrooms. At times, when a classroom becomes unbearable, teachers resort to turning the lights off, purchasing their own fans, and frequent water breaks, if there is a water fountain available at the school. Other schools are rotating students into air-conditioned libraries or computer labs to cool off, and some change the day's lessons to avoid the heat and fatigue related to the environment. These are a few of the strategies used to keep students comfortable as temperatures soar.

It is well known that many of our educational facilities are in a state of decay, neglect, and/or deterioration. The association supports funding to modernize, expand, replace, and/or maintain these facilities with air conditioning in order to provide safe, healthy, and effective teaching. Appropriate climate control in every classroom enhances improved learning for both students and employees.

The HSTA further believes that the community, parent/guardians, students and education employees must be effectively involved in the development of the plans to modernize, expand and/or replace air-conditioning units.

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



841 Bishop St., Suite 301 Honolulu. Hawaii 96813 Telephone: 808 926-1530 Contact@HEECoalition.org

Senate Committee on Ways and Means Senator David Ige, Chair Senator Michelle Kidani, Vice Chair

February 27, 2014

Dear Chair Ige, Vice Chair Kidani, and Committee Members:

This testimony is submitted in support for SB2424 SD1, 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 (*)

To: Chairperson David Y. Ige

Vice Chairperson Michelle N. Kidani

Members of the Ways and Means Committee

From: Addison Deal

Subject: Support of SB2424, relating to air conditioning in public school facilities.

Hello! My name is Addison Deal, and I am currently a sophomore at Kalaheo High School in Kailua. I strongly believe in SB2424, and I would like to ask for your support.

Many public schools are deprived from air conditioning, but by having that delicacy comfort in the learning environment and academic results will increase. School temperatures in Hawaii can reach a blazing temperature of over a hundred degrees; the effects of such high temperatures will negatively impact students and teachers performance. According to the Environmental Protection Agency, a study showed students in classrooms with higher outdoor air ventilation rates scored 14 to 15 percent higher on standardized test scores than students in classrooms with lower outdoor air ventilation rates. According to a research report done by a student at UCLA, researchers have repeatedly found a difference of between 5-17 percentile points difference between achievement of students in poor buildings and those students in standard buildings, when the socioeconomic status of students is controlled. Ensuring adequate air ventilation rates in all classrooms can reduce absences and the transmission of infectious diseases, improve overall health and productivity of teachers, and improve test scores and student performance in completing mental tasks.

This bill has the ability to do much more than just increasing the comfort level; it has the opportunities to help students achieve full academic potential.

Thank you for your time and consideration, and I truly hope that you will support SB2424.

To: Chairperson David Y. Ige

Vice Chairperson Michelle N. Kidani

Members of the Senate Committee on Ways and Means

From: Alicia Nawatani-Dias

Kailua, Hawaii 96734

Subject: Support for SB2424, Relating to Schools

My name is Alicia Nawatani-Dias and I am currently a student at Kalaheo High School. I submit this testimony in **support** of this measure on my own behalf, and not on the behalf of any fellow student at Kalaheo High School.

It is found by legislators that a student's ability to learn is increased when he or she is in a comfortable work environment. If SB2424 passed and air conditioning was installed in every public school in Hawaii, it would have a great impact on student scores and increase their intellectual abilities. The most suited environment should be afforded to every student in the State for they represent the future of the State of Hawaii.

In some cases, like that of Cambell High School, classrooms have reached over 90 degrees (Hawaii News Now) and yet the temperature in Hawaii itself does not reach that high. By providing students with air conditioned classrooms, you are decreasing the chances of distraction as well as any strain on the mind and body. The extreme heat in classrooms directly affects a student's ability to participate in the classroom.

Students often complain about the heat in their classrooms, but do they ever complain about the classroom being too cold? That may be because there are too few who have the opportunity to experience a cool classroom. I'm certain that given a choice, both students and faculty would prefer an air conditioned learning environment. It is much easier to stay warm than it is to cool down.

Studies show that student progress increases depending on their learning environment. A learning environment with a lot of noise may be very difficult to work in. Meanwhile an environment that is overheated will also be hard to work in. In fact, writing this letter in the school's library made it a much easier task than if I were writing it in my overheated classroom.

Thank you for the opportunity to address you regarding this bill. I hope you consider my statement in making your decision regarding the implementation of SB2424.

