



Sustaining Health, Strengthening Security in the Aloha State

TAACCCT IV Final Evaluation Report

September 2018



Prepared under contract to
Research Corporation of the University of Hawai'i for the benefit of
University of Hawai'i Maui College TAACCCT IV Grant



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This project received 100% of its financial support from the U.S. Department of Labor/Employment and Training Administration under Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant TC-26474-14-60-A-15, awarded to the University of Hawaii in the total amount of \$9,999,870.

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Submitted to:

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Executive Summary

With support from a Trade Adjustment Assistance Community College and Career Training (TAACCCT) Round IV grant, the Sustaining Health and Strengthening Security in the Aloha State (TAACCCT IV) project sought to expand on work completed during previous TAACCCT rounds to enhance student support systems and create new certificate programs to meet workforce needs for the state of Hawai'i. The TAACCCT IV project at the University of Hawai'i Community College (UHCC) consortium focused on education and training needs in the critical fields of health care, cybersecurity, and entrepreneurship, and on furthering student supports in the form of veterans' services and student retention. The UHCC consortium consists of seven independently accredited institutions that chose and customized programs and supports based on local labor market needs. The seven campuses are Honolulu Community College (HonCC), Kapi'olani Community College (KapCC), Leeward Community College (LeeCC), and Windward Community College (WinCC) (located on the island of O'ahu), and Hawai'i Community College (HawCC), Kaua'i Community College (KauCC), and University of Hawai'i Maui College (UHMC) located on neighboring islands. Figure ES-1 outlines programs and support services offered via the TAACCCT IV grant.

Figure ES-1. Summary of campus participation in TAACCCT IV activities, by topic

College	Health – school health assistants	Health – community health workers	Cybersecurity	Entrepreneurship	Veterans' coordinator	Early alert coordinator
Hawai'i Community College	✓+	✓+	✓+		✓+	
Honolulu Community College			✓+	✓–	✓+	
Kapi'olani Community College	✓+	✓+	✓+	✓+		✓+
Kaua'i Community College	✓+	✓+	✓+			✓+
Leeward Community College			✓+		✓+	✓+
University of Hawai'i Maui College	✓+	✓+	✓+		✓–	

Note: ✓+ = proposed and implemented; ✓– = implemented, but discontinued; – = proposed but not implemented.

With support from a grant management team, headquartered at UHMC, the TAACCCT IV campuses implemented training programs for school health assistants (SHAs), community health workers (CHWs) and in cybersecurity and entrepreneurship. From 2014 to 2018, these programs served a total of 989 participants and 580 completers. The target population for these programs were incumbent workers and new participants in health care and information technology fields as well as an increasing veterans population. To recruit participants, the project conducted outreach to incumbent SHAs, CHWs, military bases, and veterans' organizations.

Evaluation Design Summary

RTI International's third-party evaluation of the TAACCCT IV project in Hawai'i included formative analyses, as well as the collection and analysis of survey data, to identify lessons learned from TAACCCT IV implementation and to assess the impact of participation in UHCC's TAACCCT IV programs. Specifically, the evaluation was designed to address the research questions established by the U.S. Department of Labor and supplemental questions specific to Hawai'i's TAACCCT IV project developed by RTI and the grant management team (see Table 1, page 3).

To address these questions, RTI's evaluation included both an implementation and an impact study. The goal of the implementation study was to understand how TAACCCT IV changed the capacity of the individual campuses and state education and workforce systems to serve participants and meet labor force needs in the targeted fields. RTI collected qualitative data through three site visits that included interviews and focus groups with TAACCCT IV grant management, campus administrators, faculty, employers, and participants; surveys of participants, employers, and faculty; review of project documentation; and notes from regular meetings with project staff.

For the impact evaluation, RTI originally planned to use individual student data on those enrolling in cybersecurity programs to conduct a quasi-experimental cohort comparison analysis to estimate the effects of TAACCCT IV programs on student outcomes. However, the UHCC data system could not provide the student-level data needed for the analysis, therefore, impact evaluation results for this report are limited to the data from the stakeholder surveys.

Implementation Findings

UHCC's TAACCCT IV implementation included capacity building activities at the campus and consortium levels, with a focus on sustaining these activities beyond the grant, as described in the following findings.

Building institutional capacity

- Quarterly cross-campus health care, cybersecurity, and student services meetings led to better connections between campuses in the consortium. This capacity to collaborate evolved into the ability to secure additional post-grant funding through collaborative grant writing.
 - TAACCCT IV is UHCC's first attempt at a system-wide coordination of veterans' services, providing support to campuses with fewer resources and promoting the sharing of best practices. The consortium veterans' coordinator lead conducted an assessment of veterans' services at each
-

campus and developed a report with recommended changes to UHCC leadership. Campus leadership followed through on those recommendations to create new veterans' resource centers/dedicated veterans' spaces.

- All campuses participated in sustainability planning during the life of the program grant and can sustain most programs upgraded or introduced during TAACCCT IV. The enhanced student services for veterans and student retention, such as campus veterans' resource centers and the MySuccess integration into the Starfish platform, will be sustained, with the coordinator positions to be determined by each campus.
- Through the grant, HonCC began developing a Job Center Online portal that it plans to continue developing at the campus administration level. The portal is a system-wide database matching students and employers.

Key steps in implementation

- As a key step in program placement, TAACCCT IV campuses upgraded equipment and facilities to align program curriculum with workplace requirements and increase campuses' capacities to enroll and prepare participants for employment. This included purchasing health care simulation equipment for WinCC and NetLabs for KauCC, HonCC, KapCC and LeeCC. Equipment was also purchased to allow students in rural areas of Hawai'i to participate in classes via Zoom, PolyCom, and Skype.
 - The grant increased student credentialing opportunities by offering new certificates in cybersecurity and community health work, waiving tuition for SHA and CHW students, developing prior learning assessments (PLAs) for the CHW program at UHMC and cybersecurity at LeeCC, and creating an educational pathway from HonCC to University of Hawai'i–West O'ahu.
 - The entrepreneurship course initially developed and piloted at HonCC, then implemented (with some modification) at KapCC, provided students with a certificate of competence (CO) in entrepreneurship. The program was designed to develop a participant's skills in the creation of a start-up business. Areas of focus included designing and building business and marketing plans and preparing and understanding financial information and statements to ensure sound and informed business decision-making.
 - Four campuses were able to expand the early alert system from Starfish into MySuccess, which uses the Starfish platform and adds student services features such as student registration and career pathway criteria, counseling appointment scheduling, and instructor feedback. The grant provided funding for early alert coordinator positions at these campuses.
 - The project developed cybersecurity COs and certificates of achievement that were integrated into existing associate degree programs, increasing options for students to hone their skills in these areas. The cybersecurity program at one campus had latticed its
-

credentials to other programs, such as business and health. Although these credentials might require technical skills that many students in other programs do not have, they might also offer an opportunity for those with IT experience to combine these courses and credentials with other degree fields.

- Incumbent health care workers, including current SHAs and CHWs, were recruited as students for the TAACCCT IV programs. The spring 2017 student survey indicated that 87 percent of SHA students and 75 percent of CHW students were employed in the health care field at the time of enrollment.

Partnerships

- All campuses participated in employer outreach with local employers to develop and update their TAACCCT IV programs. Employer connections were varied by campus location, with staff on each campus reporting college-employer connections specific to their island.
- CHW instructors identified involving a CHW from the field in program development as a best practice.

Challenges

- Time needed to complete administrative processes, due to differences in University of Hawai'i and Research Corporation of the University of Hawai'i processes for course and hiring approval, often slowed course implementation and hiring. The process was especially cumbersome for cybersecurity programs that needed frequent updates to meet employer needs and respond to changing industry standards.
 - Finding qualified staff, coupled with a high turnover rate, was also challenging and slowed the implementation of some TAACCCT IV activities. Several campuses described searches for program instructors and student services coordinators that took a year or more. Leadership at one campus reported that faculty members often leave after three years because of the region's high cost of living. Some of the campuses developed ways to circumvent the long hiring process through casual hires.
 - The system-wide standardization of courses needed to facilitate student transfer between campuses conflicted with the need to ensure that programs meet local community and labor force needs. For example, several campuses' cybersecurity programs differed with regard to prerequisites, course registration numbers, number of credits required, and credentialing. This made creating a system-wide cybersecurity articulation agreement challenging. In health care, the CHW program was originally developed at UHMC and
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implemented at other campuses, but KauCC did not implement the medical terminology course; CHWs did not need it for the CHW position on the island.

Participant Impacts

The UHCC student-level data needed for the outcomes analysis could not be obtained. The impact evaluation results for this report are therefore limited to the numbers of TAACCCT IV program completers and data from the stakeholder surveys.

Academic Impacts

- According to the student survey, 97 percent of students or higher planned to complete their program, equating to high rates of student retention. Students also reported an increased interest in continuing their academic studies after program completion. Additionally, the longer students had been in their programs, the more advanced credentials they expected to receive.
- Faculty surveyed towards the end of the grant reported that students have more opportunities to build skills through hands-on practice in their programs because of the grant. These opportunities are due to the new, upgraded equipment and enhanced curriculum.

Employment Impacts

- All participants, regardless of time in program, predicted an increase in their average hourly wage upon program completion. The hourly wages they predicted aligned with those reported by employer partners for an entry-level position in those fields. Sixty-eight percent of students in all programs expected to stay in Hawai'i for employment after their program.
 - At the time of the 2017 student survey, half of cybersecurity program participants had lined up employment after the program. Those who did not have a position lined up were confident they would find one within three months of program completion.
 - Employer partners reported that the TAACCCT IV health care and cybersecurity graduates they hired have the necessary technical and oral and written communication skills and show career advancement potential more so than non-TAACCCT IV applicants. Faculty members corroborated this by reporting that they believe students going through TAACCCT-developed programs are better prepared to work in their chosen industry than before the grant started.
 - KapCC partnered with The Queen's Medical Center, the largest hospital in Honolulu, to train their incumbent CHWs using the TAACCCT IV-developed CHW program. As a result, the medical center reported a notable reduction in the number of visits to their emergency room by chronic patients.
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- In June 2017, the Hawai'i Department of Education announced that incumbents who completed the TAACCCT IV-developed SHA Level 1 certificate program would be eligible for a wage increase.

Conclusions

TAACCCT IV made a positive impact at both the campus and system levels through enhanced instructional programs, strengthened student services, increased cross-campus collaboration, and more robust employer partnerships.






- The TAACCCT IV grant strengthened the UHCC system as a whole. These programs facilitated more cross-campus, cross-sector idea sharing and created the necessary connections to collaborate on future curriculum and funding opportunities.
 - Because of TAACCCT IV, community colleges in Hawai'i are better able to train incumbent workers in health care positions. SHAs and CHWs now have set curriculum and training that is recommended for their positions, ensuring more knowledgeable, safer care in schools and communities at large in Hawai'i.
 - Active-duty military members and veterans have increased opportunities to receive certificates in cybersecurity that can lead to further educational opportunities and higher paying jobs. LeeCC's PLA for veterans training in cybersecurity allows veterans to earn a certificate and join the workforce in a more efficient manner.
 - Distance learning options provided opportunities for students in rural areas to attend courses. For cybersecurity, NetLabs provided safe simulated environments for students to practice needed skills on their own time. For students located in remote areas of the state, the use of PolyCom and Zoom conferencing allowed health care students to attend classes on a weekly basis.
 - Student supports were enhanced throughout the course of the grant. Even with fewer resources, veterans' services were offered in a more consistent manner systemwide. The upgrade from Starfish to MySuccess allowed students to better connect to advisors and instructors.
 - Campuses now have more robust local employer partnerships in the cybersecurity and health care fields.
 - Through the grant sustainability planning process, campuses and programs have established mechanisms to sustain gains made during the TAACCCT IV program.
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Introduction

In October 2014, the University of Hawai'i Community College (UHCC) consortium received funding from the U.S. Department of Labor (DOL) under the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Round IV grant program to implement the Sustaining Health, Strengthening Security in the Aloha State (TAACCCT IV) project. The UHCC participated in previous TAACCCT Rounds (I and II) that enhanced and created student supports and certificate programs in business, food innovation, and geographic information systems. The consortium drew on this experience to create TAACCCT IV goals to continue student services and develop programs to address workforce needs for the state of Hawai'i.

The UHCC consortium's TAACCCT IV program furthered and created certificate programs to address two of Hawai'i's critical workforce education and training needs. One sector was health care, an established sector with incumbent workers in need of foundational and advanced training. The other sector was cybersecurity, a relatively new but rapidly developing sector that faced training needs for existing employees and the creation of a new class of specialists.

Campus-level programs in health care provided training to incumbent *school health assistants (SHAs)* and *community health workers (CHWs)* designed to increase wages and engage workers in career paths to additional certificates and degrees. Campus-level programs in *cybersecurity* focused on new and incumbent workers and military veterans, providing training aligned with the needs of an internet economy and the opportunity for students to earn the industry-recognized certifications needed for IT and Information Assurance positions. Building from Hawai'i's TAACCCT I business training, an *entrepreneurship* certificate program was initially developed at Honolulu Community College (HonCC) to provide students with training and skills to create comprehensive business, marketing, and financial plans to start their own businesses. Kapi'olani Community College (KapCC) subsequently refined the program and

UHCC TAACCCT IV Activities	
	Student Health Assistant (SHA)
	Community Health Worker (CHW)
	Cybersecurity
	Veterans Support
	Early Alert/Retention

offered it at the KapCC campus where completers can earn a certificate of competency (CO) in entrepreneurship. The TAACCCT IV programs also provided student supports by upgrading existing *student retention* activities and providing services targeted to an increasing *student veteran population*.

The UHCC consortium includes seven independently accredited institutions serving 32,000 students and is part of the larger 10-campus University of Hawai'i system of 60,000 students. Four consortium members—HonCC, KapCC, Leeward Community College (LeeCC), and Windward Community College (WinCC)—are located on the island of O'ahu. The other three—Hawai'i Community College (HawCC), Kaua'i Community College (KauCC), and University of Hawai'i Maui College (UHMC)—are located on neighboring islands. UHMC also serves the most remote populated islands in the Hawai'i archipelago: Lana'i and Moloka'i.

RTI International served as the third-party evaluator for UHCC's TAACCCT IV program and conducted both formative and summative analyses. This report documents the results of the third-party evaluation, highlighting key factors related to UHCC's TAACCCT IV implementation from 2014 to 2018 and summarizing the impact of TAACCCT IV on the UHCC system and its communities.

Research Plan

Implementation Evaluation

In October 2015, RTI designed and implemented an evaluation plan for UHCC's TAACCCT IV program in accordance with DOL requirements. Evaluation data were collected through site visit interviews, telephone interviews, and three stakeholder surveys—students, employers, and faculty. Each data collection method is described after Table 1, which outlines the DOL formative evaluation questions and the methods the third-party evaluation team used to address those questions.

Table 1. Formative evaluation questions and evaluation method

Research questions	Evaluation method
What strategies have the consortium colleges used to implement the proposed program? <ul style="list-style-type: none"> Has the program leveraged activities and partnerships developed through earlier Trade Adjustment Assistance Community College and Career Training (TAACCCT) grants? How were the program curricula selected, used, or created? How was the program design improved or expanded using grant funds? What program delivery methods were offered? 	<ul style="list-style-type: none"> Site visits Faculty survey
How well are the TAACCCT IV programs identifying and serving the needs of new and incumbent workers and veterans? Which strategies have been most effective? <ul style="list-style-type: none"> Did the grant programs increase and enhance participants' skills, abilities and knowledge? Were the assessment results useful in determining if the sequence was appropriate and led to a participant's success in the program? 	<ul style="list-style-type: none"> Site visits Employer survey Student survey
How well are the TAACCCT IV program's student services meeting students' needs for support as they enter, follow, and finish their educational programs? Which services have been most effective? What support gaps remain? <ul style="list-style-type: none"> What support services and other services were offered? 	<ul style="list-style-type: none"> Site visits Student survey Faculty survey
What has been the role of the TAACCCT IV partners, such as state-level coordinators and agencies, employers, and workforce centers, in helping the institutions to meet the goals of the grant? <ul style="list-style-type: none"> What contribution did each of the partners make in terms of program design, curriculum development, recruitment, training, placement, program management, leveraging of resources, and program sustainability? What factors contributed to partners' involvement or lack of involvement in the program? Which contributions from partners have been most critical to program success, and which had less of an impact? 	<ul style="list-style-type: none"> Site visits Employer survey Faculty survey
What strategies have the colleges instituted to sustain the TAACCCT IV programs and activities after grant funding ends?	<ul style="list-style-type: none"> Site visits

Site visit and telephone interviews

RTI conducted three in-person site visits in January 2016, January 2017, and March 2018. During these visits, the evaluation team conducted interviews with project and campus staff, faculty, and students involved in the TAACCCT IV project. Project staff and stakeholders who were not available during the site visit were interviewed via telephone following the visit.

Site visit and telephone interviews focused on the following themes:

- Program implementation
- Curriculum development
- Equipment and facility upgrades
- Support for program students
- Partnerships
- Successes
- Challenges
- Sustainability

Site visit interviewees, including those interviewed via telephone, are in Table 2.

Table 2. Site visit interviewees, by site visit

Time frame	Stakeholders interviewed	
January 2016	<ul style="list-style-type: none"> • Grant leadership • Campus leadership • Vice Chancellors for Academic Affairs • Vice Chancellors for Student Affairs • Program leads • Program instructors 	<ul style="list-style-type: none"> • Consortium sector leads • Early alert/retention counselors • Veterans' services coordinators • SHA and cybersecurity students • Hawai'i Department of Labor staff
January 2017	<ul style="list-style-type: none"> • Grant leadership • Campus leadership • Vice Chancellors for Academic Affairs • Vice Chancellors for Student Affairs • Program leads • Program instructors 	<ul style="list-style-type: none"> • Consortium sector leads • Early alert/retention counselors • Veterans' services coordinators • CHW and cybersecurity students • Entrepreneurship subject matter expert
March 2018	<ul style="list-style-type: none"> • Grant leadership • Campus leadership • Vice Chancellors for Academic Affairs • Vice Chancellors for Student Affairs • Program leads • Program instructors 	<ul style="list-style-type: none"> • Consortium sector leads • Early alert/retention counselors • Veterans' services coordinators • CHW and cybersecurity students • Student veterans

The evaluation team documented findings from the site visits in reports that were shared with grant management. These reports described implementation status updates, lessons

learned, and challenges, and provide as set of consideration for the project team. The site visit interview protocols and question guides are in Appendix A.

