



Testimony BOE <testimony.boe@boe.hawaii.gov>

Testimony regarding item V.A.2 on the agenda for the 9/15/22 Board of Education meeting agenda

1 message

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To: testimony.boe@boe.hawaii.gov

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Chair Voss, Vice Chair Barcarse, and other members of the Board,

This testimony s in regards to agenda item V.A.2 Finance and Infrastructure Committee Report on September 1, 2022 meeting.

I am writing to you about my concerns with the lack of funding and budget planning for necessary ventilation and air filtration for our classrooms. The last 2 1/2 years have taught not only our state, but our country and the world at large, about the importance of ventilation and clean air in preventing he spread of respiratory diseases.

Well, it should have taught us this lesson. But I find many who claim we all need to "learn to live with" the new disease that is COVID show no signs of learning how to prevent it at all.

With the abandonment of the school mask mandate, we have a pressing need for the DOE to ensure school classrooms are adequately ventilated, and that sufficient air purification is employed where adequate ventilation is not possible. Without ventilation and filtration, the presence of just one person sick with COVID, Influenza, or any other transmissible respiratory disease will cause a build up of viral particles in the air with each exhalation, posing a high risk of transmission to other occupants of the room. Honestly, steps toward this end should not only have been started, but should have been tested and proven effective before the mask mandate was lifted - as happened in many other school districts around our country.

"Heat abatement" is a different consideration from the ventilation/air quality issue. Even in classrooms that are adequately cooled or are located at cooler altitudes, proper and sufficient ventilation or air filtering is needed to reduce the concentration of aerosolized virus in the room. In rooms where air conditioning is the means of heat abatement, doors and windows are more likely to be kept closed, creating an need for greater air purification mechanisms. Even where the air conditioner is equipped with a high-grade MERV13 or higher filter capable of trapping virus particles, supplemental air purification may be needed if the air conditioner does not filter a sufficient volume of air per hour - namely, 6 or more complete air changes per hour.

We have been informed that air purifiers were delivered to some - but not all - classrooms last year, and air quality testing has been performed at some - but not all - schools. We are also aware that DOE has adopted and distributed ventilation guidelines for this year These were steps in the right direction, but wholly inadequate this far into our new, longstanding reality. .Just as with all previous "efforts" to address the Heath and Ocupational Safety risks of COVID, this puts the burden of research on and implementation of limited, inadequate resources onto Teachers and Administrators, who were already overburdened before COVID got to our islands. At the September 1, 2022 meeting of the Facilities and Infrastructure Committee, Assistant Superintendent Tanaka admitted this: that teachers are expected to decide for themselves whether and how to use fans or air filters. He did not mention any effort being made to educate administrative and facilities staff about the ventilation guidelines, much less to assess the degree to which schools are successfully implementing them.

This is absurd! Teachers and school administrators have no formal training in this arena and cannot be expected to deal with the complexities of airflow in the context of an aerosol pathogen. Yet when the air purifiers and box fans were distributed, school staff were given no instructions for their correct placement, and were not shown how to ensure the fans are not just blowing aerosolized virus from one student to another. I saw the posts debating this issue in real time on facebook groups frequented by Teachers and concerned parents, who found themselves having to scour the internet for resources to learn how to use their inadequate mitigation tools...and then having to educate others around them that did not find good information and had set their fans up as cooling devices rather than exhaust fans.

If fans are just dropped off at schools, leaving teachers to determine how to deploy them based on the vague statements in DOE's ventilation guidelines, the fans may again end up being used simply to try to cool the classroom, rather than as a tool to ensure there are adequate air exchanges to the concentration of viral particles. Moreover, box fans do nothing to filter viral particles and other pollutants from the air. And it is known that filtration may be necessary if adequate air

exchange is not possible. Corsi-Rosenthal boxes or commercial air purifiers must be used in addition. Carbon monoxide monitors can help to determine if the ventilation in a room is sufficient or if filtration efforts are also needed, but educators need training on how to deploy these monitors (readings taken frequently, while the room is occupied) and the CO₂ concentration levels that would indicate further mitigation is needed. To do the job right, properly trained personnel must visit every classroom to assess their individual ventilation dynamics and determine what equipment is needed and how it should be used.

Another obstacle to preventing virus transmission in our classrooms is the long-standing issue with our public schools' outdated and inadequate electrical systems. The electrical infrastructure on most of our campuses is not equipped to handle the load that would be required in order to deploy HEPA filtration in HVAC systems (per 2021 memo from G. Bignami). In 2016, the DOE received public donations of air conditioners and fans to address heat, but those donations sat in boxes because there was inadequate electrical infrastructure to accommodate them in the schools that needed them most. We have heard that some teachers cannot plug in their fans or air purifiers because there is no working, available power outlet. (Seriously, you guys need to go spot check the conditions of classrooms in our state, unannounced. The disrepair is inexcusable!) And many classrooms may need multiple Corsi-Rosenthal boxes or air filters in order to do an adequate job. Accordingly, in order to ensure that all of our state's public school classrooms have adequate air circulation and/or purification, we also need to make it a top priority to upgrade school electrical systems as soon as possible.

If we want our schools to stay open and be in a position to deliver high-quality education consistently, the health of students, teachers, and staff must be better protected. From my vantage point as a parent and former Teacher, this is not happening. Lots of positively spun reports may make their way to you, idealizing the "accomplishments" of the DoE in handling this challenge. But we on the ground are hearing horror stories of teachers and students coming to class with obvious symptoms of contagious illness, sometimes unmasked even, while carbon dioxide monitors and air purifiers sit unused in classrooms, offices, or storage rooms. And it is Assistant Superintendent Tanaka's job, as well as Superintendent Hayashi's moral obligation, to tackle those issues, rather than expecting teachers and principals to do the job for them. The DOE must make a commitment to monitor and improve classroom air quality and to also make this issue one of the highest priorities for health and safety! And the Board of Education must hold them to their promises and obligations, demand measurable results and specific timeframes...or find Administrators who will actually do the job.