

TRADE ADJUSTMENT ASSISTANCE COMMUNITY COLLEGE AND CAREER TRAINING
THIRD PARTY ANNUAL EVALUATION REPORT
REPORTING PERIOD: OCTOBER 1, 2012 – SEPTEMBER 30, 2013



Heather Schopp, BA and Karen Taylor, BA, MS
Technology and Innovation in Education
1925 Plaza Blvd
Rapid City, South Dakota 57702
605-394-1876



SEPTEMBER 2013

TABLE OF CONTENTS

Executive Summary..... 3

Trade Adjustment Assistance Community College and Career Training Grant..... 9

2011-2012 Grant Governance Activities.....12

2011-2012 Green Energy Production Consortium Grant Activities.....13

The Evaluation Plan.....13

The Evaluation Model.....14

Evaluation Guiding Questions.....14

Evaluation Activities and Reporting.....16

Findings.....17

Measurable Objectives.....34

Appendix.....36

Executive Summary

Year-One Summary

The SD TAACCCT Grant, South Dakota Green Energy Production Consortium, is at the end of the second year of its three-year funded tenure. **During year one**, the SD Green Energy Production Consortium Grant Project Manager and additional personnel were hired to facilitate the implementation of grant activities. An oversight committee was established to provide leadership and direction for grant activities. Vision Video Interactive was contracted to identify and develop and/or select potential new technologies that can be adapted or adopted into grant funded online/hybrid learning programs and faculty at the four technical institutes began development of online curriculum and recruitment of students. First semester online/hybrid courses were completed and students were registered for those courses at LATI, MTI and STI. Second semester course development began. By the end of year one, all technical institutes' faculty were exposed to training opportunities in online/hybrid learning technologies. A Curriculum Discipline Committee was established with representatives for each technical school. Their task was to determine a consistent set of standards for quality online programs. A set of procedures and processes to assess online programs was developed and posted to the SD Green Energy Production website. Additionally, equipment necessary for the implementation of online courses was researched, purchased and installed where necessary. Southeast Technical Institute researched and developed retention strategies and tools. STI piloted a number of the student retention strategies in the fall of 2012 and began development of an Academic Recovery Course to be implemented in the spring of 2013. A committee was established at STI to measure the effectiveness of the retention strategies and tools. All four technical institutes had advisory meetings with employer partners. Preliminary discussions with South Dakota's contact for US DOL registered apprenticeships began and foundational Registered Apprenticeship Forums with industry were held at MTI, LATI and WDT. TIE (Technology and Innovation in Education) was contracted to provide evaluation services for the TAACCCT Grant.

Year-Two Summary

The **focus during the second implementation year** of the grant was implementing the online green energy programs at each institution and training and implementing the Student Success Toolkit. Southeast Technical Institute completed pilots for specific components of the Student Success Toolkit and the Academic Recovery Course was implemented (138 students) during the spring semester at STI. STI developed an online course for the student success toolkit and hosted "Student Success Toolkit" training in January for grant participants from each of the four technical institutes. Attendees presented the information learned to other staff in their respective institutes. The TAACCCT Oversight Committee created a definition of "At Risk" students. The online/hybrid courses at three of the four institutes completed the fall and spring semesters. Development work for the second year courses continues where applicable. WDT has completed development of the initial semester of the online CAD program and is ready to implement in the fall of 2013. LATI, MTI and STI have incorporated new technologies into the online courses. Faculty and staff at each of the four technical institutes have taken advantage of several professional development opportunities. Additional equipment was purchased and implemented. Discussions for the apprenticeship programs continue. Advisory boards continued to provide a valuable industry perspective. The Curriculum Discipline Committee members researched and evaluated online course development rubrics. A set of procedures and processes concerning online standards have been developed and posted to the SD Green Energy Production website. The project

manager developed a website for the SD Green Energy Production Consortium:

<https://sites.google.com/site/sdgep4/>.

In February of 2013, the first requested budget modification was approved. It addressed: 1) WDT would not pursue a registered apprenticeship and the monies allocated for this purpose were utilized to fund an external evaluation effort; 2) Monies allocated for a curriculum specialist at the SD DOE were also used to fund an external evaluation effort; and 3) monies were allocated to enhance marketing efforts.

A second budget modification was immediately requested to address: 1) STI not pursuing a registered apprenticeship after several attempts were made to find interested businesses; and 2) transferring money to the “other” line item. This was approved on April 1, 2013.

LATI began discussions about registered apprenticeships with 3M and Falcon Plastics, but these did not progress. MTI has established a formal apprenticeship with Northwestern Energy and LATI is meeting with Adams Thermal to develop a registered apprenticeship program for the manufacturing industry.

A review of the project documents and evaluation data indicates that the grant is making **better than satisfactory progress** toward achieving its 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.

The better than satisfactory grant progress is especially evidenced by the ongoing evaluation of grant activities and the continuous improvement model that is implemented at each of the four institutes. For example, the enrollment and retention rates for three of the four institutes’ online courses have fallen short of the on-campus rates. Discussions have taken place that have generated new ideas for educating industry about the online programs, implementing innovative marketing strategies and including courses for online students to assist them in taking courses in an online environment.

On August 9, 2013 the SD Green Energy Production Third Party Evaluation Team facilitated a benchmarking meeting with the leadership at each technical institute responsible for implementing the SD Green Production Grant. The purpose of the meeting was to:

- Share grant progress, successes, learning and challenges
- Create a shared understanding of the steps to successful completion of grant activities
- Develop a plan to complete the 2013-2014 SD Green Energy Production Grant Work

The grant participants from each site shared progress, successes, learning and challenges during the time allotted for the meeting. Grant participants were asked to continue the planning for successful implementation during the final year and to submit that plan to the evaluation team for inclusion in this report. Table 1 organizes the next steps identified by each site by priorities.

Table 1: Identified Next Steps for Successful Grant Completion

Institute	Priority/Strategy	Deliverable	Next Steps
LATI	<p>Priority 2. Improve retention and achievement rates and reduce time to completion.</p> <p>Strategy 1. Ensure at-risk students academic success and on time graduation.</p>	<p>90% of at-risk students in success program will remain on track.</p>	<ol style="list-style-type: none"> 1. Implement Student Success Pilot Course. 2. Calculate percentage of at-risk students who are on track.
	<p>Priority 3. Build programs that meet industry needs, including developing career pathways.</p> <p>Strategy 2. Develop and deliver online Green Energy Production industry focused AAS-degrees, diploma (certificate) programs and registered apprenticeship programs.</p>	<p>Agriculture curriculum</p>	<ol style="list-style-type: none"> 1. Post agriculture curriculum (syllabi, videos, assessments) on SD Green Energy Production website. 2. Continue development of 2nd year agriculture online course.
		<p>Registered apprenticeship curriculum</p>	<ol style="list-style-type: none"> 1. Assist Adams Thermal with completing documents for registered apprenticeship. 2. Develop program curriculum to registered apprenticeship requirements. 3. Post registered apprenticeship documents on SD Green Energy Production website.
		<p>74% attainment of agriculture online degrees.</p>	<ol style="list-style-type: none"> 1. Calculate percentage of graduates.
	<p>Priority 4. Strengthen online and technology-enabled learning.</p> <p>Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.</p>	<p>A minimum of three new technologies offered in online agriculture courses.</p>	<ol style="list-style-type: none"> 1. Examine curriculum for technology. 2. Interview instructors for technology implemented 3. Development of simulation and online technology by VVI
		<p>Technology research and assessment document</p> <p>Write technologies implementation instructions</p>	<ol style="list-style-type: none"> 1. Research technologies, identify potential technologies, assess feasibility of technologies. 2. Submit LATI section of technology implementation instructions

Institute	Priority/Strategy	Deliverable	Next Step
MTI	<p>Priority 2. Improve retention and achievement rates and reduce time to completion.</p> <p>Strategy 1. Ensure at-risk students' academic success and on time graduation.</p>	<p>90% of at-risk students in success program will remain on track.</p>	<ol style="list-style-type: none"> 1. Employ student success measures 2. Monitor and calculate percentages
	<p>Priority 3. Build programs that meet industry needs, including developing career pathways.</p> <p>Strategy 2. Develop and deliver online Green Energy Production industry focused AAS-degrees, diploma (certificate) programs and registered apprenticeship programs.</p>	<p>Industrial Controls curriculum and blended learning online programs.</p>	<ol style="list-style-type: none"> 1. Develop curriculum 2. Label with CCBY 3. Post to website
		<p>Registered apprenticeship curriculum for Gas Services Technician with NW Energy</p>	<ol style="list-style-type: none"> 1. Get NW Energy to agree to National Apprenticeship 2. Establish Curriculum 3. Establish tracking system (managed by MTI)
		<p>74% attainment of industry controls online certificates.</p>	<ol style="list-style-type: none"> 1. Enroll students into program 2. Employ student success measures 3. Students graduate from program 4. Monitor and calculate percentages
	<p>Priority 4. Strengthen online and technology-enabled learning.</p> <p>Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.</p>	<p>A minimum of three new technologies offered in online Energy Controls courses.</p>	<ol style="list-style-type: none"> 1. Select and order technologies 2. Implement technologies
		<p>Technology research and assessment document</p> <p>Write technologies implementation instructions</p>	<ol style="list-style-type: none"> 1. Create instructions per LATI's outline.

