

**Trade Adjustment Assistance Community College and Career Training**  
Third Party Evaluation Report – Spring 2013 Interviews



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May 2013

**Background:**

The TAACCT third party evaluators conducted a series of TAACCT participant interviews during April and May, 2013. The purpose of these interviews was two-fold:

- To establish relationships with grant participants
- To collect base-line data around the implementation of the grant deliverables

**Spring Interview Process:**

The TAACCT third party evaluators met in March to determine the scope of the interviews at each of the four institutions. At this time, they identified the key participants at each site and created a series of questions to ask individual groups of participants: Instructors, Instructional Facilitators, Retention Coordinators, Student Success Advisors and Grant Support Technician. The questions for each group included a series of general questions and questions specific to the role of the interviewee. When possible, questions were connected to the identified grant priorities:

**Priority 2: Improve retention and achievement rates and reduce time to completion**

- Strategy 1: Ensure at-risk students’ academic success and on-time graduation

**Priority 3: Build programs that meet industry needs, including developing career pathways**

- Strategy 2: Develop and deliver online Green Energy Production industry focused AAS degrees, diploma (certificate) programs and registered apprenticeship programs.

**Priority 4: Strengthen online and technology-enable learning**

- Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.

\*Question Protocols are included in the appendix.

**Table 1: Interviewees**

Interviewee	Role	Institution
Dale Moke	Instructor	Mitchell Technical Institute
Johnnie Schroeder	Grant Support Technician	Southeast Technical Institute
Jacque Danielson	Student Success Advisors	Southeast Technical Institute
Elizabeth Harder	Student Success Advisors	Southeast Technical Institute
Betsy Homan	Student Success Advisors	Southeast Technical Institute
Chelsea Reisch	Student Success Advisors	Southeast Technical Institute
LaDonna Zellmer	Student Success Advisors	Southeast Technical Institute
Anna Peterson	Retention Coordinator	Southeast Technical Institute
David Kampmann	Instructional Facilitator	Southeast Technical Institute
Bryan Cox	Instructor	Southeast Technical Institute
Andre Barnaud	Retention Coordinator	Southeast Technical Institute
Brian Olson	Instructor	Lake Area Technical Institute
Laurie Johnson	Instructor	Lake Area Technical Institute
Darrel Woolrey	Instructor	Lake Area Technical Institute
Jim Clendenen	Instructor	Lake Area Technical Institute
Todd Anderson	Instructor	Western Dakota Technical Institute
James Loverich	Instructor	Western Dakota Technical Institute
Matt Wiebe	Instructional Support Specialist	Western Dakota Technical Institute

### **Interview Data Analysis:**

#### **Instructor Background Information:**

**Eight instructors** deliver the TAACCCT online/hybrid green energy courses. All eight instructors are certified technical education instructors by the state of South Dakota. At least six of the instructors have industry experience ranging from one year to twenty-seven years of experience. Teaching experience ranges from 2 years to more than 33 years of experience. Also, instructors vary in their experience with online teaching. For at least three instructors, this is their first experience with online teaching.

#### **Online Courses Development and Implementation Background Information:**

All four schools associated with the TAACCCT grant have successfully begun to implement online/hybrid green programs of study with either diploma or degree completion status. All four schools have also demonstrated the necessary experience in designing, facilitating and implementing an online course matched with existing standards, existing online protocol, and comparable to already established face-to-face courses – although, a targeted online/hybrid green program of study will be a new endeavor at each location. Instructors at each location are required to learn more about online facilitation and instruction. Within each institution, a Learning Management System (LMS) is in place to help student retention and provide strategies for more effective learning and instruction. Additionally, each institution has incorporated new technologies to help with instruction and learning. Students in each location’s program will be compared to a comparable face-to-face cohort to meet grant evaluation requirements.

Each institution formed committees to design and deliver online curriculums and all instructors were involved in that process. Each institution strives to align online curriculum as closely as possible to the already established traditional classroom curriculum. All four institutions used industry partners to help develop curriculum.

All four institutions strive to have online standards match already established standards practiced in traditional classrooms. Although each institution has developed standards for its online course, each institution continuously tries to improve upon the online standards.

