DAVID Y. IGE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

STATE OF HAWAI`I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI`I 96804

Date: 03/24/2017
Time: 02:45 PM
Location: 229
Committee: Senate Education

Department: Education

Person Testifying: Kathryn S. Matayoshi, Superintendent of Education

Title of Resolution: SCR 171 REQUESTING THE DEPARTMENT OF EDUCATION TO DEVELOP AND ESTABLISH A LIVE, LEARN, WORK, AND PLAY PROGRAM TO PROMOTE WORKFORCE READINESS IN HAWAII'S STUDENTS THROUGH CAREER PIPELINE AND ACADEMY SCHOOL INITIATIVES.

Purpose of Resolution:

Department's Position:
The Department of Education (Department) supports the intent of SCR 171. The Department is committed to the implementation of a new statewide Career Technical Plan focused on creating a standards-based K-12 progression to ensure schools and complexes statewide prepare students for a career pipeline with the appropriate skills, certification, licensing, or college credit to enter the workforce.

The overall goal is to ensure state agencies, business networks, and educational institutions align their organizational and collective strategic efforts behind a unified approach to transforming the state's career pathway systems.

The Department respectfully request the language on Page 4, line 31, be amended from "grade fourteen" to "grade twelve."

The Department has launched Connect to Careers, or C2C, an industry-led coalition for Hawaii's economic future to collaboratively prepare students for success in high-skill, in-demand careers at both state and regional levels. It is a business-led effort with aligned K-16 curriculum and opportunities that will be tracked for effectiveness via data and industry feedback. Partners include employers, state educational systems, funders, and workforce and economic development agencies. Learn more at hawaiipublicschools.org, search "C2C" or visit http://tinyurl.com/jtwt3gf.

Thank you for this opportunity to provide testimony on SCR 171.

HAWAII STATE TEACHERS ASSOCIATION
Teaching Today for Hawaii's Tomorrow

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

Corey Rosenlee
President

Justin Hughey
Vice President

Amy Perruso
Secretary-Treasurer

Wilbert Holck
Executive Director

TESTIMONY BEFORE THE SENATE COMMITTEE ON EDUCATION

RE: SCR 171/SR 85 - REQUESTING THE DEPARTMENT OF EDUCATION TO DEVELOP AND ESTABLISH A LIVE, LEARN, WORK, AND PLAY PROGRAM TO PROMOTE WORKFORCE READINESS IN HAWAII'S STUDENTS THROUGH CAREER PIPELINE AND ACADEMY SCHOOL INITIATIVES

FRIDAY, MARCH 24, 2017

COREY ROSENLEE, PRESIDENT
HAWAII STATE TEACHERS ASSOCIATION

Chair Kidani and Members of the Committee:

The Hawaii State Teachers Association **supports SCR 171/SR 85**, requesting the Department of Education to develop and establish a live, learn, work, and play program to promote workforce readiness in Hawai'i's students through career pipeline and academic school initiatives.

According the Hawaii State Department of Education, "Career and Technical Education is an educational structure that allows students the opportunity to explore and learn through the practical application of academic and technical skills and knowledge. The support and involvement of business and industry in CTE is critical to the preparation of tomorrow's skilled workforce."

Yet, there is concern among CTE stakeholders (teachers, industry experts, and employers) about the lack of CTE inclusion in federal education legislation. As a result of the federal emphasis on high stakes accountability over the past decade, secondary schools across the state have diverted CTE funding to core content areas, especially English Language Arts and mathematics.

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A majority of all current job openings, both locally and nationally, are for positions that do not require a college degree. While education reform rhetoric endlessly extols "college and career readiness," job projections by the Hawai'i Department of Labor show that, overall, more than 72 percent of the state's projected openings through 2022 require a high school diploma or less. For comparison, about 15 percent of future openings require a bachelor's degree and only 4 percent require a master's, doctoral, or professional degree.

Hawai'i's CTE offerings must be expanded, then, to allow young people to design their own futures. According to a national study, only 25 percent of polled job seekers reported receiving career pathing in high school, however, with 41 percent saying that they wished they had received more vocational guidance. Careers taught through the state's CTE program–from automotive technology to environmental management to digital media–are at the cutting edge of our local economy, often STEM-related, and require real-world skills that students and employers desire, and that the CCRI paradigm too often fails to advance. One way of increasing participation in CTE programming is to task the DOE with developing a K-12 career pipeline initiatives, which can advance workforce development by ensuring that the growth of highly-skilled employees is a strategic goal of the department.

