

“...tonight I ask every American to commit to at least one year or more of higher education or career training. This can be community college, a four-year school, vocational training, or an apprenticeship. But whatever the training may be, every American will need to get more than a high school diploma.”
2009, President Barack Obama

Summary

The Hawaii Secondary **Career and Technical Education (CTE) program, formerly known as Vocational Education**, partners with industry, employers, and postsecondary education to help high school students develop their academic knowledge, technical skills, employability, and personal dispositions through Career Pathway Programs of Study (POS). As a recipient of federal funds through Perkins IV, officially called the Carl D. Perkins Career and Technical Education Act of 2006, Hawaii secondary CTE programs prepare students for college, career, and civic readiness through POS based on formally articulated academic and industry standards.

One CTE program, the Construction Academy Program, supports students who are pursuing a certificate or degree after high school in the post-secondary CTE Building and Construction (B&C) Program. It opens a path to continued, higher education that has the potential to lead students to high-skills, high-wage, meaningful careers. This addresses the 2016 Bureau of Labor statistics issue which showed that workers with only a high school diploma are at a disadvantage when compared to workers with post-secondary education/training and are, on the average, more likely to be unemployed and earn 50% less than their counterparts. (<http://money.cnn.com/infographic/economy/college-degree-earnings/>, Source: Bureau of Labor Statistics data for 2015. Published April 5, 2016).

HCR 103

The intent of HCR 103 is “to further diversify the curriculum in public schools by offering vocational training programs that will help to prepare students for life after high school,” specifically in the construction trades and through the Construction Academy and B&C POS. Tasks include:

- Identify ways to either re-introduce or expand current vocational training programs within public high schools and create a “dual credit” program with available apprenticeship programs;
- Identify barriers that may exist either administratively, legislatively, or by way of resources; and
- Create and implement a curriculum plan (and if necessary a legislative plan or package) that will realize the vision of HCR 103.

HCR 103 also recognized that Department of Education (DOE) schools maintain a list of minor repairs defined as any repair estimated at less than \$10,000 and not requiring a building permit for completion. The HCR 103 task force sought to review opportunities and practicalities of CTE Construction Academy students completing select minor repair projects at their schools, engaging them in hands-on, work-based learning using various industry trade skills. These projects would align to CTE and Perkins IV related indicators and outcomes of “work-based learning” and “all aspects of industry.”

Report Contributors, Stakeholders

The HCR 103 taskforce convened five times from October 2016 to early January 2017. The group worked collaboratively in producing this report; no Chair was selected.

The following members participated in the work of the task force:

Michael Barros	Educational Specialist, Hawaii Department of Education, Office of Curriculum, Instruction, and Student Support
Alison Inouye	Industrial and Engineering Technology State Resource Teacher, Hawaii Department of Education, Office of Curriculum, Instruction, and Student Support
Brenda Lowrey	Planner, Hawaii Department of Education, Office of School Facilities and Support Services, Facilities Development Branch
Bill Gebhardt	Engineer, Hawaii Department of Education, Office of School Facilities and Support Services, Facilities Maintenance Branch
Representative Feki Pouha	Hawaii House of Representatives
Ryan Kobayashi	Office of Representative Feki Pouha
Tyler Dos Santos-Tam	Executive Director, Hawaii Construction Alliance (Hawaii Regional Council of Carpenters; Plasterers and Cement Masons Union, Local 630; Bricklayers & Allied Craftworkers, Local 1; Hawaii Laborers Union, Local 368; and Operating Engineers, Local 3)
Kenton Short	Construction Academy Coordinator, Honolulu Community College
Heather DeFries	Academic Support Specialist, Honolulu Community College
Guy Shibayama	Apprenticeship Coordinator, Honolulu Community College
Malia Espinda	Government Affairs Specialist, Hawaii Department of Education, Superintendent’s Office

After discussing and researching current conditions surrounding the intent and purpose of HCR 103, the task force organized this report to communicate and clarify the following:

- Background on the transition from high school Vocational Education to Career and Technical Education or CTE, and the connection to Construction Academies;
- Major “barriers” identified by task force stakeholder groups related to the intent of HCR 103;
- Goals, organized by current conditions, recommendations, and challenges; and
- Proposed and/or alternative curriculums and implementation strategies embedded as recommendations in goals and in line with the intent and purpose of HCR 103.

