A TAACCCT Project funded by the ETA of the DOL

October 15, 2015

TCC DeMaND Workforce Project
Annual Evaluation: Summative Report
Project Years: October 2011 – September 2015

Leah Woodke, PhD
Woodke360 Consulting
Project Evaluator
TABLE OF CONTENTS

Introduction .................................................................................................................................................. 1
  Theoretical Foundation of the Project ..................................................................................................... 1
  TCC DeMaND Workforce Project Evaluation Approach ................................................................. 2
  Evaluation Questions............................................................................................................................. 4
About the DeMaND Consortium Colleges ............................................................................................... 5
Overview of Consortium College Project Activities .................................................................................... 6
  Project Priorities ................................................................................................................................ 6
  Project Activities Timeline Overview ................................................................................................... 7
Building Capacity to Meet Industry Needs .................................................................................................. 8
  Selection of Programs ............................................................................................................................ 8
  Building Programs .................................................................................................................................. 8
    Aaniiih Nakoda College ..................................................................................................................... 9
    Cankdeska Cikana Community College ......................................................................................... 11
    Fort Peck Community College .......................................................................................................... 11
    United Tribes Technical College ........................................................................................................ 13
Using Social Media ...................................................................................................................................... 15
  Telling the DeMaND Story .................................................................................................................... 15
  Recruiting Participants – Your People are Waiting for You ............................................................... 15
  Using Social Media to Share Information ............................................................................................. 18
  Forging New Partnerships .................................................................................................................... 19
Strengthen Online and Technology-Enabled Learning ................................................................................... 20
DeMaND Project Participants ..................................................................................................................... 21
  Participant Enrollment ......................................................................................................................... 21
  Participant Demographics ..................................................................................................................... 21
Student Retention ....................................................................................................................................... 23
Participant Completion ............................................................................................................................... 25
Impact of Strategies for Accelerated Progress on Completion..................................................................... 28
  Pre-Professional Seminar ..................................................................................................................... 28
  National Career Readiness Certificate ............................................................................................... 29
  Blocked Scheduling .............................................................................................................................. 29
Comparative Analyses of Student Characteristics with Regard to Completion.............................................. 30
  Gender and Completion ......................................................................................................................... 31
  Highest Education Achieved at Enrollment and Completion ............................................................... 31
  Employment Status at Enrollment and Completion ............................................................................ 32
  Marital Status and Completion ............................................................................................................. 33
Student Reaction ......................................................................................................................................... 33
Placement, Employment, and Wages ............................................................................................................. 36
  Tracking Participants ............................................................................................................................ 36
Placement ............................................................................................................................................. 37
Wages ................................................................................................................................................... 37
DeMaND Success Stories ............................................................................................................................ 39
Discussion of Findings ................................................................................................................................. 40
Project Challenges ................................................................................................................................ 40
  1) Acquiring Skilled Instructors ............................................................................................... 40
  2) Learning Curve .................................................................................................................... 40
  3) Student Transition from Training to Employment .............................................................. 41
  4) Accessing Administrative Data ............................................................................................ 42
Project Strengths .................................................................................................................................. 42
  1) Committed Instructors ........................................................................................................ 42
  2) Student Centered Programs ............................................................................................... 43
  3) Evaluation Integrated into the Project ................................................................................ 43
  4) Strong Administrative Consortium Team ............................................................................ 44
Lessons Learned ................................................................................................................................... 44
  1) Pay Attention to Needs of Low Skilled and Long Term Unemployed ......................... 44
  2) Employer Partners are Important ....................................................................................... 45
  3) Short Term Hands-On Programs Meet an Important Need ................................................ 45
  4) Instructors are Very Important in Student Success ............................................................ 46
  5) Social Media is a Great Way to Communicate and Share Information .............................. 46
  6) Need to Investigate Strategies to Better Support Employment Outcomes ........................ 47
  7) Use Data to Make Decisions – Eye on the Prize ................................................................. 47
Closing Comments ...................................................................................................................................... 47
Evaluation Strengths and Weaknesses ................................................................................................. 48
  Evaluation Strengths ........................................................................................................................ 48
  Evaluation Limitations ....................................................................................................................... 49
About the Evaluation Team .................................................................................................................. 49
Sincere Thank You to Contributors and DeMaND Team................................................................. 49
TABLES