Surveys

RTI developed surveys to collect feedback from three groups of project stakeholders—program participants, employer partners, and program instructors.

- The student survey was designed to gather information from TAACCCT IV program participants on their educational background, perceptions of the program, pre-program and current employment status, and educational plans after leaving their program. This 32-question survey was administered online in spring 2017.
- The employer partner survey, a 21-item survey, was designed to gather information from TAACCCT IV program employer partners on the input they had into program development and operations and perceptions of and experiences with workers hired from TAACCCT IV programs. This survey was administered online in fall/winter 2017.
- The faculty survey collected information from instructors about programs supported by TAACCCT IV towards the end of instructors' program involvement in spring 2018. This 11-item questionnaire, administered online, gathered information on the ways faculty involvement with TAACCCT IV influenced or changed their role, program, or professional development opportunities.

Through survey data collection, the RTI evaluation team collected responses from 214 program students, 18 faculty, and 26 employer partners. Some survey results are included throughout the TAACCCT IV Implementation section of this report, but most of the results are discussed in the TAACCCT IV Impact Evaluation section (beginning on page 29). Survey methodologies and data collection instruments are detailed in Appendix B.

Impact Evaluation

In its original evaluation proposal, RTI suggested using individual student data to conduct an impact evaluation of the TAACCCT IV program's effect on student outcomes. RTI planned to use individual student data on those enrolling in cybersecurity programs to conduct a quasi-experimental cohort comparison analysis to estimate the effects of TAACCCT IV programs on student outcomes, including persistence, completion, credentials earned, employment, and wages. To ensure the impact study's rigor (and to meet guidelines set by the DOL), the outcomes for the TAACCCT IV students were to be compared to that of a group of students not participating in TAACCCT IV programs, identified using propensity score matching (PSM).

The UHCC data system could not provide the student-level data needed for the analysis. Only limited data is collected system-wide, and the detailed educational background, demographic, and course-taking data needed to identify and track program participants through their educational programs and into the labor force could not be accessed from each campus. The TAACCCT IV grant management has communicated these difficulties to the DOL federal program officer. The impact evaluation results for this report will therefore be limited to the data from the stakeholder surveys.

TAACCCT IV Implementation

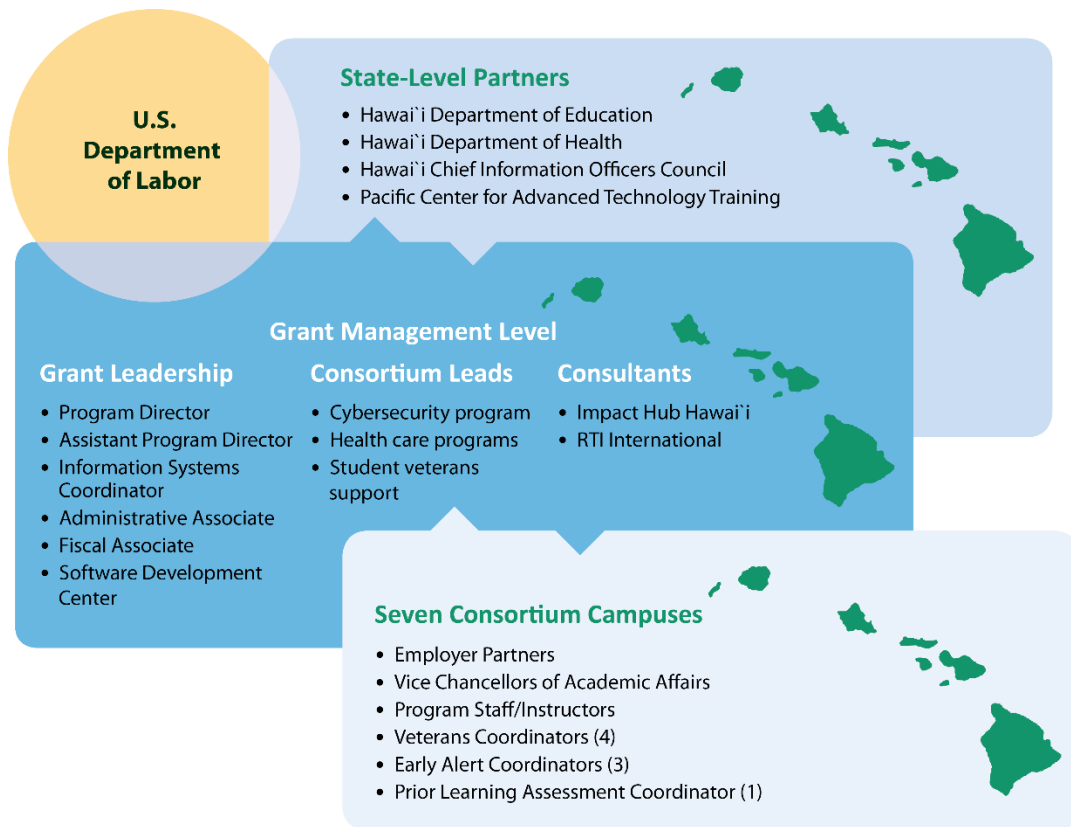
The TAACCCT IV project implemented a variety of activities that align with program goals, along with processes and procedures at the grant management and consortium level to support site-level implementation. The results of project implementation at the site level included the design of enhanced instructional programs in response to employer need and coordinated support services for participants, including targeted outreach to veterans. Summaries of grant management structure and program implementation across sites, along with perceived impact, are provided in the sections that follow. Campus specific implementation details are in Appendix C.

Project Leadership

The TAACCCT IV project's leadership team included a program director, an assistant program director, and an information systems coordinator, all of whom worked on the project full time (Figure 1). The program director and information systems coordinator were based at UHMC; the assistant program director worked with the team from O'ahu. An administrative associate and a fiscal associate provided administrative support to the team. In addition, the project received support from an application designer/developer and project support associate in the software development center at UHMC.

On each campus, the vice chancellor of academic affairs or a designee served as the primary contact with the TAACCCT IV leadership team. These staff members helped coordinate campus activities and oversaw grant reporting. Activities for some of the TAACCCT IV programs were coordinated by system-wide leads. SHA and CHW programs across all campuses were led by the health care coordinator at KapCC; cybersecurity programs were overseen by a system-wide lead first at KapCC, then by the assistant program director when that lead stepped down; and veteran activities were coordinated through a system-wide lead at LeeCC. The lead management group held quarterly meetings with sector coordinators from each campus, with assistance from system-wide sector leads, and helped with course development and implementation, student recruitment, and employer outreach.

Figure 1. Overview of the TAACCCT IV leadership team



Project leadership impact

During every site visit, TAACCCT IV staff across campuses were very positive about the support received from grant management. Staff felt roles and responsibilities were clear and well-defined and that they received the assistance they needed with administrative procedures such as course approvals and instructor hiring. Project management ran into a challenge completing administrative tasks due to the differences in the course and hiring approval processes of the University of Hawai'i and the Research Corporation of the University of Hawai'i, often slowing implementation.

In May 2016, grant leadership hired a system-wide health coordinator, based at KapCC, who worked with the State of Hawai'i's Workforce Development Council on TAACCCT I. The coordinator noted that the TAACCCT I project established a large consortium of health care employers to connect with the campuses on a continuous basis. The employer consortium did not, however, expand beyond O'ahu or continue after the TAACCCT I grant ended. Under TAACCCT IV, the coordinator continued her relationships with the health care employers from the TAACCCT I consortium by meeting with at least one employer bi-weekly, or she engaged employers weekly via email or telephone.

TAACCCT IV also introduced system-wide support for the veteran student population. The system-wide veterans' outreach specialist noted that TAACCCT IV is the first attempt at a system-wide coordination of veterans' services and that it provided veterans' support to campuses with limited resources and promoted the sharing of best practices.

System-Wide Implementation

At the consortium level, implementation of TAACCCT IV activities enhanced the working relationships among campuses but also met with some challenges.

TAACCCT IV system-wide impact

Grant leadership, campus leadership, and the cybersecurity and health coordinators all mentioned that the grant led the campuses to work together in new ways to coordinate curricula, provide student services, and pursue funding. For example, KapCC received a three-year *Perkins* grant to develop an on-site cybersecurity certification center that would not have been possible without TAACCCT IV.

TAACCCT IV has provided the equipment necessary to bring courses to students who live in rural areas of the state who could not attend classes otherwise. For example, equipment purchased using grant funds at UHMC enabled the college to provide SHA and CHW classes to students on the islands of Moloka'i and Lana'i. Students in rural parts of the island of Hawai'i have been able to attend classes at HawCC via Skype or Polycom, and virtual learning for cybersecurity classes at KapCC was introduced with this grant. All campuses with NetLab remote access systems report that the ability to offer cybersecurity courses and the option to complete lab coursework online have been invaluable to students. Faculty felt that the distance learning and grant-funded upgrades to update outdated IT/cybersecurity equipment has resulted in better training for students.

Finding and retaining staff with the qualifications needed for grant-funded positions was challenging and hindered the implementation of TAACCCT IV activities. One campus described a year-long search for an early alert coordinator, and another reported that faculty hires often leave after three years because of the region's high cost of living.

Employer engagement in TAACCCT IV programs varied by campus, with most businesses developing a relationship with a single campus. Campuses on the more rural islands had limited access to business contacts. At the beginning of the grant, grant leadership established a partnership with the Hawai'i Department of Labor (HI DOL). The HI DOL received funding to work on the state's TAACCCT I grant, which enabled TAACCCT I colleges to institute strategies that met Temporary Assistance for Needy Families and Supplemental Nutrition Assistance Program (SNAP) recipients' workforce needs. For

example, the campuses learned from SNAP personnel that if they offered a class that included SNAP participants, half of the costs for administering that class would be reimbursed by SNAP. This partnership has not been pursued since that first meeting due to limited funding. Grant leadership also mentioned that it attempted a partnership with the Hawai'i Department of Education (HI DOE) that did not materialize due to the HI DOE's focus on K–12 education and the restriction of TAACCCT funding to services for students 18 years of age and older.



School Health Assistant

KapCC led the development of the SHA program. The campus offered level 1 of the school health assistant certificate program (SHA-1), which was 6 credits, with input from the Departments of Health and Education as part of the TAACCCT III grant in summer 2014. Under TAACCCT IV, KapCC expanded SHA-1 to other campuses and finished the development of the program's next level, SHA-2. KapCC began offering the SHA-2 class in spring 2016, and faculty from UHMC, KauCC, and HawCC made minor adjustments to the curriculum to fit local needs prior to offering it at their own campuses. Both levels were offered in an in-person format, with SHA-2 adapted by UHMC and HawCC for partial online delivery to serve neighbor island and rural locations. Students on all campuses registered through KapCC. The 75-hour program was offered free of charge to the 255 incumbent SHAs in the state. The spring 2017 student survey showed that 87 percent of SHA students were incumbent workers, 65 percent were full time, and 34 percent were part time when enrolled. The two biggest reasons for joining the program were to “find employment/upgrade current job skills” and to “get a higher wage” (53 percent for both).

In the first year of the grant, some of the campuses offering SHA-1 faced challenges in recruiting students. The programs initially relied on public health nurses and the annual SHA meeting to recruit participants but later added outreach to local school staff and principals, health care employers, and SHA-1 graduates to promote the program within their communities. WinCC changed its recruiting approach by accepting nonincumbent SHA students. Health care coordinators at the SHA campuses said that these strategies were successful, and SHA enrollment increased to the point that all SHA positions on all islands except for O'ahu have been filled with training graduates.

School health assistant TAACCCT IV impact

TAACCCT IV funding enabled students to attend the SHA program free of charge and supported the purchase of equipment to bring the courses to remote rural areas. This increased the opportunity for incumbent SHAs and those interested in the field to participate in programs they may not have been able to afford or physically attend. SHA

training participants interviewed during the site visits confirmed that their lack of training prior to the grant left them sometimes unaware or uncertain of their responsibility for various regulations and requirements. A program participant with over 20 years of experience in the field noted, “For someone starting out, it would be great to know what is expected of them in that [regulations and requirements] manual, and [in this program] we went from the beginning to the end of the manual.” The participant rated the TAACCCT IV SHA program highly, not only for the technical content but also because the classroom setting provided an opportunity to share experiences with peers and build a peer network. In the words of another participant, “I love that this class has given [SHAs] the opportunity to be together and have a professional group.” This was reinforced through the spring 2017 student survey, in which SHA program students reported they liked the small class sizes, instructors, opportunity for peer networking, hours classes were offered, and job-related content. Participants also mentioned that the program gave them confidence by teaching them skills. On a broader level, the grant helped reinvigorate a statewide SHA association that had been dormant, which increased peer networking by connecting SHAs across the state.

In site visit interviews, WinCC, KapCC, and grant leadership shared hearing feedback that the program has increased the confidence level of parents who know that their children are being taken care of by people with more training.

In June 2017, the outgoing superintendent of schools developed a memo outlining the following updates to the SHA position in June 2017:

- title change from school health aide to school health assistant
- change in wage level
- completion of SHA Level 1 certificate program will become a prerequisite for hiring new SHAs

All SHAs in Hawai‘i who already completed the SHA program at a local college received the title change. However, it remains at the discretion of leadership at each campus to determine if a SHA-1 graduate meets the SHA-2 qualifications and satisfactory performance requirements before being reallocated to the new wage level.



Community Health Worker

UHMC led the development of a 6- to 8-credit CHW CO. The curriculum was approved during summer 2015, and the college began piloting the courses in fall 2015.

Hawai'i has about 1,000 CHWs. Like SHAs, these positions are entry level, require limited training, and offer low pay.

One health specialist interviewed explained that these and other positions related to health prevention are expected to grow in coming years and represent an emerging pathway in health careers. To align with this expectation, the CHW certificate was designed as part of a pipeline for community-based health training leading to an associate degree and possibly bachelor's degrees in community and public health. As of the spring 2017 student survey, 75 percent of CHW students were incumbent workers; 83 percent were working full time and 15 percent part time. When asked to select their motivations for enrolling, 55 percent of students reported joining the program because it was of interest to them, and 50 percent joined to increase their employment skills.

In November 2016, the consortium health care lead conducted a CHW employer feedback survey during an employer engagement meeting on O'ahu. The survey focused on employer hiring numbers for the upcoming five years and skills needed for an effective CHW. Skill needs mentioned during this survey were technical, such as comfort with electrical medical records (EMR) systems, cultural competency, EMR/computer literacy, and knowledge of community resources, motivational interviewing, local history, and basic public health. The health care lead used this information to estimate the CHW five-year job growth for Hawai'i and revise program content to meet the needs of employers.

Community health worker TAACCCT IV impact

As with the SHA program, the TAACCCT IV grant enabled students to attend CHW courses free of charge, which increased the opportunity for incumbent workers in a traditionally low-wage field to participate in professional development. On the spring 2017 student survey, CHW students reported that they liked the instructors, hands-on nature of the courses, flexibility of the class schedules, and knowledge gained. According to one CHW student, "This program has really opened my mind and my understanding as well. There really are multiple levels to this that go hand in hand. I'm just lucky I got in for free."

According to the health coordinators at KauCC and KapCC, the grant has contributed to a re-examination of the hospital and home care focus of health care in Hawai'i. An increasing population coupled with inadequate housing and resources have overtaxed the hospital system, which CHWs can alleviate by linking people to needed services, thereby decreasing hospital and emergency room visits. CHWs' skills and training can also help with the homelessness crisis the state is experiencing. CHWs are playing bigger roles in hospital settings through expanded "patient care coordinator" roles.

In August 2017, the Hawai'i Public Health Institute organized the first Hawai'i Community Health Worker Leadership Conference on O'ahu. The TAACCCT IV health care coordinator and the health care program coordinator from KauCC, along with TAACCCT IV CHW students, attended. The CHWs mentioned that they believed this conference recognized the enhanced role for CHWs and they enjoyed the opportunity to network with peers and learn new skills.

Through the grant, prior learning assessment (PLA) exams were developed for the practicum course in the CHW program at UHMC based on employer input. Employers confirmed the relevant work experience of incumbent workers that could be used for the practicum portion of the program. They did not recommend, however, that PLA be used as a substitute for other aspects of program courses. The practicum PLA exam was piloted in spring 2017 and implemented in fall 2017 when nine students tested out of the 15-hour practicum. The PLAs developed and put in place for the CHW program at UHMC will be sustained beyond the life of the grant.

Hawai'i received a DOL grant for apprenticeships that included CHW. The system-wide health coordinator discussed with health care employers what an apprenticeship is and how it would benefit them, which generated employer interest in establishing apprenticeships. The development of CHW apprenticeships with local employers was in the beginning stages at the end of the grant, and KapCC planned to continue this work.



Cybersecurity

Hawai'i's biggest employers are in defense and tourism, industries that handle sensitive information and need cybersecurity specialists; therefore, cybersecurity was not a new topic in the UHCC campuses' IT programs. UHMC had developed course content related to cybersecurity as part of a National Science Foundation grant in the years prior to TAACCCT IV. Instructors on other campuses noted that cybersecurity had become a growing part of their IT programs in response to industry needs.

At the beginning of the TAACCCT IV program, some of the campuses already had cybersecurity courses in place, while others developed completely new programs. For TAACCCT IV, campus faculty members drew on the resources of the National Cyberwatch Center to inform course enhancement and development.

At the time of the 2017 student survey, only 25 percent of cybersecurity students were working in cybersecurity or a related field; 29 percent of cybersecurity students were working full time and 41 percent part time. Sixty two percent of students mentioned that they joined the program because it was of interest to them, and 54 percent joined to increase their employment skills.

Four of the campuses acquired Netlab systems through the grant that allow students from any campus to complete cybersecurity lab work in a simulated environment. Campuses also received grant-funded investments to upgrade IT/cybersecurity equipment.

Grant-funded activities for cybersecurity program development initially sought to promote articulation across campuses, but campuses were at different points of development in the cybersecurity sector, and their industry partners had different training needs. As a result, curricula, prerequisites, and credentials vary by campus, making a system-wide cybersecurity articulation agreement challenging to establish. The IT program at HonCC, for example, focuses on infrastructure and networking, whereas KapCC addresses programming and database administration, which makes it difficult for students to move from one campus program to the other. Articulation to a four-year degree is also limited to HonCC—the only campus that has developed an articulation agreement with the University of Hawai‘i–West O‘ahu for a Bachelor of Applied Science in computing, electronics & networking technologies, IT, and cybersecurity.