My name is Chiara Still and I am a student at Campbell. I am asking this committee to support SB2424. The schools in Hawaii are ridiculously hot, especially Campbell, and it is hard to concentrate in this kind of environment. With air conditioning, we would be able to focus on our work and achieve what needs to be done. Studies have shown that the optimal learning temperature is 72 degrees yet Campbell classrooms can reach to temperatures at a high 90+ degree. Not only does it get really hot in classrooms, but we have to deal with the noises coming from the airplanes that pass above our school in certain classrooms we have fans that teachers have to pay for out of their pockets. Even with those fans, the 40+ students we shove into a class argue over who gets to sit by the fan. It can only cool down so many students. Imagine trying to get any work done in that kind of environment. It gets too hot to a point where the only thing you are focused on is how to cool yourself down in the heat. I had a class last year, Algebra 2, where I was sitting in a classroom that was basically a garage. The sun would be directed right into our class and we had to shut the garage door halfway. There were only two fans and one was faced towards the teacher's desk. With 30+ students, it wasn't much help. Everyday I'd walk into class and the minute I sat down, I would start sweating. Most students would put their head down and fan themselves with the work that was handed out instead of getting it done.

Education is important and without air conditioning, it's hard to say that we're getting any of it. I'd like everyone to be able to get a good education without stressing about how hot it is, it isn't a good learning environment. It isn't fair that Campbell, the hottest school in the state, has to deal with not having any air conditioning. If it affects students learning, the people that are our future leaders, I think it is important to put this into action. Thank you for your time.

Dear Senators,

My name is Chynna Oasay and I am asking this committee to support SB2424. I am a student of one of the most hottest schools in Hawaii. My education means a lot to me and sitting in these hot classes are really affecting my learning. Coming into a classroom with no breeze or fans or air conditioning really makes me feel like just putting my head down for the whole class. This is an environment where you don't want to do anything or move because you don't want to end up sweating or getting any hotter. Statistics show that the optimal learning temperature is approximately 72 degrees. Here at my school, temperatures can go up to 99 degrees. Imagine sitting in a room filled with 30 to 40 people, with no breeze whatsoever. It's really uncomfortable to the point where learning something new and getting your work done is impossible. It's no longer a learning environment, but a sauna that nobody wants to be in.

I've been to other school campuses before because of cheerleading events such as Millilani High School and Radford High School. Even Millilani's gym has air conditioning. Here at my school our gym is enclosed and it can get so hot with 600+ kids sitting in it. Events held in the gym are really hard to enjoy. All these other schools have air conditioning and I bet their test scores are much higher than the ones here at my school. Studies show that test scores would drop 18 points out of a 100 if you raised the temperature form 72 to 82 degrees. My school is already at a disadvantage because it is rare to sit in a classroom cooler than 82 degrees. What makes all these other schools that do have air conditioning any better than the ones who don't? It's simply unfair. This is where air conditioning can play an important role in our education. The cooler the classroom, the more comfortable it is to learn, the higher and better our grades will be.

Thank you,

Chynna Oasay

To Rep. Takumi and members of the House Education Committee,

My name is Corey Rosenlee and I am a teacher at Campbell High School. I strongly support <a href="https://http

Ask yourself as a parent would you hold a birthday party for twenty 6 year olds on a hot day indoors, and just open the windows a little bit?

As a society one of our greatest responsibilities is to give our children a quality education, and a quality education begins with a quality learning environment. Putting children in a classroom at 95 degrees for 6 hours a day is a way you make a cake not a scholar.

Studies show that the lack of ac impacts student behavior, ability to concentrate and test scores. With test scores increasing by 10 points when students learned in an ac vs. a non-ac room.

In the past it has been suggested to just buy fans. I have had 12 fans in a room, and that is not uncommon. First of all, teachers are already buying and putting their own fans in the classrooms and second it doesn't work. One student once asked me if the fans were heaters because they were just blowing and circulating hot air. High school students, due to the heat, would argue who should get the fan. I am a good teacher, but when it gets that hot there is nothing I can do. After being in these enclosed hot rooms all day the kids start putting their heads down. That is why this issue angers me so much. Our major private schools understand this problem and they put ac in their classrooms. Because there is no way a Punahou parent would tolerate their child in a 90 plus degree classroom. But that this is exactly what we do to public school children. We cram them into hot and crowded classrooms with 40 kids in 90 degree temperature that is not conducive to learning and then we call that a quality public education in Hawaii. This is not fair and that is not right, our public school children deserve better and this needs to change. Our keiki deserve better. P4

Here are some recommendations that I ask be included in this bill for study:

SB2424 Study on Air Conditioning

- A. Funds should be allocated to study a photovoltaic off the grid ac system:
 - a. Is solar ac system more cost effective in installation and electrical costs than a traditional system?
 - b. How many classrooms have enough sunlight and roof space to accommodate the solar ac?
- B. The study should determine:

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a. How many classrooms currently don't have ac?

b. How many classrooms currently have enough electrical capacity to handle ac without the need to upgrade their system?

