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Date: March 9, 2020

To: Cathy Sandeen, Chancellor

From: John Stalvey, Interim Provost John R Stalvey

Cc: Denise Runge, Dean, Community & Technical College
Lorraine Stewart, CTE Coordinator, Kodiak College
Jeff Libby, Associate Dean, Community & Technical College
Steve Johnson, Associate Professor, Computer Information Systems, Prince William Sound College
Betty Walters, Interim Director, Kodiak College
Susan Kalina, Vice Provost for Academic Affairs
Claudia Lampman, Vice Provost for Student Success

Re: **AY20 Expedited Program Review Findings – Technology AAS**

I have reviewed the dean's findings and the completed Expedited Program Review Template for the Technology AAS. The Provost's Office did not receive an Optional Program Response Form from the program.

Recommendations

My recommendation is to accept the decision and recommendations of the dean, with the additional commentary that the program should revise the curriculum to broaden the options for students. The revision should be completed in AY21 for implementation in fall 2021. An interim progress report on all recommendations is due to the dean by March 1, 2021. The dean will submit a review along with the program's interim progress report to the provost by April 1, 2021. Unless otherwise noted at that time, a follow-up Program Review will be conducted in AY24.

Decision

Recommend Revision

UAA Community & Technical College
UNIVERSITY of ALASKA ANCHORAGE

3211 Providence
Drive, SSB 214
Anchorage, Alaska
99508-4614

Date: February 2, 2020

To: John Stalvey, Interim Provost

Cc: Betty Walters, Interim Director, Kodiak College

From: Denise Runge, Dean

Re: AY20 Expedited Program Review Findings

Program/s in this review: Technology (AAS)

Specialized accrediting agency (if applicable): none

Campuses where the program is delivered: Kodiak College

Members of the program review committee:

- Lorraine Stewart, CTE Coordinator, Kodiak College
- Jeff Libby, Associate Dean, Anchorage
- Steve Johnson, Associate Professor, Prince William Sound College

Centrality of Program Mission and Supporting Role The AAS Technology program is well-aligned with the mission of UAA, of CTC, and of Kodiak College. The program meets an apparent workforce need. Graduates enjoy substantial employment opportunities on Kodiak Island and in nearby communities as mechanics, welders, or related positions. The program is closely related to and incorporates the courses from the Welding certificate also offered at Kodiak.

Program Demand (including service to other programs), Efficiency, and Productivity Demand for the program has fallen during the review period, and the program's efficiency is troubling, given the general loss of embedded technical programs (construction and safety) and their associated credits. The programs had an average of ten majors per year, with six during the 2019 review year, and eight the previous year. The program has, on average, graduated only two students per year. The previous certificates that were available also saw very small enrollment, averaging just three students per year. With the decision to delete the certificate and options in safety and construction, instructional productivity naturally fell sharply. For 2019, there were no classes offered at Kodiak College in OSH, CM, or TECH, however students enrolled in the AAS were taking Welding and/or GER coursework. For this reason, cost data is not available for analysis. Overall the program is experiencing excess capacity with sharply declining productivity.

Program Quality, Improvement and Student Success The program has been experiencing dramatic change, with the loss of safety and construction emphases and their

associated courses, declining demand and an unclear future. The program faculty and campus administration remain committed to offering a vocational-technical AAS degree for Kodiak residents, however, and have begun to explore the opportunity to transform this degree to better serve students and the workforce needs of the rural communities the campus serves. Prior to the loss of the emphasis areas, the program utilized several practices to support student success, including high impact practices such as community engaged learning and internships.

Program Duplication / Distinctiveness Distinctiveness: The UAA/Kodiak College program is the only one in the state that appears to combine multiple technical/trade areas within a single AAS. As a degree completion option, the AAS Technology could provide added value for students whose educational and career objectives cut across multiple trade and technical areas. This design would present substantial opportunities for revision and future growth, with little to no cost to the campus, since it would provide additional students for existing vocational/technical classes and certificate programs.

Commendations and Recommendations Commendations: The program is commended for focusing and refining its offerings to adjust to changing workforce needs in the areas served by Kodiak College. Recommendations: The program should complete a revision to broaden the curricular options available within the AAS, allowing for a true "interdisciplinary" pathway for students with training in two or more related vocational/technical areas. The program should work closely with its secondary partners to align and expand opportunities for concurrent enrollment.