Table 1: DeMaND Training and Education Programs at Each Consortium College ........................................ 6
Table 2: Participant Demographics by College .................................................................................................. 22
Table 3: DeMaND Project Student Retention Rates for All Participants by College ....................................... 24
Table 4: Completion Rates by Program at UTTC ............................................................................................ 26
Table 5: Completion Rates by Program at ANC ............................................................................................. 26
Table 6: Completion Rates by Program at CCCC ........................................................................................... 27
Table 7: Completion Rates by Program at FPCC ............................................................................................. 27
Table 8: Completion Rates by Program Length/Type (Duplicated Count) ....................................................... 28
Table 9: PPS Enrollment and Completion Status ............................................................................................ 28
Table 10: Students’ NCRC Level (first test only) by Program Completion Status (All Colleges Combined) 29
Table 11: Internal Project Participant Gender Comparisons with Respect to Completion ........................... 31
Table 12: Internal Project Participant Education Comparisons with Respect to Completion ..................... 32
Table 13: Internal Project Participant Employment Status Comparisons with Respect to Completion ....... 32
Table 14: Internal Project Participant Marital Status Comparisons with Respect to Completion .............. 33
Table 15: Student Patterns of Response from Course Evaluation Surveys ....................................................... 34
Table 16: Outcomes for the TCC DeMaND Workforce Project .................................................................. 38
INTRODUCTION

The Tribal College Consortium for Developing Montana and North Dakota Workforce (TCC DeMaND Workforce) was a Trade Adjustment Assistance Community College and Career Training Grants Program (TAACCCT) project funded by the Employment and Training Administration of the Department of Labor (SGA-DFA-PY-10-03). United Tribes Technical College (UTTC) was the lead of the TCC DeMaND Workforce, a consortium of four Tribal Colleges. The other consortium members were Cankdeska Cikana Community College (CCCC) located in Fort Totten, ND on the Spirit Lake Nation, Fort Peck Community College (FPCC) located in Poplar, MT on the Fort Peck Reservation, and Aaniiih Nakoda College (ANC) located in Harlem, MT on the Fort Belknap Reservation.

The DeMaND consortium was the only TAACCCT project comprised exclusively of Tribal colleges. The consortium worked to pool expertise and resources towards meeting critical needs in Indian Country while addressing the challenges of chronic high unemployment and trade impacted workers. The DeMaND Project allowed each of the colleges to build capacity that would not have been otherwise possible. The total budget for this project was $18,947,635. Strategies utilized by the project were based on research and best-practices for career and technical education and were implemented in a culturally responsive manner. Community partners who had a vested interest in the colleges and in the students served helped to guide the project. The TAACCCT grant facilitated significant changes in the consortium colleges that will have long lasting effects. The lessons learned through the TAACCCT project can help to inform future workforce development and education efforts at these and other Tribal Colleges in the nation. This report attempts to capture not only project progress and lessons learned, but to also describe the transformations that have occurred at each institution in the project. The report weaves in information that is aligned with the guiding principles for scaling transformative change, described by the Transformative Change Initiative (TCI) provided by the Office of Community College Research and Leadership. TCI defines transformative change as “Raising the individual, organizational, and system performance of community colleges to unprecedented levels without sacrificing their historical commitment to access and equity.”

Theoretical Foundation of the Project

The project was guided by an evidence-based design that incorporated promising strategies for promoting learning and opportunities toward improved employment outcomes. The strategies utilized in this project were supported by research to produce positive outcomes for adult learners. These strategies included developing and enhancing training programs that meet workforce needs in the region, accelerating learning through blocked scheduling, implementing pre-professional seminar, and

---

1 http://occrl.illinois.edu/projects/tci/
utilizing technology in instruction. Each of the colleges implemented the strategies to varying degrees based on local needs. The project was designed to help the colleges build capacity in terms of equipment, space, relationships, and processes to better and more effectively support workforce development and training. Shorter term impacts included helping students complete training programs and earn industry-recognized credentials so that they could obtain gainful employment. Medium term outcomes included expanding partnerships, increasing retention and completion rates, and preparing students so they are more likely to retain employment. Long term impacts are anticipated to include higher rates of labor force participation for community members and integration of policies and processes designed to support ongoing workforce development at the consortium colleges. The period of performance was from October 1, 2011 through September 30, 2015.