- c. Do classrooms that have an ac system need to be replaced because of age?
- d. What is the average interior temperature of classrooms?
- e. Are there other mitigating factors that would require ac(Vog, noise, flies, smells, etc.)?
- C. How much would it cost to put in the solar ac and for classrooms where that meet the criteria traditional ac?
- D. The following criteria can be met than the classroom should get ac with the next 6 years:
 - a. One is the room's average interior temperature over 78 degrees, or has other mitigating reasons to have ac?
 - b. The Solar PV system is effective and more cost efficient
 - c. The school has enough sunlight and roof space to accommodate the solar pv
 - <u>d.</u> The classroom/school has enough ac to accommodate a traditional ac without <u>upgrade</u>
 - e. That installation can be done for less than \$150 million over the next six years.

Please pass SB2424HB2596 and give our students a quality learning environment. Thank you.

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From: <u>mailinglist@capitol.hawaii.gov</u>

To: WAM Testimony

Cc: <u>ballesterosdonaldjay@yahoo.com</u>

Subject: Submitted testimony for SB2424 on Feb 27, 2014 09:00AM

Date: Wednesday, February 26, 2014 8:54:51 AM

SB2424

Submitted on: 2/26/2014

Testimony for WAM on Feb 27, 2014 09:00AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
donald ballesteros	Individual	Support	No

Comments: My name is Donald Jay Ballesteros and I am a student from James Campbell High School. I am asking this committee to support SB2424 because for the past years Hawaii schools are being educated in 90+ degrees classrooms. Studies have shown that when students are educated in a high temperature room test scores would drop because students have only one thing on their mind which is "why is it blazing hot in this room ?" Their mind can't focus on the work because either their mind wonders or the students heads are down because of the heat. Not to mention Hawaii schools are considered huge so it's approximately 40+ kids in one class room with no air condition. With that much body heat in one room it's kind of hard to focus. As a senior in James Campbell High school I've experience high temperature rooms in my whole entire school life. Once the heat is kicking in I automatically complain about the heat the whole day or I just put down my head for the rest of class. The heat really impacted my learning and for that it drop my grade. I understand air conditions in schools are really expensive but it is for the education purposes for the students and it will definitely make the students to pay attention more and keep those test grades up. Thank you for consideration. Sincerely, Donald Jay Ballesteros

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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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February 13, 2014

To: Senator Laura Thielen Chairperson David Ige Vice chairperson Michelle Kidani Members of the Ways and Means Committee

From: Je'Quan Gold

Subject: Support of SB2424, to install air conditioning in all Hawaii schools.

Aloha! My name is Je'Quan Gold, and I am currently a senior at Kalaheo High School in Kailua Oahu. I strongly believe in SB2424 and I would like to ask for your support. As it stands there are few schools in Hawaii with air conditioning throughout the entire school. This is how it has been for a long time. However, during hot weather it takes a tole on the students and teachers to learn and teach in a hot classroom. Students work their best when in comfort. Likewise for teachers. Heat also causes heat related illnesses that could be fatal to children.

Hawaii can be a very hot place, especially nearing summer months. With this heat, many health related issues can occur. Some are minor issues such as nose bleed, but then there are more serious conditions such as heat stroke and heat exhaustion. These heat related illnesses are harmful to all who attend schools. The Centers for Disease Control and Prevention (CDC) say the best way to prevent heat related illnesses is to stay out of heat. Specific steps to stay out of heat is to stay in an air conditioned place. Even though there are fans in schools, the CDC says that fans are not good enough for really hot days.

According to Adrian Ward of Scientific America, when the weather is too hot, students loose focus. They start to get irritable and no longer pay attention in class. The best way to ensure our children's future's in success in education and success in society is to make sure they are paying attention in class. If students are not comfortable to learn and teachers are not comfortable to teach, then school is a huge waste of time. If schools were to be air conditioned, then the environment would be a happier and healthier place of learning and education.