Decision *Revision:* The program faculty should initiate a revision in line with the recommendations above. The program should be offered at all campuses in order to meet local needs.

AY20 Expedited Program Review Template
Updated 2-5-2020

Submission date:

Program/s in this review: Technology, AAS

Specialized accrediting agency (if applicable): _____

Campuses where the program is delivered: Kodiak

Members of the program review committee:

1. Lorraine Stewart, CTE Coordinator, Kodiak College
2. Jeff Libby, Associate Dean, Community & Technical College
3. Steve Johnson, Faculty, Prince William Sound College

1. Centrality of Program Mission and Supporting Role (700 words or less)

Kodiak College serves a unique Island community, which offers a variety of industry-related workforce opportunities. The Associate of Applied Science, Technology program provides local education and training options for individuals living on Kodiak Island.

Kodiak is home to one of the largest fishing ports in the U.S., which provides ample opportunities for service-related and processing occupations. Kodiak is also home to the largest Coast Guard Base in the U.S. The USCG-Kodiak base contracting services offers several trade-related employment opportunities. Construction is another prominent industry with several employment options available locally. Kodiak College is the only local post-secondary training provider on the island for trade-based occupations. It is critical to maintain current and relevant workforce training opportunities for island residents and employers.

Initially, the AAS Technology offered concentration options in Seafood Processing, Space Facility Maintenance, and Technical Education. The program was revised in 2006, which resulted in the suspension of previous concentration options. Based on local industry needs, new options were developed in Welding, Construction, and Industrial Safety.

In 2016, Kodiak College suspended the certificate programs in Construction and Industrial Safety and discontinued offering courses in those subject areas. As a result, degree seeking students were advised to complete the welding concentration of the degree program as the other concentration options were no longer available locally. As written, the AAS Technology program is currently outdated and needs to be revised or replaced. Welding is still a high demand training option in our community and needs to remain an available training option for local students.

This AAS Technology program directly supports general education courses offered at Kodiak College. Additionally, specific program-related courses provide elective opportunities for students enrolled in other programs. For example, welding courses are popular for students looking to complete an elective course for the Associate of Arts program.

Kodiak College staff and faculty work closely with the KIBSD-Kodiak High School welding program to ensure concurrent enrollment opportunities that lead to pathways within the institution are available for students. Adjunct instructors teaching in the program are all employed full-time by local industry-related businesses including Jay Brandt, Kodiak Electric Association, and Choctaw Defense Services. Our students are also supported by local businesses and agencies. For example, Highmark Marine Services, Arc N Spark Welding, Alaska Hydraulics, Alaska Department of Fish and Game are some of our local employers who have allowed our students to complete welding internships within their organizations. Several of these employers have also hired our students at the completion of their internship.

The Associates of Applied Science (AAS) degree in Technology provides Kodiak residents and other rural Alaska communities an opportunity for degree completion without having to attend the main campus in Anchorage. Employment opportunities vary significantly in regards to workforce development. Career opportunities include; Fabricated Metal Product Manufacturing, Commercial/Industrial Machinery and Equipment Repair, Ship and Boat Building and Repair, and Construction. Welding skills are also critical for individuals working in the fishing industry as it is a means

to maintaining or repairing machines, equipment and systems in locations where service providers are not conveniently located.

In Kodiak many students find employment with the following companies; US Coast Guard Base Service Contactor, Brechan Enterprises, Highmark Marine Services, Arc N Spark Welding, Alaska Hydraulics, Alaska Department of Fish and Game, Jay Brandt, Choctaw Defense Services, Kodiak Electric Association, Fish Processing Plants, Emerson Boat Works, and the City of Kodiak. Fishing vessels and various private contractors are another employment option in Kodiak. In rural locations, students often find employment opportunities through commercial fishing, self-employment, or within their local tribal or government entities.

Additionally, this degree has served students from the following areas; Kodiak, Larsen Bay, Chiniak, Old Harbor, Akhiok, Karluk and Ouzinkie.