Background on the Transition from Vocational Education Programs to CTE

For a large part of the 20th century, *Vocational Education*, tracked students into either academic college preparatory programs or technical programs for students who entered careers after high school graduation. These pathways did not equitably prepare all students for post-secondary college and

career demands. Congress responded at the national level by modernizing the federal vocational education law, known as the Carl D. Perkins Vocational Education Act of 1984. The reauthorization of the Carl D. Perkins Career and Technical Education Act of 2006 required a clearly defined integration of academic and technical tracks, changing the program once called “Vocational Education” to “Career and Technical Education” or CTE. Integrated, rigorous academic and technical content prepares CTE students for post-secondary education/training and careers, avoiding remediation at the post-secondary level while building a foundation toward high-skill, high-wage, or high-demand occupations in current or emerging occupations. This reauthorization has resulted in the development of CTE Pathways, strengthening secondary CTE students’ access to sound academic programs while maintaining a strong technical program. These combined academic and career-related courses connected high school and post-secondary/college work that lead to credentials or certificates of attainment. Perkins IV also required states and subgrantees (such as schools) report on performance standards around core academic, technical, and graduation and placement indicators related to POS completion. (<https://www2.ed.gov/policy/sectech/leg/perkins/index.html>)

Secondary CTE in Hawaii High Schools

Secondary CTE in Hawaii has also undergone structural, organizational and funding changes over time. Downsizing of DOE staff to one general funded state educational specialist for the Vocational Education program occurred in the 1990s under Project Keauhou. Subsequent changes affected state categorical funding with the move to Weighted Student Formula (WSF) for schools. Changes in federal funding occurred with the federal School to Work initiative, (<http://www2.ed.gov/pubs/SER/SchoolWork/study3.html>), the Carl D. Perkins Vocational Education Act Amendments in the late 1990s, and the most recent Perkins IV in 2006.

Hawaii CTE Career Pathways and Programs of Study (POS)

Hawaii CTE provides all high school students with academic and technical skills, knowledge and training necessary to succeed in future careers and become lifelong learners. The CTE Career Pathways, “clusters” of related occupations and careers that share similar interests, content and skills, assists students in making career choices, decisions, and education and training plans (https://www.hawaii.edu/cte/publications/5yearPlan_F2.pdf). They include Natural Resources and Agriculture, Health Services, Business, Public and Human Services, Arts and Communication, and Industrial and Engineering Technology (IET). The construction trades were condensed into the B&C POS in the IET Pathway for CTE. (<http://www2.ed.gov/policy/sectech/leg/perkins/index.html>).

This Career Pathways and POS policy element of CTE offers an efficient and customer-centered approach to training and education by connecting the necessary academics in education, occupational training, post-secondary education, career and academic advising, and supportive services for students to prepare for, obtain, and progress in a career. The following are recognized as the Six Key Elements of Career Pathways and parallel HCR 103 intentions: (<http://www2.ed.gov/rschstat/eval/sectech/nacte/career-technical-education/interim-report.pdf>).

- 1. Build Cross-Agency Partnerships and Clarify Roles.** Partnerships, at the local and state levels, are at the heart of career pathways and are essential to CTE programs’ success. Industry and employers, State and local partners, workforce investment boards, community colleges, adult basic education providers, human services, economic development and community-based organizations, and workforce intermediaries work in collaboration.
- 2. Identify Industry Sectors and Engage Employers.** Pathways Systems in CTE are ideally designed using real-time labor market information and active employer involvement to ensure that training and education programs meet the skill and competency needs of local employers.

3. **Design Education and Training Programs.** A clear sequence of technical education and academic courses embedded in Career Pathways helps students meet the skill needs of high-demand industries. Key program design features include contextualized curricula or work-based learning, integrated academic content applications, occupational training, career counseling, support services, assessments, and credit transfer agreements that ease entry and exit and promote credential attainment.
4. **Identify Funding Needs and Sources.** Career Pathways approaches blend and align services from different government agencies to support a student’s successful completion of a POS. Innovative funding strategies from a variety of public and private sources are essential.
5. **Align Policies and Programs.** Significant alignment among workforce, education, and human services are required by Career Pathways programs to ensure that a student can move seamlessly from school to work and earn in-demand credentials.
6. **Measure System Change and Performance.** Career Pathways initiatives define desired system and program outcomes; establish how data will be collected, stored, tracked and shared; and analyze data and assess progress made toward achieving outcomes.

Hawaii’s Construction Academy, Construction Initiative and Secondary CTE

- Hawaii’s Construction Academy initially began in 2004 when a \$1.4 million U.S. Department of Labor grant to the University of Hawaii (UH) launched a pilot program to assist high school students pursuing careers in the construction industry.
- B&C education partnerships initiated between Honolulu Community College (Honolulu CC) and eight DOE high schools on Oahu.
- Late 2005: The building industry observed there was a shortfall in the number of qualified workers.
- Honolulu CC developed apprenticeship training within the pilot Construction Academy.
- In 2006, the Legislature passed Senate Bill 2980, SD2, HD1, CD1, appropriating \$5.4 million to the UH Community Colleges and expanded the Construction Academy model to public high schools statewide.
- High School Construction Academies provided DOE students with 1) a head start on a two-year post-secondary degree, 2) the ability to enter a post-secondary apprenticeship program at a higher, more qualified skill level, and 3) the opportunity to join the workforce upon graduation with specialized skills and knowledge.