Institute	Priority/Strategy	Deliverable	Next Step
STI	<p>Priority 2. Improve retention and achievement rates and reduce time to completion.</p> <p>Strategy 1. Ensure at-risk students academic success and on time graduation.</p>	90% of at-risk students in success program will remain on track.	<ol style="list-style-type: none"> 1. Finalize Retention Toolkit and post on WACCAL site. 2. Measure success of retention activities in areas served by the grant - - Academic Recovery Course and Pre-Academic Math courses. Post results with toolkit. 3. Measure success of other toolkit items and post results with toolkit. 4. Conduct second round of Academic Recovery and Pre-Academic Math courses as well as other toolkit items.
	<p>Priority 3. Build programs that meet industry needs, including developing career pathways.</p> <p>Strategy 2. Develop and deliver online Mechatronics</p>	Mechatronics Hybrid Curriculum	<ol style="list-style-type: none"> 1. Post Mechatronics curriculum (syllabi, videos, assessments) on SD Green Energy Production website. 2. Continue refinement of 2nd year Mechatronics Hybrid course. 3. Calculate percentages of graduates with "participant" to the "comparison" group.
		74% attainment of Mechatronics Hybrid degrees	<ol style="list-style-type: none"> 1. Calculate percentages of graduates
	<p>Priority 4. Strengthen online and technology-enabled learning.</p> <p>Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.</p>	<p>A minimum of three new technologies offered in online Mechatronics courses.</p>	<ol style="list-style-type: none"> 1. Examine curriculum for technology. 2. Interview instructors for technology implemented.
		<p>Technology research and assessment document</p> <p>Write technologies implementation instructions</p>	<ol style="list-style-type: none"> 1. Development of simulation and online technology by VVI

Institute	Priority/Strategy	Deliverable	Next Step
WDT	<p>Priority 2. Improve retention and achievement rates and reduce time to completion.</p> <p>Strategy 1. Ensure at-risk students academic success and on time graduation.</p>	90% of at-risk students in success program will remain on track.	<ol style="list-style-type: none"> 1. Math and English labs 2. Hire lab assistants 3. Privacy letters 4. Data collection
	<p>Priority 3. Build programs that meet industry needs, including developing career pathways.</p> <p>Strategy 2. Develop and deliver online Green Energy Production industry focused AAS-degrees, diploma (certificate) programs and registered apprenticeship programs.</p>	CAD Curriculum and hybrid learning online	<ol style="list-style-type: none"> 1. Begin instruction of CAD 101, 132 & 255 2. Complete course development of online CAD 111, 140 & 232 3. Complete course development of online CAD 214, 240 & 244. 4. Recording and delivery of CAD lectures via Panopto
		74% attainment of CAD online certificates.	
	<p>Priority 4. Strengthen online and technology-enabled learning.</p> <p>Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.</p>	A minimum of three new technologies offered in online CAD courses.	<ol style="list-style-type: none"> 1. Online provision of CAD diploma through the Blackboard LMS 2. Creation of virtual scavenger-hunt assessment in conjunction with VVI 3. Online streaming of CAD lectures via Panopto
		Technology research and assessment document	<ol style="list-style-type: none"> 1. Write implementation instructions for technology being used, focusing on process.
		Write technologies implementation instructions	

Trade Adjustment Assistance Community College and Career Training Grant

In 2009, The American Recovery and Reinvestment Act amended the Trade Act of 1974 to authorize the Trade Adjustment Assistance Community College and Career Training (TAACCT) Grant Program. TAACCT provides community colleges and other eligible institutions of higher learning with funds to expand and improve their ability to deliver education and career training programs that can be completed in two years or less, are suited for workers who are eligible for training under the TAA for Workers program and prepare program participants for employment in high-wage, high-skill occupations. The grants support partnerships between community colleges (and other eligible institutions of higher learning) and employers to develop programs that provide pathways to good jobs, including building instructional programs that meet specific industry needs. This program has the goal of increasing industry-recognized credential or degree completion.

The overarching goals of the TAACCT grant are to increase attainment of degrees, certificates and other industry-recognized credentials and better prepare the targeted population (low-skilled individuals in remote, rural locations and communities served by manufacturing) and other beneficiaries for high-wage, high-skill employment. This grant contains four priorities:

1. Accelerate progress for low-skilled and other workers. (Not a focus priority of the SD Green Energy Production Consortium Grant)
2. Improve retention and achievement rates to reduce time to completion
3. Build programs that meet industry needs, including developing career pathways
4. Strengthen online technology-enabled learning.

The SD Green Energy Consortium was awarded final approval for a three-year TAACCT grant in March of 2012. The SD Green Energy Consortium is comprised of the four technical institutes located in South Dakota.

Table 2: SD Green Energy Consortium

Technical Institute	Location	Grant Leadership
Lake Area Technical Institute	Watertown, SD	<ul style="list-style-type: none"> • Mike Cartney, Vice President; signing agent • Terri Cordrey, Grant Manager
Mitchell Technical Institute	Mitchell, SD	<ul style="list-style-type: none"> • Vickie Wiese, Vice President • Deanna Hatch, Grants Administrator
Southeast Technical Institute	Sioux Falls, SD	<ul style="list-style-type: none"> • Tracy Nolder, Vice President of Student Affairs and Institutional Research • Craig Peters, Director of Academic Support
Western Dakota Technical Institute	Rapid City, SD	<ul style="list-style-type: none"> • Kelly Oehlerking, Dean of Academics • Matt Wiebe, Instructional Support Specialist

In order to accomplish the goals of the federal TAACCT program, the following priorities, strategies and deliverables were developed.

Table 3: SD Green Energy Project Priorities, Strategies, and Deliverables

Priority	Strategy	Deliverable
*2. Improve retention and achievement rates and reduce time to completion.	1. Ensure at-risk students academic success and on time graduation.	<ol style="list-style-type: none"> 1. Student Success Toolkit. 2. Student Success Train the Trainer Model 3. Student Success Toolkit on WACCAL Best Practice Forum 4. 90% of at-risk students in success program will remain on track to complete program requirements successfully and on time.
3. Build programs that meet industry needs, including developing career pathways	2. Develop and deliver online Green Energy Production industry focused AAS-degrees, diploma (certificate) programs and registered apprenticeship programs.	<ol style="list-style-type: none"> 1. Online standards document 2. Agriculture curriculum and blended learning online program at LATI. 3. Industry controls curriculum and blended learning online program at MTI. 4. Mechatronics curriculum and hybrid learning online program at STI. 5. CAD curriculum and hybrid learning online program at WDT. 6. Energy Production curriculum and registered apprenticeship program at LATI. 7. Curriculum for two registered apprenticeship programs in green energy production industries. 8. 74% attainment of Green Energy Production related diplomas (certificates) and degrees.
4. Strengthen online and technology-enabled learning.	3. Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.	<ol style="list-style-type: none"> 1. Courses offering simulation and online components implemented at each TI utilizing a minimum of three new technologies. 2. Technology research and assessment on WACCAL Best Practices Toolkit Website. 3. Technologies implementation instructions.

*The South Dakota Green Energy Production Consortium Grant did not focus on Priority 1 as identified in the Federal Grant RFP.

The South Dakota Green Energy Production Consortium Grant was awarded final approval in March 2012. Lake Area Technical Institute (LATI) is identified as the “lead agency” with Mitchell Technical Institute (MTI), Southeast Technical Institute (STI), and Western Dakota Technical Institute (WDT) identified as “co-grantees.” Grant funding was adjusted from 4.7 million to 2.7 million which required rewriting and restructuring of the original grant submission and the statement of work to align with the new budget. The onset of the grant

activities was delayed pending approval of the SD Green Energy Production Consortium Grant revised Statement of Work approval. This delay resulted in a compressed timeline for purchasing equipment, availability of personnel and implementation of 2012-2013 Green Energy Online/Hybrid Courses.

In February of 2012, a grant manager was hired and with the approval of the statement of work, grant activities were underway. Grant support personnel were hired at each of the four technical institutes during the first year of the grant. Table 4 identifies the position and relationship to the grant of technical institution employees hired or supported by grant funding during the initial year of work.

Table 4: Grant personnel supported by SD Green Energy Production Consortium Grant funds during 2011-2012

Institution	Position	Grant Responsibilities
LATI	Grant Manager – Terri Cordrey	Manages the statewide implementation of the SD Green Energy Production Consortium Grant Manages the implementation of the Agriculture online course at LATI
	Educational Technology Specialist – Dennis Newman (Lorna Hofer)*	Technology expert and content specialist for hybrid/online course development.
	Grant Project Officer – Lorna Hofer (Theresa Schaffer)*	Apprenticeship and articulation development
MTI	Grants Administrator – Deanna Hatch	Manages the implementation of the SD Green Energy Production consortium Grant at MTI.
	Instructional Designer – Darla Kotrba	Technology expert and content specialist for hybrid/online course development.
	Industrial Controls Instructor – Dale Moke	Provides instruction for Industrial Controls Program of Study.
STI	Retention Coordinators – Anna Peterson and Andre Barnaud (Becky Cornell)**	Provide a support system to keep students enrolled in school and help them be successful.
	Mechatronics Specialist – Johnnie Schroeder (Casey Vis)***	Provide support for Mechatronics program of study.
WDT	Instructional Support Specialist – Matt Wiebe	Technology expert and content specialist for hybrid/online course development.

*During the spring of 2013, Dennis Newman took a teaching position at LATI. Lorna Hofer took his position as Educational Technology Specialist and Theresa Schaffer was hired as Grant Project Officer.

**During the spring of 2013, Andre Barnaud left STI to accept another position and Becky Cornell was hired as a retention coordinator.
 *** During the spring of 2013, Johnnie Schroeder left STI to take a teaching position and Casey Vis was hired as a Mechatronics specialist.

2011-2012 Grant Governance Activities

As the lead agency, LATI hired a grant manager to oversee the state-wide implementation of the SD Green Energy Production Consortium Grant. The grant manager shares the responsibility of state-wide implementation with the signatory agent also employed by LATI. One leadership structure was created to help manage the state-wide implementation. An oversight committee was created to make decisions about grant implementation. The oversight committee is comprised of vice president representatives from each technical institute. The oversight committee meets a minimum of four times per year, with one of those meetings being face to face, to discuss issues relevant to the grant work.

Table 5: Membership of the SD Green Energy Oversight Committee

Name	Position	Technical Institute
Michael Cartney	Vice President	LATI
Vickie Wiese	Vice President for Academic Affairs	MTI
Tracy Noldner	Vice President of Student Affairs and Institutional Research	STI
Kelly Oehlerking	Dean of Academics	WDT

One example of the tasks undertaken by the oversight committee is creating a shared definition of “at-risk” students. Each technical institution has to collect data to submit to the DLR (Department of Labor and Regulation) about how they supported “at-risk” students and the success of the strategies implemented to support “at-risk” students. Each technical institution had a process in place that identified “at-risk” students, but in order to comply with the DLR requirement, it was necessary for the four technical institutes to have a shared definition of an “at-risk” student. This task was undertaken by the oversight committee and the following definition was agreed to and utilized for federal reporting purposes:

“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.”

In addition to organizing an oversight committee, the SD Green Energy Production Grant leadership team created a grant implementation plan that identified grant priorities, strategies, activities, spending targets and timeframes. The SD Green Energy Production Grant Implementation Guide directly aligns project activities with grant goals. The Grant Implementation Guide is reviewed at each benchmark meeting and used as a tool to provide ongoing assessment of grant progress.

As well as those leadership structure mentioned above, the leadership team also conducts three onsite visits per institute each year. The project manager visits each institution twice each year and the signatory agent visits each institution once per year. The leadership team developed an onsite checklist that guides the

institution onsite visit discussion and ensures that each institution is on track to successful completion of priorities, strategies and deliverables. The leadership team has developed and implemented other forms to help the institutions focus on grant work: 1) audit certification form (a core guide for US DOL that assures there are no non-compliance issues) and 2) equipment inventory (keeps track of what is purchased with grant funds). These documents are posted on the SD Green Energy Production website for easy access.

The communication structure that has been established by the grant lead agency is effective. The project manager provides updates and addresses issues when needed at the Vice Presidents' meetings. Also, conference calls and emails are utilized to deal with concerns/topics that may need attention in the time between the Vice Presidents' meetings. Both the Project Manager and the Signatory Agent are generally accessible to grantees to answer questions or address concerns.