The Applied Technology department at Kodiak College has requested and received TVEP funding to help subsidize material and equipment purchases necessary to expand and enhance program learning opportunities for students. The program is coordinated by a staff member and courses are taught by adjunct faculty members.

Statewide employment forecasts anticipate low growth in welding occupations, but increased openings due to a retiring workforce. Nationwide forecasts predict similar industry growth. Despite predictions, Kodiak is an industrial community with ample employment opportunities for Kodiak College graduates.

2. Program Demand (including service to other programs), Efficiency, and Productivity (7 year trend; 1400 words or less)

Data provided demonstrates a low degree/certificate award rate compared to enrollment rates. Several factors contribute directly to this outcome. The decline in degree/certificate awards is a direct result of program suspension of the Construction Technology and Industrial Safety Program Support (OSH) certificate programs and related emphasis options available in the Associate of Applied Science, Technology.

Kodiak College officially suspended the Undergraduate Technology Certificates in Construction Management and Industrial Safety Program Support (OSH) in 2016. With that suspension, Kodiak College discontinued course delivery in those subject areas as well. Students pursuing the certificate program or the degree program with the CM/OSH concentrations were notified and advised accordingly. Teach-out plans were developed for each student enrolled. The program changes directly affected award trends for the Applied Technology programs at Kodiak College.

Students enrolled in the Applied Technology certificate or degree program at Kodiak College are typically non-traditional aged students who are unable to consistently maintain a full-time academic schedule. Many of these students work a full-time job and have families at home. A significant number of these students are retired military personnel using their GI/VA funding, or employed adults looking to enhance their skills and employment opportunities.

New financial aid requirements have also had an impact on enrollment and graduation rates. Students who struggle and must complete a class multiple times to earn a passing grade run the risk of not meeting the Standard Academic Progress (SAP) ratio of courses attempted vs. courses completed, which could result in loss of funding.

Some students enroll in a program specifically to gain access to funding. They would take the courses they need to gain better employment opportunities. For example, we have had cannery workers come in to take a welding or electrical course so they could be eligible for a promotion or raise in their current employment positions. Often times, these individuals are earning minimum wage and are unable to pay for a course out of their own pockets. Their only option is to apply for a program to get the funding they need to pay for the courses. These students have no intention of finishing the program and stop enrolling in courses and pursuing funding opportunities once they completed the courses they need for their employment.

Students enrolled in the AAS Technology program would often complete (2) two concentration options in the degree program, which accounts higher than average credits per degree awarded. For example, some of our students would complete the WELD and OSH concentration at the same time.

Program enrollment has declined over the past seven years as demonstrated by data provided for this report. Declining enrollment is directly related to program suspension in the CM and OSH emphasis areas.

Further, at the completion of the spring 2015 semester, Kodiak College lost access to the high school welding shop due to an extensive facility remodel. During the summer 2015 semester, Kodiak College identified a new location, secured a lease, and purchased all materials and equipment needed to operate an educational welding shop. This transition period also had an impact on program and course enrollment.

Currently, we are working directly with the technical programs within the Community and Technical College at the main campus to integrate more Occupational Endorsement Certificates (OEC's). The CTC is currently developing more OEC's through the curriculum process and these courses and program options are of great interest to the Kodiak campus. Some of these OEC's and curriculum alignment initiatives include diesel power technology, welding, automotive technology, and culinary arts. Additionally, Kodiak College is interested in pursuing OEC's in maritime trades. These additional offerings could be very advantageous for enrollment and supporting workforce development training at the Kodiak Campus.

Data clearly shows that students are doing well in the OSH, TECH and WELD courses offered at Kodiak College. Students completing CM coursework have experienced more challenges than other students enrolled in alternate subject areas.

The provided data clearly demonstrates a strong interest in WELD courses amongst community members and students enrolled in the program.

Data shows a steady decline in SCH generated through CM, OSH, and TECH courses offered at Kodiak College beginning in 2015. The decline in OSH and CM enrollment is directly related to the suspension of the certificate programs and degree concentration options in those subject areas. Prior to the suspension, OSH courses generated the second largest number of student credit hours for the Applied Technology department. However, Kodiak College demonstrates the strongest SCH production trend in WELD courses with an average of 743 student credit hours generated annually. Evidence clearly indicates a strong local interest in welding coursework.