School Year 2014-15 participating Community Colleges, DOE High Schools and student numbers:

Hawaii Community College	Honolulu Community College	Kauai Community College
Keaau Konawaena Kohala Pahoa Waiakea	Aiea McKinley Campbell Nanakuli Farrington Pearl City Kaimuki Radford Kahuku Roosevelt Kapolei Waianae Leilehua Waipahu Mililani	Kapaa Kauai Waimea
Enrollment: 321	Enrollment: 1,111	Enrollment: 169

The Construction Academy model continues to build and strengthen secondary and post-secondary relationships by being flexible to the needs of each high school and its surrounding community, an essential element of implementation. Of the 500 Oahu seniors serviced by the Honolulu CC's Construction Academy program in 2014-15, 229 (56.7%) were admitted to a UH System campus after graduating high school, 34.5% of students were admitted to Honolulu CC. On the Big Island, over half of Hawaii Community College first year carpentry students are Construction Academy students. (https://www.hawaii.edu/offices/eaugovrel/reports/2016/hrs304a-1144_2016_construction-academy_annual-report.pdf, <http://www.honolulu.hawaii.edu/construction>, <http://hawaii.hawaii.edu/ca>)

HCR 103 Task Force Findings: Re-introducing or Expanding Existing Programs

According to Honolulu CC, many high schools on Oahu and across the state have most of the equipment and facilities necessary to support a Construction Academy or B&C program, providing an existing structure to re-introduce, re-start or expand their program with support. The task force discussed and researched three scenarios for the re-introduction or expansion of existing B&C programs:¹

- Scenario 1: DOE takes the entire responsibility for administering, staffing, and funding programs in public schools;
- Scenario 2: DOE allows Honolulu CC to administer, staff, and fund the programs for public high schools under the existing Construction Academy MOA or a new MOA; and²
- Scenario 3: A "hybrid" scenario, DOE is responsible for administering, staffing and funding B&C programs in high schools if a community college is unable to support a Construction Academy.

Barriers Related to the Intent of HCR 103

The number of high schools with Construction Academies and/or B&C programs has decreased for three major reasons. Task force stakeholders agreed that these reasons be identified as barriers to the "reintroduction or expansion of existing programs," and the success of all three scenarios. These barriers are:

- Lack of qualified/licensed instructors with trades experience, knowledge and skills;
- Lack of student interest and low enrollment in the B&C program at some schools; and
- Lack of support in offering B&C and other CTE programs at some schools due to various education policies, directives or mandates that focus more on college preparatory curriculum

Further discussion is needed between the task force and additional stakeholders, including the UH College of Education, the Hawaii State Teachers Association (HSTA) teachers' union, the Hawaii Teacher Standards Board (HTSB), and high school principals. The lack of qualified/licensed instructors for B&C impacts consistency and fidelity of implementing the program, even if enrollment increases and programs are re-introduced or expanded.

¹ All listed options would include cooperation between DOE and construction trades to afford students in the program "dual credit" for graduation and credit in an apprenticeship program.

² A limitation of this option is that the construction academy is an Oahu based program administered by the Honolulu Community College and does not reach to the neighbor islands that do not have a construction academy program of their own. Therefore, while there is potential to build and expand the construction academy program on Oahu, neighbor islands without a community college to administer the program or that do not offer the program would not be able to benefit.

Goals Determined by HCR 103 Task Force

Taking into account processes, time, and resources needed, the task force focused on three goals aligned with the intent of HCR 103. Each goal is further detailed and organized by current conditions, recommendations, and challenges to implementation in the following sections.

- **Goal 1.** Strengthen connections between high school programs through articulation with industry and post-secondary stakeholders on learning and performance expectations, creating a baseline that can be implemented in a statewide curriculum in construction;
- **Goal 2.** Provide hands-on work based learning experiences; and
- **Goal 3.** Increase pre-service programs for teacher training and licensing.

Goal 1: Articulated Expectations, Baseline, and a Statewide Curriculum in Construction to strengthen connections between high school programs through articulation with industry and post-secondary stakeholders on learning and performance expectations, creating a baseline that can be implemented in a statewide curriculum, and either re-introduce or expand current (Vocational Education/CTE) programs that connect with available apprenticeship programs.

Current Conditions

- **Hawaii State secondary CTE standards for Construction Academies and B&C programs are aligned between secondary and post-secondary community college programs.** Since the 2006 Perkins IV reauthorization and the Hawaii Construction Initiative in 2006, all CTE high school POS statewide are standards-based. High school B&C course standards are aligned to post-secondary Student Learning Outcomes (SLOs) at the community college, and are also crosswalked with national occupational skill standards from the National Center for Construction Education and Research (NCCER) where applicable.
- **In School Year 2016-17, 36 of 46 high schools have B&C courses, of which 22 are implemented with a Construction Academy post-secondary partner/on-site instructor.** Fourteen Oahu schools have on-site post-secondary instructors from Honolulu CC, all three schools on Kauai work with Kauai Community College and Hawaii Community College provides an instructor in three East Hawaii schools and two West Hawaii schools. Maui College chose to end its post-secondary construction academy partnership with DOE schools. Fifteen of 36 high school B&C programs are taught by licensed CTE teachers. The 21 remaining are taught by non-CTE teachers, however nine of them work with a Construction Academy post-secondary partner.
- **Curriculum at high schools working with Construction Academy post-secondary partners and/or licensed CTE teachers follow aligned standards so students meet transfer or dual credit requirements for entry to community college programs.** Curriculum at non-academy schools or in programs taught by non-CTE teachers should align with state CTE standards in B&C with teacher support and training to facilitate entry into an apprenticeship program.