While all four institutions strive to provide instructional support for all online instructors, two of the four institutions offer online courses or trainings to online instructors to enhance online instruction.

All four institutions have established relationships with industry partners. The role of industry partners varies according to institution. Industry partner roles include, but are not limited to: serve on advisory boards; supply students to the new green programs of study; share current trends and expectations of industry; provide key pieces of equipment, internships, and/or apprenticeships, and/or help design curriculum.

Three of the institutions implemented technological updates to enhance infrastructure to meet the grant objectives; the remaining institution made infrastructure updates prior to the TAACCCT grant.

Most of the infrastructure updates were in the form of software purchases or capacity enhancements; some of the updates were physical enhancements such as: fiber links, iPad purchases, classroom computers, and/or the purchasing of an Apple TV. Additionally, all four institutions incorporate a LMS.

### **Interview Data Analysis:**

The TAACCCT grant's success is measured by the successful implementation of three priorities. The evaluators used these priorities as the framework to gather data.

#### **Priority 2: Improve retention and achievement rates and reduce time to completion**

- **Strategy 1: Ensure at-risk students' academic success and on-time graduation**

**Course design and delivery**, retention coordinators, student success advisors, an instructional facilitator, a grant support technician and student success toolkit components contributed to the success of at-risk students. In general, student participants in the online/hybrid green energy programs have full time jobs and are supporting families. This alternative to face-to-face instruction offers a variety of advantages: reduced time for completion; self-paced curriculum; and flexible deadlines.

Two of the four institutions employ **retention coordinators** to help identify and support at-risk students for both traditional and online classes. The support processes vary at each institution but in both cases they rely on instructor input to identify "at-risk" students as defined by the TAACCCT leadership at each institution. Some formal support structures include an Academic Recovery course, workshops, communication software, grade reviews and personal contacts. The retention coordinators identified several challenges working with online students.

- Online students do not have access to the same campus resources available to traditional students (i.e., tutors etc.)
- In the Academic Recovery course there is no lab component for online students
- Lack of personal connection with students both for the instructor and the retention coordinators.

In addition to the retention coordinators, one institution also employs six **student success advisors** though these positions are not funded by the grant. Every student enrolled at this institution is assigned a student success advisor. The student success advisors address personal issues outside of academia. Contacts with online students include phone conversations and Skype sessions. The support for online students include: teaching online class navigation skills, helping students be realistic about time management skills, and/or helping students overcome communication difficulties. Though not all institutions have retention coordinators or student success advisors, all four institutes have designated personnel or departments to accommodate a variety of student needs.

In the fall of 2012, it became apparent to the TAACCCT project management that each technical institution defined "at-risk" students differently. The oversight committee met via DDN in January of 2013 and reached a consensus definition of "at-risk" students.

#### **Definition of At-Risk Students (also addresses academic success & on track and on time)**

- At-risk students are defined based upon sub-standard achievement, with attendance as well as academic performance on indicators. This would include any student who is identified as in

danger of not receiving financial aid because of not maintaining a 2.0 GPA, completing 67% of coursework, or not meeting attendance requirements.

- At-risk students are provided Student Success Toolkit strategies which may include remedial education, tutoring, and one-on-one assistance.
- Any student we identify as "at-risk" AND who also receives assistance from the Student Success Toolkit then becomes a grant participant and we will need to report on them annually.

The Over-Sight Committee comprised of the Vice Presidents in attendance agreed to the above definition and that any at-risk student receiving services from the Student Success Toolkit would become a grant participant. However, student participation in a Student Success strategy does not automatically qualify them as a grant participant. The student must meet the definition of at-risk.

If a student becomes "at-risk" three institutions have established formal emergency funds for students; the remaining institution has an informal policy to support these students. Each institution strives to address and identify "at-risk" students at the earliest opportunity. Students not achieving the needed Math or English score on the Compass or Accuplacer exams must take remedial course(s). Remedial courses are offered in different formats depending on each institution's plan of action -- courses are offered in both traditional and online formats.