Within the first year of the grant, LeeCC hired a PLA coordinator dedicated to developing PLA exams for IT students and determining options for military veterans to earn credits for their military experience in cybersecurity. Student uptake of this option was low, however, with an average of one cybersecurity student attempting a PLA per month. One cybersecurity instructor attributed the low PLA rate to faculty and administrators’ unfamiliarity with many of the IT industry certifications that students have earned and the types of skills they cover. Veterans’ joint service transcripts indicate college credit equivalents for military training but tend to use 2-credit units instead of the 3-credit units used by most colleges, complicating transfer and forcing some veterans to take courses in skills they already have. Additionally, the system-wide veterans’ coordinator shared that advisors and faculty do not always inform students of these PLA exams.

Cybersecurity TAACCCT IV impact

During site visits, staff mentioned that the NetLabs have been a good confidence builder for students, and all cybersecurity students interviewed during the site visits expressed appreciation for the option to complete lab work from home or off campus. According to one cybersecurity instructor, NetLab has not changed how instructors teach, but it helps students practice what they learn in the classroom in a realistic but protected environment. In the spring 2017 student survey, cybersecurity students reported that they liked their instructors and the hands-on nature of courses and that they found the content engaging. According to one cybersecurity student at HonCC, “When a lot of campuses talk about hands-on training, what they mean is virtual training, but here we’re actually lifting hardware and plugging in cables, fixing things and breaking them again.”

TAACCCT IV cybersecurity coordinators reported working with employers to break the taboo of hiring in the IT field without a bachelor's degree. They have joined the University of Hawai'i Cybersecurity Consortium, led by the University of Hawai'i at Mānoa, which consists of representatives from the IT industry and all 10 Hawai'i colleges/campuses and meets twice a semester. Grant cybersecurity coordinators showcased their students' skills and worked to convince consortium members that the certificates created through the grant are cost-effective and serve as an excellent pathway into jobs that have a high demand for workers.

The grant provided the opportunity for LeeCC and KapCC to apply for status as National Centers of Academic Excellence in Information Assurance/Cyber Defense from the National Security Agency. Cybersecurity instructors have also joined the Hawai'i Advanced Technology Society, and each campus has started its own chapter with meetings where instructors work with students on cybersecurity activities and participate in national cybersecurity league competitions and cybersecurity defense competitions. LeeCC has also become a member of the VMware IT Academy, a global network of colleges and universities that provides students with access to education content, certifications, and experience with VMware technologies. Members pay \$250 a year to access software that is used industry wide. HonCC has joined CyberHawai'i, an umbrella of CyberUSA, making Hawai'i one of 22 affiliates. HonCC is working to grow membership in CyberUSA across the state.



Entrepreneurship

TAACCCT IV grant leadership and HonCC worked with subject matter experts (SMEs) to develop an entrepreneurship certificate program. SMEs designed a six-week curriculum for the program. Statewide recruitment efforts involving social media, radio and newspaper ads, flyers, and networking in the community resulted in 10 students completing and earning certificates in the first cohort in August 2016. Feedback from participants was very favorable.

With the success of the first cohort, KapCC hired one of the SMEs to refine, enhance, and expand the course content for the entrepreneurship program. The enhanced curriculum was piloted in summer 2017 at the campus with eight student participants and has been embedded into the entrepreneurship program in which completers earn a CO in entrepreneurship.

Entrepreneurship TAACCCT IV impact

The TAACCCT IV entrepreneurship program created relationships between UHCC campuses and local employers that had not existed before. The SME developed the

entrepreneurship program after conducting interviews with approximately 30 business leaders, entrepreneurs, and government agencies who support entrepreneurship in Hawai'i. Interviews focused on what employers saw as gaps in entrepreneurship education curriculum in Hawai'i at the university and community college levels. Employer mentors were engaged throughout the course of the program to answer questions and provide feedback on the students' business ideas. These relationships provided students the opportunity to connect with employers for potential job placement or partner in their own business enterprise.



Student Veterans' Services

While the state of Hawai'i has a large per capita population of veterans, veteran enrollment in community colleges has traditionally been low. In TAACCCT II, UHMC created a veterans' resource center (VRC) on its campus, with dedicated staff, that was very popular with student veterans; it was often the first stop for veterans looking to enroll in classes or programs at UHMC. TAACCCT IV built on the success of the VRC by addressing barriers to veteran recruitment and success with the goal of increasing the enrollment, completion, and post-program employment rates of veterans.

The TAACCCT IV grant provided the opportunity for campuses to consider hiring a veterans' outreach specialist. Four of the campuses—HawCC, HonCC, LeeCC, and UHMC—opted to take advantage of this funding. The consortium-level veterans' outreach coordinator lead was established at LeeCC. The campus-level positions were designed to focus on outreach to local military bases and veterans' service organizations and connect these organizations with local community colleges to better serve student veterans, with assistance from the consortium lead. During the grant, the coordinators acted as liaisons between the campus and veterans to provide information about TAACCCT IV program offerings and the low cost of attending courses in the UHCC system. Coordinators offered hands-on support and guidance to veterans throughout the recruitment and enrollment process. Each veterans' coordinator also participated in outreach to local military bases to better publicize offerings for current or former service members. Through these connections with the local bases, LeeCC offered IT courses to U.S. Marine Corps service members on its base on O'ahu.

Student veterans' services TAACCCT IV impact

As a part of the TAACCCT IV grant, the consortium veterans' coordinator lead worked with the University of Hawai'i System Veterans' Task Force to assess student veteran needs and identify gaps in services. This assessment found that 1) having a designated space and contact person for veteran students was vital to their success and integration into an academic environment, 2) existing staff members required further training on how to work

with student veterans, 3) better systems and opportunities for student veterans to earn college credits for their military service training was needed, and 4) there is a negative cultural stigma against veterans, especially female veterans. Based on these findings, and hearing the needs of veterans on all seven campuses, campuses worked for the remainder of the grant to make improvements to meet the needs of student veterans in the following ways:

- HonCC opened a VRC in April 2018 after a year of advocacy and planning by the veterans' coordinator and campus administration. The VRC offers student veterans and their families a dedicated space on campus for services such as assistance from the veterans' coordinator, academic tutoring, and counseling from a Veterans Integration to Academic Leadership (VITAL) counselor. The VITAL initiative's mission is to provide health care and improve the overall mental health of veterans, while supporting their successful integration into college and university campuses. VITAL is offered at 25 sites throughout the U.S. and in Hawai'i under the Pacific Islands Health Care System, which provides counseling and resources to veterans and their families dealing with combat-related injuries. The VRC is centrally located but set back from major campus thoroughfares to allow veterans to access the center and its services discreetly.
- LeeCC and KapCC had college-supported VRCs and veterans' coordinators prior to the TAACCCT IV grant. Through the efforts of the TAACCCT consortium veterans' coordinator, both campuses developed memorandum of understanding (MOUs) with VITAL counselors. At LeeCC, the VITAL counselor spends two days a week on campus in the VRC seeing veterans. WinCC created an MOU with the same VITAL counselor to provide telehealth consultations with its campus veterans.
- At HawCC, the grant-funded veterans' coordinator now has a dedicated office that is a veterans' space. According to the HonCC's veterans' coordinator, "When students come in, now that I have the set space, they will bring up: 'Oh, it's so much better than having to talk over a counter.' They can sit and we can talk and just check in. Student veterans are much more comfortable [in the space]." In addition to the new space, the veterans' coordinator has facilitated events for student veterans and their families such as a welcome back picnic in the fall and a veterans' group.

According to interviews with LeeCC and HonCC student veterans during the third site visit, they have the resources they need to be successful. In the words of one LeeCC student veteran, "The best part of being here is knowing that I have the support that I need. Being in the military, everything is given to us on a platter... LeeCC has been very supportive. They really care about [veterans] and it helps to feel like I'm not alone because sometimes it can seem overwhelming balancing school, work, and being a dad."



Early Alert/Student Retention

The Starfish early alert system was implemented at the UHCC campuses during the TAACCCT II grant. This software tracks students' progress and receipt of counseling or other student services. It also flags registered students who fail to attend classes which enables staff to refer them to student support resources.

The TAACCCT IV grant enabled campuses to hire new staff to continue the system's use. Four of the colleges—KapCC, KauCC, LeeCC, and WinCC—hired coordinators to continue implementation and increase instructor participation in monitoring student attendance, which they cannot be required to do. The coordinators also devised interventions to ensure that students who are sent alerts take action to access support rather than get discouraged and drop out.

During the grant, the four retention coordinators upgraded from Starfish to the MySuccess system. MySuccess had already been purchased by UHCC prior to the TAACCCT IV grant. As with Starfish, MySuccess is used by administrators, counselors, and instructors to track student progress, but unlike Starfish, the system can also be used by students to register for classes, track graduation progress, and schedule appointments with counselors. MySuccess's early alert function sends surveys to instructors electronically every few weeks on class attendance and other issues that students may have. Any flags raised from the survey data generate emails from the campus's vice chancellor of student affairs to students and alerts instructors and counselors to follow up with these students. The MySuccess system also adds a "kudos" feature that gives instructors the chance to give deserving students an "e-pat on the back" and use the system for support rather than just for identifying problems.

Starfish/MySuccess TAACCCT IV impact

The MySuccess platform was not fully implemented until the second year of the grant. As a result, data on the system's effects on student retention were not available by the end of the grant, but the staff shared anecdotal feedback on the platform's effectiveness. At HonCC, the number of students flagged in 2017 had increased, and as a result, the college hired tutors managed by the professional staff to provide services quickly through group and individual coaching. KapCC instituted an effective calling campaign for students who were enrolled but not registered (about 1,000 students) during the winter break. The KapCC early alert coordinator also related instructor feedback that the intervention tool has helped students.

From the student perspective, during site visits, students mentioned that they used the MySuccess platform regularly and liked being to schedule appointments with counselors and

check on their progress to graduation, including the ability to hypothetically change their major in the system and see what courses they would need to take if they switched programs.



Sustainability

In summer 2017, the TAACCCT IV grant management team asked the evaluation team to develop a sustainability report that could guide the creation of a project sustainability plan after the grant program's end in June 2018. The evaluation team developed a sustainability plan using the TAACCCT Sustainability Toolkit¹ that contained consortium- and campus-level plan templates for post-grant sustainability. The report listed additional resources and instructions.

The original report, delivered to the grant management team in August 2017, outlined activities funded through TAACCCT IV, summarized campus sustainability goals gathered during previous site visits, and proposed next steps and topics for future consideration. The TAACCCT IV grant management team shared the templates with faculty and staff at each campus during fall 2017 grant monitoring meetings. Campuses updated the templates to document their sustainability goals, funding sources, responsible individuals, and potential next steps based on progress already made. The evaluation team reviewed sustainability plans with representatives from each campus during the March 2018 site visit and subsequently made updates and changes based on the information gathered. The TAACCCT IV grant management team made additional updates and finalized the plan in June 2018.

All programs that were introduced or augmented using TAACCCT IV resources or funding will be sustained beyond the life of the grant. Details can be found in preceding sections on sustainability for specific programs and campuses. Table 3 outlines the activities and programs funded by TAACCCT IV and their sustainability status: sustained, as needed, or to be determined. Details on sustainability for specific programs and campuses comprise the rest of this section.

¹ U.S. Department of Labor, Education and Training Administration, and Jobs for the Future. 2017. *TAACCCT Sustainability Toolkit*. Washington, DC: U.S. Department of Labor, Education and Training Administration; Jobs for the Future.

https://taaccct.workforcegps.org/resources/2016/07/25/13/22/Resource_TAACCCTsustainabilityToolkit.

Table 3. TAACCCT IV programs/activities sustained

Campus	Community health worker	Cybersecurity	Entrepreneurship	School health assistant	Veterans' coordinator	Student retention specialist	Early alert/Starfish system
HawCC	Sustained	Sustained		Sustained	CTD	CTD	CTD
HonCC		Sustained			CTD	CTD	CTD
KapCC	Sustained	Sustained	Sustained	Sustained	CTD	CTD	CTD
KauCC	Sustained	Sustained		Sustained	CTD	CTD	CTD
LeeCC		Sustained			CTD	CTD	CTD
UHMC	Sustained	Sustained		Sustained	CTD	CTD	CTD
WinCC	As needed	Sustained		Sustained	CTD	CTD	CTD

Note: CTD = Campus to determine

Of the five campuses offering SHA-1 and SHA-2, four— HawCC, KauCC, UHMC, and WinCC—have trained all SHAs in their communities and plan to offer the SHA courses in the future on an as-needed basis. Students will continue to register for these courses through KapCC but will pay tuition for all post-grant course offerings. KapCC will continue to offer SHA-1 and SHA-2 certifications to incoming SHA substitutes and the 49 percent of SHAs on O'ahu who have not yet received training.

All four campuses plan to continue offering the CHW program after the end of the grant. KapCC plans to offer CHW courses with assistance from *Perkins* grants and by integrating CHW coursework into other programs at KapCC, such as the human services degree. UHMC will continue its program with the assistance of local, nonprofit organizations. The college plans to integrate CHW coursework into the existing associate of science degree in health care. HawCC plans to work with its employer partners to recruit students and develop CHW internships for students completing coursework at HawCC. KauCC revised its CHW program as a 16-credit course supported by tuition funds and eligible for financial aid; beyond the fall 2018 semester, the CHW program will be offered on an as-needed basis.

After the grant ends, all consortium campuses will continue to offer cybersecurity courses created with grant funds with some variation across campuses. HonCC, KapCC, KauCC, LeeCC, and UHMC will continue to offer cybersecurity certificate programs. For example, cybersecurity courses at LeeCC are very popular, and the campus will likely need to hire another instructor to teach them. It will continue to fund and staff the IT help desk established during the TAACCCT IV grant by colocating faculty office hours at the help desk and requiring help desk cybersecurity and IT students to participate. Additionally, UHMC hopes to integrate its cross-disciplinary cybersecurity certificate modules developed under the grant into other IT and business programs.

HawCC and WinCC will maintain cybersecurity certificate courses. HawCC will offer the “Introduction to Cybersecurity” course as part of its IT associate of science degree and offer the additional two courses created during the TAACCCT IV grant as electives as needed for students completing the cybersecurity certificate. Similarly, WinCC plans to offer its “Introduction to Cybersecurity” course on an as-needed basis using the current instructor as an adjunct lecturer funded through student tuition and fees.

Plans for the Netlab equipment purchased under TAACCCT IV also vary by campus. At KapCC, the equipment will serve as a storage system for training modules developed by the IT faculty. Because the certificate and courses will be sustained using student tuition money, faculty decided to purchase course materials from InfoSec Learning that offer a better price for students but still provide remote, online access to the curriculum. HonCC, KauCC, and LeeCC will use campus funds and student tuition to maintain their NetLab equipment as well.

Two campuses also anticipate expanding the cybersecurity training options available on their campuses. UHMC plans to develop a secondary to postsecondary cybersecurity pathway using funding from its National Science Foundation grant. HawCC will develop a credit for PLA for cybersecurity for military veterans and explore further partnership options with military service branches.

To sustain the veterans’ coordinator positions beyond the grant, the consortium campuses submitted a proposal along with the report created by the University of Hawai‘i System Veterans’ Task Force to the Hawai‘i state legislature. They proposed adding one state-funded counselor for veterans or, depending on college needs, other counselors at each of the seven campuses. The legislature approved the proposal and, as of July 1, 2018, there are state funds available to hire a counselor at each UHCC campus.

HawCC, HonCC, and LeeCC will maintain separate veterans’ centers allowing veterans their own space on campus with access to a variety of services (advising, mental health, financial, etc.). KapCC and UHMC also plan to continue pre-TAACCCT IV veteran support on their campuses. The ongoing support for veterans’ coordinators means that the connections with military bases and campus activities for veterans that began during TAACCCT Rounds II and IV will be continued for the foreseeable future.

All campuses plan to keep using the Starfish/MySuccess system after the grant. During the grant, the early alert/retention coordinators worked to get the MySuccess system in place to where it would only need maintenance once the grant ended. The KauCC retention coordinator was transitioned to a full-time, campus-funded role prior to the end of the TAACCCT IV grant, but the other campuses did not retain the early alert coordinator position.

TAACCCT IV Impact Evaluation (Survey Results)

Introduction

The goals of the TAACCCT IV grant at the UHCC consortium were to aid participants in securing high-demand, high-wage jobs and embark on well-designed career pathways supported through professional development and training. As originally conceived, evaluators planned to use individual student-level data to assess participants' in-school experiences and post-program outcomes. Due to a lack of access to and collection of individual-level student data, the planned analyses were not possible. To present some analysis of the impact of the TAACCCT IV grant, evaluators drew on existing targeted data collected from grant stakeholders via a set of surveys, which consortium members administered to individuals within identified stakeholder groups. This impact evaluation uses data collected through three separate surveys to qualify the perceived effect the TAACCCT IV grant had on stakeholders and any successes and challenges experienced during the grant. Survey populations included the following:

- **Students**—Surveys conducted in spring 2017 yielded responses from 214 students enrolled within the consortium. Students answered questions about their educational background, perceptions of their program, pre-program and current employment status, and post-program education plans.
- **Faculty**—Survey responses were collected via an online instrument from 15 faculty members in March 2018. Survey questions focused on the influence of the TAACCCT IV program on faculty's instructional role and professional development.
- **Employers**—Survey responses from 18 employers were collected using an online instrument in fall 2017. Individuals were asked questions on their input into the TAACCCT IV programs and perceptions of and experience with applicants and workers hired from these programs.

Institutions were provided paper copies of and links to each survey developed by the evaluation team. Institutional staff did not maintain a count of the number of individuals solicited or provide information on the institutions or programs they attended, therefore, survey response rates are unknown.