2011-2012 SD Green Energy Production Consortium Grant Activities

Though the official award was delayed until March 2012, much was accomplished during the first year of implementation. Each institution hired personnel to support grant activities. (See Table 4). The grant's point of contact and the project manager attended the TAACCCT Conference in Washington DC. The project manager conducted institution onsite visits to establish relationship and provide implementation support. The Oversight Committee and the Curriculum Discipline Panel were established and began meeting. The lead agency secured a contract with Vision Video Interactive and work began on creating technology to support learning for the online/hybrid green energy production courses. The faculty from all four technical institutes began development of the online/hybrid curriculum, marketing strategies were implemented and three of the four technical institutes began online courses in the fall of 2012. All four institutes conducted an assessment of their technology needs and purchased the appropriate tools necessary to support increased demand. Southeast Technical Institute began the development of retention strategies and began the internal process for approval of an academic recovery course. By the fall of 2012, STI piloted several of the retention strategies. Conversations with identified industry partners continued while new partnerships were investigated. Preliminary discussions between the Oversight Committee and the South Dakota's US DOL contact for registered apprenticeship began and "Registered Apprenticeship Forums" were held at three of the four technical institutes.

The Evaluation Plan

Evaluation services were contracted to and conducted by a three-person team employed by TIE (Technology and Innovation in Education) during the second year of implementation. Information was gathered through two, institution onsite visits in which interviews were conducted with personnel responsible for implementing the grant at each technical institution.

The SD Green Energy Production Consortium Grant evaluation plan is based on the priorities, strategies and deliverables identified in Table 1. The SD Green Energy Production evaluation is designed with four purposes:

- **Improve the Project:** The evaluation is intended to provide regular, structured and objective feedback to project leaders and partners.
- **Monitor implementation:** The evaluation seeks to document progress on implementation of project outcomes and use of resources.
- **Document learning:** The evaluation proposes to identify and disseminate lessons learned and conditions necessary for successful replication.
- **Provide accountability:** The evaluation will regularly report findings to TAACCCT Grant Leadership for dissemination as needed.

The Evaluation Model

The operational model for this evaluation is aligned with the principles of Empowerment Evaluation as described by Fetterman, Kaftarian and Wandersman (Empowerment Evaluation: Knowledge and Tools for Self-Assessment and Accountability, 1996). That is, evaluation:

- 1) promotes organizational learning.
- 2) represents an ongoing, continuous process that utilizes spiraling cycles of planning, action, observing and reflection.
- 3) becomes an embedded process within the day-to-day operations of the grant.
- 4) becomes the responsibility of everyone and serves as a tool toward successful implementation of the grant.

The establishment of an empowerment partnership between the leadership of the South Dakota Green Energy Production Consortium Grant and its evaluation team enhances the collection of relevant evidence of progress being made toward accomplishing grant objectives.

Evaluation Guiding Questions

The evaluation activities will be focused through the use of Evaluation Guiding Questions organized around the priorities and strategies identified to guide the work of the grant. The guiding questions are shown in Table 6.

Table 6: Evaluation Guiding Questions

Priority/Strategy	Guiding Questions
<p>Priority 2: Improve retention and achievement rates and reduce time to completion.</p> <p>Strategy 1: Ensure at-risk students’ academic success and on time graduation</p>	<ol style="list-style-type: none"> 1. To what degree was the Student Success Toolkit developed and enhanced? 2. To what degree was the Train the Trainer Model successfully implemented at each technical site? 3. To what degree was the usage of the Student Success Toolkit effective at improving completion of coursework? 4. To what degree did the use of the Student Success Toolkit improve graduation rates for at-risk students? 5. To what degree was the Student Success Program implemented at all four technical schools?

<p>Priority 3: Build programs that meet industry needs, including developing career pathways.</p> <p>Strategy 2: Develop and deliver online Green Energy Production industry focused AAS degrees, diploma (certificate) programs and registered apprenticeship programs.</p>	<ol style="list-style-type: none"> 1. How successful was each institution in the creation of their targeted hybrid online program? 2. How successful was each institution in the implementation of their targeted hybrid online program? 3. How successful was each institution in establishing/enhancing green energy production apprenticeships? 4. How did having an apprentice coordinator enhance this experience? 5. What enhancements were made to accommodate different learning styles? 6. In what ways did each technical institute share their successes with other technical institutes? With employment partners?
<p>Priority 4: Strengthen Online and Technology-Enabled Learning</p> <p>Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach skills.</p>	<ol style="list-style-type: none"> 1. Which new technologies (real-time online interaction(s), simulations and/or gaming technologies) were selected and embedded within each technical institution’s SD green energy related program(s)? 2. To accommodate such, what enhancements needed to be made to the IT infrastructure? 3. In what ways did incorporating these new technologies (real-time online interactions(s), simulation and/or gaming technologies) enhance learning? 4. In what ways did incorporating these new technologies contribute to an increase in retention? 5. In what ways did embedding these technologies contribute to participants’ course completion? Toward completing their degree? 6. In what ways did embedding these technologies contribute to participants obtaining meaningful employment in their desired field?
<p>Grant-Level Questions</p>	<ol style="list-style-type: none"> 1. What implementation strategies enabled grant participants to complete their program of study at the targeted rate? What implementation strategies contributed to an increase in retention? 2. What implementation strategies enabled grant participants to complete their program of study in a timely and accelerated manner? 3. To what degree are grant participants securing meaningful employment in their desired field? What strategies are contributing to job placement? 4. To what degree did the leadership structures contribute to the successful implementation of the grant?

Evaluation Activities and Reporting

Table 7 identifies and briefly describes the evaluation activities conducted during the period of October 1, 2012 – September 30, 2013.

Table 7: 2012-2013 Evaluation Activities and Reporting

Event	Date	Relationship to Project
Evaluation Team	<ul style="list-style-type: none"> October 1, 2012 	<ul style="list-style-type: none"> External Evaluation Team contracted and team formed
Evaluation Team Project Document Review	<ul style="list-style-type: none"> November 1 and 2, 2012 	<ul style="list-style-type: none"> Evaluation Team Builds Understanding of the Project
Evaluation Team Tool Development	<ul style="list-style-type: none"> November 3, 2012 January 4 – 7, 2013 July 7 – 9, 2013 	<ul style="list-style-type: none"> Protocols for site visits Classroom observation tool Benchmark Meeting Protocol
Evaluation Team/Leadership Communication	<ul style="list-style-type: none"> November 7, 2012 April 12, 2013 	<ul style="list-style-type: none"> Clarifying grant work to date
Evaluation Team Meetings and Phone Conference	<ul style="list-style-type: none"> November 10, 2012 November 14, 2012 January 3, 2013 January 14, 17, 30, 31, and Feb. 1, 2013 February 4, 2013 April 3, 2013 June 5 and June 6, 2013 July 15, 2013 	<ul style="list-style-type: none"> Initial site visit preparation Debrief Site Visits Review and revise site visit compilation Second site visit preparation Instructor Interview protocol Classroom observation protocol New partner briefing
Evaluation Team Facilitates Site Visits	<ul style="list-style-type: none"> November 27, 2012 November 28, 2012 December 3, 2012 December 14, 2012 January 29, 2013 February 12, 2013 March 7 and 8, 2013 March 12, 2013 April 8, 2013 April 15, 2013 April 16, 2013 April 17 and 18, 2013 April 19, 2013 June 6 – 7, 2013 July 11, 2013 August 9, 2013 	<ul style="list-style-type: none"> Conducts data gathering site visits Attend Student Success Toolkit Training Benchmark Meeting
Evaluation Team Report Writing	<ul style="list-style-type: none"> January 7 – 11, 2013 May 5 – 8, 2013 August 12 – 16, 2013 	<ul style="list-style-type: none"> Draft compilation of site visits TAACCCT personnel interviews TAACCCT Annual Report

Findings:

Findings: The findings resulting from the evaluation work will be presented as responses to the evaluation guiding questions organized around the priorities and strategies identified in the South Dakota Green Energy Production Consortium Grant’s Statement of Work.

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

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

Guiding Questions:

1. To what degree was the Student Success Toolkit developed and enhanced?

Prior to the implementation of the SD Green Energy Production Consortium Grant, Southeast Technical Institution had a committee in place to research and recommend student retention strategies to be implemented at STI. The committee was led by the Vice President of Student Affairs and Institutional Research. The toolkit components, identified and briefly described in Table 8 were in place or implemented at STI during the first implementation year of the grant. STI trained staff and hired a Retention Coordinator. STI has established a committee to measure the effectiveness of each student success strategy and make adjustments as necessary. Components of the student success toolkit are identified and briefly described in Table 8:

Table 8: Student Success Toolkit Strategies:

Strategy	Date Implemented	Description
JumpStart	Fall 2011	Each STI program hosts a one day (or longer) JumpStart seminar for all incoming students enrolled in their program prior to the first day of classes. Topics covered include: learning about the career field, meeting employers, learning the instructor expectations, learning institutional requirements, developing relationships with faculty, picking up their laptop and learning basic login information, meeting Student Success staff, performing pre-academic requirements such as safety exams or handbook revisions and completing last minute details. Year Two improvements: JumpStart was added to students’ schedules. This will help identify students who are not planning to attend STI to make room for “waiting list” students. It will also help STI staff to determine initial “at-risk” students and begin providing them with additional support.
Student Success Advisors	Prior to the grant	All STI students are assigned a Student Success Advisor. These advisors work with students to help them with institutional and personal concerns. Student Success Advisors provide proactive advising using three basic methods: Method 1: New students without any prior successful college experience are required to take a Student Success Seminar. The content of the course includes: academic success skills, social skills (connecting with other students), required STI processes including how to use the STInet student site etc. and provides students with a Student Success Advisor to assist them throughout their education at STI.