Additionally, one institution employs an **instructional facilitator and a grant support technician**. Both were instrumental in the design of that institution's online/hybrid green energy class. The contributions included discussions and solutions for bringing the physical classroom to an online environment and converting physical assessments to online assessments.

Personnel from Southeast Technical Institute have developed a **Student Success Toolkit** to assist and support students academically, financially, and personally. Remediation is offered at all four institutions in both technical and traditional formats. Ongoing and continuous checks and support are in place to assist students who are in danger of failing. Each institution used the Student Success Toolkit differently to meet their institution's needs and policies.

All four institutions sent personnel to attend a training discussing the use, procedures, and applications of the Student Success Toolkit. As of now, each institution will incorporate aspects of the training at their institution that fits with their institution's policies and resources. Two of the institutions use Smarthinking as a tutorial resource.

### **Priority 3: Build programs that meet industry needs, including developing career pathways**

- **Strategy 2: Develop and deliver online Green Energy Production industry focused AAS degrees, diploma (certificate) programs and registered apprenticeship programs.**

TAACCCT grant participants at each of the four institutions are confident that their green energy online/hybrid courses meet industry needs. Each program has an **advisory board** consisting of partners working in the industry and their role is to share current trends and expectations of industry. Additionally, most institutes seek ongoing input from graduates and employers about how prepared students are to meet the demands of the job and use that information to revise programs to meet industry needs.

Several instructors identified their **years of experience** working in the industry as an asset designing courses that meet industry needs.

Two of the four institutions are working to create registered apprenticeships as outline in the grant deliverables. LATI is working to create a registered apprenticeship with Adams Thermal in Canton, SD. Apprenticeship inclusion between industry partners and the school was determined by local industry needs and/or interests.

#### **Priority 4: Strengthen online and technology-enable learning**

- **Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.**

The TAACCCT **instructors**, the **grant support technician** and the **instructional facilitator** all have roles in the successful implementation of Priority 4. All four institutions have incorporated technology on an individual basis to meet the specific needs of each institution. Incorporated technology has been in both software and hardware forms. As required of the TAACCCT grant, each institution is incorporating three new technologies to its institution. Examples of technology enhancements include: Ethernet IP change (to one that is compatible with being controlled remotely); pneumatic trainers; Learning Objects; Popplet; Educreations; Podcasts; working on networkable PLC's; Circuit Challenge; Smartthinking; and Voice Thread.

#### **Additional Information:**

##### **Program Tracking and Evaluation**

Three of the institutions have a **comparison cohort** in place to compare their respective online/hybrid green program. Two of the three institutions use programs within their respective institution; the third institution uses a similar program at an offsite location. The fourth institution will create a comparison cohort based on the participants registered for their program in the fall of 2013. Students in the online/hybrid green programs were matched as closely as possible to their cohort counterparts: age and gender being two main factors. When online/hybrid green programs could not be matched, schools used programs that used comparable software, required the same time for completion, and/or similar technical skills needed to successfully achieve a degree/diploma. In addition, all four institutions have established some form of feedback (surveys, course evaluations, instructor evaluations) to track performance and evaluate each respective program.

##### **Marketing**

All four institutions facilitated their own **marketing strategies** in-house. Each institution determined size and aggressiveness of their marketing campaigns, including when to start the campaign. The main mediums used for marketing were: word of mouth, mailing list, radio, print, and/or visiting potential students at area high schools.

##### **Obstacles and Challenges**

Some **obstacles** identified with the **implementation of the TAACCCT grant** have been: generating student enrollment in each program; creating online programs; having ample time to fulfill grant expectations; hiring qualified personnel to teach online programs; and measuring the success of online students.

Challenges identified with the **design and delivery** of an online course include: communication with students at a distance; loss of one-to-one time with students; designing student collaboration with other students; making traditional physical hands-on course into online courses; assessment of skills; communication with other technical institutions/students and creating the course to be shareable with other educational institutions.

Even with the above mentioned obstacles and challenges, two of the four institutions believe that the addition of their online program will increase completion rates for their respective programs and all four institutions reported that they feel confident in meeting all TAACCCT grant objectives.