Recommendations

- **Align high school curricula with industry trade expectations.** Currently, the State of Hawaii recognizes 40 registered construction trade apprenticeship programs. Nearly all of them require a high school diploma, GED, or equivalent. Several have additional requirements:

Carpenters – Local 745	Basic math test (8 th grade math)
Construction Equipment Operator – Local 3	General knowledge test
Drywall – Local 745	Basic math test (8 th grade math)
Electrical Wireperson – HEW	One year High School Algebra 1
Electrician – ABC	One year High School Algebra 1
Electrician Wireperson – IBEW	One-year High School Algebra 1 or equivalent
Elevator Constructor – Local 126	Math and reading aptitude test
Fire Sprinkler Fitter – Local 675	Pass placement evaluation
Heavy Duty Repairman and Welder – Local 3	General knowledge test
Paving Equipment Operator – Local 3	General knowledge test
Plumber – Local 675	Pass placement evaluation
Refrigeration Air-Conditioning – Local 675	Pass placement evaluation
Steamfitter/Welder – Local 675	Pass placement evaluation
Truck Operator and Driver – Local 3	General knowledge test

The trades typically expect apprentices to have skills such as verbal and written comprehension, self-confidence, problem-solving, ability to work well on a team, and ability to carefully follow directions, which may not otherwise be captured in a written test or in a high school transcript. In addition, apprentices should possess basic practical skills such as reading a tape measure, familiarity with interpreting blueprints and other diagrams, understanding fractions and decimals, and an awareness of basic safety concepts. A listing of the minimum requirements for these registered construction trade apprenticeship programs can be found on DLIR’s website at <https://labor.hawaii.gov/wdd/files/2014/03/Construction-Trades-Revised-10.14.16.pdf>.

- **Share “Career Connections” Curricula with schools.** On the national level, several trade unions have developed B&C curricula which could be adapted for use in Hawaii. One example is the “Career Connections” program from the United Brotherhood of Carpenters and Joiners of America. An articulation agreement with local Carpenters Union apprenticeship programs could enable students who participate in “Career Connections” to earn credits toward the apprenticeship program while still in high school. Benefits include:
 1. Articulated curriculum with construction industry buy-in;
 2. Supports cooperation between schools and the labor unions, providing the potential for graduating students being eligible to enter apprenticeship programs after high school;
 3. Statewide uniformity and consistency between standards and curriculum, making non-academy expectations aligned with expectations in academy schools; and

4. Provides strategies integrating 21st Century skills (“soft skills”) in Construction Academies and B&C programs.

Recently, the Hawaii Carpenters Union provided the “Career Connections” curriculum to the CTE State Educational Specialist for analysis and alignment to secondary CTE B&C state standards. The alignment showed that “Career Connections” curricula are a good fit to the sequence of courses and POS at the schools.

- **Articulate agreements for entry into Apprenticeship Programs.** Currently, graduating secondary CTE students meeting Construction Academy standards qualify for entry and an early start with transfer credits in community colleges. Agreements also allowing qualifying high school graduates into apprenticeship programs will provide stronger pathways to construction careers.

Recent discussions between the Hawaii Carpenters Union and the DOE resulted in the decision to pilot the use of “Career Connections” in selected high schools. Further details on implementation, funding for curriculum and resources will be discussed in upcoming meetings between the Hawaii Carpenters Union, DOE, and post-secondary community colleges.

Massachusetts provides an excellent example of how union apprenticeship programs and high schools can work together through articulation agreements to allow students in high school vocational programs to seamlessly transition into registered union apprenticeship programs, with significant benefits. Examples of such agreements are:

1. Agreement between the Massachusetts Construction Craft Laborer Apprenticeship Program & Training Committee and the Massachusetts Vocational Technical High Schools, <http://www.mass.gov/lwd/docs/dat/articulation-agreement-cons-craft-laborers.pdf>
2. Agreement between the Boston Carpenters Apprenticeship & Training Fund and the Massachusetts Vocational Technical High Schools, <http://www.mass.gov/lwd/docs/dat/articulation-agreement-boston-carpenters.pdf>
3. Agreement between the Eastern Massachusetts Carpenters Apprenticeship & Training Fund and the Massachusetts Vocational Technical High Schools, <http://www.mass.gov/lwd/docs/dat/articulation-agreement-eastern-ma-carpenters.pdf>
4. Agreement between the Sheet Metal Workers Local 17 (Boston) & 63 (Central/Western Massachusetts and Vermont) Joint Apprenticeship & Training Fund and the Massachusetts Vocational Technical High Schools, <http://www.mass.gov/lwd/docs/dat/articulation-agreement-local-17-local-63.pdf>

To integrate the potential for developing a dual credit apprenticeship pathways and build on the sequence of courses currently in secondary CTE (Building and Construction 1 and 2), the Honolulu CC Construction Academy recommends the creation of *Building and Construction Technology 3* and *Building and Construction Technology 4* classes which will be targeted toward a more advanced student audience who have already been exposed to basic tool and equipment safety.