		<p>Method 2: Once a student is assigned to a Student Success Seminar and has established a Student Success Advisor, the advisor continues to be the student’s advisor throughout the time the student is enrolled at STI. As issues and concerns arise, the student may seek advice and assistance from his/her success advisor. Instructors that have a concern about a student may contact his/her Student Success Advisor to assist with communication or other issues.</p> <p>Method 3: “At-risk students, students who are more likely to terminate attendance, are given additional assistance and attention through the Student Success Center.</p>
Student Success Seminar	Prior to the grant	The Student Success Seminar course was developed at STI to assist students entering post-secondary education directly out of high school with this transition. The content of the course is described in Method 2 above.
Student Success Center	Prior to the grant	The Student Success Center is an integrated approach providing student support services in one centralized location. Support structures include: Vice President of Student Affairs, Student Success Advisors, Registrar, Career Placement, Student Government Activities, Library, Retention Coordinators and the Non-Traditional Student advisor.
Student Success Advisors	Prior to the grant	During the first year (2009-10), the Student Success Center had three Student Success Advisors - (SSA). Each SSA taught 9 sections of the Student Success Seminar (SSS) in the fall, 2 sections in the spring and 1 section in the summer. During 2010-2011 and 2011-2012, a fourth SSA/Evening and Online Coordinator was added to the team. In 2012-2013, another SSA was added to the team. This advisor also serves as the Student Activities Coordinator and SGA advisor.
“At-Risk” Student Identification and Internal Communication about Students	Prior to the grant	STI implemented EBI MAP-Works software to identify “at-risk” students. Map-Works was chosen because it provides both an “at-risk” student survey and a communication system to share student information internally to all employees working with a student. Goal 1: Determine “at-risk” students sooner and improve internal communications to better meet student needs. Goal 2: Increase “at-risk” student support.
Retention Coordinators	Fall 2012	Two-part-time retention coordinators were hired during the summer of 2012. In the fall of 2012, the focus was: 1) Learning how to use MAP-Works; 2) Determining the course content for the Academic Recovery Course scheduled for spring 2013) Determining who would be placed in the Academic Recovery Course; 4) Contacting “at-risk” students as they were identified by MAP-Works or referrals from faculty or staff. The spring 2013 focus was: 1) Teaching the Academic Recovery Course; 2) Working with students on academic/financial aid warning; 3) Monitoring “at-risk” students through MAP-Works and faculty/staff referrals.

Attendance Challenge	Fall 2012	The Attendance Challenge is a “challenge” issued at the beginning of each semester by STI leadership to all students. The challenge was promoted by employee “word of mouth”, announcements made in Student Success Seminars and JumpStart Days, fliers located in dorms and other strategic campus locations. Two “challenges” were issued: a 14-day challenge and a 30-day challenge. Students who met the 14-day challenge became eligible for a drawing for a \$50 gift card for the STI Bookstore. Students who met the 30-day challenge received a challenge t-shirt and were eligible for a drawing for a Kindle Fire.
Academic Recovery Course	Spring 2013	The Academic Recovery Course is a two-credit course with one hour of lecture and two hours of lab each week. The lecture hours are used to work with students on their existing strengths and develop new strategies in order to improve academically. Lab hours provide students with more individual assistance and opportunities to improve their academic performance. The Academic Recovery Course is required of all students who were: 1) brand new to STI in the summer or fall 2012 AND were on financial aid for the first time. Beginning fall 2013, all students on financial aid warning for the first time will be required to take this course. Students are not able to drop this course. The appeals process was formalized. Lessons have been altered to allow for more individual, engaging time with students.
SmartThinking	Fall 2012	SmartThinking is an online tutoring service which provides student support 24/7. A student is able to chat live with a tutor 24 hours every day from ANY internet connection.
Pre-Academic Courses	Fall 2012	English 099 and Math 099 are 2 credit courses required of students identified with low English and/or Math skills. The courses are taken concurrent with English and Math 101 classes. Beginning Fall 2013, the Math 099 course moved away from the “I Can Learn” software and implemented STI developed materials to support the student. The tighter alignment to existing requirements is hoped to be less of a burden for students.
Emergency Loan Fund	Prior to the grant	The Emergency Loan fund was created through donations solicited from businesses and individuals through a campaign of the STI Foundation. To be eligible for a loan, students are required to be currently enrolled at STI and in good standing. Loans are interest free. Loans may not be used to pay for tuition, fees or books but is designed to help with emergency situations such as medical bills, groceries, rent etc.

Attendance Monitoring	TBA	STI is developing a method for tracking student attendance that will allow a quicker response to students with poor attendance. Once a student has missed a specified number of classes, STI faculty/staff will intervene, setting a plan of action with the student to 1) reduce the number of absences and 2) get the student back on track with his/her classes.
------------------------------	-----	---

Findings: An extensive Student Success Toolkit has been developed and piloted/implemented by STI and modifications have been made based on data collected. STI staff is in the process of finalizing a Student Success Toolkit webpage which describes each component of the toolkit, provides implementation suggestions and tips.

2. To what degree was the Train the Trainer Model successfully implemented at each technical site?

On January 28, 2013 STI hosted a “Student Success Training” for South Dakota Green Energy Consortium Grant staff. Two staff from each of the four technical institutes attended the training and subsequently presented the information learned to other staff at their respective technical institution. An opportunity for a follow-up training was offered in June 2013. Each of the four institutes had variations of the Student Success Toolkit in place, and as a result of the January 2013 and June 2013 trainings, each of the institutes will implement new components or revise existing components to be used at their institute in the fall of 2013. Table 9 identifies the student success components implemented at each institution.

Table 9: Student Success Components Implemented Fall 2013

Institution	Student Success Component
Lake Area Technical Institution	<ul style="list-style-type: none"> • Freshman orientation utilizing Jump Start Day strategies
Mitchell Technical Institution	<ul style="list-style-type: none"> • SmartThinking • Jenzabar Retention Module • Jump Start Day
Southeast Technical Institution	<ul style="list-style-type: none"> • Implementing all components in Table 8
Western Dakota Technical Institution	<ul style="list-style-type: none"> • Math and Writing Labs • Lab assistance

Findings: At least two of the components of the Student Success Toolkit have been implemented in three of the four technical institutions. In some instances, the strategies being implemented compliment student success strategies already in place at the institution.

3. To what degree was the usage of the Student Success Toolkit effective at improving completion of coursework?

There is insufficient data to determine how effective the toolkit components have been at improving completion of coursework. STI has established a committee to collect data about the effectiveness of the components of the toolkit but that data is not yet available.

4. To what degree did the use of the Student Success Toolkit improve graduation rates for “at-risk” students?

There is insufficient data to determine how effective the toolkit components have been at improving completion of coursework. STI has established a committee to collect data about the effectiveness of the components of the toolkit but that data is not yet available.

5. To what degree was the Student Success Program implemented at all four technical schools?

Though each of the four institutes had variations of some of the Student Success Toolkit in place, as a result of the January training each of the institutes will implement new components or revise already existing components to be used at their institutes in the fall of 2013.

Finding: Each institution sent two representatives to the training, returned to their institutes to train other staff, and led discussions about which of the Student Success Toolkit components would likely have an impact on their students. All implemented new strategies or revised existing strategies based on information received at the January training.

Recommendation: The Student Success Toolkit has been developed and components have been implemented at each technical institution. The question now remains if these strategies make a difference in completion of coursework and improved graduation rates for at-risk students. Each technical institution should collect data that will provide answers to these questions. Also, the Student Success Toolkit should be posted on WACCAL Best Practice Forum to meet the deliverable requirement outlined in the Statement of Work. **The progress that has been made on this priority and strategy has been better than satisfactory and the grantees are on-track to complete all activities and deliverables in a timely manner.**

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.

Guiding Questions:

- 1. How successful was each institution in the creation of their targeted blended online program?**
- 2. How successful was each institution in the implementation of their targeted hybrid online program?**

Three of the four technical institutes created an online/hybrid green energy program that was ready to implement in the fall of 2012. Table 10 identifies the program implemented at each institution.

Table 10: Online and/or Blended Program implemented in SD Green Energy Production Consortium Institutes

Institution	Program	Duration	Implementation Date
Lake Area Technical Institution	Agriculture AAS degree	2 Year	August 2012
Mitchell Technical Institution	Industrial Controls Diploma	1 Year*	August 2012
Southeast Technical Institution	Mechatronics AAS degree	2 Year	August 2012
Western Dakota Technical Institution	CAD Diploma	1 Year	August 2013

*Industrial controls is a part time program

Finding: All four technical institutes have created online/hybrid green energy programs. Three of the institutes have completed one year of implementation and the fourth institute will be implementing the program in the fall of 2013. Additionally, each of the four institutes assessed the infrastructure at their respective institutes and upgraded when necessary to support increased demand.

3. How successful was each institution in the implementation of their targeted online/hybrid program?

Three of the four technical institutes implemented their targeted online/hybrid program during the 2012-2013 school year. Successful implementation is defined in the “Grant Implementation Plan” as meeting the following outcomes: 1) 90% of Student Success participants will remain on track to complete program requirements successfully and on time; 2) 2% per year improvement in retention and on time completion for all targeted populations; 3) the number of students who earn any number of credits in a one-year time period out of the number of students who were enrolled and attempted to earn credits during the same one-year time period (yr. two 43/70 = 61%); 4) 74% attainment of Green Energy Production related certificates and degrees; 5) 85% satisfaction determined through employers’ surveys and focus groups; 6) the number of students who earn an industry recognized certificate in less than one year out of students who were enrolled in any certificate or degree program (yr. two 8/70 = 11%); 7) the number of students who earn an industry recognized certificate in more than one year out of all students who were enrolled in any certificate or degree program (yr. two 8/70 11%).

Additionally, the evaluation team interviewed instructors implementing the programs in the spring of 2013. Their responses may add some insight in how the instructors view the success of the implementation.

Instructors were asked to rate themselves on a rubric developed by the evaluation team using iNACOL (National Standards of Quality for Online Programs). The purpose of the rubric was to focus a discussion on “best practices” with regard to online instruction and to determine where each instructor rated his/her self on each component of the rubric. Instructors were asked to rate their online instruction performance using ten categories. Instructors could rate themselves as novice, beginning proficiency, advanced proficiency or exemplary. The categories that provide insight to “successful” implementation are inserted below.

Table: 11: TAACCCT Targeted Instructional Rubric

CATEGORY	NOVICE	BEGINNING PROFICIENCY	ADVANCED PROFICIENCY	EXEMPLARY
On-Line Curriculum	<p>Much of the course is under construction, with a few key components identified.</p> <p>Instructors: 12.5% (1/8)</p>	<p>Course is organized and navigable. Students can understand the key components and structure of the course.</p> <p>Instructors: 75.0% (6/8)</p>	<p>Course is well-organized and easy to navigate. Students can clearly understand all components and structure of the course.</p> <p>Instructors: 12.5% (1/8)</p>	<p>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 courses are provided.</p> <p>Instructors: 0% (0/8)</p>
<p>Cited Evidence: 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 after 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 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>				

CATEGORY	NOVICE	BEGINNING PROFICIENCY	ADVANCED PROFICIENCY	EXEMPLARY
Instructional Resources	Course minimally uses digital content, resources and/or tools to supplement instruction. Instructors: 0.0% (0/8)	Course uses adequate digital content, resources, and tools to supplement instruction. Instructors: 50.0% (4/8)	Digital content, resources and tools expand and enhance the curriculum and content. Instructors: 25.0% (2/8)	Use of digital resources and tools are integral to content, curriculum and instruction. Instructors: 25.0% (2/8)

Cited Evidence:

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.