To prepare students for the 21st Century workforce, the Hawaii State Teachers Association asks your committee to **support** this bill.

HAWAII YOUTH SERVICES NETWORK

677 Ala Moana Boulevard, Suite 904 Honolulu, Hawaii 96813
Phone: (808) 489-9549
Web site: http://www.hysn.org E-mail: info@hysn.org

March 20, 2017

Senator Michelle Kidani, Chair,
And members of the Committee on Education

TESTIMONY IN SUPPORT OF SCR 171/SR 85 REQUESTING THE DEPARTMENT OF EDUCATION TO DEVELOP AND ESTABLISH A LIVE, LEARN, WORK, AND PLAY PROGRAM TO PROMOTE WORKFORCE READINESS IN HAWAII'S STUDENTS THROUGH CAREER PIPELINE AND ACADEMY SCHOOL INITIATIVES

Hawaii Youth Services Network, a statewide coalition of youth-serving organizations, supports SCR 171/SR 85 Requesting the Department of Education to Develop and Establish a Live, Learn, Work, and Play Program to Promote Workforce Readiness in Hawaii's Students through Career Pipeline and Academy School Initiatives.

It is likely to increase interest in science, technology, math, and engineering careers, where there is an unmet demand for workers. Providing hands-on technical education can increase graduation rates by successfully engaging students who are not reached effectively in traditional classroom settings and accommodating students with diverse learning styles. In the 2016 Children and Youth Summit at the State Capitol, youth identified hands-on education on real life skills as a top priority.

Thank you for this opportunity to testify.

Sincerely,

Judith F. Clark, MPH
Executive Director

Native Hawaiian Education Council

March 22, 2017

Senator Michelle N. Kidani, Chair
Senator Ka`aialii Kahele, Vice Chair
State of Hawai'i Senate
Committee on Education

Via: Electronic Upload - EDUtestimony@capitol.hawaii.gov

RE: SCR171-SR85 - REQUESTING THE DEPARTMENT OF EDUCATION TO DEVELOP AND ESTABLISH A LIVE, LEARN, WORK, AND PLAY PROGRAM TO PROMOTE WORKFORCE READINESS IN HAWAII'S STUDENTS THROUGH CAREER PIPELINE AND ACADEMY SCHOOL INITIATIVES.

Aloha 'olua mai,

The Native Hawaiian Education Council (NHEC or the Council) **SUPPORTS SCR167-SR85** based on our strategic plan strategies of linking: a) Business to curriculum work; b) Education program outcomes to employment opportunities; c) Business communities and partnerships with education; and d) P-20 programs and models systemically.

The Native Hawaiian Education Council was established in 1994 under the federal Native Hawaiian Education Act. The Council is charged with coordinating, assessing and reporting and making recommendations on the effectiveness of existing education programs for Native Hawaiians, the state of present Native Hawaiian education efforts, and improvements that may be made to existing programs, policies, and procedures to improve the educational attainment of Native Hawaiians.

Please feel free to contact the Council's Executive Director, Dr. Sylvia Hussey, directly via e-mail (sylvia@nhec.org), office (808.523.6432) or mobile (808.221.5477) telephone with any questions.

Sincerely,

Lisa M. Watkins-Victorino

Dr. Lisa M. Watkins-Victorino, Chair

cc: Policy & Advocacy and Executive Committees and staff

Testimony of Patrick J Gilbert on SCR171

I was in shock after reading SCR171 – so much so that for the first time I am submitting testimony. Of course, I am fully aware that like most testimony mine will be ignored but writing this document at absolves me of the guilt of not speaking up. There are many potentially good points that can be culled from the SCR but as it stands it needs a significant rewrite. There are factual errors. There are statements not grounded in fact. There are truisms that simply are true but do not add to the argument.

By way of introduction, I am Patrick J. Gilbert PHD, MEd, MS, and BEd and a 1965 graduate of Waialua High. I have been involved in education since 1968 as a high school teacher, community college teacher, West Oahu, and UH Manoa instructor in business and Information and Computer Science. I am currently a lecturer in Information Technology at Kapiolani CC. I am a DOE substitute teacher so that I can stay in contact with lower education. I have been a member of the HSTA Negotiating Team with Joan Husted – the one that called the strike against the State that gave teachers many of the benefits they now enjoy. My PHD concentrated on distance education and where it might take the University. During the investigation, I must have read between 3,000 and 4,000 articles on many areas of education. So, I have a good sense about trends and issues in education and the nascent ability to read educational research and make sense of it.