**TAACCCT Targeted Instructional Rubric**

The evaluation team also designed an online instructional rubric using iNACOL (National Standards of Quality for Online Programs) [www.inacol.org/resources/publications/national-quality-standards](http://www.inacol.org/resources/publications/national-quality-standards). The purpose of the rubric discussion was to help focus instructors on “best practices” with regard to online instruction and to determine where each instructor rated his/her self with regard to each component of the rubric. Instructors were asked to discuss evidence for the rating they chose. Instructors were assured that no individual information would be shared with TAACCCT leadership.

**TAACCCT Targeted Instructional Rubric**

<b>CATEGORY</b>	<b>NOVICE</b>	<b>BEGINNING PROFICIENCY</b>	<b>ADVANCED PROFICIENCY</b>	<b>EXEMPLARY</b>
On-Line Curriculum	Much of the course is under construction, with a few key component identified.  <b>Instructors: 12.5% (1/8)</b>	Course is organized and navigable. Students can understand the key components and structure of the course.  <b>Instructors: 75.0% (6/8)</b>	Course is well-organized and easy to navigate. Students can clearly understand all components and structure of the course.  <b>Instructors: 12.5% (1/8)</b>	Course is well-organized and easy to navigate. Students can clearly understand all components and structure of the course. Additional materials related to successful strategies for completing online course are provided.  <b>Instructors: 0% (0/8)</b>
<b>Cited Evidence:</b> One instructor (12.5%) rated their course at the Novice level, stating that their course was organized, but the content needed to be clearer. Additionally, this instructor said that it was unclear if all points of the materials were understood because the students do not have textbooks for reference. Six instructors (75%) rated their courses as Beginning Proficiency, stating that their course was modeled on online course development standards and guidelines. Additionally, these instructors shared that they use the Learning Management System (LMS) extensively to share materials with students, have the ability to provide and receive feedback from students, and				

<p>also use different forms of technology such as Podcasts to strengthen online curriculum. One instructor (12.5%) rated their course as Advanced Proficiency, stating that because of their previous work with online courses they have established a trusted structure that has proven successful. Zero instructors (0%) rated their course as Exemplary.</p>				
<p><b>Instructional Resources</b></p>	<p>Course minimally uses digital content, resources and/or tools to supplement instruction. <b>Instructors: 0.0% (0/8)</b></p>	<p>Course uses adequate digital content, resources, and tools to supplement instruction. <b>Instructors: 50.0% (4/8)</b></p>	<p>Digital content, resources and tools expand and enhance the curriculum and content. <b>Instructors: 25.0% (2/8)</b></p>	<p>Use of digital resources and tools are integral to content, curriculum and instruction. <b>Instructors: 25.0% (2/8)</b></p>
<p><b>Cited Evidence:</b> Zero instructors (0%) rated their course at the Novice level. Four instructors (50%) rated their course as Beginning Proficiency, stating: there is room for growth for more digital resources; the course is still heavily reliant upon textbooks; and/or, the institution is developing and/or exploring ways to incorporate new software and/or new equipment. Two instructors (25%) rated their course as Advanced Proficiency, stating: the course uses numerous digital resources such as eLearning, YouTube, and Multisims which allows students to use what they have learned on numerous projects. Two instructors (25%) rated their course as Exemplary, stating: their institution has been equipped with video capture hardware and software; Penopto software; and is currently experimenting with virtual touring with VVI in Sioux Falls to enhance student learning.</p>				
<p><b>Instructional Design</b></p>	<p>Course provides limited visual, textual, kinesthetic, and/or auditory activities to enhance student learning and accessibility. <b>Instructors: 12.5% (1/8)</b></p>	<p>Course provides adequate visual, textual, kinesthetic, and/or auditory activities to enhance student learning and accessibility. <b>Instructors: 37.5% (3/8)</b></p>	<p>Course provides ample visual, textual, kinesthetic, and/or auditory activities to enhance student learning and accessibility. <b>Instructors: 50.0% (4/8)</b></p>	<p>Course provides multiple visual, textual, kinesthetic, and/or auditory activities to enhance student learning and accessibility. <b>Instructors: 0% (0/8)</b></p>
<p><b>Cited Evidence:</b> One instructor (12.5%) rated their course as novice because of a heavy reliance upon textbooks. Additionally, this course only has a limited use of auditory activities. Three instructors (37.5%) rated their course as Beginning Proficiency, stating they have abundant visual, textual, and digital media resources. These instructors also noted that these resources could be improved upon and sequenced better. Four instructors (50%) rated their course as Advanced Proficiency, stating the use of: blogs, Podcasts, numerous tutorials, links, videos, readings, and hands-on activities to address different learning styles; however, these instructors also shared that they want to add a virtual element to expand their instruction to more students. Zero instructors (0%) rated their course as Exemplary.</p>				