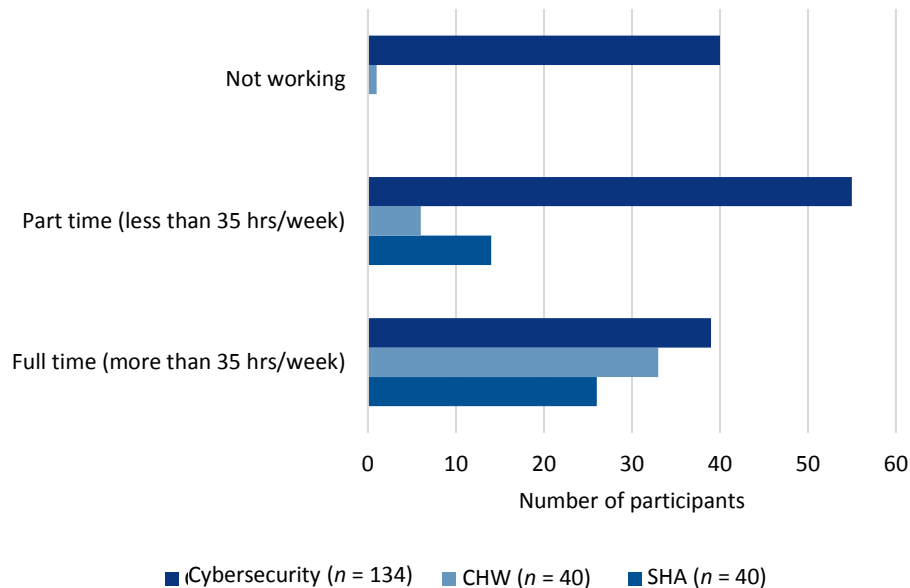
Student Survey

Of the 214 students who responded to the survey, 134 were in cybersecurity programs, 40 were in SHA programs, and 40 were in CHW programs. Through this survey, respondents reported past and current wage and employment information as well as predicted wage, employment, and future education outcomes.

Wages and employment

As a part of this survey, students enrolled in TAACCCT IV programs reported on their employment status and wages both at the time they enrolled in the program and at the time of the survey in spring 2017. Figure 2 shows TAACCCT IV student employment status when they enrolled in their program.

Figure 2. TAACCCT IV student employment status at program enrollment



Note: CHW = community health worker; SHA = school health assistant.

For participants in health care programs (SHA and CHW), most respondents indicated they were employed full time at the time of program enrollment. All health care respondents except for one CHW student were working upon enrollment. These results are to be expected as both SHA and CHW programs were designed as training programs for incumbent workers in these fields.

Cybersecurity respondents tell a different story than those enrolling in health care programs. The fewest respondents reported being employed full time (more than 35 hours per week), and only 25 percent of those who were employed were working in cybersecurity or a related field. Most respondents reported being employed part time (less than 35 hours a week),

followed by respondents reporting being unemployed at the time of entry into their program.

Table 4 presents the average hourly wage of survey respondents who were working full or part time at program enrollment, by the amount of time they had participated in their TAACCCT IV program at the moment of the spring 2017 survey.

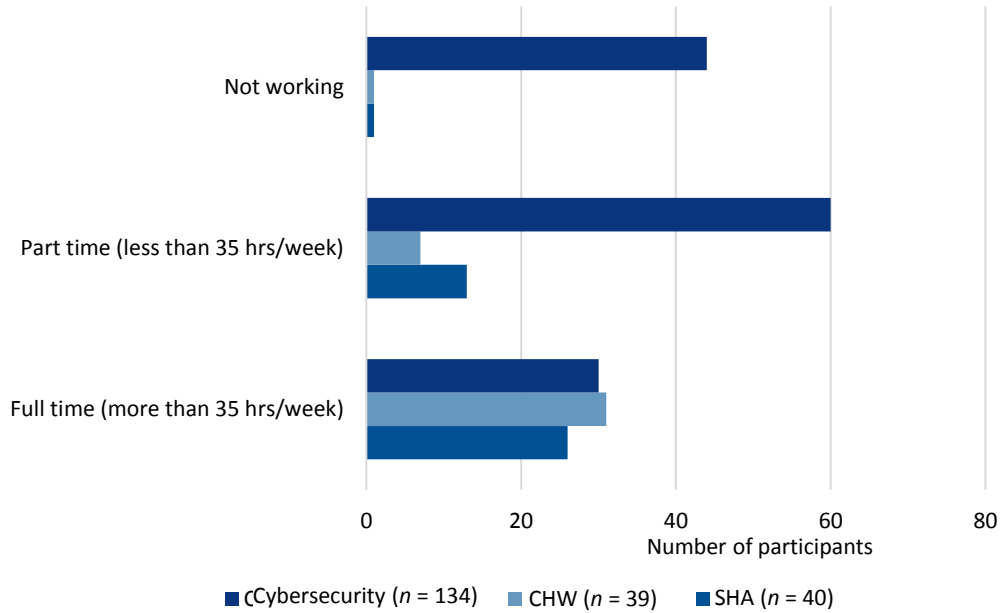
Table 4. Average hourly wage at enrollment, by program and length of time in program

	Time in program	Average wage at enrollment (hourly)
School health assistant	1 year or less	\$12.46
	More than 1 year	N/A
Community health worker	1 year or less	\$14.34
	More than 1 year	\$13.70
Cybersecurity	1 year or less	\$13.08
	More than 1 year	\$16.66

At the time of enrollment, SHAs made the least on an hourly basis (\$12.46) and, since the SHA program is only two semesters/one year long, there are no reported wages for students having participated in their program for more than one year. CHWs enrolled in their program for one year or less made more (\$14.34) at the time they entered the program than their counterparts who had been in the program more than one year (\$13.70). Cybersecurity respondents reported earning an average of \$13.08 at the time of enrollment for those who had been in their program for one year or less, compared with a much higher average entering wage of \$16.66 for those respondents who had been enrolled in a cybersecurity program for more than one year.

At the time of the spring 2017 survey, respondents reported slight shifts in their employment status when compared with their responses upon program entry. Figure 3 shows TAACCCT IV student employment status upon completion of the spring 2017 survey.

Figure 3. TAACCCT IV student employment status at spring 2017 survey



Note: CHW = community health worker; SHA = school health assistant.

While most SHA respondents still reported being employed, one reported being unemployed. The employment status of CHW respondents largely stayed the same as what was reported at the time of enrollment, except for one respondent who shifted from full-time to part-time employment. Four more cybersecurity respondents were unemployed at the time of the survey as compared with time of enrollment, and respondents shifted from full-time to part-time employment.

Respondents employed at the time of the spring 2017 survey reported their average hourly wage, shown in Table 5.

Table 5. Average hourly wage at time of spring 2017 survey, by program and length of time in program

	Time in program	Average wage at time of survey (hourly)
School health assistant	1 year or less	\$13.06
	More than 1 year	N/A
Community health worker	1 year or less	\$14.75
	More than 1 year	\$14.22
Cybersecurity	1 year or less	\$12.86
	More than 1 year	\$17.05

At the time of the spring 2017 survey, all programs except one noted an increase in average hourly wages from the time of program enrollment. For SHA respondents, the average wage

increased by 60 cents per hour for respondents having participated in the SHA program for one year or less. CHW respondents noted an increase of 41 cents per hour for those participating in the CHW program for one year or less. For respondents who had been in the program for more than one year, the increase was more pronounced, resulting in a 52 cent higher hourly wage. This number, however, is still lower than the average hourly wage for students in a CHW program for one year or less. Respondents who had participated in a cybersecurity program for one year or less were the only ones to see an average wage decrease; these respondents reported an average hourly wage that was 22 cents less than the average hourly wage at program enrollment. For cybersecurity respondents in their program for more than one year, however, the average wage increased by 39 cents.

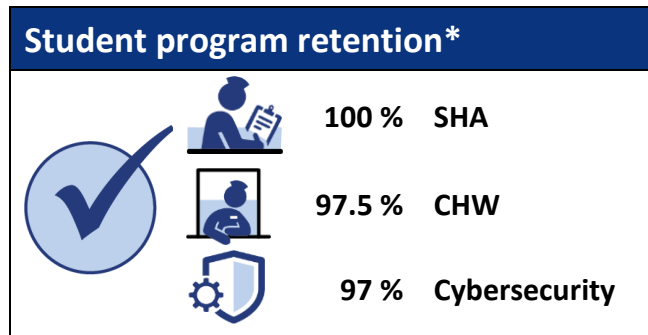
Perceived trajectory

In the spring 2017 survey, respondents who were not planning to finish their program that semester reported they would return the following semester. All respondents except five (one CHW, four cybersecurity) planned to either finish their

program or continue their studies as of spring 2017. For those five students planning to discontinue their studies altogether, the predominant cause of discontinuation was personal factors, such as work or family obligations or health or financial issues.

Of the 199 respondents who reported continuing their education and coursework, 71 percent said they would continue taking courses in the same program in which they were currently enrolled, while 7 percent planned to complete their program and not continue further education. The remaining 22 percent planned to complete their current program in the spring 2017 semester and then enroll in another program in the subsequent semester.

Respondents also reported on credentials they expected to earn by the time they completed their program, shown in Table 6.



*TAACCCT IV program retention from spring 2017 to fall 2017

Table 6. Expected credentials earned at program completion, by program and length of time in program

	Time in program	One or more certificates of competency	One or more certificates of achievement	An associate degree	Industry certifications
School health assistant	1 year or less	28	11	1	3
	More than 1 year	N/A	N/A	N/A	N/A
Community health worker	1 year or less	15	4	3	2
	More than 1 year	9	4	7	2
Cybersecurity	1 year or less	111	5	26	4
	More than 1 year	24	29	92	18

For students enrolled in SHA, a one-year program, most respondents earned COs, while some earned certificates of achievement (CAs); very few expected to receive an associate degree. For the CHW and cybersecurity programs, both with the potential to last more than one year, the longer students were enrolled, the higher the level of credential they expected to earn. For example, most CHW students who had been enrolled for one year or less expected to earn COs, the lowest level credential offered by TAACCCT IV programs, while their counterparts who had participated in the program for more than one year expected to earn not only COs, but also associate degrees. Most cybersecurity respondents expected to earn an associate degree, regardless of their time in the program, though for cybersecurity students enrolled for more than one year, the number of other credentials they expected to earn also increased (COs, CAs, and industry certifications).

The average hourly wages upon program completion predicted by respondents were notably higher than the wages reported at the time of the survey, as seen in Table 7.

Table 7. Predicted average hourly wage after program completion, by program and length of time in program

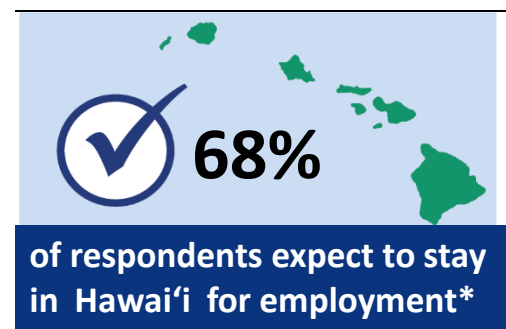
	Time in program	Average predicted wage at time of survey (hourly)	Increase from average hourly wage reported at time of spring 2017 survey
School health assistant	1 year or less	\$16.58	+\$3.52
	More than 1 year	N/A	N/A
Community health worker	1 year or less	\$18.92	+\$4.17
	More than 1 year	\$21.16	+\$6.94
Cybersecurity	1 year or less	\$25.36	+\$12.50
	More than 1 year	\$24.32	+\$7.27

The largest predicted increase came from cybersecurity students enrolled in their program for one year or less who predicted that their average hourly rate would nearly double from what they earned at the time of the survey in spring 2017.

These predictions fall in line with what employers reported that they expect to pay an incoming graduate of a TAACCCT IV program. Health care employers report offering hourly wages between \$13 and \$20 per hour, which mostly aligns with SHA and CHW program student predictions. CHW students participating in their program for more than one year predicted a slightly higher average hourly wage than employers reported they would pay. Cybersecurity employers stated that they paid between \$13.80 and \$30 per hour, which also aligns with student predictions, though student predictions were on the higher end of that scale.

Predicted employment outcomes varied across the three TAACCCT IV programs. Over half of SHA students (23 respondents) reported they would remain in the position they had when they entered the program. Five indicated they had already found a position in a field related to their SHA training. Only three were still seeking post-program employment. The lower numbers for the latter two categories makes sense since the SHA program was designed to be a training program for incumbent workers. Responses from CHW students were more varied than those of their SHA counterparts. A majority of CHW students indicated they would remain in their current position or had found a position within a related field, but more respondents reported not having a job lined up after graduation. Those who had not yet found positions had mixed levels of confidence regarding whether they would find a position within three months of program completion (three were confident, two were a little confident, and two were not confident at all). Exactly half of cybersecurity respondents reported not having a position lined up at the end of the program. However, 83 percent of these respondents were somewhat confident they could find a position within three months of program completion.

Respondents who planned to continue their education had different goals and programs of interest depending on the programs in which they were enrolled. SHA students' goals were to continue to SHA-2 or begin a CHW or nursing program, ultimately receiving an associate degree. CHW students planned to continue their education in the fields of human services, nursing, business, or social work at their current community college or at a four-year institution in Hawai'i with the goal of earning their associate or bachelor's degrees. Cybersecurity students wanted to earn their bachelor's or master's degrees from four-year institutions in



**Of 106 respondents out of 156 who responded to the question "Which of these statements best describes where you expect to go when you leave [PROGRAM]?"*

Hawai'i in fields such as cybersecurity, information security, computer science, engineering, and networking.

Of respondents who answered the question of where they expected to go when they left their program, 68 percent expected to remain in Hawai'i to continue their education or find employment. Other respondents were unsure where they would go (20 percent) or expected to move elsewhere to find employment (12 percent).

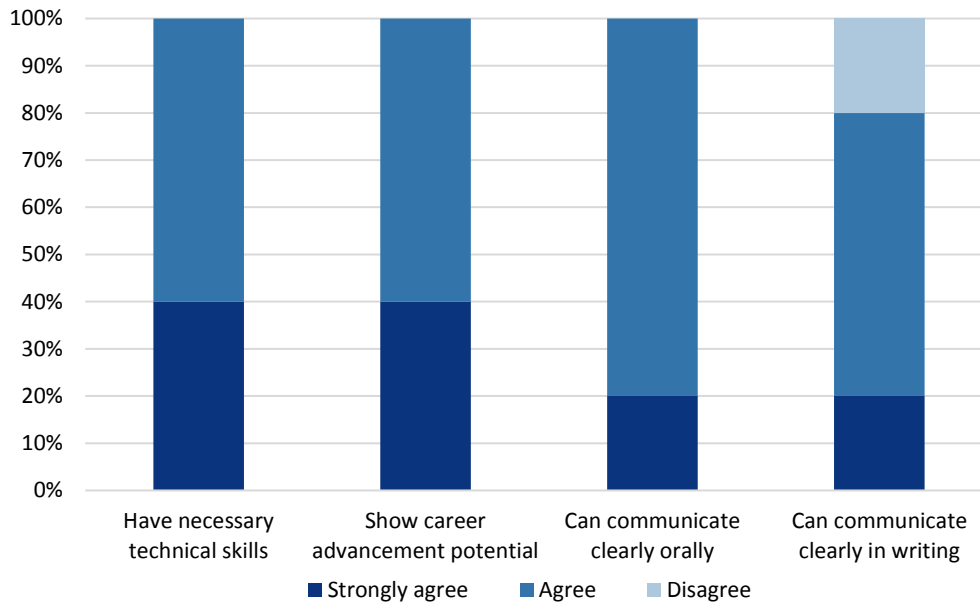
Employer Survey

The 18 respondents to the employer survey reported that they were more engaged in TAACCCT IV programs across the consortium than they had been with programs that preceded the grant. This engagement took the form of participating in campus-led activities, hosting students at their workplace, and hiring and recruiting program graduates.

Health care

For employer partners of the SHA and CHW programs, the most popular ways to collaborate with campus program partners were through input on program content, employee training, and offering internships. Health care employer partners also helped further their connections with the programs and students by participating in campus-led activities like classroom visits, having students visit their workplace facilities, and career fairs.

Seventy-five percent of employer respondents reported hiring a graduate from their partner program within a year of the survey. For entry-level program graduates of SHA and CHW, most employers reported paying rates of \$13–20 per hour. Their assessment of these employees' skills are shown in Figure 4.

Figure 4. Health care employer assessment of TAACCCT IV program graduate skills

According to employer respondents, graduates from TAACCCT IV SHA and CHW programs are prepared for the workforce. All respondents agreed that, in comparison with other applicants for positions who did not complete TAACCCT IV programs, program graduates have the necessary technical skills to perform their job and show potential for career advancement in their field. Employers all also agreed that program graduates can communicate clearly orally. However, one employer (of 5 who responded) did not think that program graduates could communicate clearly enough in writing.

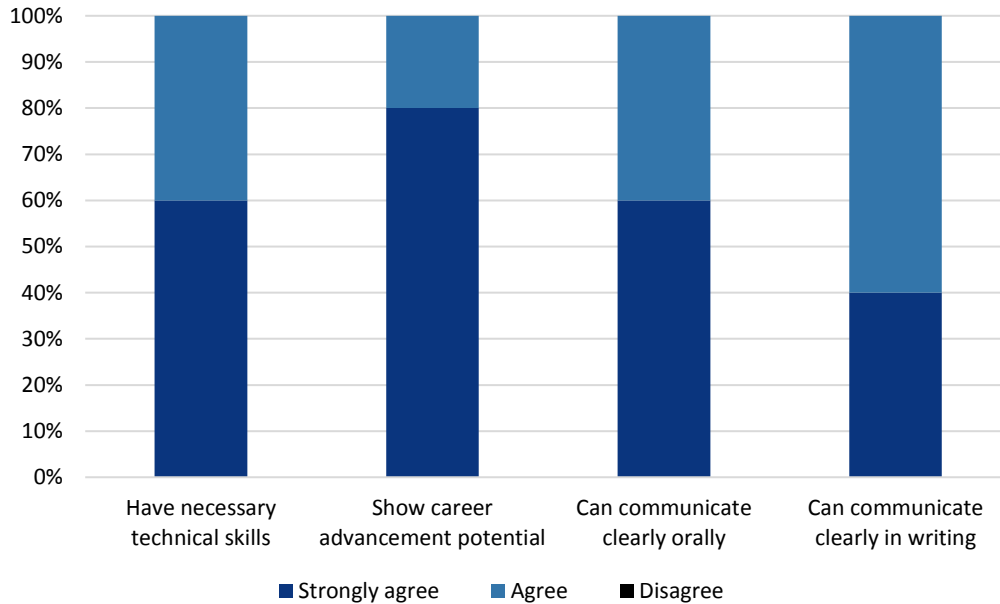
In addition to hiring TAACCCT IV program graduates through partnerships, 75 percent of employer respondents reported sending current employees to their campus partner program for additional training and certifications. Employers noted that, in the past, it had been difficult to find staff with appropriate computer literacy levels or who met the educational requirements. However, since the TAACCCT IV program had been implemented, they could send employees to get training on those skills at their partner campus.