SCR171 appears to be an outgrowth of some efforts by the Leilehua Alumni Community Association (LACA) which to date has yielded little. In fact, web sites and communication on the effort have been basically dead for over a year. [A check of the Facebook shows it was last updated in 2014. There do not seem to be other broad, public communications.] The concepts contained in the effort are not bad but two very important issues arise:

1. Does whatever the “Live, Work, Learn, Play” program is generalize across the State?
2. The program is amorphous and ill-defined so how would one assess the efficaciousness and efficiency of the program?

Absent clarity the broad scope of researching an extension to a wider audience by the DOE is unlikely to result in a clear and cogent report. It is even more unlikely to result in an implementable program.

It is clear from many of the “resolved” paragraphs that the SCR is borrowing heavily from existent or yet growing efforts. For example, one of the resolves is clearly an enhancement of the efforts already underway where high school students earn college credits using methods like SAT AP courses, Jumpstart, and others. There is nothing hugely new in the paragraph except for the currently very unrealistic suggestions that high school students might earn an associate degree from the UH System will concurrently earning their high school diploma. There are far too many hurdles to such a proposal but there are some alternatives that could capture the essence of the proposal.

As the Leilehua complex is a model for such an effort, it is important to look at the just released P-20 statistics below for a shot of reality. Before we worry about college credit, we should note that English language proficiency is only 53%, Mathematics 38%, and science 25% on the state-wide standard test SBAC. Further, we see a similar pattern in the ACT results where reading, math, English, and science on the college admission test also indicate that the preparation for post-secondary work is challenging. Leilehua is already participating in the dual credit program at a very low level. The College Board AP exam with a 3 or better that grants credit in various courses at various colleges if they accept the result is also but a fraction of the student body.

LEILEHUA P-20 Status Report (March 2017)

State Assessments (% Proficient) [4]			
English Language Arts (SBA)	*	*	53%
Mathematics (SBA)	*	*	38%
Science Assessment	*	*	25%
ACT [5]			
# (%) of completers taking the ACT	305 (77%)	326 (85%)	321 (86%)
% College Ready: English ≥ 18	35%	35%	34%
% College Ready: Reading ≥ 22	16%	22%	19%
% College Ready: Math ≥ 22	16%	17%	22%
% College Ready: Science ≥ 23	11%	17%	16%
Dual Credit [6]			
# (%) of completers participating	2 (1%)	30 (8%)	29 (8%)
# (%) of completers earning ≥ 6 credits	†	9 (2%)	15 (4%)
Advanced Placement (AP)			
# (%) of completers taking AP exams	133 (34%)	163 (42%)	144 (38%)
# (%) of completers scoring ≥ 3 on an exam	70 (18%)	79 (21%)	68 (18%)

The issue is not that Leilehua is a troubled school because many of the results compare favorably to state averages which are themselves not the best. It is also the case that the Smarter Balanced (SBAC) is not necessarily a reliable test for comparison and is being challenged across the US. More so, it really makes no sense to give the ACT to all students or a large population of students unless that test is actually required and the student has prepared for it as you would be testing students on subjects or skills that they have no intent and will not need.

Maybe the most fundamental issue with the SCR is that I purports to have a "program" that should be encouraged, studied, and introduced state-wide. It proposes the introduction of yet another curricular or organizational intervention in the midst of significant upheaval within the DOE system over common core (math, language arts) and NGSS (science) while also making changes and placing emphasis on new pathways for CTE and early college credit. Then there is the just released national standards for computer science education that have not even been discussed at a serious level for implementation. All of these programs are putting a great deal of stress.

It is also the case that such programs often fail.

1. I can recount in 1968 being a novice mathematics teacher who was "compelled" to attend "new math" professional development because this new methodology that avoided wrote skills and emphasized "understanding", "the beauty of math", and "the structure of mathematics" as going to solve our lagging mathematics results. The system failed miserably in a few years as students soon could not do basic manipulations.
2. In Los Angeles, the huge district went whole-hog for "every student gets 1 to 1 access to a computer" as did Hawaii but only in prototype or selected schools. In LA, the entire processed collapsed with the schools suing all the vendors for selling them a bill a goods. Actually, what

many indicate is that there was no actual curriculum and a total lack of preparation for such a massive change. Such external efforts can yield benefit but most fail.

3. On its last day in office the Obama administration released a report on the efforts it had made on such publicized programs as Race to the Top. The essential result: The programs failed.