Category	Novice	Beginning Proficiency	Advanced Proficiency	Exemplary
Instructional Design	Course provides limited visual, textual, kinesthetic, and/or auditory activities to enhance student learning and accessibility. Instructors: 12.5% (1/8)	Course provides adequate visual, textual, kinesthetic, and/or auditory activities to enhance student learning and accessibility. Instructors: 37.5% (3/8)	Course provides ample visual, textual, kinesthetic, and/or auditory activities to enhance student learning and accessibility. Instructors: 50.0% (4/8)	Course provides multiple visual, textual, kinesthetic, and/or auditory activities to enhance student learning and accessibility. Instructors: 0% (0/8)

Cited Evidence:

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.

CATEGORY	NOVICE	BEGINNING PROFICIENCY	ADVANCED PROFICIENCY	EXEMPLARY
Technology Integration	Course uses limited technology tools to facilitate learning. No access to technology. Instructors: 0% (0/8)	Course uses adequate technology tools to facilitate learning. Access to technology ends with class period. Instructors: 0% (0/8)	Course uses a variety of technology tools to appropriately facilitate learning. Access to technology exists during school hours. Instructors: 12.5% (1/8)	Access to course work and technology infrastructure is 24/7. Instructors: 87.5% (7/8)

Cited Evidence:
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 currently being 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.

Category	Novice	Beginning Proficiency	Advanced Proficiency	Exemplary
Communication and Interaction	Opportunities for appropriate instructor-student interaction are infrequent and sporadic. Instructors: 12.5% (1/8)	Opportunities are created to foster instructor-student interaction. Instructors: 62.5% (5/8)	Regular opportunities are created to foster timely and frequent instructor-student interaction. Instructors: 12.5% (1/8)	Regular opportunities are created to foster timely and frequent instructor-student interaction as well as student-student interaction. Instructors: 12.5% (1/8)

Cited Evidence:
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.

CATEGORY	NOVICE	BEGINNING PROFICIENCY	ADVANCED PROFICIENCY	EXEMPLARY
Student Feedback	<p>Opportunities for students to receive feedback about their own performance are infrequent and sporadic.</p> <p>Instructors: 0% (0/8)</p>	<p>Opportunities for students to receive feedback about their own performance are provided.</p> <p>Instructors: 37.5% (3/8)</p>	<p>Regular feedback about student performance is provided in a timely manner throughout the course.</p> <p>Instructors: 62.5% (5/8)</p>	<p>Ongoing, varied and frequent feedback about student performance is provided in a timely manner throughout the course.</p> <p>Instructors: 0% (0/8)</p>
<p>Cited Evidence: 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>				

One indicator of successful implementation may be whether or not the online/hybrid courses were able to hit the targeted number of participants each year. Table 12 identifies the targeted and actual enrollment numbers for each on the online/hybrid courses funded by the grant.

Table 12: SD Green Energy Course 2012- 2013 Enrollment (Targeted and Actual)

Institute	Online and/or Hybrid Course	Target Enrollment	Actual Enrollment	Returning Participants	Participant Completers
LATI	Agriculture	15	5	2	N/A
MTI	Industry Controls	15	4	1	1
STI	Mechatronics	15	15	11	N/A

*WDT will begin CAD courses in August 2013

Finding: Three of the institutes implemented online and/or hybrid programs in the fall of 2012. The instructors had varying degrees of experience in teaching online courses. In general the instructors felt that improvements could be made to the courses to improve the curriculum and delivery systems. Instructors were generally pleased with student 24/7 access and felt there was room for improvement in the online curriculum navigation and understanding, communication and interaction, and the use of instructional resources.

It is important to note that August 2012 enrollment for two of the online and/or hybrid courses was significantly below the targeted number. One reason may be the late award of the grant. The SD Green Energy Production Consortium grant application did not receive final approval until March 30, 2012. This compressed timeframe may not have allowed grantees significant time to effectively market and advertise the online and/or hybrid courses which may have been a factor in low enrollment. However, marketing strategies were implemented at each of the institutes. It might be worthwhile to survey students to determine which

marketing strategy resulted in their attendance in the program. This would allow institutes to focus resources on successful marketing strategies.

Additionally, the grantees have devoted time and energy into discussing and brainstorming “why” enrollment may be low and what strategies they might implement to improve enrollment. One reason for low enrollment may be the lack of understanding of the effectiveness of simulation technology and online learning for industry partners and the targeted enrollment population. Based on this concern, MTI is developing ways in which employers of the targeted population can be exposed to the simulations and curriculum.

4. What enhancements were made to accommodate different learning styles?

One of the advantages of online instruction is allowing students varying instructional strategies that will accommodate their specific learning style. Technology tools have greatly enhanced an instructor’s ability to provide alternate routes to accomplishing the goals of a specific course. In order to determine the extent to which instructors were accommodating individual learning styles, two categories were discussed during the instructor interviews: individualization of instruction and teaching with technology. The results of those discussions are represented in Table 13 below.

Table 13: Individualized Instruction Accommodations in Online/Blended Courses

Category	Novice	Beginning Proficiency	Advanced Proficiency	Exemplary
Individualization of Instruction	All students expected to complete same instructional pathway. Instructors: 62.5% (5/8)	Students are minimally engaged with digital content to customize their instructional pathway. Instructors: 25.0% (2/8)	Students engage with digital content to customize their instructional pathways that are competency-based. Instructors: 12.5% (1/8)	Students engage with digital content and have multiple pathways that are competency-based and not tied to a fixed school calendar. Instructors: 0% (0/8)
<p>Cited Evidence: 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>				

Category	Novice	Beginning Proficiency	Advanced Proficiency	Exemplary
Teaching with Technology	There are limited multimedia elements and/or learning objects for accommodating different learning styles. Instructors: 12.5% (1/8)	There are adequate multimedia elements and/or learning objects for accommodating different learning styles. Instructors: 25.0% (2/8)	Multimedia elements and/or learning objects are used and are relevant to accommodate different learning styles. Instructors: 62.5% (5/8)	Varieties of multimedia elements and/or learning objects are used and are relevant to accommodate different learning styles throughout the course. Instructors: 0% (0/8)
<p>Cited Evidence: 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>				

Finding: A majority of instructors rated their course in the “novice” category for “individualization of instruction” and the advanced proficiency category for teaching with technology. Though the majority of instructors shared that courses are generally designed for all students to follow the same instructional pathway, they do have the ability to reach all styles of learning through the use of technology.

5. How successful was each institution in establishing/enhancing green energy production apprenticeships?

Preliminary discussions with the South Dakota’s US DOL contact for registered apprenticeships and the SD Green Energy Production Consortium Grant Oversight Committee took place in March 2012. In June of 2012, foundational Registered Apprenticeship Forums were held at MTI, LATI, and WDT to provide information and determine interest in establishing registered apprenticeships. Fifty individuals representing 21 businesses/industries attended. Several businesses expressed an interest in establishing a registered apprenticeship and made the initial contact with the SD US DOL representative. Prior to the onset of the grant, MTI’s Corporate Education Director had in place a well-established process for building registered apprenticeships. During the first year of implementation of the grant, MTI developed relationships with industry partners in order to build apprenticeship programs in Power Line Worker, Welder Fitter, Electrician, and Gas Main Fitter. In the fall of 2012, MTI also identified Northwestern Energy for an apprenticeship. Twenty-two students are enrolled in MTI online training to prepare them to enter the workforce as Gas Service Technician. Those students who are employed with Northwestern Energy will have the opportunity to enroll in a formal apprenticeship training program administered by MTI. Throughout the remainder of the 2011-2012 implementation year, LATI continued to have conversations with business partners relative to establishing registered apprenticeships. During the spring of 2013, LATI hired a TAA Grant Project Officer with

the responsibility of moving this work forward. As a result, LATI identified Adams Thermal as a potential industry to offer a registered apprenticeship. Through grant modifications STI and WDT will not establish green energy production registered apprenticeships. Neither had businesses in their area that were willing to tackle the necessary steps to see this process through to completion.

Finding: Establishing registered apprenticeships has been an ongoing struggle for all institutions. The process requires support and final approval from the South Dakota US DOL representative, and businesses have to demonstrate an interest and follow through with the necessary steps. The technical institutes have little control over the process. In order to inform businesses of the process and the benefits for them, the SD Green Energy Productions Leadership Team scheduled a series of regional forums. Two of the four institutes continue to make contact with businesses and industries to continue the effort to establish registered apprenticeships.

6. How did having an apprentice coordinator enhance this experience?

It appears having an employee with the responsibility of moving this work forward helps this process since MTI and LATI each have employees focused on establishing registered apprenticeships and that resulted in ongoing conversations about establishing registered apprenticeships with interested businesses.

Finding: The process for establishing a registered apprenticeship is complicated and time consuming. Many businesses/industries do not readily see benefits for them in pursuing this time-consuming process. Another barrier to this work is that the technical institutes have little control over the entire process as businesses/industries must contact the South Dakota US DOL representative and work with him to establish an apprenticeship. Additionally, an apprenticeship is approved by the SD DOL representative so other than providing information about the process, the institutes have little influence over this process. Given the barriers and challenges experienced in facilitating this work, two of the institutes have demonstrated a great deal of tenacity as they continue to attempt to move this work forward.

7. In what ways did each technical institute share their successes with other technical institutes? With employment partners?

Several communication structures were established for sharing success and learning among the four technical institutes. Table 14 represents the communication tool and its frequency of use.

Table 14: Internal Communication Structures

Communication Structure	Frequency of Use
Oversight Committee Meetings	Quarterly
South Dakota Green Energy Production Website	Ongoing
Benchmark Meeting	Annual
Student Success Toolkit Meeting	Annual w/ Follow-Up

Each technical institution has established employer partnerships for the purpose of 1) providing input and direction in the curriculum design for the online/hybrid courses; 2) providing resources to support education/training and potentially hiring qualified participants who complete grant funded education and training programs. Table 15 identifies the employer partners for each institution.

Table 15: Employer Partners

Institution	Employer Partner
Lake Area Technical Institute	Cenex Harvest States
Mitchell Technical Institute	Trail King
Southeast Technical Institute	John Morrell
Western Dakota Technical Institute	Caterpillar

Finding: SD Green Energy Production faculty and staff have a number of tools to facilitate internal communication among the institution leadership. Vice-presidents who serve on the Oversight Committee are also responsible for grant implementation at their technical institute. Two staff members from each institution responsible for student retention attended the Student Success Toolkit meeting and learned about the components of the tools being utilized at STI. All grantees have access to the South Dakota Green Energy Production Website. This website houses a plethora of information about the implementation of the TAACCCT grant in South Dakota including a newsletter with information about the implementation at each institution. Additionally, the third party evaluation team facilitates an annual benchmark meeting in which sites share progress, success, challenges and lessons learned. Each program of study has an advisory board that meets two times a year. Their purpose is to provide input on curriculum, industry trends, and feedback on the workforce preparedness of the students. Minutes from these meetings were recorded and shared with meeting participants.