<p>Individualization of Instruction</p>	<p>All students expected to complete same instructional pathway.</p> <p><b>Instructors: 62.5% (5/8)</b></p>	<p>Students are minimally engaged with digital content to customize their instructional pathway.</p> <p><b>Instructors: 25.0% (2/8)</b></p>	<p>Students engage with digital content to customize their instructional pathways that are competency-based.</p> <p><b>Instructors: 12.5% (1/8)</b></p>	<p>Students engage with digital content and have multiple pathways that are competency-based and not tied to a fixed school calendar.</p> <p><b>Instructors: 0% (0/8)</b></p>
<p><b>Cited Evidence:</b>                  Five instructors (62.5%) rated their course as Novice, stating: lack of curriculum development; no current plan of customizing instruction per each student; course was designed with the expectation that all students will complete the same instructional pathway; and/or, the course is self-paced. Two instructors (25%) rated their course as Beginning Proficiency, stating: one-on-one communication with students; weekly email notices from eLearning. One instructor (12.5%) rated their course as Advanced Proficiency, stating: all digital content of software is open; there is open enrollment for the course; and/or, each student is able to complete the course on their own time schedule. Zero instructors (0%) rated their course as Exemplary.</p>				
<p>Instructional Support Models</p>	<p>Direct student learning” through traditional teacher roles and staffing models.</p> <p><b>Instructors: 12.5% (1/8)</b></p>	<p>Direct student learning through a blended model of traditional teacher roles and some reliance on technology-based tools and content.</p> <p><b>Instructors: 62.5% (5/8)</b></p>	<p>Facilitate student learning: through a team approach with a significant reliance on technology-based tools and content.</p> <p><b>Instructors: 25.0% (2/8)</b></p>	<p>Coordinate student learning: through the expanded use of technology-based tools and content, as well as the effective use of outside experts and/or community resources.</p> <p><b>Instructors: 0% (0/8)</b></p>
<p><b>Cited Evidence:</b>                  One instructor (12.5%) rated their course as Novice, stating: course is lecture-based, and is heavily dependent upon a textbook. Five instructors (62.5%) rated their course as Beginning Proficiency, stating: although the course is based on the traditional format of teaching, technology has been blended into the course; and/or, access to visual content. Two instructors (25%) rated their course as Advanced Proficiency, stating: student learning is heavily reliant upon technology; a strong team support from the institution; and/or, the course is designed so students are asked to identify equipment through links sent by the instructor.</p>				