The point is, when one attempts to make organizational change external that sound so very good – and just might be good – that the likelihood of success is low especially when the objectives are unclear, the funding weak, and the organizational commitment low. SCR171 sound like the classic case.

Whereas Paragraph #1

WHEREAS, despite a state-wide high school graduation rate of eighty-one percent, only fifty-six percent of Hawaii's public school graduates continued on to post-secondary education in 2015; and

The numbers cited are correct. The 81% high school graduation rate is fantastic but missing in the analysis is the quality of that graduation. To discuss the quality impact of the obsession with the percent graduating would take too many pages but suffice it to say that there are indications that if you lower the bar sufficiently downwards that more students can jump over it. Though it is a one-off observation, I watched all summer in one high school as students did "credit recovery" activities. These activities were far less than those which might be covered in a normal class. They appeared to be designed to just get the credit and move on. I was struck by one key observation – many of the classes were online. From all my research, the one key point made about distance education is that "weak" students should almost never be taught this way because they did not have the study skills in the first place to succeed. Putting such students in independent learning is demonstrated in research as being the single worst choice for the student.

The measurable consequence of the obsession with post-secondary education as a marker of success is the P-20 et all focus on the percent going – herein reported as 56%. Again, no quality measure. An analogous situation would be for 65% of all "rural" Oahu getting on H1/2/3 to head to town at 7AM. We would have a high percentage on the road but almost no one would have a quality experience. How does this relate to post-secondary education?

Point 1: The completion rate for our University system is approximately 60% for UHM and 40% for the CC system. We push students into situations where failure is highly likely. We push far too many students into post-secondary education who are not ready. The measure of percent going is the worst possible measure.

Point 2: Is there real evidence of the impact of the obsession with percent going to post-secondary education? Yes. Just consider Kapiolani Community College and limit the discussion to Mathematics though similar patterns are available for other large, foundational academic programs. Given that everything below and including Calculus I is remedial, it is immediately obvious that only 5% of all offered mathematics courses at Kapiolani are remedial[1]. Essentially, KCC is forced to duplicate courses

[1] Here we are defining remedial as courses that are offered to students in high school. There will be discussion about whether all the courses classified remedial are "remedial" but if one goes by mathematical content and terminal performances objectives of each course match lower level courses.

and skills that should have been acquired in secondary education and in most cases are covered by DOE graduation expectations. The point – we are pushing students into post-secondary education who must then repeat or take for the first-time mathematics that should have been learned. What good then is pushing 56% to go secondary education? It is a social good that everyone achieve to the highest possible -- but consider this against the push for post-secondary education.

The education establishment and various others are pushing students into a situation for which they should have been prepared by secondary education – but they were not.

Row Labels	Count of Con	Percent
MATH 075X-Expand Intro to Math Reasoning	10	13.2%
MATH 078-College Math Companion	3	3.9%
MATH 082-Algebraic Foundations	5	6.6%
MATH 088-College Algebra Companion	5	6.6%
MATH 100-Survey of Mathematics	9	11.8%
MATH 103-Fundamentals of Coll Algebra	19	25.0%
MATH 111-Math for Elementary Teachers I	1	1.3%
MATH 112-Math for ElementaryTeachers II	1	1.3%
MATH 115-Statistics	4	5.3%
MATH 135-Precalc: Elementary Functions	7	9.2%
MATH 140-Trigonometry/Analytic Geometry	4	5.3%
MATH 205-Calculus I	4	5.3%
MATH 206-Calculus II	2	2.6%
MATH 231-Calculus III	1	1.3%
MATH 232-Calculus IV	1	1.3%
(blank)		
Grand Total	76	

Whereas Paragraph #2

WHEREAS, there is a disconnect between the needs and expectations of today's employers and the current skills of the State's local workforce; and

This statement has been a truism and remains one. For one thing, education changes much slower than employers who must respond quickly or fail. Before education responds to change, the change must be obvious, must be put into structure, text and educational material must be prepared, there must be staff who understands the change, and so on. Then, the huge diversity of "current skills" will be so vast that it is unreasonable to expect a response – there are just not the resources. Research has indicated that employers are not expecting "current skills" because many realize they will have to do more extensive and specific training. For example, Starbucks does not expect a Barista to be trained by the schools to make a Carmel Machiato but it does expect that the schools provide a work ethic of a responsible citizen who understands being on time and caring about their job. Unfortunately, as was revealed in a P-20 document – the soft skills are ignored in favor of the more measured math, science, language arts and such.