TCC DeMaND Workforce Project Evaluation Approach

The project evaluation employed mixed methods undergirded by a constructivist paradigm in an explanatory case study approach to evaluation. The evaluation included multiple levels of data from multiple sources and multiple stakeholders. Information was derived from direct observations, regular interactions with project personnel, student and faculty surveys, student data records, interviews with senior personnel and executing leadership, and community and stakeholder focus groups. The evaluation took into account each consortium member’s contribution to the project. It was a participative approach in which consortium members also had a stake. Quantitative and qualitative data were triangulated to lend credibility to the findings of the evaluation. The evaluation encompassed project outcomes as well as aspects of the project that were important to the colleges that they could use to inform project decisions for sustainability and scalability. The overall goal of the evaluation was to determine how the TAACCCT funds were used to improve college programs and processes, help the colleges better meet the needs of low-skilled and other workers, improve retention, achievement, and completion or reduce time to completion, and explore aspects of the project and the institutions that contributed to transformative change within those institutions.

A logic model was developed and used as a basis for building and maintaining a common understanding of the project. As a living visual representation of the program’s intended inputs, activities, and outcomes, it was useful in identifying relationships between project activities and intended outcomes in context. Although the logic model was developed later in the project, it helped guide conversations regarding project progress among site coordinators and other stakeholders. Using the logic model as a basis, project personnel were able to focus more clearly on their output targets and anticipated outcomes. They were also able to more clearly understand how the evaluation activities related to the overall project. Credible evidence was collected regarding the planned activities, the projected outputs and the intended outcomes as a means to monitor progress. The overall project evaluation was designed to measure how well the project met its performance objectives over the life of the grant and to better understand presumed causal links between program implementation and program effects. The logic model is provided in the following page.

The project engaged the services of Dr. Leah Woodke of Woodke360 Consulting as an external evaluator. Dr. Woodke was with the project since its beginning. In line with a participative approach, the plan for project evaluation was developed with input from the Project Director, Project Site Coordinators, and college leaders and was updated as subsequent rounds of TAACCCT grants were awarded in order to be more consistent with developing DOLETA requirements for evaluation. Data collectors at each institution, employed by the project, were responsible for data collection at each college and served as a primary point of contact for the project evaluator. The data collectors, guided by the project evaluator, helped to ensure that data was collected consistently across the colleges. This was important as each college uses separate student data systems and processes. In addition, the data collectors assisted with survey distribution and collection when appropriate. The data collectors submitted participant data to the project evaluator at the end of each quarter.

The project evaluator worked closely with the Project Director and the Site Coordinators at each college. The project evaluator traveled to each college at least twice per year to visit the sites and directly observe project progress. She spoke with participants, instructors, student services personnel, and other people involved in the project. The information was shared with the project director and used to develop the quarterly and annual reports. More importantly, however, the information was used for program management and decision-making. Data was used by project managers to determine continual progress toward stated goals and to inform project decisions and direction.

This final report is the synthesis of the data collected from direct observations, regular interactions with project personnel, student surveys, student data records, interviews with senior personnel, and focus groups over the life of the project. It provides background information, a synopsis of project activities, challenges, strengths, and lessons learned.