Challenges

- **The lack of qualified/licensed instructors with trades experience, knowledge and skills**

impedes the **aligning of high school curricula with industry trade expectations**. Ideally, all school year 2016-17 CTE B&C POS should be taught by a Hawaii Teacher Standards Board (HTSB) licensed CTE teacher in the IET pathway. However, only 15 B&C teachers have a CTE IET license. (None of the current non-CTE teachers are licensed in Mathematics, a critical area to the construction trades.) The remaining 21 teachers are licensed as follows:

10 - No license listed, includes instructors from industry without teacher license

6 - Special Education

1 each - Natural Resources, Special Permit, Physical Education, Social Studies, Emergency Hire

Both recommendations, sharing "Career Connections" Curricula with schools and increasing the sequence of courses to include Building and Construction 3 and 4, will also be impacted by the **lack of qualified/licensed instructors with trades experience, knowledge and skills**. However, having a curriculum provided by industry and labor stakeholders may help with consistency in programs across the state for academy and non-academy schools by providing instruction aligned with agreed upon expectations of knowledge and skills.

- **Department of Labor Approval**, specifically in regards to CFR 29 Part 30 Code of Federal Regulations 29-Labor Part 30-Equal Employment Opportunity in Apprenticeship and Training, created to set policies and procedures for apprenticeship programs registered with the U.S. Department of Labor or with State recognized apprenticeship agencies, needs to be considered with the recommendation, **articulated agreements for entry into Apprenticeship Programs**. Approval or agreements from the Hawaii Department of Labor and all trade stakeholders will support the recommendation and assure that CTE secondary students entering construction trades apprenticeship programs will be able to progress in high-skill and high-wage occupations (<https://www.law.cornell.edu/cfr/text/29/30.2>, https://www.hawaii.edu/offices/eaar/govrel/reports/2016/hrs304a-1144_2016_construction-academy_annual-report.pdf).

Goal 2: Provide Hands-on, Work-Based Learning Experiences to develop opportunities where student learning can be supported by DOE campus facilities repair and maintenance projects to engage learning via practical applications and to develop a sense of student pride and ownership.

Current Conditions

- **Secondary CTE B&C course projects are predominantly classroom/shop-based**. This practice is predominant for a variety of reasons:
 1. Safety is more easily controlled within the shop environment, there are safety zones around the fixed equipment, and safety gear is readily available;
 2. The DOE's teacher/student ratio is 1 to 22, and the open setting of the classroom/shop allows easy supervision for the teacher/instructor in an environment where different students can be working on various projects, at various stages, individually and/or in small groups; and
 3. Actual job sites present safety and liability issues.
- **Minor Repairs projects and requests**. Minor repairs are an integral part of the DOE Office of School Facilities and Support Services (OSFSS) function in supporting schools. These repair and maintenance (R & M) projects range from \$5,000 to \$15,000 and are handled by the Facilities Maintenance Branch (FMB) when funds and time are available. The majority of work orders submitted and responded to by FMB are up to \$5,000 and include:

1. Electrical work (e.g., replacing light fixtures, installing additional outlets);
2. Carpentry (e.g., replacing termite eaten cubbies and cabinets); and
3. Building and Maintenance work (e.g., repairing broken ceiling tiles, repainting, and installing gutters).

FMB employees who currently address the repair and maintenance work orders for schools are bargaining unit workers governed by agreements. Their focus is to work on and complete minor repair projects in a timely basis. Therefore a CTE teacher/instructor would be necessary to provide supervision of students working on real world hands-on repair and maintenance projects outside the classroom/shop space.

Recommendations

- **Establish a process where Minor Repairs requests at high schools can be used as hands-on work-based learning projects for secondary students.** Establishing a process where FMB and Construction Academy or B&C classes can work together to identify potential projects at schools that would provide real world learning experiences. Additional funding, logistics, quality of instruction, and time need to be considered. Criteria to determine the appropriateness of projects would include:
 1. Connections to standards and curriculum in scope of work;
 2. Safety/liability issues;
 3. Knowledge or skills students need to complete the project;
 4. Number of teacher/instructors needed for supervision of students;
 5. Certification, licensure, minimum qualifications for teachers/instructors/supervisors;
 6. Materials, resources, tools or equipment needed; and
 7. Agreements with FMB and bargaining unit employees union.
- **Increase and expand on sequence of courses in secondary CTE B&C programs** by creating two additional courses, Building and Construction 3 and 4. The Honolulu CC Construction Academy recommends embedding the DOE facilities R & M component within the courses, which supports the dual credit apprenticeship pathways in CTE, targeting a more advanced student audience. Funding for positions, instructional materials and resources is needed.