This paragraph as a truism also suffers from an assumption that we know what are "current skills". It is impossible to know this unless you are in a slow moving field like retail or government. If we consider…

Whereas Paragraph #3

WHEREAS, industries in the State require employees with skills in coding, computer science, engineering, foreign language, and other technology-based jobs; and

Again, the Georgetown study as cited elsewhere does not indicate the growth that is supposed by this paragraph.

Given that I am an instructor of coding and computer science, I believe that the statement as it stands makes no sense. Coding should not be listed as coding is not something one does absent a purpose. Though it is a skill like good writing in the grammatical sense, it is the content that counts in the writing – the purpose to which the writing is done. Coding is more than grammar but much less than content.

Computer science is a very special subset of all that might be embodied in computer technology. CS is a highly mathematical field that is captured within the sciences thus requiring very specific and challenging course work. CS is also generally a minimum of a bachelor's degree to be competent.

There is of course a wide swath of alternatives that are not "computer science" per se. Examples in Hawaii might include the Kapiolani, Leeward, and Honolulu Community college specializations in networking and software development. These are different programs and the fact they are 2-year programs eliminates many job opportunities that require a BA or BS though today UH West Oahu and these three community colleges have cooperative arrangements to expedite and align their academic programs so that students can more efficiently apply their CC technical work towards a bachelor's degree.

This paragraph is also confusing because most of the emphasis is STEM yet language skills are tossed in. This is unrelated except – for those who understand some confusion caused by the NSA personnel who listed these skills as things they may want – in the connection just described. There are many skills that the state needs. Soon, as retirements are projected, we will need many new medical doctors and our replacement rate is not good. We need more teachers due to high turnover of entering teachers and aging of the workforce.

This paragraph simply makes no sense as a general statement about State needs. If it is intended to be a statement about STEM, then I must be clarified.

Whereas Paragraph #4

WHEREAS, the current low unemployment rate has contributed to employers finding it more difficult than normal to fill vacant positions because too few individuals have the right skills for the right openings; and

Again, this is a truism. Research has shown that there is a missing component of this – the right person with the right skills at the right cost. There has been a great deal of discussion in the "computer technology press" about the claims of insufficient people with commensurate skills. The problem is not

as simple as it sounds. Employers use this claim as a "woe is me" but often have little hard data to substantiate the claim.

Before the Senate validates this claim in a resolution, some proof is needed. The whereas is so general and so unsubstantiated that allowing it to stand is essentially making the case for an argument that may not be true – or may not be as intended.

Whereas Paragraph #5

WHEREAS, business leaders in Hawaii's expanding industries have reported that the reason it is often difficult to recruit local applicants who have the skills and experiences that the employer needs is that there are not enough skilled workers graduating; and

Again, as with the previous paragraph – what is the proof? What are the skills?

Whereas Paragraph #6

WHEREAS, a gap exists between the skills that students in the State have upon graduation and the skills that employers in the State are seeking; and

This repeats paragraph #2 and adds no insight. Further, this paragraph refers to "gap", "graduation", and "skills that employers [seek]". The paragraph fails to specify what institutions? High school? Community college? Specialty college? Four year university – bachelor, master, doctorate?

Whereas Paragraph #7

WHEREAS, a way to close this skills gap is to improve job training and more closely align education to employment; and

This will be rejected by much of the educational establishment. Why? Because this is the description of education as a technical trade school.

Let me provide you an example from my experience at Kapiolani CC Information Technology of about 20 years ago which is as much true today. KCC ITS has always had an excellent focus on the vast majority of IT employers and opportunities via constant feedback from its various external bodies. At one point, we were being told that the skills needed were COBOL on mainframes and RPG on midrange computers. When the college moved to Diamond Head, we revamped and upgraded the equipment and environment to meet that need. The problem was that IBM had just introduced the PC and a revolution was afoot. If we had continued to focus on the "close alignment" as called for in this whereas we never would have created labs of PC's to begin to introduce the revolution that would sweep away most RPG shops.

The point is not to say education programs should not be cognizant of current needs but it is also the case that real world often moves either too slowly or too quickly for education to respond.