Recommendations: All four institutes have completed the design process for the online and/or hybrid programs. In each case, the development phase included conversations with business partners to ensure that the course design provided the skills necessary for success in the respective field of work. Each institution offered online classes prior to the grant and had already established a set of “standards” for best practices for online instruction. These standards were also used as guidelines for course development. It may be beneficial for curriculum designers/instructors to share experiences to maximize organizational learning from this experience.

The instructors have varying experience delivering online courses. Though each institution provided some level of professional development and/or support structures based on best practices for online learning, the lead agency offered a general professional development opportunity to online instructors. Each of the instructors has a wealth of information to share about online instruction. A format should be developed so that the important lessons learned are shared among instructors and other grant participants.

MTI and LATI have continued to actively pursue the establishment of registered apprenticeships though the process is not very “user friendly”. LATI hired a TAACCCT Grant Director in an effort to focus more resources in the area. Despite a sound effort, progress on this deliverable has been slow. MTI has a well-established process that has been successful. It might be helpful for MTI’s Corporate Education Director to provide insights and/or direction for other grantees in order to accomplish the intended outcome for this deliverable.

The SD Green Energy Production Grant leadership team has established several structures that promote grant leadership learning. The Oversight Committee meetings are a venue for discussion and decision making. The institutional vice presidents responsible for implementing the SD Green Energy Production Grant in their respective technical institutes receive frequent updates and come together to discuss and resolve issues as they arise. Additionally, the SD Green Energy Production website houses useful information and updates and the annual benchmark meeting which includes the Oversight Committee members as well as project managers for MTI and WDT, provides insights and leadership learning. In order to capitalize on the learning that is taking place in other areas of grant implementation, focus groups should be organized for instructors, retention coordinators and other staff responsible for this deliverable, staff responsible for establishing apprenticeships, and staff responsible for innovative software development. It would also be beneficial to provide a venue for cross-membership groups to contribute to the larger body of knowledge to capture and share organizational learning with all groups.

It is important to note that the August 2012 enrollment for two of the online/hybrid courses were below the targeted number. One reason may be the late award of the grant. Grantees were not formally informed of the award until March 30, 2012 which compressed the online student enrollment timeline. However, marketing strategies were implemented at each of the institutes. It might be worthwhile to survey students to determine which marketing strategy resulted in their attendance in the program. This would allow institutes to focus resources on successful marketing strategies.

The progress that has been made on this priority and strategy has been satisfactory and despite the challenges with the registered apprenticeships, the grantees are on-track to complete all activities and deliverables in a timely manner.

Priority 4: Strengthen Online and Technology-Enabled Learning

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

Guiding Questions:

- 1. Which new technologies (real-time online interaction(s), simulations and/or gaming technologies) were selected and embedded within each technical institution's SD green energy related program(s)?**

All institutes have implemented new technologies into their online and/or hybrid course. Grant partners continue to work with VVI (Vision Video Interactive) to develop innovative software that will enhance student learning. Table 16 identifies the technologies that are being implemented at each site.

Table 16: Technologies Implemented in SD Green Energy Production Online and/or Hybrid Courses

Institute	Course	Technology
Lake Area Technical Institution	Agriculture	Educreations Popplet eLearning Camtasia Podcasts YouTube Video Lecture
Mitchell Technical Institution	Industrial Controls	Multisim for Educators (Circuit Design and Teaching) Simutech – Troubleshooting Automation (Cloud-based) Constructor (Building Electrical Ladder Diagrams) Got To Meeting Voice Thread Smarthinking Hands-on and virtual mini-car wash capstone project
Southeast Technical Institution	Mechatronics	Learning Objects SmartThinking Enhanced Reality Software Articulate Storyline Top Hat Monocle Panopto Lecture Capture
Western Dakota Technical Institute	CAD	Panopto Blackboard LMS Engineering Design Software GoogleDocs

In addition to those technologies currently being implemented, VVI continues to develop innovative technologies specifically designed to enhance the online learning experience of SD Green Energy Production Grant participants. Visiocab, a software program that matches text questions with visual representations to make a better learning experience for students will begin trial tests with students in fall 2013 at WDT and LATI.

Finding: Each technical institution has developed and implemented at least three technologies to enhance their students’ online learning experience. Development work continues with VVI to create technologies designed to specifically fill the needs of students enrolled in SD Green Energy Production courses.

2. To accommodate increased demand as a result of increased online courses, what enhancements needed to be made to the IT infrastructure?

SD Green Energy Production Grant leadership at each school researched and implemented infrastructure updates as needed at each institution. MTI updated their system prior to the onset of the grant so no infrastructure updates were necessary. Table 17 outlines the infrastructure (and equipment) updates by each institution.

Table 17: Infrastructure (and equipment) Updates

Institution	Infrastructure (and equipment) Updates
Lake Area Technical Institute	One server and a networking switch
Southeast Technical Institute	Fiber links between buildings and storage and processing for virtual machines
Western Dakota Technical Institute	Hardware and software updates to accommodate video. Updated classroom computers and the classroom environment (workstations lectern/monitor stand).

Finding: Three of the four technical institutes enhanced their existing infrastructure to accommodate technology requirements in SD Green Energy Production Online/Hybrid Courses.

3. In what ways did incorporating these new technologies (real-time online interactions(s), simulations and/or gaming technologies) enhance learning?
4. In what ways did incorporating these new technologies contribute to an increase in retention?
5. In what ways did embedding these technologies contribute to participants obtaining meaningful employment in their desired field?

Finding: There is insufficient data at this time to determine how these technologies enhanced student learning, contributed to an increase in retention, and/or contributed to participants obtaining meaningful employment in their desired field.

Recommendation: Each SD Green Energy Production Grant funded course is implementing at least three technologies designed to enhance student learning. Infrastructure enhancements have been completed where necessary. The question remains if these technologies are enhancing participants online learning experience or contributing to retention and/or obtaining meaningful employment in participants’ desired fields. A survey could be designed and implemented to gather data about participants and how the use of technology enhanced their learning experience. It would be difficult to tie the use of technology integration to retention or obtaining meaningful employment without a well-designed extensive study, but one might gather perception data to inform these indicators. **The progress that has been made on this priority and strategy has been better than satisfactory and the grantees are on-track to complete all activities and deliverables in a timely manner.**

Grant Level Questions

1. What implementation strategies enabled grant participants to complete their program of study at the targeted rate? What implementation strategies contributed to an increase in retention?
2. What implemented strategies enabled grant participants to complete their program of study in a timely and accelerated manner?
3. To what degree are grant participants securing meaningful employment in their desired field? What strategies are contributing to job placement?

Finding: There is insufficient data to determine which implemented strategies: 1) enabled grant participants to complete their program of study at the targeted rate; 2) contributed to an increase in retention; 3) enabled grant participants to complete their program of study in a timely and accelerated manner; or 4) assisted grant

participants in securing meaningful employment in their desired fields. Data is being collected by the individual institutions that will inform these questions to some degree.

4. To What degree did the leadership structures contribute to the successful implementation of the grant?

Three leadership structures were implemented to facilitate the successful implementation of the South Dakota Green Energy Production Consortium Grant. Early in the first year of implementation, an Oversight Committee was organized comprised of the Vice Presidents from each technical institute responsible for implementing grant activities. The purpose of the Oversight Committee was to provide leadership and direction for the work of the grant and to make state-wide grant decisions. In addition to the Oversight Committee, the Grant Manager and the Signatory Agent make periodic institution onsite visits to provide leadership and guidance individually to grant leadership at each technical institute. The Grant Manager also created a website that houses important project-level documents. This has been a valuable resource for grantees to get immediate answers to questions they may have. The Grant Manager is a full time position supported by grant funds and as such is available to grantees for phone calls and emails on an ongoing basis.

Recommendation: The leadership structures in place have facilitated successful implementation of the grant. Grantees know their roles and responsibilities and know how to access information when they have questions. Additionally, the priorities, strategies and deliverables that outline the successful completion of the grant are outlined in the Statement of Work which is referenced by the Grant Manager when the Oversight Committee receives updates. These structures and activities keep the grantees focused on successful completion of the work. **The progress that has been made on this priority and strategy has been better than satisfactory and the grantees are on-track to complete all activities and deliverables in a timely manner.**

Measurable Objectives

In addition to implementing the priorities and strategies discussed above, the South Dakota Green Energy Production Grant implementation success is also determined by seven measurable outcomes assessed at the end of each year of the second and third years of implementation. The data relevant to the outcome measures is gathered by grant leadership at each technical institute. A specific process was developed for assigning students to either a participant or comparison cohort. The criteria for assigning students to the participant cohort were: 1) the student must be enrolled in an online/hybrid grant funded program of study, 2) must be enrolled at the onset of the courses. The criteria for assigning students to the comparison cohort were: 1) enrolled in an identified program of study or a similar program and not enrolled in online/hybrid courses, 2) must be a current or recent student (within the last five years), 3) must be enrolled in a program of study whose length of time is equivalent, and 4) must match the percentage of gender and age of the participant cohort. For a more detailed description the participant and comparison cohort selection strategy see Document C located in the Appendix of this report. The measurable outcomes and targets for participants are identified in Table 18.

Table 18: SD Green Energy Production Grant Outcome Measures

Outcome Measures	Targets for all Participants	
1. Entered Employment Rate: The number of students entering employment within the first quarter after the quarter of program completion out of the number of students who completed their programs.	Year 1: 0/0 Year 2: 7/8 Year 3: 29/38	Total: 36/46
2. Employment Retention Rate: The number of students who retained employment during the second and third quarters after program completion out of the number of students who entered employment during the first quarter after the quarter of program completion.	Year 1: 0/0 Year 2: 6/7 Year 3: 25/29	Total: 31/36
3. Average Earnings: The average six-month earnings for the second and third quarters after program completion for students who are employed in the first, second and third quarters after program completion.	Year 1: 0/0 Year 2: 93,000/6 = 15,500 Year 3: 399,240/25 = 15,970	Total: 492,240/31 = 15,878.70
4. Credit Attainment Rate: Total number of students enrolled that have completed any number of credit hours to date.	Year 1: 0/0 Year 2: 43/70 Year 3: 48/79	Total: 91/180
5. Attainment of Certificates (less than one year): The number of students who earn an industry recognized certificate in less than one year out of students who were enrolled in any certificate or degree program.	Year 1: 0/55 Year 2: 8/70 Year 3: 8/79	Total: 16/204
6. Attainment of Certificates (more than one year): The number of students who earn an industry recognized certificate in more than one year out of all the students who were enrolled in any certificate or degree program.	Year 1: 0/55 Year 2: 8/70 Year 3: 14/79	Total: 22/204
7. Attainment of Degrees: The number of students who earn a degree during the grant period of performance out of all students who were enrolled in any certificate or degree program	Year 1: 0/55 Year 2: 0/70 Year 3: 16/79	Total: 16/204

The SD Green Energy Production grantees have made significant progress in achieving the priorities (performance goals) and deliverables outlined in the statement of work and are predicted to meet a majority of the priorities and deliverables by the end of the grant period. The exception may be reaching the targeted numbers (service or product goals) for the measurable outcomes. Target numbers were not available at the time of this writing but 1st year enrollment figures were significantly lower than expected due to the lateness of the grant award.