Cybersecurity

Employer partners of cybersecurity programs collaborated with campuses, faculty, and students through offering internships, providing input on program content, and filling hiring needs. Like their health care counterparts, cybersecurity employers participated in campus-led activities such as classroom visits, workplace visits, and career fairs.

Five respondents reported hiring graduates from cybersecurity programs at their partner institutions during the past year, offering wages from \$13.80 to \$30 per hour. Employer assessments of program graduates' skills can be seen in Figure 5.

Figure 5. Cybersecurity employer assessment of TAACCCT IV program graduate skills



Employer respondents believed that program graduates are prepared to work at their companies. All respondents agreed that TAACCCT IV programs prepared students with adequate levels of necessary technical skills. Additionally, respondents all believed that program graduates showed more career advancement potential and better oral and written communication skills than peers applying for the same positions who had not completed the program training. Two employer respondents sent current employees to a partner cybersecurity program for training to help build skills and gain credentials in specific software and systems.

Faculty Survey

TAACCCT IV program faculty were surveyed near the end of the grant period to gather information on their perception of how the grant affected their programs, institutions, and interactions with other campuses. The survey was completed by a total of 15 respondents: seven SHA instructors, three CHW instructors, and five cybersecurity instructors.

Program benefits and impact

TAACCCT IV program instructors reported that both they and their programs benefited from the grant through the creation of new courses, offering of new credentials for students, expanded professional development opportunities, and new equipment. SHA and CHW instructors all reported teaching new courses. They also offered new credentials to students, because the COs in SHA and CHW programs had not been available at all campuses prior to this grant. SHA and CHW faculty also reported receiving new, grant-funded equipment ranging from simulation mannequins, new teleconferencing equipment for improved distance learning, and classroom furniture. Cybersecurity instructors reported teaching mostly revised courses with updated curriculum and new equipment, such as NetLabs. Instructors from all three programs also reported participating in professional development opportunities, such as attending conferences and receiving additional credentials.

Through this survey, instructors were asked to weigh in on the ways in which their program had changed because of the TAACCCT IV grant. Their responses fell into two categories: industry-related change (Table 8), and campus-related change (Table 9).

Table 8. Instructor perceptions of industry-related change based on TAACCCT IV implementation, by program

	Program	Strongly agree	Agree	Disagree	Strongly disagree	N/A
Program more responsive to needs of industry	SHA	2	4	0	0	1
	CHW	2	0	0	0	1
	Cybersecurity	1	4	0	0	0
	Total	5	8	0	0	2
Program more up-to-date and better reflects current industry standards	SHA	2	4	0	0	1
	CHW	2	0	0	0	1
	Cybersecurity	2	3	0	0	0
	Total	6	7	0	0	2
Expanded number of contacts with industry representatives	SHA	4	2	0	0	1
	CHW	1	2	0	0	0
	Cybersecurity	1	3	0	0	1
	Total	6	7	0	0	2
Stronger relationships with industry partners	SHA	4	3	0	0	0
	CHW	1	2	0	0	0
	Cybersecurity	1	3	0	0	1
	Total	6	8	0	0	1
Job entails more industry outreach	SHA	2	1	1	0	3
	CHW	1	2	0	0	0
	Cybersecurity	0	1	1	0	3
	Total	3	4	2	0	6

Note: CHW = community health worker ($n = 3$); Cybersecurity ($n = 7$); SHA = school health assistant ($n = 5$).

Overall, instructors across all three programs agreed that their programs are more responsive to, and up to date with, industry needs and they have more and stronger connections to local employer partners. Program instructors were in agreement that the TAACCCT IV grant positively impacted their programs by helping to create better contacts and connections with industries and by giving students better hands-on training opportunities that reflect industry needs. However, based on their responses, most instructors do not conduct industry outreach or have not noted an increase in the amount of industry outreach expected of them since implementation.

Table 9. Instructor perceptions of campus-related change based on TAACCCT IV grant, by program

	Program	Strongly agree	Agree	Disagree	Strongly disagree	N/A
Stronger relationships with faculty at other campuses	SHA	2	2	0	0	3
	CHW	1	2	0	0	0
	Cybersecurity	2	2	1	0	0
	Total	5	6	1	0	3
Students have opportunities to build skills through hands-on training	SHA	6	0	0	0	1
	CHW	2	1	0	0	0
	Cybersecurity	3	1	1	0	0
	Total	11	2	1	0	1
Students better prepared to work in industry	SHA	6	0	0	0	1
	CHW	2	1	0	0	0
	Cybersecurity	3	2	0	0	0
	Total	11	3	0	0	1
Class enrollments have increased	SHA	4	0	1	0	2
	CHW	1	0	1	0	1
	Cybersecurity	2	1	2	0	0
	Total	7	1	4	0	3
Job entails more student recruiting	SHA	1	1	0	0	5
	CHW	1	0	2	0	0
	Cybersecurity	0	0	1	0	4
	Total	2	1	3	0	9

Note: CHW = community health worker ($n = 3$); Cybersecurity ($n = 7$); SHA = school health assistant ($n = 5$).

Like their relationship to industry, instructors from all programs reported that the TAACCCT IV grant had positive benefits on students and campus-related issues. Most instructors (11 of 14) strongly agreed that students have better opportunities to practice skills through hands-on learning and that students are better prepared to work in their industry of choice. On issues of student recruitment, however, instructor respondents were split, with slightly more than half noting increased enrollment and the other half noting no increase or a lack of involvement in class enrollments. Similarly, most respondents also reported that they are not involved with or do not recruit students into their programs.

Interactions

As noted in Table 10, most instructor respondents across programs reported that they have stronger connections to and increased communication with faculty at other campuses within the UHCC consortium since implementation of the TAACCCT IV grant.

Table 10. TAACCCT IV program instructor collaboration across campuses and departments

Task	TAACCCT IV grant management	Leadership at own campus	Other faculty at own campus	Other faculty at other campuses	Student services
Recruiting students	5 SHA: 2 CHW: 1 Cybersecurity: 2	2 SHA: 1 CHW: 0 Cybersecurity: 1	3 SHA: 1 CHW: 1 Cybersecurity: 1	2 SHA: 1 CHW: 0 Cybersecurity: 1	8 SHA: 3 CHW: 2 Cybersecurity: 3
Providing students help with financial aid	0	0	1 SHA: 0 CHW: 1 Cybersecurity: 0	0	4 SHA: 1 CHW: 1 Cybersecurity: 2
Helping students with job applications	0	0	1 SHA: 1 CHW: 0 Cybersecurity: 0	0	7 SHA: 3 CHW: 2 Cybersecurity: 2
Connecting students to employers	1 SHA: 0 CHW: 1 Cybersecurity: 0	0	2 SHA: 1 CHW: 0 Cybersecurity: 1	1 SHA: 1 CHW: 0 Cybersecurity: 0	5 SHA: 1 CHW: 2 Cybersecurity: 2
Developing or implementing an apprenticeship program	1 SHA: 0 CHW: 1 Cybersecurity: 0	0	1 SHA: 0 CHW: 0 Cybersecurity: 1	1 SHA: 0 CHW: 1 Cybersecurity: 0	4 SHA: 0 CHW: 2 Cybersecurity: 2
Developing open educational resources	2 SHA: 1 CHW: 0 Cybersecurity: 1	0	2 SHA: 1 CHW: 1 Cybersecurity: 0	0	1 SHA: 0 CHW: 1 Cybersecurity: 0

Note: SHA = school health assistant; CHW = community health worker

Not only did the grant facilitate enhanced communication across campuses but it also helped bolster connections within each campus between TAACCCT IV program faculty and other staff and faculty. Most instructors from all programs (SHA, CHW, and cybersecurity) agreed that the grant facilitated stronger relationships with faculty teaching the same program on

other campuses within the consortium. CHW, SHA, and cybersecurity instructors reported working with faculty at other campuses to develop curricula, share curricula and course content, and provide guidance in developing courses and programs.

Instructors reported the most collaboration at their campus with the student services office, which helped recruit students, connect them with employers, and assist them in applying for jobs. The number of instructors not participating in helping with financial aid can be explained by the fact that many TAACCCT IV programs were free for students. Only CHW programs and some campuses with cybersecurity explored apprenticeship options.

Conclusions

As described in this evaluation report, the TAACCCT IV campuses implemented a mix of program and student services enhancements that led to improved educational and employment opportunities for participants. Regular cross-campus meetings facilitated by the grant management team and system-wide sector leads resulted in a more strengthened UHCC consortium than in previous TAACCCT rounds. This management approach allowed for campuses to share best practices in hiring, curriculum development and student service coordination at the consortium level, with each campus customizing implementation to meet the needs of its own student population and local employers.

The program focused on providing training and credentialing options for the increasing veteran population in Hawai'i and filling the training gaps for incumbent health care workers. The grant gave the UHCC consortium the ability to provide tuition-free training to existing SHAs and CHWs in Hawai'i, which was the only way that some students were able to complete the training. The tuition waiver, along with enhanced curricula developed with health care employer input, resulted in the state's ability to fill the majority of these positions with better trained health care providers. Those trained through the program felt more confident in their skills, and community feedback was equally as positive. Similarly, the TAACCCT IV cybersecurity programs were developed to provide students and veterans with alternatives for pathways into higher paying information technology jobs. Developing certificate courses in cybersecurity allowed students to get the skills they needed to obtain cybersecurity jobs without having to complete a degree program, while also allowing for the opportunity to articulate into a two- or four-year program.

Student supports were also increased with the TAACCCT IV grant. Support for student veterans was enhanced through system-wide coordination that resulted in activities specific to veterans, such as counseling and help with adjustment to civilian life, to take place on each campus, within a dedicated space. To increase student retention rates, some campuses hired retention coordinators to upgrade the UHCC's early alert Starfish system to MySuccess. Student feedback has been positive on the student-centered features of MySuccess that connect students with counselors and project education pathways for other possible programs of study.

Funding from the TAACCCT IV grant enabled students in rural areas of Hawai'i to participate in courses. The use of PolyCom and Zoom conferencing allowed SHAs and CHWs to participate in training, increasing the level of health care in some of the more

remote areas of the state. For cybersecurity, distance learning through NetLabs provided students the ability to practice skills safely in a simulated environment, on their own time.

Employer partnerships were strengthened through system-wide lead and campus-level instructor outreach to local businesses for input into program development, student recruitment, and job opportunities for students. The entrepreneurship program involved business and industry input to develop the course and provide mentorship for students throughout the program.

Sustainability was a major focus for this TAACCCT grant. The UHCC consortium began discussing sustainability the second year of the grant, developing a template for sustainability planning that each campus used throughout the life of the grant. Quarterly cross-campus sector meetings included sustainability as an agenda item. With the focus on sustainability started earlier in the grant, campuses were able to complete the TAACCCT IV project with targeted strategies in place to sustain gains made under the grant.

Although a targeted outcome analysis was not possible for this grant, the qualitative data point towards successes in student retention within programs, student and employer satisfaction with level of skills received through program training, and students' ability to move into higher paying jobs at the end of their program.

Appendix A: Site Visit 3 Interview Protocols and Question Guides

The RTI evaluation team conducted three site visits to Hawai'i during the grant evaluation period. During each visit, evaluation team staff used protocols to conduct semi-structured interviews at each campus with relevant stakeholders.

Site Visit Summaries

Site visit 1

Dates:	January 25-29, 2016
Sites visited:	HawCC, HonCC, KapCC, KauCC, LeeCC, UHMC, WinCC
Interviews conducted:	Interviews were conducted with TAACCCT IV grant management, as well as college leadership, instructors, staff and students at all seven sites.
Other activities:	None

Site visit 2

Dates:	January 23-27, 2017
Sites visited:	HawCC, HonCC, KapCC, KauCC, LeeCC, UHMC, WinCC
Interviews conducted:	Interviews were conducted with TAACCCT IV grant management, as well as college leadership, instructors, and staff at all seven sites. The evaluation team interviewed students at the following campuses: HawCC, HonCC, KauCC, LeeCC, and UHMC.
Other activities:	None

Site visit 3

Dates:	March 12-16, 2018
Sites visited:	HonCC, KapCC, LeeCC, UHMC, WinCC
Interviews conducted:	Interviews were conducted with TAACCCT IV grant management, as well as college leadership, instructors, and staff at five sites. College leadership, staff, and instructors from HawCC and an instructor from KauCC traveled to meet with the evaluation team on Oahu. The evaluation team also spoke with students at HonCC, KapCC, and LeeCC.
Other activities:	An evaluation team member attended the Cybersecurity sector team meeting on March 16.

Protocol

The RTI evaluation team developed an interview protocol for the initial site visit that contained sections of questions designed for specific interviewees such as program instructors, students, or staff. Protocols for the second and third site visits were similar, but also included questions targeted specifically for that period of the grant. The protocol that follows was created for the third and final site visit to Hawai'i and serves as an example of evaluation protocols developed for the TAACCCT IV grant evaluation. Bolded questions were required, and non-bolded questions were not required.

Question guide

Introductions and Informed Consent

Begin interviews with introductions of everyone in the room. Then read the informed consent statement and note any questions that participants raise.

Informed Consent Statement

The UHCC consortium has asked RTI International, a nonprofit research firm based in North Carolina, to conduct an evaluation of the Sustaining Health, Strengthening Security in the Aloha State project. The purpose of this phase of our research is to gain a better understanding of the successes and challenges of this project and plans for post-grant sustainability. Your voice is important in all of this and we appreciate the time you're taking to talk with us.

Our interview will last about 30 minutes/1 hour and your participation is entirely voluntary. You may decline to answer a question or discontinue your participation at any time. This interview is entirely confidential. Your name will never be used in any discussions we might have about the research or when we publish the findings.

We'll be recording today's conversation to assist with our notes. If at any time you would like to share something off the record, please indicate that and I'll turn off the recorder.

Do you have any questions before we begin?

[Refer questions to Jeanne Snodgrass (snodgrass@rti.org)]

Grant leadership team

Introduction

1. How has your role changed since the project started?
2. **Has the overall purpose and goals for this grant changed over the life of the grant? If so, how?**
3. **Have there been any changes to the proportion of time devoted to the project by any grant management team members?**
4. **Have there been any changes to the way information is shared and activities are coordinated across the different campuses? How have the sector team meetings helped further grant activities?**
 - a. Would it have been beneficial to share more or less?
5. What kind of professional development or trainings have you participated in for the TAACCCT Round IV project? [Probe: What kind of training and support have you received? From the U.S. Department of Labor, The Urban Institute, etc.?
 - a. IF YES: What was useful about those opportunities? What would you change if you could?
 - b. Was there anything you needed assistance/training on that you did not get?
6. Aside from the TAACCCT grant funds, are the activities being conducted for the TAACCCT grant supported by any other funding sources? [Examples: staff time for grant activities not covered by grant funds and materials].

Program structure

7. Describe how the program approval process [*Maui*: overall; *Other campus*: on your campus] has affected the implementation of TAACCCT IV.
 8. **How have the following programs changed since our last site visit (January 2017)? [Probe: How many terms? How many courses? Do students participate as a cohort?]**
 - a. **Student Health Assistant**
 - i. **Can you tell us more about the statewide SHA association and the involvement it has had with TAACCCT IV programs?**
 - b. **Community Health Worker**
 - c. **Cybersecurity**
 - d. **Entrepreneurship**
 - i. Have there been any changes to allow for credential stacking or latticing?
-

- ii If YES: Please describe them.
9. Has anything changed in the way...
- a. Students are admitted and enrolled?
 - b. Students take courses (a particular order, courses outside the program, prerequisites)?
- 10. Have there been any changes or additions to any articulation agreements?**
- a. How have programs across the consortium been standardized to allow for better articulation?
11. Is the level of faculty and staff turnover that this grant has experienced typical at these campuses?
- a. If NO: What has contributed to the high turnover rate for faculty/staff on this TAACCCT project?
 - b. Was this an issue in earlier TAACCCT grants as well?
 - c. What have been the successes in staff recruitment and retention?

Support services/Recruitment

12. Have there been any changes to strategies for marketing and recruitment targeted to particular types of students? [Probe: Women, low income, minority, veterans?]
13. What features of the program were designed to help attract and retain students? [Probe: Alternate schedules, more support services?]
14. How do students learn about education and employment opportunities beyond the TAACCCT Round IV project?
- 15. What role have workforce services, like local workforce investment boards, played in helping students find employment?**
- a. **If YES: Has this been beneficial?**
 - b. **If NO: Why not? What challenges have there been to implement these services/partnership?**
16. What have been the challenges of implementing the [early alert, veterans' coordinator, job coordinator]? What have been the benefits?

Data collection

- 17. How are you monitoring TAACCCT IV implementation progress?**
- a. **Which campus do you feel has made the greatest strides?**
-

18. How are you tracking the experiences of students in the TAACCCT courses and programs?

- a. *Maui*: How do you collect data on TAACCCT program enrollments from each of the campus? Have you encountered any challenges in collecting this information?
 - i. *Maui*: Do you feel that the program will be able to make its participant goals overall and at each campus? Which campus, if any, do you suspect may fall short?

19. Do you use a database to track program students and employer contacts?

- a. **Can you tell us about the status of implementation for the Efforts to Outcomes software originally proposed?**
 - i. **If implemented: How has it helped in tracking grant progress?**
 - ii. **If not implemented: Why not? What were the challenges to implementing this?**
 - 1. **What system is being used instead?**
- b. **Is there any information that is particularly challenging to collect and report?**

Employer partnerships/Apprenticeships

20. What has been the role of the following consortium-level partners in the grant:

- a. Hawai'i Department of Education
- b. Hawai'i Department of Labor
- c. High Tech Development Corporation
- d. Maui Economic Development Board
- e. U.S. military
- f. Hawai'i Business Roundtable, Inc.
- g. Hawai'i Strategic Development Corporation
 - i. Is there anyone we are missing?
 - ii. How have any of these relationships changed over the life of the grant?

21. How have employer partnerships impacted these programs?

- a. **What have been the successes?**
- b. **The challenges?**
- c. **What is something you might have done differently with respect to employer partnerships?**

22. Are any of the campuses/your campus exploring or establishing apprenticeships in any of the TAACCCT IV programs?

- a. [If yes] What steps have been taken?
- b. Have local employers expressed interest or a willingness to participate?
 - a. Who is involved in exploring and/or establishing apprenticeships?

23. What challenges or issues have come up in the development or implementation of these apprenticeships?

Sustainability

24. Will campuses continue to collaborate on issues related to TAACCCT programs post-grant? If so, in what capacity?

25. What have you made plans to sustain at a consortium level?

- a. How are those plans progressing?
- b. What has gone well?
- c. What has not gone as planned?
- d. How were these goals selected?
- e. What is the possibility that SHA and CHW courses could be offered for-credit?