Whereas Paragraph #8

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1       WHEREAS, closing the skills gap for science, technology,
2  engineering, and mathematics (STEM) jobs is extremely important,
3  as STEM jobs are expected to grow 1.7 times faster than non-STEM
4  jobs in the coming years; and
```

This is a terrible paragraph. It fails on the most basic of statistical comparison. It also appears that this value is a quote from a website WalletHub that does not provide a solid basis for its calculation.

The major fallacy in this citation is volume. Small and insignificant volumes of any observation will move as a percent much more rapidly than large and established activities.

For example, Apple computer stock may only move 0.2% while Snap Chat may move 3% thus making Snap Chat move 15 times faster yet in volume Apple's move represents billions of dollars and Snap Chat hundreds of thousands.

Or consider the birth of 10 Hawaiian Monk seals. The population being so limited, the appearance would be spectacular. Whereas, 100,000 more Chinese or Indians born in China or India respectively would be such a small percentage that no one would care. Yet, if you compare the percent growth rate of seals to the percent growth rate for Chinese/Indian, you would find the "rate" largely skewed toward the seals.

Comparisons of rates of growth of populations must always also consider the size of populations and thus the importance of the growth figure.

The comparison in this paragraph of the SCR is meaningless and useless for decision-making without clarification.

We now turn to the projected job counts from the often-cited Georgetown labor research institute. They project Hawaii will have approximately 733,000 employed people while 22,000 STEM jobs(or maybe 49,000 depending on definitions of STEM). It may be that STEM is rising faster but as total job count it is insignificant. Mark Twain is often quoted as having said, "There are lies, damned lies, and statistics.". This quote of 1.7 times faster fits Mark Twain's concern.

Whereas Paragraph #9

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6       WHEREAS, Honolulu has not been able to keep up with the
7  rising demand for STEM professionals; and
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Again, depending on what one includes as a STEM job – and that is NOT clear from either the Federal or other sources—the Georgetown center projects an increased demand of jobs between 2,000 and 4,000 – again depending on definitions. There are other projects. Also, most projects are for Hawaii and not Honolulu as stated above.

This claim of a shortage of professionals was made by the recent Hawaii head of NSA but when it was challenged it turned out to be a far smaller problem that originally though. In fact, it turned into a non-problem.

Whereas Paragraph #10

WHEREAS, according to a 2017 analysis of the best metropolitan areas for STEM professionals, Honolulu ranked ninety-five out of one hundred; and

This is the worst semi-citation of all. Again, this goes back to a website[2] not a valid, established research institution or certainly not any academically reviewed research. The data comes from WalletHub.com. Before one accepts this "ranking", one must ask – what was the basis of the ranking.

In survey research, one must ask if the question have external validity – do the claimed set of measurements actually measure what the object is? The researcher has an obligation to the reader to address the validity question and establish validity beyond reproach. Failure to do this makes the instrument invalid and thus its conclusions useless.

As previously mentioned, there is a serious challenge as to the list of skills that employers are seeking. Who said these are the measures that are important? Are the measures skewed to a specific area or region? Why are the measures weighted as they are.

Then, one needs to read who did the ranking? As it turns out, "staff" did the review. They also have not published or provided other verification of details. Even if one accepts the categories, the ranking values themselves could be open to challenge. There is no discussion of how staff did the review. There is no discussion of why they were qualified. There is no discussion of any relationship to a reality.

This ranking is simply a joke. It is an insult. It is a nice but useless article as far as decision-making is concerned.

Whereas Paragraph #11

WHEREAS, high school students in Hawaii would benefit from precisely aligning curriculum to workforce readiness which depends upon close collaboration between the public school system, a community college, and one or more industry employers near the school complex to ensure they receive the industry-based skills and certification required for employment post-graduation and to live, learn, work, and play in the community; and

This is pure non-sense. Why would a person's job be near a "school complex"? A job is where the employer is.

[2] https://wallethub.com/edu/best-worst-metro-areas-for-stem-professionals/9200/

Why would education be limited to the one's initial community? Should we condemn Waialua graduates to work in the sugar can fields – oops – that industry doesn't exist. Pick pineapple –ooops gone. Grow corn? That exists but hires few people. What happens to the student who wants to build robots but lives in Waimea on the Big Island? Should we say – concentrate on raising cows and being a paniolo?

This paragraph is clearly related to websites from the Leileihua (LACA) effort where a dying community is hoping to entice the younger generation to find employment and remain in the community to avoid further atrophy.