Appendix

South Dakota Green Energy Production Third Party Annual Evaluation Report

Statement of Work							
Priority 2:		Improve retention and achievement rates and reduce time to completion					
Activities	Implementor(s)	Costs		Time		Deliverables	
Strategy 1: Ensure at-risk students' academic success and on time graduation.	1. STI led research of best practices for student success 2. Pilot selected best practices at STI during the 2012-2013 school year. 3. Refine program using data driven results. 4. Create Student Success Toolkit. 5. Provide Student Success Toolkit training to Career Coaches at all 4 SD Technical Institutes. 6. Replicate Student Success program at all 4 technical institutes.	STI, LATI, WDT, MTI, DLR, DOE	Strategy	\$98,800	Start:	3/1/12	1. Student Success Toolkit. 2. Student Success Train the Trainer Model. 3. Student Success Toolkit on Western Alliance of Community College Academic Leadership (WACCAL) Best Practices Forum. 4. 90% of at-risk students in success program will remain on track to complete program requirements successfully and on time.
			Total:		End:	9/30/14	
			Equipment:	\$0	Milestones:		
			Year 1:	\$52,000.00	Aug -12: Begin Student Success Pilot		
			Year 2:	\$46,800.00	Jan -13: Student Success Program begins at remaining tech schools.		
			Year 3:	\$0.00	May - 14: Graduate first classes with full year of Student Success		
Priority 3:							
Priority 3:		Build Programs That Meet Industry Needs, Including Developing Career Pathways					
Activities	Implementor(s)	Costs		Time		Deliverables	
Strategy 2: Develop and deliver online Green Energy Production industry focused AAS-degrees, diploma (certificate) programs, and registered apprenticeship programs.	1. Determine consistent set of online standards for SD. 2. Ensure IT Infrastructure at each Technical Institute is capable of supporting increased demand. 3. Develop and deliver curriculum for online and technology delivered Agriculture AAS degree at LATI, Energy Controls diploma at MTI, Mechatronics AAS degree at STI, and CAD diploma at WDT. 4. Research registered apprenticeship programs with industry and SD WIB. Identify apprenticeships to be implemented. 5. With industry involvement, develop and deliver identified registered apprenticeship programs at all four Technical Institutes.	LATI, STI, WDT, MTI, DLR, DOE, WIB, Industry Partners	Strategy	\$2,250,298	Start:	3/1/12	1. Online standards document. 2. Agriculture curriculum and blended learning online program at LATI. 3. Energy Controls curriculum and blended learning online program at MTI. 4. Mechatronics curriculum and blended learning online program at STI. 5. CAD curriculum and blended learning online program at WDT. 6. Energy Production curriculum and registered apprenticeship program at LATI. 7. Curriculum for two registered apprenticeship programs in green energy production industries.
			Total:		End:	9/30/14	
			Equipment:	\$160,400	Milestones:		
			Year 1:	\$615,034	Aug -12: Accept students into programs		
			Year 2:	\$796,926	May -13: Graduate first class of Diplomas (certificates)		
			Year 3:	\$677,939	May - 14: Graduate first classes with AAS degrees		

South Dakota Green Energy Production Third Party Annual Evaluation Report

							8. 74% attainment of Green Energy Production related diplomas (certificates) and degrees.
Priority 4: Strengthen Online and Technology-Enabled Learning							
Activities		Implementor(s)	Costs		Time		Deliverables
Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.	<ol style="list-style-type: none"> 1. Research available technologies with Vision Video Interactive and Focus Groups. 2. Identify potential technologies. 3. Assess feasibility of proposed technologies. 4. Implement new technologies in SD green energy related programs. 	LATI, DLR, DOE, Industry Partners	Strategy Total:	\$309,060	Start:	3/1/12	<ol style="list-style-type: none"> 1. Courses offering simulation and online components implemented at each TI utilizing a minimum of three new technologies. 2. Technology research and assessment on WACCAL Best Practices Toolkit website. 3. Technologies implementation instructions.
			Equipment:	\$0	End:	9/30/14	
			Year 1:	\$102,248	Milestones: Aug -- 12: Initial potential technologies identified June -- 13: Three technologies available to improve online June 14: One technology for virtual lab skills at a distance ready to field		
			Year 2:	\$116,175			
			Year 3:	\$90,637			

South Dakota Green Energy Production Plan of Action
Document B

Priority 2: Improve retention and achievement rates and reduce time to completion.			
Project Goals/Benchmarks	Activities	Deliverables	Timeline
<p>Strategy 1: Ensure at-risk students' academic success and on time graduation.</p> <p>Progress Measure 1.1 90% of Student Success participants will remain on track to complete program requirements successfully and on time. <i>(The number of student success participants that earn credits and remain on time in a program compared to all student success participants.)</i></p> <p>Progress Measure 1.2 2% per year improvement in retention and on time completion for all targeted populations. <i>(The number of program students completing courses on time and remaining enrolled compared to all students who enrolled in the program.)</i></p> <p>Outcome Measure 4B Credit Attainment Rate The number of students who earn any number of credits in a one-year time period out of the number of students who were enrolled and attempted to earn credits during that same one-year time period.</p> <p>* As Reported in Statement of Work (SOW) Year 1: [0/55] = [0%] (Oct 2011 – Sept 2012) Year 2: [43/70] = [61%] (Oct 2012 – Sept 2013) Year 3: [48/79] = [61%] (Oct 2013 – Sept 2014)</p>	<p>Implementation Measure 1 Develop pilot Student Success Processes and Procedures program to improve retention and completion rates.</p> <p>1. STI led research of best practices for student success.</p> <p>2. Pilot selected best practices at STI during the 2012-2013 school year.</p> <p>3. Refine program using data driven results at the end of the 2012-2013 school year.</p> <p>4. Create Student Success Toolkit during 2012-2013 school year.</p>	<p>1. Student Success Toolkit</p>	<p>March through May 2012: STI to Research Best Practices for Student Success Pilot.</p> <p>June through August 2012 STI to Select Best Practices and Develop Student Success Toolkit. Develop Train the Trainer Model. Train STI Career Coach.</p> <p>September 2012 through May 2013 STI to Pilot Student Success Program.</p> <p>June through July 2013 STI, LATI, MTI, and WDT to evaluate and revise as necessary Student Success Program. Update Student Success Toolkit. Update Train the Trainer Model.</p>
	<p>Implementation Measure 2 Implement Student Success Processes and Procedures program at all four technical institutes.</p> <p>5. Provide Student Success Toolkit training to Career Coaches at all four technical institutes.</p> <p>6. Replicate Student Success program at all four technical institutes.</p>	<p>2. Student Success Train the Trainer Model.</p> <p>3. Student Success Toolkit published on Western Alliance of Community College Academic Leadership (WACCAL) Best Practices Forum.</p>	<p>August 2012: Begin Student Success Pilot at STI</p> <p>January 2013: Student Success Program begins at LATI, MTI, and WDT</p> <p>May 2014: Graduate first classes with full year of Student Success Program</p>
		<p>2. Student Success Train the Trainer Model.</p> <p>3. Student Success Toolkit published on Western Alliance of Community College Academic Leadership (WACCAL) Best Practices Forum.</p>	<p>January 2013 – LATI, MTI, and WDT Career Coaches to be trained in Student Success Program by STI.</p> <p>January 2013 through May 2013 – LATI, MTI, and WDT to implement Student Success Program.</p> <p>September 2013 – Present Student Success Toolkit and Train the Trainer Model to WACCAL for publication on their website.</p>

South Dakota Green Energy Production Third Party Annual Evaluation Report

Priority 3: Build Programs That Meet Industry Needs, Including Developing Career Pathways.			
Project Goals/Benchmarks	Activities	Deliverables	Timeline
<p>Strategy 2: Develop and deliver online Green Energy Production industry focused AAS-degrees, diploma (certificate) programs, and registered apprenticeship programs.</p> <p>Progress Measure 2.1 74% attainment of Green Energy Production related certificates and degrees. <i>(The number of students who earn an industry recognized certificate or degree, regardless of length of program, out of students who were enrolled in any certificate or degree program.)</i></p> <p>Progress Measure 2.2 85% satisfaction determined through employers' surveys and focus groups. <i>(The number of employers who report being satisfied with the quality of student work and apprenticeship programs.)</i></p>	<p>Implementation Measure 1 Train faculty and staff to improve current online offerings and increase the overall number of online courses at all four technical institutes.</p> <p>1. Ensure IT Infrastructure at each technical institute is capable of supporting increased demand.</p> <p>2. Provide Quality Matters training to faculty and staff at all four technical institutes.</p>	<p>1. Quality Matters Program and Online Standards Training Model.</p>	<p>March 2012: Curriculum Discipline Panel established</p> <p>August 2012: Accept students into programs at LATI, MTI, STI, and WDT</p> <p>May 2013: Graduate first class of Diplomas (certificates)</p> <p>May 2014: Graduate first classes with AAS degrees</p>
<p>Outcome Measure 5 Attainment of Certificates The number of students who earn an industry recognized certificate in less than one year out of students who were enrolled in any certificate or degree program.</p> <p>* As Reported in Statement of Work (SOW) Year 1: [0/55] = [0%] (Oct 2011 – Sept 2012) Year 2: [8/70] = [11%] (Oct 2012 – Sept 2013) Year 3: [8/79] = [10%] (Oct 2013 – Sept 2014)</p>	<p>Implementation Measure 2 Develop and deploy a hybrid blended learning AAS degree or certification program, including registered apprenticeship and industry endorsed programs at all four technical institutes.</p> <p>3. Develop and deliver curriculum for online and technology delivered Agriculture AAS degree at LATI, Energy Controls diploma at MTI, Mechatronics AAS degree at STI, and CAD diploma at WDT.</p> <p>4. Research registered apprenticeship programs with industry and SD WIB. Identify apprenticeships to be implemented.</p> <p>5. With industry involvement, develop</p>	<p>2. Agriculture curriculum and blended learning online program at LATI.</p> <p>3. Energy Controls curriculum and blended learning online program at MTI.</p> <p>4. Mechatronics curriculum and blended learning online program at STI.</p> <p>5. CAD curriculum and blended learning online program at WDT.</p> <p>6. Energy Production curriculum and registered apprenticeship program at LATI.</p> <p>7. Curriculum for two registered apprenticeship programs in green energy production industries.</p>	<p>April through July 2012: LATI, MTI, STI, and WDT to examine IT infrastructure and purchase/install necessary equipment to support increased demand.</p> <p>July through August 2012: LATI, MTI, STI, and WDT to ensure blended learning and online courses are established with the same set of standards.</p> <p>June through August 201 LATI, MTI, STI, and WDT to enroll eligible students into hybrid blended learning programs.</p> <p>August 2012 through May 2014: LATI, MTI, STI, and WDT to start and track eligible students in grant funded courses.</p> <p>August 2012 through May 2014 LATI, MTI, STI, and WDT to start and track participant and comparison cohorts.</p> <p>May through July 2012 LATI, MTI, STI, and WDT to develop a hybrid blended learning certificate or degree program.</p> <p>August 2012 through September 2014 LATI, MTI, STI, and WDT to implement blended learning programs.</p> <p>September 2012 through September 2014 LATI, MTI, STI, and WDT to implement registered apprenticeship programs.</p> <p>August 2012 through September 2014 LATI, MTI, STI, and WDT to publish all curriculum, blended learning programs, and apprenticeship programs in compliance with SCORM and Open Licensing.</p>