26. Previously we identified members of the consortium-level sustainability team.

- a. Have there been any changes to the team in the past year? Is there full-representation of the TAACCCT IV sites?

27. How has (or will) this team worked (or work) together?

- a. What role do you feel that each of these people will play in sustaining the programs?

28. At the campus level, how are staff involved with TAACCCT planning for sustainability?

- a. Have teams been established?
- b. What progress has been made toward sustaining TAACCCT IV activities at the campus level?

Closing

29. What have been the biggest challenges you have encountered in implementing the TAACCCT IV project? [Probe: Policy, buy-in, time?]

30. What are the strongest aspects of the project across the campuses? What are the weakest?

31. What do you think are the most important/significant results from TAACCCT Round IV programs?

- a. What has made these significant?
 - b. Were there any unintended results?
32. In what ways do you think the TAACCCT Round IV programs have influenced or changed other programs at your campus?
37. What will be the lasting impact of this grant?
- a. On the campus?
 - b. On the consortium?
 - c. On the community?
 - d. On the state?
 - e. On higher education?
-

Health Program Directors / Faculty – Maui, Windward, Kapi’olani, Kaua’i*

Introduction

1. [IF NEW]: What’s your role at [your campus] and how long have you been here?
 - a. What was your job before your current position?
2. [IF NEW]: Describe your role and responsibilities in the TAACCCT IV project.
3. **How has the [student health assistant and community health worker] program/s changed since January 2017?**
4. How do you share or obtain information from other health faculty involved with the TAACCCT Round IV project?
 - a. Would it be beneficial to do more or less sharing with other campuses? Why?
5. **Have you had meetings—one-on-one or as a group—with the TAACCCT Round IV grant leadership? If yes, do you think these meetings:**
 - a. Were helpful to you in implementing the project at your campus?
 - b. Spurred new ideas for the project or otherwise?
 - c. Aided the sustainability planning process?

Program structure

6. **How have “casual hires” helped alleviate issues related to faculty/staff turnover?**
 7. What did the program approval process involve?
 - a. Did this process help or hinder program implementation?
 8. **How has the [student health aid and community health worker] program(s) changed at all in the last year? [Prompts: Curriculum? How many terms? Full-time or part-time? How many courses? Order in which courses are taken? Do students complete the program as cohort?]**
 - a. What proportion of courses is offered in the classroom versus online or through blended learning or other formats?
 - b. Have there been any changes to the prerequisites needed for these courses?
 9. Do you have students in your program who are career advancers, that is, people who are already employed in a related field but taking this program to grow their knowledge and advance in their job?
-

- a. IF YES: Do these people tend to stick with the program until completion, or do they take only a few courses? [or, if not enrolling students yet, what do they expect]
10. Has enrollment increased or decreased since the TAACCCT Round IV project started? [Prompt if yes: Why do you think that is?]
 11. Did your campus purchase any new equipment or materials for the program this year?
 12. What kind of professional development have you participated in for the TAACCCT Round IV project? [Probe: What kind of training and support have you received? Before it started, ongoing?]
 - a. IF YES: What was useful about those opportunities? What would you change if you could?
 13. **Here are your employer partners we know of:**
 - a. **MAUI**
 - i. **HI Department of Health**
 - ii. **Family Life Center**
 - iii. **Pacific Cancer Foundation**
 - b. **WINDWARD**
 - i. **None**
 - c. **Kapi'olani**
 - i. **Hawai'i Department of Education**
 - ii. **Kula no na Po'e Hawai'i**
 - d. **Kaua'i**
 - i. **None**
 - e. **Is there anyone we are missing?**
 14. **How have employer partnerships impacted these programs?**
 15. Have you/campuses solicited feedback from employer partners regarding their needs? What about if program graduates are meeting those needs?
 16. Do you have any employer contacts that you share with other campuses in the consortium?
 17. **Can you tell us more about the statewide SHA association and the involvement it has had with TAACCCT IV programs?**

Student Skills and Credentialing

18. Does the program address employability or soft skills? Examples include: oral and written communication skills, leadership skills, conflict resolution, etc.
 - a. If yes, how are these skills addressed?
 19. How do you assess students' skills and knowledge?
 - a. Who was/is involved in selecting and updating assessments?
 - b. IF ALREADY EXISTED: Has that changed since the TAACCCT Round IV project started?
-

20. Can students transfer credits from your program to any or all of the other Hawai'i campuses?
[Prompts: If not, why not? And where can they]
21. **Have there been any changes to the degrees or credentials students can earn through the program from the campus in the past year? [*School Health Assistant certificate*]**
- a. How will this program encourage students to pursue further education, such as a two-year degree in nursing? Does the School Health Assistant program ladder into that degree?
22. **Have the certificates or licenses students can earn from an industry organization changed in the past year?**
- a. How were those selected?

Data collection

23. **What information or data do you know about students who enroll in your program?**
- a. Of the number who enroll in a course in one term, about how many enroll again the following term?
 - b. What proportion of students earns a degree or credential?
 - c. **Do you know whether they are employed after leaving?**

Support Services/Recruitment

24. **What specific services are offered to incumbent workers?**
- a. **Do they take advantage of these services?**
25. **What specific services are offered to veterans?**
- a. **Do they take advantage of these services?**
 - b. **What is the perception of veterans on your campus, and how has this perception influenced your work with veterans?**
 - c. What kinds of academic advising do students receive? [Probe: When students have questions about what courses to take, to whom do you send them?]
 - i. How has this changed over the past year?
 - ii. Does this differ from services provided to other students on campus?
26. How do students learn about education and employment opportunities beyond the TAACCCT Round IV project?
- a. What is the current local market for SHAs and CHWs?
 - a. How did you acquire this information? [Probe: Labor market data? Job postings? Etc.]
 - b. What type of career counseling do students receive? [Probe: When students have questions about what career opportunities, to whom do you send them?]
-

27. What career advice do you give students, either formally or informally?
- 28. What role have workforce services, like local workforce investment boards, played in helping students find employment?**
29. Have your recruitment methods changed in the last year?
- Are any of your recruitment efforts targeted to particular types of students? [Probe: Women, low income, minority?]
 - Have you made any changes to the program to attract and retain students? [Probe: Alternate schedules, more support services?]
 - When will Student Health Assistants be required to have post-secondary certification? [Prompt if not yet: How will you attract students to this program in the absence of a certificate requirement?]
30. What support services do students have access to? [Probe: Tutoring? Financial aid? Transportation? Childcare? Flexible scheduling?]
- What services are most useful? Least useful?
 - How do the early alert/retention coordinators, veterans' coordinator or job placement coordinators support students?

Closing/Sustainability

- 31. Are you involved in planning for program sustainability after the grant ends?**
- If YES: What aspects of these programs are you hoping to sustain?**
 - What progress has been made toward sustainability?**

[GO THROUGH CAMPUS LEVEL SUSTAINABILITY PLAN]

- 32. What has been the biggest challenge in implementing the health program(s)?**
- 33. What are the strongest aspects of TAACCCT Round IV project at your campus?**
- What are the weakest?**
- 34. What are the most important/significant results from the TAACCCT Round IV program on your campus?**
- What makes these results significant?**
-

Cybersecurity Program Directors / Faculty – UHMC, HawCC, LeeCC, HonCC, KapCC, KauCC, WinCC

Introduction

1. [IF NEW] What's your role at [your campus] and how long have you been here?
 - a. What was your job before your current position?
2. [IF NEW] Describe your role and responsibilities in the TAACCCT IV project.
3. **How has the cybersecurity program changed over the past year?**
4. How do you share or obtain information from other IT faculty involved in TAACCCT IV at other campuses?
 - a. Would it be beneficial to do more or less sharing with other campuses? Why?
5. **Have you had meetings—one-on-one or as a group—with the TAACCCT Round IV grant leadership? If yes, do you think these meetings:**
 - d. **Were helpful to you in implementing the project at your campus?**
 - e. **Spurred new ideas for the project?**
 - f. **Helped with the sustainability planning process?**

Program structure

6. **How have “casual hires” helped alleviate issues related to faculty/staff turnover?**
 7. What did the program approval process involve?
 - a. Did this process help or hinder program implementation?
 8. **How has the cybersecurity program changed in the past year? [Prompts: Curriculum? How many terms? Full-time or part-time? Course order? How many courses? Do students complete the program as cohort?]**
 - c. **What proportion of courses is offered in the classroom versus online or through blended learning or other formats?**
 - d. **Have there been any changes to program prerequisites?**
 - e. **Has there been any progress made toward the development of cybersecurity modules for existing programs?**
 9. Do you have students in your program who are career advancers, that is, people who are already employed in a related field but taking this program to grow their knowledge and advance in their job?
-

- b. IF YES: Do these people tend to stick with the program until completion, or do they take only a few courses? [or, if not offered yet – what do they anticipate?]
10. Has enrollment increased or decreased since the TAACCCT Round IV project started? [prompt if yes: Why do you think that is?]
11. Did your campus purchase any new equipment or materials for the program this past year?
- 12. What kind of professional development have you participated in for the TAACCCT Round IV project? [Probe: What kind of training and support have you received? Before it started, ongoing?]**
- a. IF YES: What was useful about those opportunities? What would you change if you could?

Student Skills and Credentialing

13. How do you assess students' skills and knowledge?
- c. Who was/is involved in selecting and updating assessments?
 - d. IF ALREADY EXISTED: Has that changed since the TAACCCT Round IV project started?
14. Can students transfer credits from your program to any or all of the other Hawai'i campuses? [Prompts: If not, why not? And where can they]
- 15. Have there been any updates to the degrees or credentials (including industry credentials and certifications) students can earn through the program from this campus?**
- b. How did you decide on those?
 - b. Are there opportunities for students to stack/lattice credentials through these programs?
- 16. Here are your employer partners we know of:**
- a. Are there any we are missing?
- 17. How have your employer partnerships impacted these programs?**
18. Have you/campuses solicited feedback from employer partners regarding their needs? What about if program graduates are meeting those needs?
19. Do you have any employer contacts that you share with other campuses in the consortium?

Data collection

20. What information or data do you know about students who enroll in your program?
- a. Do you know whether they are employed after leaving?
-

Support Services/Recruitment

21. **What specific services are offered to incumbent workers?**
 - a. Do they take advantage of these services?
22. **What specific services are offered to veterans?**
 - a. Do they take advantage of these services?
 - b. What is the perception of veterans on your campus, and how has this perception influenced your work with veterans?
23. **How do students learn about education and employment opportunities beyond the TAACCCT Round IV project?**
35. **What career advice do you give students, either formally or informally?**
36. **What role have workforce services, like local workforce investment boards, played in helping students find employment?**
24. **Have your methods for recruiting students changed in the last year?**
 - d. Are any of your recruitment efforts targeted to particular types of students? [Probe: Women, low income, minority?]
 - e. Have you made any changes to the program to attract and retain students? [Probe: Alternate schedules, more support services?]
25. **What support services do students have access to? [Probe: Tutoring? Financial aid? Transportation? Childcare? Flexible scheduling?]**
 - a. What services are most useful? Least useful?
 - b. How do the early alert/retention coordinators, veterans' coordinator or job placement coordinators support students?
 - c. What kind of academic advising do students receive? [Probe: When students have questions about what courses to take, to whom do you send them?] Do advising services for TAACCCT participants differ from other campus students?
 - d. What type of career counseling do students receive? [Probe: When students have questions about what courses to take, to whom do you send them?]

Closing/Sustainability

26. **Are you involved in planning for program sustainability after the grant ends?**
 - a. **If YES: What aspects of this program are you hoping to sustain?**
 - b. **What progress has been made toward sustainability?**

[GO THROUGH CAMPUS LEVEL SUSTAINABILITY PLAN]

27. **What are the strongest aspects of TAACCCT Round IV project at your campus?**
-

a. What are the weakest?

28. What are the most important/significant results from the TAACCCT Round IV program on your campus?

b. What makes them significant?

Campus Leadership

Introduction

1. How has your role changed since last year?
2. **From your perspective, what were your original goals for the TAACCCT IV project? How have those goals changed over the life of the grant?**

Campus implementation

3. How much information do you share or obtain from other campuses involved with the TAACCCT Round IV project? Is this a change from last year?
 - a. Would it be beneficial to do more or less sharing with other campus? Why?
4. **Have there been any barriers or challenges to implementing the TAACCCT Round IV project? [Probe: Policy, buy-in, time?]**
5. **How have partnerships with community organizations and employers impacted the TAACCCT Round IV programs?**
 - a. What has been the most successful?
6. **What impact have TAACCCT Round IV programs had on...**
 - a. ...the community?
 - b. ...non-TAACCCT programs on campus?
 - a. ...higher education in Hawai'i ?
37. **Which faculty/staff members are supported by grant funding?**
 - a. What will happen to their position(s) after grant funding ends?

Sustainability

[REFER TO CAMPUS LEVEL AND SYSTEM-WIDE SUSTAINABILITY PLANS]

7. **Have you participated in planning for program sustainability after the grant ends?**
 - a. What programs/classes/career pathways will be sustained? How will this happen? [Prompt: Funding sources? Equipment? Resource sharing?]
 - b. What progress has been made toward sustainability planning?
 - c. What is your long-term vision for the success of this program?
-

- d. Which innovations/what progress was made during the TAACCCT IV grant that you are most proud of?
8. **Which activities from your original scope of work should continue after funding ends to maintain this success?**
 9. Are there college specific activities that should be continued at a consortium level or at least tried at other colleges?

Closing

10. **In your opinion, what are the most important/significant results from the TAACCCT Round IV programs on your campus?**
 - a. **What makes them significant?**
-

Student support: early alert coordinators, student/academic affairs leadership, veterans' coordinators, job placement coordinators

Introduction

1. [IF NEW] What's your role at [your campus] and how long have you been here?
 - a. What was your job before your current position?
2. [IF NEW] Describe your role and responsibilities in the TAACCCT IV project.
3. What contact have you had with support staff working on the TAACCCT IV project at other campuses?
 - a. Has this contact been beneficial?
4. **Have you had meetings—one-on-one or as a group—with the TAACCCT Round IV grant leadership? If yes, do you think these meetings**
 - a. **Were helpful to you in implementing the project at your campus?**
 - b. **Spurred new ideas for the project or otherwise?**
 - c. **Helped concretize sustainability planning?**
5. **What kind of professional development have you participated in for the TAACCCT Round IV project? [Probe: What kind of training and support have you received? Before it started, ongoing?]**
 - a. IF YES: What was useful about those opportunities?
 - i. What would you change if you could?

Support Services/Recruitment

6. **How has your role in student recruitment changed over the past year?**
 - a. **Are any of your recruitment efforts targeted to particular types of students? [Probe: Women, low income, minority?]**
 7. What support services do students have access to? [Probe: Tutoring? Financial aid? Transportation? Childcare? Flexible scheduling?]
 8. **What are some of the challenges and issues that you assist students with in the TAACCCT programs?**
 - a. **Have these issues changed over the past year?**
 - b. If a student drops out, what are the most common reasons?
-

9. How do students learn about student support services?
10. How do students learn about education and employment opportunities beyond the TAACCCT Round IV project?
 - a. What is the job market like for graduates of the TAACCCT IV programs?
 - b. What kind of academic advising do students receive? [Probe: When students have questions about what courses to take, to whom do you send them?]
 - i. Has this advising changed within the last year?
 - ii. Does that differ from other campus students?
 - c. What type of career counseling do students receive? [Probe: When students have questions about what career opportunities, to whom do you send them?]
 - d. What career advice do you give students, either formally or informally?
11. **JOB PLACEMENT COORDINATOR ONLY: How do you support students in finding employment? Has this changed over the past year?**
 - a. **Who are the community and employer partners that you work with? Is this a change from last year?**
12. **VETERANS COORDINATOR ONLY: Do you feel your work has been adequately focused on serving veterans? Why/why not?**
13. **VETERANS COORDINATOR ONLY: What kinds of outreach and recruitment do you do at local military bases?**
 - a. **How are veterans identified? How are they counted?**
 - i. **How many veterans are on your campus?**
 - b. **How do you ensure veterans are getting the services they need?**
 - c. **Do you do any specific work with veterans around job placement after program completion?**

Sustainability

[REFER TO CAMPUS LEVEL AND SYSTEM-WIDE SUSTAINABILITY PLANS]

11. **Have you participated in planning for program sustainability after the grant ends?**
 12. **Which activities from your original scope of work should continue after funding ends to maintain this success?**
 13. Are there college specific activities that should be continued at a consortium level or at least tried at other colleges?
-

Closing

14. What are the most important/significant results from the TAACCCT Round IV program on this campus?
 - a. What makes these results significant?

 15. In what ways do you think the TAACCCT Round IV program might influence or change other programs at your campus?
 - a. The campus as a whole?
 - b. Higher education in HI? [Probes: increased cooperation with other campus/employers; more opportunities for students through online education]
-

Student Veterans

1. How long have you been a student at this campus? In your current program?
 - a. What is your previous military experience? Any work experience or educational experience?
 2. How did you hear about your current program? What brought you to this program?
 - a. **Was the recruitment and application process “veteran friendly”?** (Prompt: Did you have the information needed to successfully apply and enroll in classes?)
 3. When do you expect to complete this program?
 - a. **Have you received any assistance and recruitment services specific to your veteran’s status that helped you successfully complete the program?**
 4. What certificates, certifications, or degrees do you plan to earn?
 - a. *As relevant:* How recognizable and valued do you feel that these credentials are to employers?
 5. How helpful do you think this program will be in finding a job or advancing in your career? [Prompt: What services are available to connect you with potential employers during your program and after?]
 6. Is there anything different about how courses in this program are taught compared to other courses you’ve taken at the campus?
 7. **When you have questions about the program, who do you ask?** [Prompt: which classes to take, how to find and access academic or other support, job search advice]
 - a. **If you needed help with things like child care, transportation, financial aid, who would you ask?**
 8. **Do you know where to go to ask about your G.I. Bill and other issues related to being a veteran student?**
 - a. **Who do you ask?**
 9. What experiences in your program – they might be through your classes, assignments, and activities – have stood out to you as particularly rewarding or valuable?
 - a. Which aspects of the program have been most challenging?
 10. **What could make this program better for student veterans?**
 - a. **Have you had any needs related to the program or student services – including any related to coursework, financial aid, administrative issues – that have not been met?**
-

Campus specific questions

Kapi'olani :

- 1) Has the entrepreneurship program been implemented?
 - a. If YES: How is the program going?
 - b. If NO: What happened?
- 2) Has SHA-2 been converted into an online format course?
 - a. If YES: How successful has this been?
- 3) Has progress been made toward creating a SHA to CHW pathway?
- 4) How has the use of Starfish impacted student retention?
 - a. Do you have any data from the system that shows this?