As noble a societal goal as this may be – it is not realistic. There is simply not the economic activity nor the kinds of jobs that many young people will seek that are necessarily co-located with

Whereas Paragraph #12

WHEREAS, collaboration between educators and industry allows students to graduate from high school with a high school diploma and an industry-recognized associate's degree, as well as pre-apprenticeship certificates and other industry-recognized certificates; and

This paragraph makes no sense. Cooperation between educators and industry allows a high school student to concurrently graduate with a high school and associate "industry recognized associate degree". This paragraph is mess as it weaves together many unrelated activities. Industries do not "recognize" associate degrees. Yes, educators and industry people meet, discuss, and develop but recognition is not part of the process. The modifier "industry-recognized" in front of associate degree is irrelevant.

Further, though it is true that high school students can – through various limited programs -- start to take college courses, the idea that a high school student will earn a 2-year degree is preposterous on its face – at least as education is organized now. Yes, you could release all qualified students from their junior year on in high school to go to college and skip the last two years of high school – but in so doing impact staffing at high schools, upset graduation requirements, and initially overload 2-year schools. The union and professional kick-back against this – except as negotiated – will be significant. The idea of community colleges forking over their courses to high school would also be contentious due to staffing.

As to certification, many certifications are organization independent. A person could get certified without formal schooling or a course could align with the certification.

This paragraph needs major revision. There are some very serious values to be had but the vast majority as written will draw fire from may sides and can not become a reality. I will address some of this in the conclusions.

Whereas Paragraph #13

WHEREAS, similar models recently established in Connecticut, Illinois, and New York are showing promise in graduating more high school students with career-ready skills to meet an industry's workforce needs; and

There are many such programs. One must inspect closely the applicability of the program. As this resolution calls for investigation, then the paragraph is fine. It is also the case that often these touted solutions do not transfer or are meeting specific needs.

Whereas Paragraph #14

WHEREAS, Hawaii has also experienced difficulties with "brain drain", the constant challenge encountered in the public and private sector of retaining Hawaii's highly-skilled or highly-intelligent workers or encouraging the return of those workers who left the State for school or work; and

This has nothing to do with education and educators have no control over this.

The claim made in this paragraph needs foundation. Who or what is the proof of this? And, why would not Hawaii's best students not want to move to Silicon Valley to work at Google? IBM? Microsoft? Intel? Apple? Facebook? Hawaii has NO equivalent – not even close. Besides the creativity, the leading edge, the excitement, and everything else – the pay at these major businesses is so much greater than Hawaii.

If there is a drain, it is the fault of employers –failure to pay commensurate salaries. Failure to provide the excitement and creativity.

Failure of the business environment to foster the growth of the kinds of businesses – and in sufficient number – that would counter the drain. As repeatedly published in national publications, the Hawaii environment for business is one of the worst in the nation and is generally only saved by our physical environment – which is not something that Government controls or creates. Those attributes that would create the economic activity sought in this paragraph to counter the drain are run again so much of the regulatory environment of business here.

I also challenge the "brain drain". Where is this proven? I have heard this claim for years. I personally know so many students who have made rational decisions to move elsewhere across the US to take up opportunities they would never have here. They are happy with that decision.

Whereas Paragraph #15

WHEREAS, a recent United States Census report found that ten thousand more people moved out of Hawaii to other states than moved in from other states - the biggest loss since 2010; and

This is another ungrounded statistic. A great number of the move from Hawaii is for retirees who are seeking a more balanced cost-of-living to match their income. This paragraph appears to be an unrelated factoid thrown into the resolution to provide more heft – but it adds nothing to the argument.

One must ask again – so how is this related to education.

Whereas Paragraph #16

WHEREAS, many high school graduates in Hawaii go elsewhere to attend college or seek employment, resulting in the "brain drain" in the State; and

No proof. Yes, students go elsewhere. The go for football. Sports. They go because they want to achieve in life—they want Harvard, Yale, MIT, Berkley, and so on. They want to grow and be out of their parent's home. Many go because institutions recruit them. Students seek programs not particularly strong in Hawaii but are available elsewhere.

Where are the statistics on this? Where have we actually lost people? This is another one of those tales told. What are the surrounding issues for the move?

Whereas Paragraph #17

WHEREAS, the Department of Education has established several options to prepare students for either a college or career pathway:

(1) Academies or pathways for high school;