Please support and pass SB2424 to give the students a better chance at learning and becoming better educated.

CDC representatives (2012) "Tips for Preventing Heat Related Illnesses" http://www.bt.cdc.gov/disasters/extremeheat/heattips.asp Date accessed: 2/12/14

Ward, Adrian (2013) "Winter Wakes Up Your Mind and Warm Weather Makes it Harder to Think Straight"

http://www.scientificamerican.com/article/warm-weather-makes-it-hard-think-straight/ Date accessed: 2/12/14

My name is Joshua Ishikawa and I am a senior student at a local high school on the island of Oahu, HI. I am writing this letter to ask the board for sufficient funding in order to acquire air conditioning for not only the school of Campbell High but all the other hot schools in Hawaii as well. In such schools it tends to get abnormally hot in classrooms to the point where students have a hard time concentrating on their work. Studies show that any temperature of 80 degrees and up tend to produce harmful physiological effects that decrease the efficiency and output of students, and in comparison, temperatures at Campbell have been recorded to be a blazing 90+ degrees on average and often reaching an all time high at 99 degrees. These students as well as others working in such hot environments deserve the luxury of air conditioning in their classrooms if it means optimizing their chances at success in high school. Studies by McDonald (1960) concluded that classroom conditions improved by air conditioning included reduced annoyances, improved visual display and flexibility, and comfortable conditions. Teachers' and students' attitudes and behavior improved as well due to less fatigue and proper air conditioned climates. I have attended Campbell myself, and from my perspective I've never experienced such a hot working environment like Campbell's. Attending the school as a freshman just starting high school, not having an air conditioned environment made life in my first year of high school a living hell. I would have to catch the bus to school, so every day I walked a block to the bus stop, caught the city bus, then walked another block to school, then 6 hours of heat later followed the same routine back home all in the hot 90 degree sun. At the end of every day as I got home I found myself drenched in sweat and gasping for air and water throwing myself in front of my own air conditioner in my household and drinking multiple bottles of water. The heat at Campbell is a huge nuisance to everyone who attends the school, and it undoubtedly affects the academic performance of the students as well as the guidance of the teachers. Students don't deserve to have their education jeopardized by the suffering under such harsh climate conditions in what should be a proper working environment. I have attended this school for 4 years, and now as a senior, I've developed the courage to fight for what the future generations of students deserve. I hope that something could be done for this issue and a kindly thank you for your time.

To: Chairperson Jill Tokuda
Vice Chairperson Michelle
Members of the Educations committee

From: Lauren Nahale

Kalaheo High School

Subject: Support for SB2424; requesting a study for air conditioners in schools.

Aloha, my name is Lauren and I strongly support Senate bill 2424.

The heat students take on in classes in unbearable, in school the temperature is a huge essential piece of learning; I am completely distracted if the room is to cold or to warm, at Kalaheo High School only certain buildings are air conditioned and the other class rooms students suffer from the heat. According to Loren Moreno an editor of the Star Advertiseronly 21 of Hawaii`s 258 public schools (excluding charter schools) are fully air conditioned.

Schools such as Campbell high school reach a temperature of 88 degrees normally. The hottest school temperature in Hawaii is Lokelani Intermediate reaching over 96 degrees averagely, ending with Shafter Elementary reaching over 93, on a study of the 15 hottest Hawaii schools according to the Department of Education.

Please support SB2424.

My name is Logan Tengan and I am asking the Committee to support SB2424. Schools in Hawai'i become very hot, especially in the afternoon. Temperatures taken at Campbell High School have reached up to 97 degrees. Studies show that the optimal temperature for learning is around 72 degrees. A survey given to teachers was done in 1960 concluded that classroom conditions improved by air conditioning had reduced annoyances, improved visual display, and comfortable conditions. Not only will this help students, but also teachers. The study also showed that teachers' attitude and work patterns were significantly improved due to less fatigue.

Throughout my high school years, I've had many classes that didn't have AC. During third period, which is right after lunch, were the worst times. Sitting in a hot classroom makes you feel sweaty and tired and you have no desire to learn and focus. Students are fortunate to have teachers that provide fans for them, but it also has its downside. Students would have to fight over who gets the fan and where it should rotate to and the noises of the fan also made it hard to hear the teacher causing even more students to not focus. It would get worse when we would have to close the doors due to noise or glare on smart boards. The heat was compressed in the classrooms and would just get worse.