Challenges

- **Coordinated involvement, agreements, or approvals from DOE offices, districts and schools, needed to establish a process for using minor repairs and requests as projects.** A process to identify potential projects that students could work on needs to involve various branches within the DOE, including the Office of Curriculum Instruction and Student Support (OCISS), to align curriculum with project goals, and Office of School Facilities and Support Services (OSFSS), to evaluate safety and liability concerns with various R&M projects.
- **Formal agreement with and approval from bargaining unit(s).** Positive work on agreements with UPW Bargaining Unit 1 were initiated and will need to be formalized. Additional CTE Building & Construction teachers and/or Construction Academy instructors may be needed to supervise students working on R & M projects outside of the classroom/shop.

- **Development of secondary CTE standards and curriculum for proposed Building and Construction 3 and 4 courses.** Courses will align with current high school CTE B&C course standards, post-secondary Student Learning Outcomes (SLOs), and national occupational skill standards from the National Center for Construction Education and Research (NCCER).
- **Quality instruction - the need for qualified/licensed teachers/instructors with trades experience, knowledge and skills; instructional materials and resources and funding.** Implementing a minor repairs request as a student project requires teachers/instructors to possess, partner with, or have access to industry standard experience, knowledge and skills. Funding will be needed as follows:
 1. Teacher positions. Due to class sizes and types of real-world hands-on projects, additional teachers are needed for supervision and safety. This is a funding and recruiting issue, discussed in more depth under Goal 3.
 2. Construction Academy postsecondary positions. Additional manpower will be needed to identify projects, train, and supervise students.
 3. Funding will also be required for resources and instructional materials.

Goal 3: Increase Teacher Pre-service and development to address the lack of qualified/licensed instructors with trades experience, knowledge and skills teaching in secondary CTE.

Current Conditions

- In school year 2016-17, 36 of 46 high schools statewide have either Construction Academies or B&C programs. Ideally, all 36 secondary CTE programs should be taught by a Hawaii Teacher Standards Board (HTSB) licensed CTE teacher in the IET pathway.
- Multiple factors contribute to the lack of qualified/licensed instructors for B&C and other CTE pathways. These include:
 1. The absence of a pre-service teacher training program for CTE in Hawaii;
 2. Industry professionals or non-CTE teachers seeking CTE licensure must meet all HTSB requirements to “add a field;”
 3. Industry professionals or postsecondary instructors hired to teach in the high schools may not be prepared for effective instruction of high school students;
 4. Industry professionals without a Bachelor Degree certified to teach in CTE via a State Approved Teacher Education Program (SATEP), such as the Leeward Community College Alternative Certification Program, cannot rise above Class II salaries contractually; and
 5. Industry professionals with a Bachelor Degree MUST be certified/licensed by HTSB within 10 years to continue to teach in the DOE or they will not be able to rise above Class IV salaries. The 2013-2017 HSTA contract specifies teacher salaries up to Class VII. http://www.hsta.org/images/uploads/0324WEBSALARYSCHEDULE2013-17_HSTA_Upward_Salary_Movement.pdf

(See MOU, HIDOE, HSTA CTE Teachers, April 2014; Hiring Teachers without HTSB Licensure; and HTSB CTE Limited License; §302A-802 Licensing standards; policies).

Recommendations

- **Engage postsecondary four-year institutions in developing a pre-service program for preparation of CTE teachers**, including options and support for industry professionals seeking a Bachelor Degree in Education.
- **Develop opportunities for Construction Academy students interested in pursuing a career in teaching**, providing supports for certification and licensure as a secondary CTE IET teacher. This would include meeting one of the content expertise requirements that follows:
 1. Passing the appropriate Praxis in the content field, if one exists;
 2. Possessing a current valid National Industry Certification in the content area;
 3. Possessing a current valid industry license in the content area; or
 4. 30 hours coursework in the license field.
- **Recruit and/or involve retired industry trade professionals to teach in the schools**, either as Construction Academy instructors or directly into the teaching profession.

Challenges

- **Absence of any CTE pre-service four-year education degrees offered in the state.**
- **Teachers receiving alternative certification and licensing in CTE are limited to salaries ranging from Class II, step 3 to Class IV, step 4.** The issue of limited salaries needs to be addressed this year as HSTA negotiates a new teacher contract for school year 2017-18 and on.

**MEMORANDUM OF UNDERSTANDING
BETWEEN
HAWAII STATE DEPARTMENT OF EDUCATION
AND
HAWAII STATE TEACHERS ASSOCIATION
(Career and Technical Education Teachers)**

This Memorandum of Understanding (MOU) is entered into this 25 day of Aug. 2014 by and between the Department of Education (DOE) and the Hawaii State Teachers Association (Association) on behalf of the Career and Technical Education (CTE) teachers employed by the DOE under a CTE Special Permit or Limited Standard License issued by the Hawaii Teachers Standards Board (HTSB).