(2) Dual-credit programs enabling students to graduate high school with college credits; and

(3) Career and technical education programs; and

All true. But how expansive? How available on a fair basis across all of Hawaii? How successful are these programs? The paragraphs said "DOE has established several options". What is the evaluation of these options? Are they working?

The problem with this paragraph is that is says nothing except that some programs exist under some conditions for some people with some success. This paragraph mixes what exists with the eventual be it resolves that might propose change.

Testimony of Patrick J Gilbert on SCR171

Right now I am going through each of the recently released P-20/DOE status reports on college readiness and other vital statistics My specific interest relative to these reports is this: Is the access, availability, and use of Jump Start and other programs as outlined in this whereas fairly and evenly distributed or it is the case that the "rich" and "affluent" districts of the State have all the access? Do we have the same kind of unfair advantage based on various demographics that were the foundation of the Brown v Board of Education – do we have serious inequality to educational opportunity that we believe is a societal good?

There are a considerable number of "be it resolved" paragraphs in the SCR. The problem is that before one can proposed a solution via a "resolution" the problem itself has to be clearly understood and a solid foundation provided upon which to base the resolution. For that reason, I will halt here and not comment on the "resolves" as laudable as some of them may be.

It is my belief that the predicate to the conclusion is not established and that before proceeding to advocate a program or send the DOE on a wild goose chase that more clarity is needed. The research cited in the predicates is flawed or weak. The assertions made are more "truism" than actionable.

Again, there are so many things that could be good in the underlying intent.

If I can be of any value in further explaining or in sharing some ideas that may be far more effective then please contact me.

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Appendix: WalletHub Criteria-Methodology

In order to determine the best job markets for STEM professionals, WalletHub's analysts compared the 100 most populated U.S. metropolitan statistical areas (MSAs) — metro area, for short — across two key dimensions, namely "Professional Opportunities" and "STEM-Friendly Environment."

We evaluated those dimensions using 17 key metrics, which are listed below with their corresponding weights. Each metric was graded on a 100-point scale, with 100 representing the most favorable conditions for STEM professionals. Data for metrics marked with an asterisk (*) were available only at the state level.

Finally, we calculated the overall score for each metro area based on its weighted average across all metrics and used the resulting scores to rank the metro areas.

Professional Opportunities – Total Points: 70

- Job Openings for STEM Graduates per Capita: Double Weight (~13.33 Points)
- Share of Workforce in STEM: Double Weight (~13.33 Points)
- Projected Demand for STEM Jobs by 2020*: Half Weight (~3.33 Points)
- STEM-Employment Growth: Double Weight (~13.33 Points)
- Unemployment Rate for Residents with at Least a Bachelor's Degree: Full Weight (~6.67 Points)
- Research & Development (R&D) Spending*: Half Weight (~3.33 Points)
- Research & Development (R&D) Intensity*: Half Weight (~3.33 Points)

Note: "R&D Intensity" refers to R&D expenditures expressed as a percentage of GDP.

- Utility Patents*: Half Weight (~3.33 Points)

  Note: “Utility Patents” refers to state-granted invention patents as a percentage of the U.S. total.
- Annual Median Wage for STEM Workers: Full Weight (~6.67 Points)

  Note: This metric was adjusted by the cost of living.
- Annual Median Wage Growth for STEM Workers (2013-2015): Half Weight (~3.33 Points)

STEM-Friendly Environment – Total Points: 30

- Mathematics Performance*: Full Weight (~5.00 Points)

  Note: This metric considers standardized math test scores of fourth and eighth graders.
- Share of Best Engineering Schools: Full Weight (~5.00 Points)

  Note: This metric measures the number of engineering universities in the top 100 of U.S. News & World Report’s Best Engineering Schools ranking.
- Quality of Engineering Universities: Full Weight (~5.00 Points)

  Note: This metric is based on U.S. News & World Report’s Best Engineering Schools ranking.
- Housing Affordability: Full Weight (~5.00 Points)

  Note: This metric was calculated as follows: Annual Median Wage for STEM Workers / Median Gross Rent.
- Transit Accessibility of Workplace: Full Weight (~5.00 Points)

  Note: This metric measures the number of jobs accessible within 30 minutes by transit held by workers with at least a bachelor’s degree divided by number of workers with at least a bachelor’s degree.
- Recreation-Friendliness: Half Weight (~2.50 Points)

  Note: This metric is based on WalletHub’s Best & Worst Cities for Recreation ranking.
- Family-Friendliness: Half Weight (~2.50 Points)

  Note: This metric is based on WalletHub’s Best & Worst Cities for Families ranking.

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SCR171
Submitted on: 3/21/2017
Testimony for EDU on Mar 24, 2017 14:45PM in Conference Room 229

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Mizusawa	Individual	Support	No

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Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Oppose	No

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Submitted By	Organization	Testifier Position	Present at Hearing
Kaulana Dameg	Individual	Support	No

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