<p>Technology Integration</p>	<p>Course uses limited technology tools to facilitate learning. No access technology.</p> <p><b>Instructors: 0% (0/8)</b></p>	<p>Course uses adequate technology tools to facilitate learning. Access to technology ends with class period.</p> <p><b>Instructors: 0% (0/8)</b></p>	<p>Course uses a variety of technology tools to appropriately facilitate learning. Access to technology exists during school hours.</p> <p><b>Instructors: 12.5% (1/8)</b></p>	<p>Access to course work and technology infrastructure is 24/7.</p> <p><b>Instructors: 87.5% (7/8)</b></p>
<p><b>Cited Evidence:</b>                  Zero instructors (0%) rated their course as Novice. Zero instructors (0%) rated their course as Beginning Proficiency. One instructor (12.5%) rated their course as Advanced Proficiency, stating: students can access resources but are currently unable to access the actual machines; this option is being currently explored with hopes of a remedy for the Spring semester of 2014. Seven instructors (87.5%) rated their course as Exemplary, stating: access to all course materials are available 24/7; available on eLearning; have access to instructor most hours of the day; and/or the ability for all students to submit assignments from anyplace at any time.</p>				
<p>Technology Enhancement</p>	<p>Limited usage of new technology tools that enhance student learning.</p> <p><b>Instructors: 12.5% (1/8)</b></p>	<p>Adequate usage of new technology tools that enhance student learning.</p> <p><b>Instructors: 50.0% (4/8)</b></p>	<p>Novel usage of new technology tools that enhance student learning.</p> <p><b>Instructors: 37.5% (3/8)</b></p>	<p>Innovative usage of new technology tools that interactively enhance student learning.</p> <p><b>Instructors: 0% (0/8)</b></p>
<p><b>Cited Evidence:</b>                  One instructor (12.5%) rated their course as Novice, stating: a brief use of websites; and is intimidated by technology. Four instructors (50%) rated their course as Beginning Proficiency, stating: beginning to learn how to use more web tools in the classroom – even if at a slower speed than they would like. The instructors also mentioned that a lack in funds prohibits them from excelling in this area. Three instructors (37.5%) rated their course Advanced Proficiency, stating: changes in industry demand changes in technology, and the way in which the technology is used in the course; and/or, the institution has upgraded both hardware and software to better enhance the teaching and learning experience. Zero instructors (0%) rated their course as Exemplary.</p>				

<p>Teaching with Technology</p>	<p>There are limited multimedia elements and/or learning objects for accommodating different learning styles.</p> <p><b>Instructors: 12.5% (1/8)</b></p>	<p>There are adequate multimedia elements and/or learning objects for accommodating different learning styles.</p> <p><b>Instructors: 25.0% (2/8)</b></p>	<p>Multimedia elements and/or learning objects are used and are relevant to accommodate different learning styles.</p> <p><b>Instructors: 62.5% (5/8)</b></p>	<p>Varieties of multimedia elements and/or learning objects are used and are relevant to accommodate different learning styles throughout the course.</p> <p><b>Instructors: 0% (0/8)</b></p>
<p><b>Cited Evidence:</b>                  One instructor (12.5%) rated their course as Novice, stating: hard to know all the different learning styles of online students, and how to accommodate each student in an online capacity. Two instructors (25%) rated their course as Beginning Proficiency, stating: the use of multimedia elements has helped most learning styles; however, the kinesthetic learners have not been reached. Five instructors (62.5%) rated their course as Advanced Proficiency, stating: they have an ability to reach all styles of learning through multimedia, LMSs, social learning (discussion boards), blended learning, narrated PowerPoint, lecture capture, and/or interactive videos. Zero instructors (0%) rated their course as Exemplary.</p>				
<p>Communication and Interaction</p>	<p>Opportunities for appropriate instructor-student interaction are infrequent and sporadic.</p> <p><b>Instructors: 12.5% (1/8)</b></p>	<p>Opportunities are created to foster instructor-students interaction.</p> <p><b>Instructors: 62.5% (5/8)</b></p>	<p>Regular opportunities are created to foster timely and frequent instructor-students interaction.</p> <p><b>Instructors: 12.5% (1/8)</b></p>	<p>Regular opportunities are created to foster timely and frequent instructor-students interaction as well as student-student interaction.</p> <p><b>Instructors: 12.5% (1/8)</b></p>
<p><b>Cited Evidence:</b>                  One instructor (12.5%) rated their course as Novice, stating: unable to reach out individually to each student, and would like to meet online students via Skype. Five instructors (62.5%) rated their course as Beginning Proficiency, stating: the use of virtual office hours; remote access to student computers; access to all course materials; and/or, the ability to give prompt feedback to students. One instructor (12.5%) rated their course as Advanced Proficiency, stating: weekly online meetings; frequent email communication; weekly Skype meetings; and institution policy of immediate feedback or correspondence concerning emails or graded projects/assignments. One instructor (12.5%) rated their course as Exemplary, stating: communication is constant with students, and the ability for students to ask questions during lab time.</p>				