Effective July 1, 2006, the enactment of amendments to Section 302A-802, Hawaii Revised Statutes directed the HTSB to set alternative criteria and establish other measures of qualification necessary for CTE teachers to meet licensing standards in order to increase the number of vocational, technical, and career pathway education teachers;

The DOE and the Association agree to the following conditions related to the employment of CTE teachers within the DOE:

1. CTE teachers shall be covered by the Bargaining Unit 05 (BU 05) Agreement.
2. CTE teachers covered by this MOU shall have a limited duty special permit or a limited standard license issued by the HTSB.
3. CTE teachers covered by this MOU shall be designated as a Temporary Teaching Appointment Agreement employee until such time as he/she completes HTSB licensing requirements for a standard, limited standard license, or advanced license.
4. CTE teachers covered by this MOU shall be paid as follows:
 - CTE teachers entering without a Bachelor's degree and with a limited duty special permit shall be paid at the salary designated for Class III, Step 3.
 - CTE teachers entering with a Bachelor's degree and with a limited duty special permit shall be paid at the salary designated for Class IV, Step 3.
 - CTE teachers who have completed a State Approved Teacher Education Program (SATEP) entering without a Bachelor's degree and with a limited standard license shall be paid at the salary designated for Class II, Step 5.
5. If the CTE teacher with a limited duty special permit successfully obtains a standard, limited standard, or advanced license, he/she will be placed immediately in the appropriate class and step of the salary schedule for teachers who have completed a SATEP.
6. A CTE teacher who has completed a SATEP but enters without a Bachelor's degree and a limited standard license is not eligible to utilize teacher reclassification guidelines to move to a higher salary classification. Only after obtaining a bachelor's degree may the CTE teacher utilize the prevailing teacher reclassification guidelines in order to move to Class III and higher.

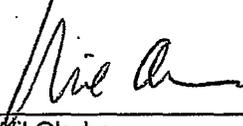
7. CTE teachers with a limited standard license may earn probation toward tenure.
8. CTE teachers with a limited duty special permit shall be eligible to be reappointed to their positions provided no tenured staff reduced or unassigned probationary CTE teacher requires reassignment.
9. CTE teachers covered by this MOU shall not be placed in any other position than the one for which they hold a limited duty special permit or limited standard license.
10. CTE teachers covered by this MOU shall be required to comply with all DOE rules, regulations, policies and procedures, as well as all collective bargaining requirements. Some collective bargaining requirements would be lesson plans, campus supervision, attendance at faculty meetings, etc.
11. CTE teachers shall receive all benefits provided by the BU 05 Agreement except as modified by the terms and conditions of this MOU.
12. The parties may amend this MOU as circumstances warrant. Either party must give written notice of their desire to amend this MOU no less than thirty (30) calendar days prior to the request to meet to propose said amendments.

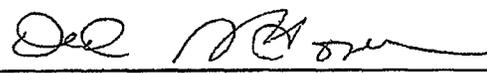
This MOU contains the complete agreement between the parties and shall expire on June 30, 2017.

STATE OF HAWAII

HAWAII STATE TEACHERS ASSOCIATION

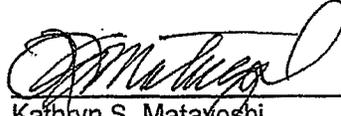
By:  9/3/14
 Neil Dietz Date
 Chief Negotiator

By:  9/10/14
 Wil Okabe Date
 President


 Donald G. Horner Date
 Chairperson, Board of Education

 9/10/14
 Alvin Nagasaki Date
 Executive Director


 James D. Williams Date
 Member, Board of Education

 AUG 25 2014
 Kathryn S. Matayoshi Date
 Superintendent, DOE

Appendix B: Hiring Teachers without HTSB Licensure

If an individual does not have a bachelor's degree a CTE Special Permit may be obtained. The individual works directly with a school and the school works with the Personnel Regional Officer (PRO) to ensure they can meet criteria for the permit. The criteria for the permit is as follows:

- Possess at least a high school diploma.
- Hold a valid industry license for the area they are going to teach, if one exists for that particular field.
- Have had at least 3 years of successful experience directly related to the CTE subject area
- Have completed the 30-hour substitute teaching course.

<http://www.htsb.org/licensing-permits/licensing-permits-overview/>
<http://www.htsb.org/wp-content/uploads/2016/03/CTE-SP-1008-App.pdf>

Hawaii Teacher Standards Board (HSTB) CTE Limited Standard License

HTSB issues a CTE Limited Standard License which requires the following:

- Completion of an associate's degree from a regionally accredited college.
- Documentation of a minimum of three years of industry experience in the content field.
- Employment in a public school as a CTE teacher (cannot add a field to this license)
- Content expertise through one of the following:
 - 1) Praxis in the content field, if one exists;
 - 2) current valid National Industry Certification in the content area;
 - 3) Current valid industry license in the content area; or
 - 4) 30 hours of coursework in the license field.
- Evidence of one of the following:
 - 1) Fifteen hours of pedagogy coursework from a state approved teacher education program in the grade level of the license; or
 - 2) twelve hours of pedagogy coursework from a state approved teacher education program in the grade level of the license AND a passing score on the Principles of Learning and Teaching (PLT) in the appropriate grade level of the license.