Education is the most important thing especially for high school students. Having air conditioning in all schools in Hawaii would make a big impact on test scores and learning abilities. Many studies have already proven that a controlled temperature environment improves learning ability and better attitudes in teachers. I do hope that you will consider supporting SB2424, it will be greatly appreciated.

Thank you,

Logan Tengan

My name is Mark Bardon and I am asking this committee to support the SB2424. I am here today to ask this board to appropriate money for air conditioning for all schools on Hawaii who does not have air conditioning. Students who attend schools without any air conditioning have it harder than students who attend schools with air conditioning. Learning in a class without any fans or Air condition affects our education because we are being distracted by the heat and all we could think about is finding a way on how to cool ourselves down. "Many studies have revealed that the thermal environment in the classroom will affect the ability of students to grasp instruction" "Herrington found that temperatures above 80 degrees tend to produce harmful physiological effects that decrease work efficiency and output" During the summer classrooms could reach as high as 90-100 degrees and you have at least 30, 40 students in that classroom the heat is just unbearable it affects our learning and it interrupts us from focusing on our work because all we can think about is the heat. Students tend to argue or fight about whoever gets to sit by the fans because it's too hot and you see most of the kids are sweating and putting their heads down on the desk because the heat just gets to them. One of my classrooms that I have for 4th period is a portable building and that is in the middle of the day where the sun is out and the heat of that classroom is just unimaginable, once you step into that classroom you could just feel the heat and it's like I am in a Sauna room I'm unable to focus on my work and I tend to find myself sitting by the window or walking to the door just to catch some air which stops me from finishing all my work. I am hoping that you will soon find a solution to this problem for all of the schools on Hawaii without any air conditioning and all of us will greatly appreciate it

My name is Mark Christian Dilla and I am asking this committee to support SB2424. It is known that Hawaii has really nice weather. But in reality it is tremendously hot. With Hawaii being so hot having AC is a must for schools but most schools in Hawaii don't have AC. "Only 21 of Hawaii's 258 public schools, excluding charter schools, are fully air-conditioned." Without AC students are not able to concentrate in class. Instead of thinking about the subject, students are thinking about the heat.

In my freshman year I had classes with no AC. First and second period was not a problem because the sun is not at its highest yet. But at lunch it starts to kick in. The heat was so bad that students stay in the shade, under buildings or even go to their classrooms to hog the fans. When third period starts, it's so hot that students don't even pay attention. In fact most students either complain about how it is so hot or put their head down.

"When Civil Beat visited Campbell, it was about 87 degrees – but that was during the morning on a windy spring day. Temperatures in the area can rise to the mid-90s in the afternoons, well above the optimal learning temperature of 72 degrees," (The 'Air Conditioning Wars'). Hawaii schools that don't have AC can really take a toll on the learning environment. Putting 30 to 40 students in a 90 degree classroom is really hard for students to learn and teachers to teach. That's 20 degrees higher than the optimal learning temperature of 72 degrees.

I'm hoping that you can help public schools in Hawaii get AC. With AC students are able to learn more efficiently and don't need to worry about the heat. I believe that you can solve this problem for most schools in Hawaii. You're not only helping present students but also the future students. Thank you for your time. I would greatly appreciate if you made a difference.

Thank you,

Mark Christian Dilla

February 25, 2014

To: Chairperson David Y. Ige

Vice Chairperson Michelle N. Kidani

Members of the Ways and Means Committee.

From: Marlowe Wilson

Kailua, Hawaii

Subject: Support of SB2424, Air Conditioning in Public Schools

Hello! My name is Marlowe Wilson and I am currently a freshman at Kalaheo High School on Oahu. I strongly support bill SB2424 and would like to give reasons on why this bill should be put into place.

On Oahu, only 12 of the 255 public schools in the state are fully air conditioned, according to the Garden Island newspaper. Even some of the hottest places where schools are located lack air conditioning. September of last year a press release was sent out saying that inside the classrooms of Campbell High School the temperatures rose to 96 degrees.

According to a study taken at Westview High School in Beaverton, Oregon, air conditioning also helps with the attentiveness of students. "This study indicates that air conditioning does have an impact on students' attentiveness. If the room is too hot or too cold, students are likely to perform poorly on activities in which high attentiveness is required."