Data clearly shows a decline in SCH/FTEF for CM, OSH, and TECH courses offered at Kodiak College. This is directly related to program/course suspension in the CM and OSH subject areas. However, WELD courses have generated an annual average of 360.4 SCH/FTEF per year over the past seven years. Additionally, by hiring adjunct instructors to teach welding curriculum at Kodiak College it is an effective and inexpensive means to maintaining the program.

Enrollment/FTEF data shows a steady decline beginning in 2015 for CM, OSH, and TECH courses offered at Kodiak College. This decline is directly related to program/course suspension in the CM and OSH subject areas. However, WELD courses have generated an average of 112.9 enrollment/FTEF annually for the past seven years. All welding courses are taught by adjunct instructors, which keeps course delivery costs low. Additionally, all welding courses are capped at (10) students based on number of available welding booths and equipment.

Beginning in 2015, students enrolled in the CM and OSH courses began their individual teach out plans to complete their program. As each student was working at their own pace, enrollment numbers fluctuated. However, WELD courses have generated an average of 11.8 FTES/FTEF annually for the past seven years. Welding course enrollment is typically capped at (10) ten students due to number of welding booths and machines in addition to facility capacity.

Average class sizes begin to fall drastically in 2015 with the suspension of the CM and OSH certificate program and degree concentration options. Students completing the CM and OSH programs were put on a teach-out plan based on their individual course needs remaining for the program. Students were at various stages of the program resulting in courses with one or two students.

The program only requires (2) two TECH courses total. One course is offered cyclically, and the other course is for student internships, which are limited to one or two per semester. However, WELD courses offered at Kodiak College have an average class size of 12.2 annually over the past seven years. Typically, the welding courses are capped at (10) students, but the demand is such that it is necessary to accommodate extra students each semester.

Data demonstrates a decrease in cost per student credit hour after 2015. This is a direct result of program suspension in the subject areas of CM and OSH. The program is coordinated by a staff member and courses are taught by adjunct instructors, which helps reduce costs per student credit hour at the Kodiak campus. WELD courses delivered on the Kodiak campus remain consistently low with an average annual cost per student credit hour of 60.82.

The overall costs for program delivery remain low as the department is coordinated by a staff member and all courses are taught by adjunct faculty members. Tuition and fee's cover a significant amount of this expense. Additionally, the department seeks grants to purchase supplies and equipment necessary to deliver coursework.

3. Program Quality, Improvement and Student Success (1500 words or less)

Welding Technology coursework included in the AAS Technology degree and certificate program adheres to the American Welding Society (AWS) guidelines for weld specifications and certification. Though our coursework is geared towards AWS codes, students are also introduced to API and ASME codes. CM and OSH courses and related programs have been suspended and are no longer applicable.

Curriculum used in the AAS Technology degree is current and relevant to today's workplace. However, the program is in need of significant revision which is presented in the summary of this report.

The Associate of Applied Science, Technology degree offered at Kodiak College is a unique program designed to meet the workforce needs of Kodiak. The program features the standard General Education Requirements as all other two-year programs within our system. The program also includes a Technology Core, which was designed to give supporting soft skills in addition to technical knowledge and skills for a variety of industrial applications. The Technology core includes coursework in Computer Aided Drafting and Design, Industrial Safety, Hazardous Materials, Basic Electrical, Technological Principles, Human Relations, Personal Computers, and Software Applications. Students could then select a concentration area in Welding, Construction, or Occupational Safety and Health. However, at this time, the welding concentration is the only available option for students at Kodiak College.

With the suspension of the OSH and CM portions of the program, the AAS Technology degree courses are delivered in a face-to-face format at the Kodiak Campus. Students enrolled in the program are now meeting their core requirements in OSH and CM/AET courses via distance delivery from other campuses.