§302A-802 Licensing standards; policies.

(a) The board shall establish licensing standards that govern teacher licensing in Hawaii. Licensing standards established by the board shall be adopted as rules under chapter 91 unless otherwise specified in this subpart.

(b) In the development of its standards, the board shall consider the existing teacher applicant pool that is available in the State and the level of the qualification of these applicants, as well as the nature and availability of existing preservice teacher training programs.

- (c) The board shall adopt policies, exempt from chapters 91 and 92, to initiate the following:
- (1) Develop criteria allowing more individuals with trade or industry experience to teach in vocational, technical, and career pathway programs, and criteria for the issuance of permits allowing qualified individuals to teach when recommended by the superintendent or the commission, when appropriate. The department or the

commission, when appropriate, shall be responsible for the review and acceptance of the relevant licenses, certificates, or other qualifications related to an individual's vocational, technical, or career pathway education-related experience that the department or the commission, when appropriate, deems necessary for a permit. The department or the commission, when appropriate, shall have the authority to waive the requirement of a bachelor's degree to teach in a vocation, technical, or career pathway education program;

(2) Develop a plan to accept teachers from any state as long as they have completed state-approved teacher education programs and pass relevant Hawaii teacher examinations or their equivalent;

(3) Clarify the requirements, on a state-by-state basis, for out-of-state licensed teachers to obtain a license in Hawaii;

(4) Develop a plan to facilitate licensing for those who intend to teach in Hawaii immersion programs, the island of Niihau, or any other extraordinary situation as defined by the superintendent or the superintendent's designee, or by the commission, when appropriate; and

(5) Pursue full teacher license reciprocity with all other states.

<http://www.htsb.org/wp-content/uploads/2015/02/Licensure-Guide-2-2015.pdf>

HOUSE CONCURRENT RESOLUTION

REQUESTING THE DEPARTMENT OF EDUCATION TO ESTABLISH A TASK FORCE
TO REINTRODUCE VOCATIONAL PROGRAMS AT PUBLIC SCHOOLS.

1 WHEREAS, all students have the right to pursue careers in
2 their chosen fields, and the State must encourage students to do
3 so; and
4

5 WHEREAS, while not all students in the public school system
6 have the propensity, qualifications, or desire to attend college
7 or university, all students can achieve success through
8 acquiring and honing skills that may be utilized in gainful
9 employment; and
10

11 WHEREAS, the public education system fails to help some
12 students meet their educational goals through existing programs;
13 and
14

15 WHEREAS, the public school system currently has a repair
16 and maintenance backlog of approximately \$300,000,000, however
17 this backlog does not include minor repair and maintenance
18 projects; and
19

20 WHEREAS, certain repair and maintenance work at some
21 schools can take longer than at other schools because of
22 geographic locations and distance from agencies charged with
23 conducting repair and maintenance at these facilities; and
24

25 WHEREAS, students, under the supervision of an instructor,
26 should be allowed to undertake minor repair and maintenance
27 projects, valued at \$10,000 or less, in exchange for school
28 credit; and
29

30 WHEREAS, Hawaii's public schools once had vocational
31 programs which not only helped to provide a career path for



1 students, but also helped to produce well-rounded students; now,
2 therefore,

3
4 BE IT RESOLVED by the House of Representatives of the
5 Twenty-eighth Legislature of the State of Hawaii, Regular
6 Session of 2016, the Senate concurring, that the Superintendent
7 of Education is requested to establish a task force to:

- 8
- 9 (1) Identify vocational programs that are appropriate for
- 10 implementation at public high schools;
- 11
- 12 (2) Develop vocational program curricula for public high
- 13 school students; and
- 14
- 15 (3) Identify any costs of or barriers to reintroducing
- 16 vocational programs at public high schools; and
- 17

18 BE IT FURTHER RESOLVED that the Superintendent of Education
19 is requested to invite representatives of appropriate trade
20 unions and apprenticeship training programs of the community
21 colleges to join or provide input to the task force; and

22
23 BE IT FURTHER RESOLVED that not later than twenty days
24 prior to the convening of the 2017 Regular Session, the
25 Superintendent of Education is requested to submit a report on
26 the findings and recommendations of the task force including any
27 proposed legislation; and

28
29 BE IT FURTHER RESOLVED that certified copies of this
30 Concurrent Resolution be transmitted to the Chairperson of the
31 Board of Education and the Superintendent of Education.

32
33
34 OFFERED BY:

Anthony Thielan
Brend Kobayashi

Feli Pouch
Bob [unclear]
[unclear]
Phil [unclear]