Although air conditioning in quite expensive, "[it] is an investment that will pay back in improved environment, better air quality, green operation, and controllability that will allow the most efficient use of the air conditioning system" according to simplyairconditioninglondon.co.uk.

Thank you for your time and I hope you consider my thoughts in support of bill SB2424.

From: <u>mailinglist@capitol.hawaii.gov</u>

To: WAM Testimony

Cc: <u>59.msarmiento@gmail.com</u>

Subject: Submitted testimony for SB2424 on Feb 27, 2014 09:00AM

Date: Wednesday, February 26, 2014 8:55:17 AM

SB2424

Submitted on: 2/26/2014

Testimony for WAM on Feb 27, 2014 09:00AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Mindy Sarmiento	Individual	Comments Only	No

Comments: My name is Mindy Sarmiento and I am asking this committee to support SB2424. I cannot concentrate on learning because of the hot ugly weather which causes me to feel drowsy and dead tired. As I walk into my classroom after lunch, my friends and I fight over the one and only fan we have with 30+ students in our classroom environment. It isn't fair for most public schools to be in school for 6+ hours with this kind of heat. I lived in Ewa almost my whole life and the schools I attended has been the same with this situation in lack of focus because of the environment we are suffering in. I am hoping you take this into consideration to fight for our schools to get air conditioners. Thank you for your time.

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Aloha Kakou,

My name is Nahoa Ioane Laurito and I am asking this committee to support the SB2424. In some Hawaii schools temperatures can reach the high 90 degrees in the afternoon. Now imagine 40 students sitting in that for 82 minutes a period every day for about 2-3 periods. Now imagine your one of those 40 students. That is just too hot for most students.

I have no A/C in two of my classes: Modern History of Hawaii and Expository writing. My History class is fine due to it being in the early morning and being in the shadow of another building. However, my English class can be unbearable for most students. The class room is a portable with thin walls and big windows on both sides. It has good ventilation, but most of the time the air blown through it also very humid and hot. I myself am not bothered by it, but that's only because I practice judo in that same heat with a heavy and thick cotton judogi. I see my classmates are suffering a lot through the heat though. Most of them are drenched in sweat and are either fanning themselves or their putting their head down attempting to get their body heat down. They really can't pay attention in class.

You could say fans would work out, but the fans come out of our own teacher's pockets, and all they basically do is shuffle around hot air which really doesn't help at all. Many classrooms in Hawaii need A/C, so please support the SB2424.

Sincerely

Nahoa Ioane Laurito

My name is Novalinda Julian and I am asking this committee to support SB2424. I am a senior and throughout my years of learning at Campbell I had to suffer learning in a very hot environment condition. Having no A.C. in a classroom has caused me to stress more about how hot it is rather than on my class work. I remember back in my freshman year we had no fans in the classroom, so majority of my classmates had to use their folders to fan them. It was difficult trying to focus while the heat overwhelmed us and exhausted us from learning and paying attention in class.

I currently have no A.C. in two of my classes, and it is difficult trying to learn when all I can think about is heat especially after lunch time. Hawai'i itself is a hot state; students need air-conditioned classrooms to better their education. "Student performance, attitude, and behavior improve in proper air conditioned climates making it easier to concentrate and making them feel less drowsy and fatigue" (McDonald 1960). The class I do have A.C. in has allowed me to concentrate better and it has made learning more enjoyable because I don't have to deal with how hot it is. I am sure that if you were working in a hot environment it would be difficult for you to get your work done as well.

I would greatly appreciate if you would advocate for our school and other schools all as well to input aircondition into the classrooms. Teachers and students would be thankful because they won't have to deal with the pressure of getting their work done as well has tolerating the heat.

Thank you,

Novalinda Julian

My name is Sabrina Marzan and I am asking this committee to support SB2424. I am writing to bring your attention to a major issue going on in our classrooms. Many classrooms in my school don't have air conditioning, and a few don't even have fans. Without air conditioning it makes it hard to learn in a hot environment. In my experience it is really hard to concentrate on my work. All I want to do is just sit there and put my head down. I am sure that other students feel the same way.

Out of my four classes I only have one class that has air conditioning. It is hard to learn in a hot environment, and because I am a senior I need these classes in order to graduate. During my last periods in the day I just usually put my head down our just faze out because I can't concentrate on doing my work and listening to my teachers. Imagine yourself working in a hot office without air conditioning or even fans, would you even want to go to work, and if you did would you be able to accomplish anything?