South Dakota Green Energy Production Third Party Annual Evaluation Report

<p>Outcome Measure 6 Attainment of Certificates The number of students who earn an industry recognized certificate in more than one year out of all students who were enrolled in any certificate or degree program. * As Reported in Statement of Work (SOW) Year 1: [0/55] = [0%] (Oct 2011 – Sept 2012) Year 2: [8/70] = [11%] (Oct 2012 – Sept 2013) Year 3: [14/79] = [18%] (Oct 2013 – Sept 2014)</p>	<p>and deliver identified registered apprenticeship programs at all four technical institutes. Implementation Measure 3 Establish statewide Curriculum Discipline Panel. 6. Determine consistent set of online quality standards for SD. 7. Prepare Quality Matters Program Training Model.</p>	<p>8. All curriculum and blended learning programs available in SCORM and Posted on the Internet with Open Licensing. 9. Online Standards Document 10. Quality Matters Program Training Model</p>	<p>March 2012 Curriculum Discipline Panel established. March 2012 through September 2014 LATI to establish a continued partnership with Carnegie Mellon. May through June 2012 Curriculum Discipline Panel in conjunction with Carnegie Mellon to determine a consistent set of online quality standards.</p>	
<p>Outcome Measure 7 Attainment of Degrees The number of students who earn a degree during the grant period of performance out of all students who were enrolled in any certificate or degree program. * As Reported in Statement of Work (SOW) Year 1: [0/55] = [0%] (Oct 2011 – Sept 2012) Year 2: [0/70] = [0%] (Oct 2012 – Sept 2013) Year 3: [16/79] = [20%] (Oct 2013 – Sept 2014)</p>				
<p>Outcome Measure 1 Employment Rate The number of students entering employment within the first quarter after the quarter of program completion out of the number of students who completed their programs. * As Reported in Statement of Work (SOW) Year 1: [0/0] = [0%] (Oct 2011 – Sept 2012) Year 2: [7/8] = [88%] (Oct 2012 – Sept 2013) Year 3: [29/38] = [76%] (Oct 2013 – Sept 2014)</p>				
<p>Outcome Measure 2 Employment Retention Rate The number of students who retained employment during the second and third quarters after program completion out of the number of students who entered employment during the first quarter after the quarter of program completion. * As Reported in Statement of Work (SOW) Year 1: [0/0] = [0%] (Oct 2011 – Sept 2012) Year 2: [6/7] = [86%] (Oct 2012 – Sept 2013) Year 3: [25/29] = [86%] (Oct 2013 – Sept 2014)</p>				

South Dakota Green Energy Production Third Party Annual Evaluation Report

<p>(SOW)</p> <p>Outcome Measure 3 Average Earnings The average six-month earnings for the second and third quarters after program completion for students who are employed in the first, second, and third quarters after program completion. * As Reported in Statement of Work (SOW)</p>	<p>Year 1: [0/0] = [0] (Oct 2011 – Sept 2012)</p> <p>Year 2: [93,000/6] = [15,500] (Oct 2012 – Sept 2013)</p> <p>Year 3: [399,240/25] = [15,970] (Oct 2013 – Sept 2014)</p>			
<p>Priority 4: Strengthen Online and Technology-Enabled Learning</p>				
<p>Project Goals/Benchmarks</p>				
<p>Strategy 3: Enhance virtual and simulation technologies enabling SD to change (improve) the way we teach technical skills.</p> <p>Progress Measure 3.1 By the end of Year One, all technical institutes' faculty will be exposed to and had training opportunities in online and blended learning technologies.</p> <p>Progress Measure 3.2 By the start of Year Three, each technical institute will be using a minimum of three new online technologies.</p>	<p>Implementation Measure 1 Research and identify proven effective technologies.</p> <p>1. Research available technologies with Vision Video Interactive and Focus Groups.</p> <p>2. Identify potential technologies.</p> <p>3. Assess feasibility of proposed technologies.</p> <p>Implementation Measure 2 Adopt and adapt technology including training of appropriate personnel.</p> <p>4. Implement new technologies in SD green energy related programs.</p>	<p>Deliverables</p> <p>1. Online technologies programs/products/software, including simulations, games, augmented reality, etc.</p> <p>2. Courses offering simulation and online components implemented at each technical institute utilizing a minimum of three new technologies.</p> <p>3. Technology research and assessment on WACCAL Best Practices Toolkit website.</p> <p>4. Instructions for Technologies implementation.</p>	<p>Timeline</p> <p>March through May 2012 LATI and Vision Video Interactive to examine, research, and identify potential technologies to incorporate into curriculum and blended learning programs.</p> <p>June through August 2012 VVI to train staff and faculty at LATI, MTI, STI, and WDT in identified technologies.</p> <p>September 2012 through September 2014 LATI, MTI, STI, and WDT to incorporate new technologies into curriculum.</p> <p>October 2013 through September 2014 LATI, MTI, STI, and WDT to implement new online technologies.</p>	<p>Milestones</p> <p>August 2012: Initial potential technologies identified</p> <p>June 2013: Three technologies available to improve online learning</p> <p>June 2014: One technology for virtual lab skills at a distance ready to pilot</p>

**South Dakota Green Energy Production
Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant**

Participant and Comparison Cohort Selection Strategy- Document C

Procedure:

The South Dakota Green Energy Production Consortium shall maintain a written set of procedures and documentation for selection of participant and comparison cohorts.

Rationale:

TAACCCT grantees should have a written set of procedures for where and how students are selected to be members of participant and comparison cohorts.

Criteria:

1. Program of Study and Location
 - a. Agriculture – Agri-Business, Commodity Merchandising and Ranch Management to be offered by Lake Area Technical Institute, Watertown, SD.
 - b. Industrial Controls to be offered by Mitchell Technical Institute, Mitchell, SD
 - c. Mechatronics Technology to be offered by Southeast Technical Institute, Sioux Falls, SD
 - d. Computer Aided Drafting (CAD) to be offered by Western Dakota Technical Institute, Rapid City, SD.
2. Start Date of Programs and Duration
 - a. Agriculture is a two year AAS degree to begin August, 2012.
 - b. Industrial Controls is a one year certificate to begin August, 2012.
 - c. Mechatronics Technology is a two year AAS degree to begin August, 2012.
 - d. Computer Aided Drafting (CAD) is a 9 month certificate to begin August, 2013.
3. Participant Cohort Selection Strategy:
 - a. Participant cohorts will be selected based on the following criteria:
 - i. Enrolled in one of the grant funded programs of study listed above
 - ii. Enrolled in online and/or hybrid course.
 - iii. For Agriculture, Industrial Controls or Mechatronics must be enrolled and begin program in August, 2012.
 - iv. For Computer Aided Drafting must be enrolled and begin program in August, 2013
 - v. Number of students to be selected for each program
 1. Lake Area Technical Institute – 15 students
 2. Mitchell Technical Institute – 10 students
 3. Southeast Technical Institute – 15 students
 4. Western Dakota Technical Institute – 15 students
4. Comparison Cohort Selection Strategy:
 - a. Comparison cohorts will be selected based on the following criteria:
 - i. Enrolled in one of the programs of study listed above or a similar program
 - ii. No enrolled in online or hybrid courses
 - iii. Be a current or recent student (within the last five years)
 - iv. Enrolled in a program of study whose length of time is equivalent to the duration listed above.

The technical institute where the individual student is enrolled shall be responsible for maintaining and be prepared to provide sufficient documentation to demonstrate that the student meets all of the criteria as specified for either the participant or comparison cohort.

South Dakota Green Energy Production
TAACCCT Grant
Certification of Audit – Document D

*Audit Completed By – Firm:	
Fiscal Year Being Audited:	
Date of Audit Report:	
Significant Findings That May Have An Impact of Federal Grants:	

Authorized Signature

Date

*Attach a copy of the cover letter from the Auditor and a copy of the pages included within the audit report that identify current/prior audit findings and questioned costs.

On-Site Checklist – Document E

Core Activity 2:

- Show documentation of what you are reporting in the quarterly narrative report, e.g., agendas and/or minutes from advisory board meetings, sign-in sheets from professional development workshops.
- Show/share your records retention policy.
- Show/share your leverage spreadsheet, if applicable.
 - Personnel not paid by grant
 - Office space
 - Food for meetings
 - Business office
 - Additional documents, e.g., cost computation spreadsheet or memo for record
- Share your equipment purchasing process, if applicable
 - Document your procurement process
 - Document if equipment was purchased through state bid
 - Show your equipment inventory
- Show documentation of Audit Certification Form (Due July 1st)

Core Activity 3

- Show documentation to support submitted claims.
 - Purchase Orders, Vouchers, Invoices
 - Time and Effort Logs
 - Travel Reimbursement
 - Memo for Record or other documentation
- Show/share your expenditure report for the grant account.
- Discuss how you meet the general accepted accounting principles and follow OMB circulars.

Core Activities 3 and 4

- Show documentation on how you are implementing the activities in the grant's Statement of Work and the Grant Implementation Plan. Document your progress on the grant's goals/objectives and deliverables. Discuss how you will make curriculum available as an open resource.
- Provide evidence that the documents in the Participant Files are based on the written Selection Procedure and Participant File Document.
- Share what types of employment/placement services are being provided.

Share/show documentation of professional development activities faculty have participated in related to quality online/hybrid programs.

Share/show documentation of the integration of new technologies by grant funded courses.

Share/show documentation of progress towards creating a registered apprenticeship.

Discussion Items:

FAQ #7 – Document how you are marketing to the targeted population.

Technology Implementation Instructions.