Students enrolled in the Associate of Applied Science, Technology degree and related Undergraduate Technology Certificate programs are meeting defined Program Student Learning Outcomes. With the suspension of the CM and OSH certificate programs and degree concentration options, assessment data in these areas is no longer available. However, the WELD certificate programs and concentration option of the AAS Technology degree are consistently delivered and assessed annually. Program outcomes are evaluated by staff and faculty in the Applied Technology department to determine if changes are needed to better assess student learning. For example, it was determined that students needed more immediate feedback and skill assessment throughout the semester to demonstrate growth and identify specific areas for improvement. Faculty members came up with an assessment process that allows the opportunity to produce a sample test plate that is used for visual inspection. Students are monitored closely for faculty during this process to identify any issues that need to be addressed. Once the assessment is complete, the faculty meets with each individual student to go over their assessment and develop a plan for improvement. Additional forms of assessment include grade data, certification testing, and student products.

Service learning and internship experiences are a critical component of the AAS Technology program. All students enrolled in the program must complete an internship prior to graduation. Additionally, the department works very closely with the

HUMS instructor to ensure Technology students have service learning opportunities. For example, during one semester, the HUMS class came together to put together a fundraising event for a local child suffering from cancer. This event was incredibly successful because not only did the students learn to work with each other and within the community, they learned the value of giving back to their community.

Prior to the cancellation of the construction courses at Kodiak College, students would participate in a "Construction Academy" to gain exposure to working with tools, equipment and various building materials. The class would select a local non-profit in need of assistance. For example, students built a new deck and storage shed for our local women's shelter during one semester. On another occasion, a class built a new after-hours drop off hut for our local animal shelter. It is important that our students learn that they have a civic responsibility to "give back" to their community.

The department chair provides all academic advising for students enrolled in the AAS Technology degree and related certificate programs. Additionally, all new students participate in our "Student Coaching" program. This program partners each student with a Kodiak College faculty or staff member for their first semester. Students meet weekly with their individual coach to discuss campus resources, important academic dates/deadlines, challenges and successes in their current courses. This is also an opportunity to determine if a student is in need of assistance. This program is incredibly successful for first-time freshmen and those students returning to an academic institution after a long absence.

4. Program Duplication / Distinctiveness (300 words or less)

The Associate of Applied Science, Technology degree offered at Kodiak College is a unique program designed to meet the workforce needs of Kodiak. At this time, there are no other programs within the UA system that are similar to the AAS Technology offered at Kodiak College.

The Technology program features the standard General Education Requirements as do all other two-year programs within the UAA system. The program also includes a Technology Core, which was designed to give supporting soft skills in addition to knowledge and skills for a variety of industrial applications. The Technology core includes coursework in Computer Aided Drafting and Design, Industrial Safety, Hazardous Materials, Basic Electrical, Technological Principles, Human Relations, Personal Computers, and Software Applications. Students could then select a concentration area in Welding, Construction, or Occupational Safety and Health. However, Kodiak College suspended delivery of the Construction and Safety-related certificates and concentration options.

The program initially was designed to be flexible and achievable for non-traditional students based on their employment needs and goals. The program was also designed as a pathway for students at the Kodiak High School. Concurrent enrollment opportunities allowed high school students to work towards the completion of a degree/certificate program while still enrolled in high school.

Though the program is unique in design, it is apparent that the certificate and degree programs are in need of a significant revision to remain relevant to current workforce needs locally and statewide.

5. Summary Analysis (500 words or less)

The Associates of Applied Science in Technology is advantageous for the Kodiak Campus. The data clearly indicates that the decision to remove Construction Management and Occupational Safety and Health options from campus delivery significantly contributed to the declining enrollment in the program. However, it is clear that Welding Technology courses and program options are in high demand in Kodiak.

Moving forward, it would be advantageous to revise this degree option to embed multiple Occupational Endorsement Certificates (OEC's). For example, a student could complete the Welding OEC and perhaps a second OEC in Diesel Power Technology. The combination of both of these OEC's would provide valuable skills to students while meeting the workforce needs of rural communities throughout Alaska. Additionally, certain OEC's (like Millwright) could be included and offered at various community campuses or even the main campus.

In conclusion, this review process has made it abundantly clear that the Associate of Applied Science, Technology program offered at Kodiak College needs significant revisions to remain a valid and viable program option. The department will work closely with the Community and Technical College to identify and integrate new program options that meet local workforce needs and can be delivered in a flexible format directly in Kodiak.