Windward:

- 1) What progress has been made toward implementing the cybersecurity program?
- 2) What is the current local market for SHAs and CHWs?
 - a. How did you acquire this information?
- 3) When using Starfish, you used the Kudos function. To your knowledge, have other campuses used this function?
 - a. Have you seen any effects from this positive reinforcement?
 - b. Do you have any data to show that Starfish has been successful at retaining students?

Maui:

- 1) How have prior learning assessments affected graduation rates of CHW students?
- 2) Progress update – How is the SHA to CHW pathway, plus articulation working?
- 3) What feedback did you get from CHW employers? Have any findings been incorporated into the program?
- 4) Progress update – Has content regarding public health and cultural communities been added to the SHA and CHW programs?
- 5) What is student opinion on online course offerings for cybersecurity?

Hawai'i :

- 1) Are there any updates to the articulation agreement with West O'ahu between the CHW and Public Health programs?
- 2) Has a new cybersecurity instructor been hired?
 - a. If NO: How has the program been progressing?
- 3) Has a new veteran's coordinator been hired?
 - a. If NO: How do veterans receive services?
 - b. Is there any data on the effect of student support services?

Kaua'i:

- 1) Did the planned employability and cultural skills training take place?
-

- a. If YES: What was the result?
- 2) How do you engage with local employers?

Honolulu:

- 1) Can you tell us more about ICT pathways and what this looks like?
- 2) Has another career coordinator been hired?
 - a. Job Center Online – what is the status of this? Was it completed?
 - b. One stop student services – update?
- 3) Has an additional student retention specialist been hired?

Leeward:

- 1) What has been the impact of instructor professional development on courses and student outcomes?
 - 2) What work has been done around military outreach to gain veteran students credits for prior learning?
-

Appendix B: Survey Methods and Instruments

Student Survey

Students asked to participate in the survey were enrolled in spring 2017 classes in the following TAACCCT IV programs:

- **Student health assistant (SHA):** Hawai'i Community College (HawCC), Kapi'olani Community College (KapCC), Kaua'i Community College (KauCC), University of Hawai'i Maui College (UHMC)
- **Community health worker (CHW):** KapCC, KauCC, Leeward Community College (LeeCC), UHMC
- **Cybersecurity:** HawCC, Honolulu Community College, KapCC, KauCC, LeeCC,

The target population excluded high school students and students younger than 18 since they are not counted as TAACCCT program participants.

In March 2017, an RTI International survey methodologist drafted a student survey to provide interim data for program feedback. The survey was designed specifically to systematically capture students'

- educational and employment backgrounds prior to enrolling in a TAACCCT IV program;
- motivations for enrolling;
- satisfaction and program experiences; and
- employment and job placement plans and expectations.

RTI worked with the TAACCCT IV grant leadership and program staff from each campus to finalize the questions and the data collection instrument through April 2017. The TAACCCT IV student survey instrument included 35 questions and took six minutes to complete. A copy of the survey is included at the end of this section.

Once finalized, the TAACCCT IV student survey was programmed in SurveyGizmo, an online platform that enables users to create data collection instruments that can be securely completed using a computer or mobile device. The survey questions were mostly closed-ended, with a few open-ended items included to capture qualitative information. Once programmed, RTI conducted multiple tests of the survey, modeling response patterns for different types of respondents to ensure question text and logic accuracy as well as data collection instrument functionality and usability.

At the end of April 2017, RTI sent a link to the finalized online survey, along with a PDF of a paper version, to grant leadership who sent an email announcing the upcoming study to all seven campuses. The campus contacts shared the survey link with students at the end of a program class, allowing time for survey completion, or via an email that encouraged students to complete the survey. RTI sent campus contacts reminders and interim response rates and responded to questions and feedback throughout the four-week data collection process.

As an incentive for completion, student respondents were sent \$10 Starbucks gift cards. To collect this incentive, students had to provide an email address that was kept separate from their survey answers; about 95 percent of students entered their email addresses.

A questionnaire was considered final if more than 50 percent of the questions were completed.

Participants

Table B-1 provides a breakdown of the student survey respondents, by campus and by program.

Table B-1. Student survey respondents, by campus and program

Campus	School health assistant students	Community health worker students	Cybersecurity students	Total
Hawai'i Community College	5	0	5	10
Honolulu Community College	N/A	N/A	71	71
Kapi'olani Community College	12	23	27	61
Kaua'i Community College	10	1	4	15
Leeward Community College	N/A	N/A	28	28
University of Hawai'i Maui College	13	16	0	29
Total	40	40	134	214

Questionnaire

Sustaining Health, Strengthening Security in the Aloha State

Student Survey

If you are a high school student or under the age of 18, please do not take this survey.

Survey purpose: All students who are taking courses in health care, cybersecurity, and entrepreneurship are being asked to complete this Student Questionnaire. The survey is voluntary. Your answers will provide important feedback to colleges and help them learn what is going well in their courses and where they need to improve.

Privacy: The survey is being conducted and data analyzed by an independent evaluator, RTI International. RTI keeps your responses anonymous and stores your e-mail (if provided) separately from your answers. RTI presents data to the colleges in summary report format only and students will never be identified.

Why not get started now? Everyone who completes the survey will receive a **\$10 Starbucks gift card** by email. To receive your gift card, please enter your e-mail at the end of the survey; this information will not be linked to your answers to the survey questions.

Instructions:

- The survey can be completed on a laptop, desktop, or mobile device in about 5-10 minutes.
- The questions are about your experiences with your college and your courses. If you do not want to answer a particular question, click the “>” button to proceed to the next question. To return to a previous question, click “<.”
- If you’re unable to complete the survey in one sitting, press “save and continue” and you’ll be emailed a link that will return you to the spot where you left off. (If you don’t see that email, check your junk mail or spam folders – it might have gone there).

You can also complete the survey on paper. Please see your college’s administrator to get a paper copy. Then, complete it, and return it to your administrator; or you can scan it yourself and send to snodgrass@rti.org.

Contact: If you have any questions about the survey or your participation, please call or email Jeanne Snodgrass at snodgrass@rti.org or 503-428-5681.

1. Which college are you enrolled in?
 - University of Hawai'i UHMC College
 - Kaua'i Community College
 - Kapi'olani Community College
 - Honolulu Community College
 - Windward Community College
 - Leeward Community College
 - Hawai'i Community College

2. Which field are you taking courses in?
 - School health assistant
 - Community health worker
 - Cybersecurity
 - Entrepreneurship

3. How did you learn about the courses offered in this field? **Choose all that apply.**
 - Through a job services/workforce agency
 - Through a veterans' services organization
 - I saw a brochure/flyer/poster for the program
 - I spoke with someone from the college about it, such as an admissions counselor or faculty member
 - I saw it on the college website
 - Through a high school instructor, guidance counselor, or guidance office
 - Through an employer
 - A student who is/was already in the program told me about it
 - A friend or family member not affiliated with the program told me about it
 - Other (please specify): _____

4. When you started this program, what was the highest level of education you had completed?
 - High school or high school equivalency
 - Some college but no degree
 - Associate's degree
 - Bachelor's degree
 - Master's degree
 - Doctorate degree
 - Professional degree beyond a bachelor's degree (DDS, DVM, JD, etc.)

5. Which of the following factored into your decision to start taking courses in this field? **Choose all that apply.**
 - I need the skills offered in these courses for my current job or to find employment
 - I need the industry certifications offered through this program for my current job or to find employment
 - I thought it would lead to a promotion, wage increase, or job that pays more than my current/most recent job.
 - The topic is of personal interest to me

Other (please specify):

6. When you **enrolled** in your field of study, were you working full time, part time, or not working? If you were self-employed at the time of your enrollment, please count that as working.
- I was working full time (35 or more hours/week)
 - I was working part time (less than 35 hours/week)
 - I was not working → **GO TO QUESTION 9**
7. Were you working in the same field, a related field, or not the same or related field as your current field of study?
- Same field
 - Related field
 - Not the same or related field
8. How much did you earn at that job? Enter the dollar amount, then indicate whether it was per hour, per month, or per year.
- \$_____.
- PER HOUR
 - PER MONTH
 - PER YEAR
9. Are you **currently** working full time, part time or are you not working? If you are self-employed, please count that as working.
- I am working full time (35 or more hours/week)
 - I am working part time (less than 35 hours/week)
 - I am not working → **GO TO QUESTION 12**
10. Are you working in the same field, a related field, or not the same or related field as your current field of study?
- Same field
 - Related field
 - Not the same or related field
11. How much do you earn at this job? Enter the dollar amount, then indicate whether it is per hour, per month, or per year.
- \$_____.
- PER HOUR
 - PER MONTH
 - PER YEAR
12. How many semesters have you been enrolled in your current program? Please include the current semester.
- 1 semester
 - 2 semesters
 - 3 semesters
 - 4 semesters
 - 5 or more semesters
-

13. After the current semester (spring 2017), which of the following statements best describes your education or training plans for the coming year?
- I plan to continue taking courses in my current program → **GO TO QUESTION 15**
 - I will complete my program at the end of this semester and will not enroll next year → **GO TO QUESTION 15**
 - I will complete my program at the end of this semester and plan to continue my education in another program → **GO TO QUESTION 15**
 - I will not have completed my current program, but do not plan to continue next year → **GO TO QUESTION 14**
14. What factors contributed to your decision to discontinue your field of study at this time? **Choose all that apply.**
- I completed the courses and/or earned the credentials that I intended to complete
 - I got a job in this career area and further courses aren't necessary
 - I got a job in another career area and don't need to pursue this field of study
 - I'm no longer interested in pursuing the career path of this field of study
 - Personal factors (such as job or family obligations, health issues, financial reasons) prevent me from continuing this field of study
 - Other reasons not listed (please specify): _____

**IF YOU ANSWERED QUESTION 14, PLEASE GO TO THE BOX BEFORE
QUESTION 20.
IF YOU DID NOT ANSWER QUESTION 14, CONTINUE TO QUESTION 15.**

15. When you complete your program, which of the following credentials will you have earned? **Choose all that apply.**
- One or more certificates of competency (COs)
 - One or more certificates of achievement (CAs)
 - An associate's degree
 - Industry certification(s) (please specify): _____
16. After you complete your program, do you plan to get a job, continue your education, or both?
- Get a job → **GO TO BOX BEFORE QUESTION 20**
 - Continue education
 - Both
17. What field do you plan to study?
- _____
18. Where do you plan to study further? **Choose all that apply.**
- My current community college
 - Another community college in Hawai'i
 - A 4-year institution in Hawai'i
 - An institution outside of Hawai'i
- _____

19. What degree do you plan on getting ultimately?
- Associate's degree
 - Bachelor's degree
 - Master's degree
 - Doctorate degree
 - Professional degree beyond a bachelor's degree (DDS, DVM, JD, etc.) (please specify):
-

**IF YOU ARE COMPLETING THIS PROGRAM AT THE END OF THIS SEMESTER,
PLEASE COMPLETE QUESTIONS 20-25.
OTHERWISE, GO TO QUESTION 26.**

20. Do you have a job lined up when you leave your current program?
- I will continue in the same job that I had when I entered the program → **GO TO QUESTION 24**
 - Yes, in a field related to my field of study → **GO TO QUESTION 21**
 - Yes, in a field unrelated to my field of study → **GO TO QUESTION 21**
 - No → **GO TO QUESTION 22**
21. How many months did you look for a job?
- 1 month or less
 - 2-3 months
 - 4-6 months
 - 7 months or more

**IF YOU ANSWERED QUESTION 21, PLEASE GO TO QUESTION 24.
OTHERWISE, CONTINUE TO QUESTION 22.**

22. How many months have you been looking for a job?
- I have not been looking for a job
 - 1 month or less
 - 2-3 months
 - 4-6 months
 - 7 months or more
23. How confident do you feel that you will be able to find a job in your field within three months of leaving your college?
- Very confident
-

- Confident
- A little confident
- Not confident at all

**IF YOU ANSWERED QUESTION 23, PLEASE GO TO QUESTION 26.
OTHERWISE, CONTINUE TO QUESTION 24.**

24. How much will you earn or do you expect to earn in your job **after** completion of your field of study? Enter the dollar amount, then indicate whether it is per hour, per month, or per year.

\$ _____ . _____ PER HOUR
 PER MONTH
 PER YEAR

25. Which of these statements best describes where you expect to go for your job when you leave your college?
- I expect to stay in Hawai'i
 - I expect to move to a job on the west coast of the mainland
 - I expect to move to a job somewhere else besides the west coast of the mainland
 - I am not sure
26. Which of the following people **in your college** have helped you with a job search by discussing your job interests with you, connecting you with employers, sharing job listings, or helping you with your resume? **Choose all that apply.**
- College career services office
 - Faculty
 - One or more other students
 - Someone else at this college (please specify) _____
 - No one at this college did this

27. What is your current age?

28. Are you male or female?

- Male
- Female

29. Which of the following best describes you? **Choose all that apply.**

- White
 - Black or African American
 - American Indian or Alaska Native
 - Native Hawai'ian
 - Other Pacific Islander
 - Asian
-

Other (Specify) _____

30. Are you of Hispanic, Latino, or Spanish origin or descent?

Yes

No

Lastly, please tell us what you like best about your program.

What would you change about your program?

That was the last survey question. Before we get your contact information to send you your \$10 Starbucks gift card, we would appreciate your feedback. Please let us know if there were any questions in the survey that you felt were unclear, or any other feedback that you would like to give us about the survey.

If you would like to receive a \$10 gift card from Starbucks, please enter your e-mail address on the last page of this survey in the space provided. Your survey responses will be kept separate from this information.

Thank you for taking our survey. Your response is very important to us.

Employer Survey

Employers asked to participate in the survey were partners with TAACCCT IV programs at each UHCC consortium campus.

In summer 2017, an RTI survey methodologist drafted a survey to collect data from employer partners of TAACCCT IV programs. The survey was designed to capture employers' involvement with TAACCCT IV programs and campuses, needs and priorities for employees, and satisfaction with and assessment of the skills of any employees hired from TAACCCT IV programs.

RTI worked with the TAACCCT IV grant leadership to finalize the questions and the data collection instrument through September 2017. The TAACCCT IV employer survey instrument included 20 questions and took six minutes to complete. A copy of the survey is included at the end of this section.

Once finalized, the TAACCCT IV employer survey was programmed in SurveyGizmo, an online platform that enables users to create data collection instruments that can be securely completed using a computer or mobile device. The survey questions were mostly closed-ended, with a few open-ended items included to capture qualitative information. Once programmed, RTI conducted multiple tests of the survey, modeling response patterns for different types of respondents to ensure question text and logic accuracy as well as data collection instrument functionality and usability.

In August 2017, RTI sent a link to the finalized online survey, along with a PDF of a paper version, to grant leadership who disseminated the link to the online survey to their contacts at all seven campuses. The campus contacts shared the survey with employers via an email that encouraged them to complete the survey. RTI sent campus contacts reminders and interim response rates and responded to questions and feedback throughout the eight-week data collection process. No incentive was offered to employer respondents. A questionnaire was considered final if more than 50 percent of the questions were completed.

Participants

Table B-2 provides a breakdown of the employer survey respondents, by campus.

Campus	Total
Hawai'i Community College	2
Honolulu Community College	6
Kapi'olani Community College	3
Kaua'i Community College	1
Leeward Community College	2
University of Hawai'i Maui College	3
All Colleges	1
Total	18

Questionnaire

Sustaining Health, Strengthening Security in the Aloha State Employer Survey Summer/Fall 2017

RTI International

Survey purpose: We are contacting employers who have collaborated with Hawai'i colleges in the areas of healthcare and cybersecurity. We are asking employers to complete this questionnaire to gather information on the level of input employers may have into these college programs, and their experiences with the applicants and workers hired from these programs. The survey is voluntary, and your answers will provide important feedback that will help the colleges and the programs learn what is going well and where things may need to improve.

The survey takes about **5 minutes** and can be done on a laptop, desktop, or mobile device. If you do not want to answer a particular question, click the "Next" button at the bottom of a page. To return to a previous page, click the "Back" button.

Confidentiality: The survey is being conducted and data analyzed by an independent evaluator, RTI International. RTI keeps your responses anonymous and stores any identifying information separately from your answers. RTI presents data to the colleges in summary report format only

Contact: If you have any questions about the survey or your participation, please email or call Jeanne Snodgrass at snodgrass@rti.org or 503-428-5681.

First, please answer these questions regarding your company.

1. What is the name of your company? This information will only be used to indicate that you have completed an interview. Your company name will never be associated with your answers.

-
2. What type of business is your company?

- Healthcare
 - Communications
 - Travel/Hospitality
 - Wholesale Trade
 - Retail Trade
 - Military
-

- Other SPECIFY [_____]
3. Overall, how many people does your company currently employ?
- 1-9
- 10-49
- 50-99
- 100-249
- 250+

This next section includes questions about your level of involvement with Hawai'i colleges.

4. Do you work or collaborate with a Hawai'i 2-year college in any capacity? Examples include working or collaborating in the areas of program content, employee training, hiring needs, internships, apprenticeships, and other areas.
- Yes
- No → **Go to end of survey.**
5. Which college do you primarily work with?
- University of Hawai'i Maui College
- Kaua'i Community College
- Kapi'olani Community College
- Honolulu Community College
- Windward Community College
- Leeward Community College
- Hawai'i Community College
- Other SPECIFY [_____]
6. Which program at [COLLEGE] do you primarily work with?
- Healthcare
- Cybersecurity
- Other SPECIFY [_____]
7. Are you a member of this program's advisory committee?
- Yes
- No
8. In what year did you or your organization first start working with the [PROGRAM] program at [COLLEGE]?
- _____ [ENTER IN YYYY FORMAT]
9. How often do you communicate with any of your contacts at [COLLEGE]?
- Twice per month or more
- Once a month
- A few times a year
- Twice a year
- Once a year
- Other SPECIFY [_____]
-

10. During the past year, in which of the following areas have you or your organization communicated or collaborated with [COLLEGE]? **Please choose all that apply.**
- Program content
 - Employee training
 - Hiring needs
 - Internships
 - Apprenticeships
 - Equipment or space donations
 - Financial contributions
 - Other SPECIFY [_____]
 - None
11. During the past year, which of the following [COLLEGE] events or activities has your company participated in? **Please choose all that apply.**
- Career fairs
 - Classroom visits
 - Workplace visits by students
 - Other SPECIFY [_____]
 - None
12. During the past year, has your company hired anyone from the [PROGRAM] program at [COLLEGE]?
- Yes
 - No
13. Please list any hiring needs that your company currently has that you are finding it difficult to fill.
-
14. Has your company sent any of its current employees to [COLLEGE] for training?
- Yes
 - No → **Go to Question 16.**
-

15. Which program or programs at [COLLEGE] has your company sent current employees to for training? **Please choose all that apply.**

- Healthcare
- Cybersecurity
- Other SPECIFY [_____]
- None

16. Does your company require its workers to have a college certificate/degree, an industry-recognized credential, both or neither?