<p>Student Feedback</p>	<p>Opportunities for students to receive feedback about their own performance are infrequent and sporadic.</p> <p><b>Instructors: 0% (0/8)</b></p>	<p>Opportunities for students to receive feedback about their own performance are provided.</p> <p><b>Instructors: 37.5% (3/8)</b></p>	<p>Regular feedback about student performance is provided in a timely manner throughout the course.</p> <p><b>Instructors: 62.5% (5/8)</b></p>	<p>Ongoing, varied and frequent feedback about student performance is provided in a timely manner throughout the course.</p> <p><b>Instructors: 0% (0/8)</b></p>
<p><b>Cited Evidence:</b>                  Zero instructors (0%) rated their course as Novice. Three instructors (37.5%) rated their course as Beginning Proficiency, stating: eLearning provides instantaneous feedback for student assignments with electronic comments; students have the ability to reach instructors via email; however, instructors did identify that they need to improve feedback via technology with older students who may not be as comfortable with this method. Five instructors (62.5%) rated their course as Advanced Proficiency, stating: the use of Skype has helped with student feedback; institutional policy of immediate feedback to assignments or emails; and/or the ability for students to provide feedback at the end of each semester during course evaluations. Zero instructors (0%) rated their course as Exemplary.</p>				

**Summary of Instructor Interviews:**

When asked how the TAACCCT course differs from other courses the instructors have taught, responses included: online course posed a challenge between student and instructor concerning communication; converting the lab component to an online format has been difficult; students need to be more focused, dedicated, and motivated to successfully complete an online course; online students miss out on personal anecdotes/relationship aspects of lectures; online students do not get to interact with other students as much as traditional classroom students; collaboration for online students has been a challenge; and/or online students get to go at their own pace, but the student has to be the right fit for the online environment.

When asked how each program strives to improve retention and achievements, including a reduced time to completion according to Priority 2 of the TACCCT grant, instructors responses included: more flexibility for online students (working professionals, distance, family structures); use of technology to enhance online learning; weekly emails to students outlining objectives and goals; traditional course is graded differently than online equivalent; open communication to online students (Skype); and/or online course has been designed to ensure that what might lack in depth is balanced with career readiness.

When asked how their institution’s program meets industry needs, including developing career pathways in conjunction with Priority 3 of the TAACCCT grant, instructor responses included: worked closely with industry partners to ensure the proper textbooks, materials, and/or machinery was available to students; advisory boards developed a set of competencies to ensure career readiness; industry partner feedback on recent graduates; creation of certificates so students can individualize instruction to increase industry wants and needs and to

improve already established skills; elimination of due dates for assignments; and/or changes to content of course to adjust to student/industry needs.

When asked how instructors strengthened online and technology-enabled learning in accordance to Priority 4 of the TAACCCT grant, instructor responses included: the use of Camtasia (screen recording and video editing software); the use of Popplet (collaboration and idea sharing tool); eLearning (use of [electronic media](#) and [information and communication technologies](#)); Educreations (interactive tutorial); YouTube (video resources); Blackboard (Learning Management System); Jenzabar (Learning Management System); upgrade of infrastructure in both software and hardware formats; Smarthinking (tutorial services); Voicethread (cloud-based conversation tool); Simutech (troubleshooting software); Multisim (electronics assessment); partnership with Vision Video Interactive (creation of virtual assignments); Podcasts; Panopto (video capture and management platform); and/or the creation of networkable programmable logic controls.

# Appendix

## Protocol for TAACCCT Instructor Interviews

**Instructor Name:**

**Instructor Background:**

1. How long have you been teaching at (STI, LATI, WDT, MTI)? Tradition and/or online courses?
2. How has the TAACCCT course been different from other courses you have taught?

### Connection to TAACCCT Priorities and Strategies

The TAACCCT grant's success is measured by the successful implementation of three priorities. Now we are going to focus on how the delivery of your course helps successfully implement those strategies?