I am hoping you would be able to hear our voices and others in our district to get air conditioning installed in the classrooms that don't have any. I strongly believe that you can put an end to this issue for us and other schools as well. Thank you for taking your time and reading this.

Sincerely,

Sabrina Marzan

My name is Scott Juan Barnard Jr. and I am asking this committee to support SB2424, appropriate money for air conditioning in all hot Hawaii schools. I and many other students who have to learn in hot environment classrooms at average temperatures of 90 degrees have a mutual understanding that it's hard to concentrate on the material or subject being taught in class when it's so hot. There are many instances where students would argue and fight over who gets to sit next to the fan and or hogging the fan in the classroom. Many can argue and say "well life's not fair," but it doesn't have to be that way. In time choices people make can make a big difference. Other schools have air conditioning, while some schools and students have to suffer in a hot, sauna like environment. There has been many days that I am just so tired and hot that I have to leave class to get a water break, put my head down, and or take a trip to the health room. Also, there have been many occasions where I would have to bring an extra school uniform shirt because the current one I would have on would be drench in sweat. I am thankful that my teachers care enough about their jobs and the students they teach because they have out of pocket provided many fans of which we have and use in our classrooms. That's money out of a teacher's pockets to help kids learn better, those teachers don't get reimburse for it or anything. Therefore, not only do the students care about air conditioning in schools and there education opportunities but the teachers, adults, and administration / staff members of the school care as well. Thank you for taking the time to read and consider this testimony upon SB2424.

Respectfully,

Scott Juan Barnard Jr.

My name is Sherly Anne Kentaro. I am asking the WAM committee to support SB2424. In today's society, poor students attend public schools where they are forced to learn in a hot environment. In one of the classrooms I had at Campbell High, was at the back of the school that had either a few oscillating fans or no fans at all. Every teacher I had at Campbell would tell me that the fan they have in the classroom came out of their own pockets. Every day, I would have to remind myself to bring a folder to fan myself just to keep cool, but even that did not help me concentrate in class. Sometimes I would even ask my teacher if I could go to the library to do my work because there was air-conditioning. Researchers found scientific studies that showed temperatures above 80 degrees tend to produce harmful physiological effect that decrease work efficiency and output. Teachers were survey and McDonald (1960) concluded that classroom conditions improved by air-conditioning included reduced annoyances, improved, visual display and flexibility, and comfortable conditions. I strongly believe that this issue can be solved by the help of the WAM committee to fund for the need of air-conditioning in all schools of Hawaii. Thank for your time and consideration.

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Sherly Anne Kentaro

From: <u>mailinglist@capitol.hawaii.gov</u>

To: WAM Testimony
Cc: troymoega@gmail.com

Subject: Submitted testimony for SB2424 on Feb 27, 2014 09:00AM

Date: Wednesday, February 26, 2014 8:56:08 AM

Attachments: <u>Memo 20140224 154922160.snb</u>

SB2424

Submitted on: 2/26/2014

Testimony for WAM on Feb 27, 2014 09:00AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing	
Troy Moega	Individual	Support	No	1

Comments:

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Dear Senators,

My name is Vanessa Ranon. I am here to talk about a common lingering problem that most public school are having in classroom, air conditioning. It might not seem like a big problem but it is to the student and the teachers of public schools. Hawaii is known for it sunny weather and most of the time it's hot during the day, creating a hot oven class room for students and teachers to sit in. Student's become more focused on how to stay cool than focusing on work, even teacher try their best to find ways to keep the classrooms cool for their students so they can pay attention but cuts time from learning anything in class. Teachers try to use fans in class to cool down the class rooms but the loud noises of the fan and other students fighting over it makes it worst. I have only one class with air conditioning and the rest is regular class rooms. To see the difference between how the air condition class room learns to the one without has a huge difference. In the air conditioned class room all the students are focused on their work and pay attention, compared to the one without air conditioning. Students are putting their head down, leaving classrooms to get fresh air to cool down, fighting over who sits by the window or fan, not paying attention, and causing problems. Imagine sitting in a hot class room little windows, loud noises of fans and students arguing, while having a teacher try to teach and clam down the class. Would you be able to focus? It's a big problem students learning in school and it's not fair that public school aren't able to have air conditioning compared to private school. Private schools always get better thing that public school but why don't we have the right to have the same? I'm hoping that you're able to make a change for public schools and help students with their learning, thank you.

Sincerely,

Vanessa Ranon