- Industry-recognized credential or certification
- College certificate/degree
- Both
- Neither

17. Which do you feel is more valuable for your workers to have?

- The industry-recognized credential or certification
- The college certificate/degree
- Both are the same
- Neither

18. What is the typical starting salary of a new hire from the [PROGRAM] program at [COLLEGE]? Enter the dollar amount, then indicate whether it is per hour, per month, or per year.

\$_____.

- PER HOUR
- PER MONTH
- PER YEAR

19. Finally, please answer the following questions about the [PROGRAM] program at [COLLEGE] based on your knowledge of your company's employees who were trained in that program.

**IF YOU HAVE HIRED WORKERS FROM [COLLEGE] IN THE PAST YEAR,
CONTINUE WITH QUESTION 19 BELOW.
IF NOT, GO TO QUESTION 20 ON THE NEXT PAGE.**

This program provides workers...	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
...who have the technical skills needed to work on day one.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...who can communicate clearly orally (in comparison to other applicants).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

...who can communicate clearly in writing (in comparison to other applicants).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...who show career advancement potential (in comparison to other applicants).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. If there is any training that [COLLEGE] currently does not provide that would help your employees stay current or advance in their field, please specify it below.

If you have any further comments or have a suggestion of a way to improve the [PROGRAM] program at [COLLEGE], please let us know here.

**Thank you for taking the time to answer this questionnaire.
Your response is very important to us!**

Faculty Survey

During the final month of 2018, TAACCCT IV program instructors and faculty members participated in exit interviews with the evaluation team. Instructors who could not meet with the evaluation team in person were given an online survey to complete.

In February 2018, an RTI survey methodologist drafted a survey to collect data from instructors on their experiences with their TAACCCT IV programs, including program changes that stemmed from the grant and collaboration across the UHCC consortium.

RTI worked with the TAACCCT IV grant leadership to finalize the questions and the data collection instrument through April 2018. The TAACCCT IV faculty survey instrument included 11 questions and took four minutes to complete. A copy of the survey is included at the end of this section.

Once finalized, the TAACCCT IV faculty survey was programmed in SurveyGizmo, an online platform that enables users to create data collection instruments that can be securely completed using a computer or mobile device. The survey questions were mostly closed-ended, with a few open-ended items included to capture qualitative information. Once programmed, RTI conducted multiple tests of the survey, modeling response patterns for different types of respondents to ensure question text and logic accuracy, as well as data collection instrument functionality and usability.

In May 2018, RTI sent a link to the finalized online survey, along with a PDF of a paper version, to grant leadership who disseminated the link to faculty via an email that encouraged them to complete the survey. RTI sent campus contacts reminders and interim response rates and responded to questions and feedback throughout the four-week data collection process. No incentive was offered to faculty respondents. A questionnaire was considered final if it more than 50 percent of the questions were completed.

Participants

Table B-3 provides a breakdown of faculty survey respondents, by campus.

Table B-3. Number of faculty survey respondents, by campus

Campus	Total
Hawai'i Community College	5
Honolulu Community College	2
Kapi'olani Community College	4
Kaua'i Community College	1
Leeward Community College	2
University of Hawai'i Maui College	1
Total	15

Questionnaire

Sustaining Health, Strengthening Security in the Aloha State

Faculty Survey Spring 2018

INTRODUCTION

All faculty from programs at the seven community campuses participating in the Sustaining Health, Strengthening Security in the Aloha State TAACCCT Round IV grant (TAACCCT Round IV) are being asked to answer a few questions that will provide important feedback on how well the grant went.

These questions are about your experiences with your campus and your program. Your participation is voluntary. If you do not wish to answer a particular question, just let me know, and we will proceed to the next question.

This data is collected and analyzed by an independent evaluator, RTI International. RTI keeps your responses anonymous and presents data to the campuses in summary report format only.

If you have any questions about these questions or your participation, please call or email Jeanne Snodgrass at snodgrass@rti.org or 503-428-5681.

1. Which campus are you a faculty member of?	2. Which program are you a faculty member of?
<input type="checkbox"/> Hawai'i Community College	<input type="checkbox"/> School Health Assistant
	<input type="checkbox"/> Community Health Worker
	<input type="checkbox"/> Cybersecurity
	<input type="checkbox"/> Other (SPECIFY)
<input type="checkbox"/> Honolulu Community College	<input type="checkbox"/> Cybersecurity
	<input type="checkbox"/> Other (SPECIFY)
<input type="checkbox"/> Kapi'olani Community College	<input type="checkbox"/> School Health Assistant
	<input type="checkbox"/> Community Health Worker
	<input type="checkbox"/> Cybersecurity
	<input type="checkbox"/> Entrepreneurship
	<input type="checkbox"/> Other (SPECIFY)
<input type="checkbox"/> Kaua'i Community College	<input type="checkbox"/> School Health Assistant
	<input type="checkbox"/> Community Health Worker
	<input type="checkbox"/> Cybersecurity
	<input type="checkbox"/> Other (SPECIFY)
<input type="checkbox"/> Leeward Community College	<input type="checkbox"/> Cybersecurity
	<input type="checkbox"/> Other (SPECIFY)
<input type="checkbox"/> University of Hawai'i Maui College	<input type="checkbox"/> School Health Assistant
	<input type="checkbox"/> Community Health Worker
	<input type="checkbox"/> Cybersecurity
	<input type="checkbox"/> Other (SPECIFY)
<input type="checkbox"/> Windward Community College	<input type="checkbox"/> School Health Assistant
	<input type="checkbox"/> Community Health Worker
	<input type="checkbox"/> Cybersecurity
	<input type="checkbox"/> Other (SPECIFY)

3. Were you hired before or after October 1, 2015?
- Before
- After
4. **As a result of this grant**, which of the following changes to your courses or program have **you** experienced? **Choose all that apply.**
- I have new faculty colleagues that have been hired during the TAACCCT Round IV grant period
- I am teaching newly created courses
- I am teaching courses that have been revised
- I am teaching courses that have new vendor-provided content
- My program offers students new industry-recognized certifications
- I have participated in professional development workshops or training
- I have earned new industry-recognized credentials and/or certifications
- My courses use new equipment purchased through money from the TAACCCT Round IV grant
- The facilities in which I teach have been renovated (cosmetically or structurally)
- None of the above

**IF QUESTION 4 INCLUDES “I have participated in professional development workshops or training” AS AN ANSWER, CONTINUE TO QUESTION 5.
IF NOT, SKIP TO BOX BELOW QUESTION 5.**

5. What additional training have you received that was paid for with TAACCCT Round IV grant funds?

**IF QUESTION 4 INCLUDES “I have earned new industry-recognized credentials and/or certifications” AS AN ANSWER, CONTINUE TO QUESTION 6.
IF NOT, SKIP TO QUESTION 7 ON THE NEXT PAGE.**

6. What new industry-recognized credentials and/or additional certifications have you received?

7. What else has changed about your program since the TAACCCT Round IV grant was implemented?

8. Please indicate how much you agree or disagree with each of the following statements.

Since my involvement with the TAACCCT Round IV grant began...	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
...my program is more responsive to the interests and needs of industry.					
...my program is more up-to-date and better reflects current industry standards.					
...I have expanded the number of contacts I have with industry partners in my area.					
...I have stronger relationships with my program's industry partners.					
...I have stronger relationships with faculty at other campuses.					
...my students have more opportunities to develop their skills through hands-on training.					
...my students are better prepared to work in industry.					
...enrollments in my classes have increased.					
...my job entails more student recruiting.					
....my job entails more industry outreach.					

9. Have you worked with faculty at other campuses?

- Yes
- No → **GO TO QUESTION 11**

10. In what ways have you worked with faculty at other Hawai'i campuses as part of the TAACCCT Round IV grant? **Check all that apply**

- Worked with them to develop curricula
- Provided guidance in developing a course or program
- Shared curricula or other course content

Appendix C: Campus-Specific Program/Services Development

Hawai'i Community College (HawCC)

TAACCCT IV Activity	
Student Support	
Veterans' coordinator	Due to position turnover, multiple staff served as veterans' coordinator at HawCC. The original coordinator led campus activities that included a veterans' job fair and veterans' program meetings.
Early alert coordinator	N/A
Job placement coordinator	N/A
Prior learning assessment	N/A
Health Care	
School Health Assistant (SHA)	
New or enhanced?	New – HawCC did not originally propose a SHA program, but it was implemented based on community request. HawCC offered SHA-1 and, subsequently, SHA-2. Students at HawCC participating in the SHA program were enrolled through Kapi'olani Community College (KapCC) and instructors used the KapCC SHA curriculum.
Credential(s) offered	Certificate of competence in SHA (Level 1 and Level 2) – through KapCC
Community Health Worker (CHW)	
New or enhanced?	New – The CHW program was first offered at HawCC in spring 2017 after a qualified instructor was found. CHW students at HawCC were enrolled through University of Hawai'i Maui College.
Credential(s) offered	Certificate of competence in CHW
Number of health care completers	51
Other health care information	SHA courses were offered to offsite students via PolyCom and Skype, new methods of course delivery.
Cybersecurity	
New or enhanced?	Enhanced – The certificate of competence created by TAACCCT IV serves as an add-on to HawCC's existing associate in science (AS) in Information Security and Assurance (ISA).
Credential(s) offered	Certificate of competence in cybersecurity
Number of completers	8
Other information	HawCC's AS in ISA is a prerequisite for enrollment in the certificate of competence in cybersecurity.

Honolulu Community College (HonCC)

TAACCCT IV Activity	
Student Support	
Veterans' coordinator	A veterans' coordinator was hired in February 2017 and spearheaded the opening of a campus veterans' resource center for veterans and their families to access advising and other services on campus.
Early alert coordinator	N/A
Job placement coordinator	A career coordinator was hired at the beginning of the grant and left in November 2016; the position was not refilled. Work began, but was not finished, on a "Job Center Online" portal to match students to employers.
Prior learning assessment	N/A
Cybersecurity	
New or enhanced?	Enhanced – Prior to the TAACCCT Round IV grant, HonCC had a robust associate of science in the computing, electronics, and networking technology program. The addition of resources such as NetLab allowed for the integration into existing courses of content related to systems-level C programming and cybersecurity for mobile devices.
Credential(s) offered	Certificate of achievement in information assurance
Number of completers	60

Kapi'olani Community College (KapCC)

TAACCCT IV Activity	
Student Support	
Veterans' coordinator	N/A
Early alert coordinator	Coordinator was hired in December 2016. Under this coordinator, the campus piloted the MySuccess early alert system with faculty and distance learning students. MySuccess was implemented campus wide in spring 2018.
Job placement coordinator	N/A
Prior learning assessment	N/A
Health Care	
School Health Assistant (SHA)	
New or enhanced?	Enhanced – SHA-1 was first offered at KapCC in 2014 under a TAACCCT Round III grant. Under Round IV, KapCC developed and piloted the SHA-2 certificate course. SHA-2 is designed for SHAs with at least one year of work experience.
Credential(s) offered	Certificate of competence in SHA-1, SHA-2
Community Health Worker (CHW)	
New or enhanced?	New – The CHW program was first offered at KapCC in fall 2015 after it was developed and piloted by University of Hawai'i Maui College.
Credential(s) offered	Certificate of competence in CHW
Number of health care completers	107

TAACCCT IV Activity	
Other health care information	The grant-funded consortium health care coordinator position was based at KapCC.
Cybersecurity	
New or enhanced?	Enhanced – Prior to the TAACCCT Round IV grant, KapCC had a robust IT program, and the addition of resources such as the NetLab allowed for more seamless integration of practical cybersecurity skills into existing courses.
Credential(s) offered	Associate in science, advanced professional certificate, and certificate of achievement in information technology; certificates of achievement and competence in information security and assurance; certificate of competence in database administration; certificate of competence in help desk services; certificate of competence in programming
Number of completers	65
Entrepreneurship	
New or enhanced?	Enhanced – KapCC hired a subject matter expert who initially worked with Honolulu Community College to refine and enhance existing curriculum for its entrepreneurship program. The curriculum was successfully piloted in summer 2017, and the course content has been embedded in the campus's Certificate of Competence in Entrepreneurship program.
Credentials(s) offered	Certificate of competence in entrepreneurship
Number of completers	6

Kaua'i Community College (KauCC)

TAACCCT IV Activity	
Student Support	
Veterans' coordinator	N/A
Early alert coordinator	The early alert/student retention coordinator was transitioned to a campus-funded full-time position prior to the end of the grant. That person will continue to help with campus-wide training on the MySuccess system.
Job placement coordinator	N/A
Prior learning assessment	N/A
Health Care	
School Health Assistant (SHA)	
New or enhanced?	New – SHA-1 was adapted from the curriculum and program created at Kapi'olani Community College to be a three-credit, semester-long course. SHA-2 was developed specifically to meet the community needs of SHAs on KauCC.
Credential(s) offered	Certificate of competence in SHA
Community Health Worker (CHW)	
New or enhanced?	New – The CHW program at KauCC was developed using the University of Hawai'i Maui College curriculum and was then modified to meet local needs (homelessness, diabetes, etc.). The program was designed for incumbent CHWs in the community needing additional, formal training.
Credential(s) offered	Certificate of competence in CHW
Number of health care completers	18
Other health care information	KauCC promotes CHW to its SHA-2 students as an opportunity to broaden and build skills.
Cybersecurity	

New or enhanced?	Enhanced – The TAACCCT IV grant helped KauCC create a three-course certificate in cybersecurity which the campus planned to integrate into its existing associate of science program. The addition of resources such as NetLab allowed for more multimodal integration of practical cybersecurity skills.
Credential(s) offered	Certificate of competence in network security
Number of completers	7

Leeward Community College (LeeCC)

TAACCCT IV Activity	
Student Support	
Veterans' coordinator	The consortium veterans' coordinator was based at LeeCC during the TAACCCT IV grant. This position helped increase the amount of collaboration across campuses regarding veterans' policies and services and authored a report that provided improvement suggestions based on veterans' service best practices.
Early alert coordinator	N/A
Job placement coordinator	N/A
Prior learning assessment	Cybersecurity program staff worked with the campus prior learning assessment coordinator to streamline processes for evaluating transcripts.
Cybersecurity	
New or enhanced?	Enhanced – New content was created using the TAACCCT IV grant for digital forensics courses and an ethical hacking course. The grant also allowed for the purchase of NetLab equipment, which facilitated offering more online courses and labs, and the creation of a student-run IT help desk.
Credential(s) offered	Certificates of competence in information security; certificate of achievement in information security and information and computer science; associate of science in information and computer science; academic subject certificate in information and computer science; certificates of competence in basic logic and programming, Levels 1 and 2; certificate of competence in help desk; certificate of competence in network support; certificate of competence in software developer
Number of completers	89

University of Hawai'i Maui College (UHMC)

TAACCCT IV Activity	
Student Support	
Veterans' coordinator	Due to staff turnover, this position was vacant after fall 2017 and was not refilled. Prior to leaving, the veterans' coordinator helped train campus advising staff on veterans' service needs and best practices and strategies for veteran outreach.
Early alert coordinator	N/A
Job placement coordinator	N/A
Prior learning assessment	N/A
Health Care	
School Health Assistant (SHA)	
New or enhanced?	New – UMHC offered SHA-1 and SHA-2 using curriculum created and approved by Kapi'olani Community College (KapCC). All students at UHMC participating in SHA were enrolled through KapCC.
Credential(s) offered	Certificate of competence in SHA (Level 1 and Level 2) – through KapCC

Community Health Worker (CHW)	
New or enhanced?	New – The CHW program was developed during the first summer of the TAACCCT IV grant, with input from community members and employers, and subsequently piloted by UHMC staff. Other campuses used this curriculum to create their own. Some campuses enrolled students through UHMC.
Credential(s) offered	Certificate of competence in CHW
Number of health care completers	120
Cybersecurity	
New or enhanced?	Enhanced – UHMC developed a four-course program in cybersecurity focused on entry-level skills. Using grant funds, cybersecurity modules were also developed for non-IT programs to increase general awareness of cybersecurity basics.
Credential(s) offered	Certificate of competence in cybersecurity
Number of completers	45

Windward Community College (WinCC)

TAACCCT IV Activity	
Student Support	
Veterans' coordinator	N/A
Early alert coordinator	This position helped to introduce the MySuccess addition to the Starfish system and trained faculty and staff on how to use the system.
Job placement coordinator	N/A
Prior learning assessment	N/A
Health Care	
School Health Assistant (SHA)	
New or enhanced?	New – WinCC offered SHA-1 using curriculum created and approved by Kapi'olani Community College (KapCC). All students at WinCC participating in SHA are enrolled through KapCC. While it was possible to offer SHA-2 courses at WinCC through KapCC, none were offered.
Credential(s) offered	Certificate of competence in SHA (Level 1 and Level 2) – through KapCC
Community Health Worker (CHW)	
New or enhanced?	New – Work was done to create and approve CHW curriculum at WinCC but was not implemented during the grant period.
Credential(s) offered	Certificate of competence in CHW
Number of health care completers	(Completers are included with number of KapCC completers)
Other health care information	Two of five CHW courses were approved by WinCC during the grant period. There is local interest, but WinCC had difficulty finding a qualified instructor.
Cybersecurity	
New or enhanced?	New – WinCC worked with Leeward Community College to develop the information security certificate of competence that articulates with a four-year computer science degree at University of Hawai'i at Mānoa.
Credential(s) offered	Certificate of competence in information security
Number of completers	4
Other information	Due to difficulty finding a qualified instructor, this program was slow to start. All cybersecurity courses created and proposed during the grant period have been approved by WinCC.