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**Priority 2: Improve retention and achievement rates and reduce time to completion.**

- **Strategy 1: Ensure at-risk students' academic success and on-time graduation**

1. How have you altered your course content or structure to ensure students' retention, academic success and/or reduce time to completion? (May also answer N/A)
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**Priority 3: Build Programs That Meet Industry Needs, Including Developing Career Pathways.**

- **Develop and deliver online Green Energy Production industry focused AAS degree, diploma (certificate) Programs.....**

2. Were you involved in the development of the content and structure for this course?
  3. How does the content and structure for this course meet industry needs and how do you know?
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**Priority 4: Strengthen Online and Technology-Enabled Learning**

- Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.

4. The deliverable for this priority is that each technical institute will implement a minimum of three new online technologies by the start of year three. What new technologies are you using to strengthen online and technology-enabled learning?

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## **STI – Retention Coordinators**

### **Background**

1. Explain your position.
2. How long you have been working in this position?
3. How has your job changed as a result of the TAACCCT grant being implemented at STI?

### **Connection to TAACCCT Priorities**

The TAACCCT grant’s success is measured by the successful implementation of three priorities. The priority that most closely connects to your work is Priority 2: Improve retention and achievement rates.

1. What support structures have you put in place to support the successful completion of priority 2?
2. Do you support students in both online and traditional classes?
3. Is there a difference in the support offered to each of those groups?
4. What have been the greatest challenges in supporting online students?
5. In your opinion, what are the greatest obstacles for student retention?
6. What are the greatest obstacles for academic success?
7. How are the obstacles different for students taking online courses?

## **STI – Student Success Advisors**

### **Introductions**

### **Background**

4. Explain your position.
5. How long you have been working in this position?
6. How has your job changed as a result of the TAACCCT grant being implemented at STI?

### **Connection to TAACCCT Priorities**

The TAACCCT grant’s success is measured by the successful implementation of three priorities. The priority that most closely connects to your work is Priority 2: Improve retention and achievement rates.

8. What support structures have you put in place to support the successful completion of priority 2?
9. Do you support students in both online and traditional classes?
10. Is there a difference in the support offered to each of those groups?
11. What have been the greatest challenges in supporting online students?
12. In your opinion, what are the greatest obstacles for student retention?
13. What are the greatest obstacles for academic success?

## STI – Instructional Facilitator

### Background

7. Explain your position.
8. How long you have been working in this position?
9. How has your job changed as a result of the TAACCCT grant being implemented at STI?
10. How were you involved in the design of the Mechatronics Online Class? Who helped support this work?
11. What is your involvement, if any, in the delivery of the Mechatronics Online Class?

### Connection to TAACCCT Priorities

The TAACCCT grant's success is measured by the successful implementation of three priorities.

Priority 2: Improve retention and achievement rates and reduce time to completion.

Priority 3: Build Programs that meet industry needs, including developing career pathways

Priority 4: Strengthen online and technology-enabled learning

1. How did you consider each of these priorities as you designed the Mechatronics Online Class?
  - a. Improve retention
  - b. Improve achievement rates
  - c. Reduce time to completion
  - d. Build programs that meet industry needs (including developing career pathways)
  - e. Strengthen online and technology-enabled learning
2. What new technologies have been implemented to strengthen online and technology-enabled learning?
3. What challenges have you encountered as you implement this work?

## **STI – Grant Support Technician**

### **Background**

12. Explain your position.
13. Is this a new position at STI?
14. How long have you had this position?
15. How has your job changed as a result of the TAACCCT grant being implemented at STI? (If new position, NA)
16. How have you been involved in the design and delivery of the Mechatronics online class?
17. Do you have other responsibilities at STI? Explain.
18. How does your position support the successful implementation of the TAACCCT online class?

### **Connection to TAACCCT Priorities**

The TAACCCT grant's success is measured by the successful implementation of three priorities. The priority that most closely connects to your work is Priority 4: Strengthen online and technology-enabled learning.

1. How have you specifically supported this priority?
2. What new technologies have been implemented to strengthen online and technology-enabled learning?
3. What challenges have you encountered as you implement this work?