**Evaluation Questions**

The questions central to the external evaluation were:

1. How were the programs and certification trainings selected, used, or created?
2. How was the grant used to improve the education and training programs at the colleges?
3. What contributions did each of the partners make in terms of: 1) program design, 2) curriculum development, 3) recruitment, 4) training, 5) placement, 6) program management, 7) leveraging of resources, and 8) commitment to program sustainability?
4. How effective was the instruction in the DeMaND programs toward training low-skilled and other workers?
5. How effective were the DeMaND strategies for improving retention and achievement rates and/or reducing time to completion?
6. How well did DeMaND programs prepare students for the workforce?
7. What was the impact of the TCC DeMaND Workforce project on each consortium college?
ABOUT THE DEMAND CONSORTIUM COLLEGES

In order to explain the impact of the project, it is important to describe the context of the colleges in the project. Chronically underfunded, Tribal Colleges serve some of the poorest populations in the country. American Indians are underrepresented in many facets of the workforce. Tribal Colleges were formed in the late 1960s and 1970s to meet the educational needs of American Indian people in a culturally relevant manner. As such, Tribal Colleges are uniquely different from most mainstream institutions of higher education. The colleges’ cultural identities are “reflected in virtually every aspect of college life” (AIHEC, 1999, p. 10). Their missions universally include goals around culture and language preservation and revitalization as well as tribal sovereignty, self-determination, and individual self-sufficiency. Today Tribal Colleges serve a critical role in economic development for tribes through education. Economic development on reservation land is complicated by issues related to federal oversight, trust status and fractionalization of the land, and multiple levels of regulations. Tribal Colleges are the best and most effective avenue for many tribal members who would not otherwise have access to higher education to gain skills and knowledge necessary for employment.

The Tribal Colleges in this project are small. 1800 participants was an aggressive goal for this consortium of four small Tribal Colleges. FPCC and ANC are located along what is referred to as the highline of Montana. This area is so remote that it is considered frontier land. Fort Peck Community College, located in Poplar and Wolf Point on the Fort Peck Reservation, serves approximately 430 students annually. Aaniiih Nakoda College, in Harlem on the Fort Belknap Reservation, typically serves about 200 students annually. Located on the Spirit Lake Nation, Cankdeska Cikana Community College usually serves about 230 students annually. United Tribes Technical College is located off-reservation in Bismarck, North Dakota, and serves approximately 1200 students annually. UTTC has ample on-campus student housing, which helps to draw students from around the country while the other colleges in the consortium draw primarily from their own reservations.
OVERVIEW OF CONSORTIUM COLLEGE PROJECT ACTIVITIES

Project Priorities
The TCC DeMaND Workforce project (DeMaND) addressed four priorities as outlined by the Department of Labor. The first priority was to accelerate progress for low-skilled and other workers. Toward this end, the project developed several programs of study in block-scheduled and accelerated formats. The project also implemented a Pre-Professional Seminar and the ACT WorkKeys. The Pre-Professional Seminar was to be taken by each project participant prior to beginning a training or degree program. ACT WorkKeys is a nationally recognized, research based assessment system that measures student skills required for most occupations: 1) reading for information, 2) locating information, and 3) applied mathematics. In addition, participants could earn a National Career Readiness Certificate (NCRC) based on their WorkKeys assessment scores.

The second priority was to improve retention and achievement rates and/or reduce time to completion. Activities that addressed this priority include blocked scheduling and flexible career pathways that include stackable courses. Some of the certificate programs were blocked scheduled so that a one-year certificate can be completed in just 16 weeks. Other short term certificate programs that were blocked included nursing assistant, phlebotomy, truck driving, weatherization, and safety courses designed to qualify workers in oil production and support occupations. Some of the programs were able to be stacked so students could earn a certificate and, if they desired, go on to earn an AAS degree, an apprenticeship or other education and training.

The third priority was to build programs that meet industry needs, including developing career pathways. The strategies to meet this priority were at the core of the project and served to significantly increase the capacity of each institution to offer workforce development programs. Each member college developed or enhanced programs to meet workforce needs. Grant funds helped to refurbish educational space, hire instructional expertise, purchase equipment and supplies necessary to efficiently and effectively train students according to industry needs, and test educational strategies designed to improve student outcomes. The industry-recognized training and education programs included certificates of completion, one-year certificate degrees, and AAS degrees. Table 1 outlines the programs of study that were approved at each college:

| Table 1: DeMaND Training and Education Programs at Each Consortium College |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| ANC                     | CCCC                        | FPCC                        | UTTC                        |
| Carpentry                | HVAC/R                      | Building Trades             | C.D.L./Heavy Equip Operator |
| C.D.L.                   | Plumbing                    | C.D.L. Truck Driving        | Construction Technology     |
| C.N.A.                   |                             | C.N.A.                      | Electrical Technology       |
| EMT-B                    |                             | Electrical Lineman          | GIS                         |
| Phlebotomy               |                             | Heavy Equipment             | Welding                     |
| HAZWOPER/HAZMAT          |                             | Welding                     |                             |
| Welding                  |                             | Home Health Aide            |                             |
| Fire Fighting            |                             |                             |                             |
The fourth priority for this project was to strengthen online and technology-enabled learning. This was addressed by integrating the use of simulators and simulation software into the classrooms. The use of simulators provided an opportunity for participants who were new to the skills to practice in a safe and controlled environment. Simulators also saved the colleges materials costs. Technology was used to help students transition from training to the workforce, one of the challenges encountered by the project. As a means for addressing that challenge, the project developed a mobile application designed to support students in transition from training to the workforce. It includes a resume builder, information regarding employment in the region, and a collaborative space in which they can network with other students and maintain a connection to their instructors.

Project Activities Timeline Overview

The first year of the project presented many challenges that were not anticipated and caused delays to implementation. These challenges included: a) relationship definition among the consortium members; b) administrative costs calculations; c) new accreditation rules; and d) delays for approval of refurbishments and equipment purchases. However, once these challenges were addressed, the project moved forward and after a year, was well into the process of training a qualified workforce to meet local workforce demands.

In the second year of the project, a change to the Scope of Work was requested to remove one program of study and add three others. The Energy Auditor training program at UTTC was removed because it required too much outside support causing the accrediting agency to deny it as an educational program at the college, which made the program ineligible for Title IV funding support for students. UTTC added CDL/Heavy Equipment Operator to its DeMaND training programs and enhanced the Construction Technology program to be more in line with the workforce needs of the construction related industries in the region. In addition, CCCC was approved to add a plumbing training program. Each of the colleges experienced unexpected challenges due to the oil activity in the region. Low unemployment rates combined with a high demand for qualified workers limited the pool of instructional personnel available to the colleges. Programs with unfilled instructional positions could not be offered until those instructors were hired. Despite the challenges, though, each of the colleges experienced significant successes.

In the third year of the project, approval for a one year period of performance extension was granted. Targets were adjusted to represent what the colleges believed they could meet. Programs continued to be offered and the project continued to build employer relationships.

In the last year of the project, the colleges continued to work with a greater number of non-tribal employer partners and began to plan how they would sustain programs where possible and appropriate. Following is a cumulative report of the project’s progress over the life of the project, from October 1, 2011 until September 30, 2015.
BUILDING CAPACITY TO MEET INDUSTRY NEEDS

Selection of Programs

At the time of project conception in spring 2011, the Bakken oil play was beginning to cause serious workforce shortages in the region. Small towns were being inundated with people coming from all corners of the country to work in the oil fields. The small city of Williston, for example, grew from a population of the 14,716 in 2010 to 20,850 in 2013; that is a growth of over 40% in just three years.\(^3\) Similar trends were occurring in other small towns in the region. The population growth spurred the need for skilled workers to not only work directly in the oil fields, but also to build up the infrastructure necessary to support the growing number of people and families moving to the region. The Bakken related activity provided an unprecedented opportunity for employment in the region. Tribal labor force also needed to be built up in some key areas. Tribal Colleges serve students from areas that suffer from persistent low employment and generational poverty. The colleges in the consortium recognized the opportunity that the TAACCCT funding afforded toward building their capacity to make a difference in the lives of their constituents. **Training programs were selected based on the convergence of several factors: a) regional labor market needs; b) tribal labor market needs; c) tribal employer input; and d) existing capacity at each consortium member institution.**

The programs enhanced or developed in the DeMaND project were chosen based on current and real-time LMI data that was supported by employer feedback information. It was important that graduates had ample employment opportunities upon completion of the training and education programs. Each of the colleges leveraged training and education programs that already existed. In some cases, the colleges used the TAACCT funding to bolster or enhance existing programs and in other cases, new programs were developed that complemented existing programs at the colleges. Leveraging the colleges’ strengths was hoped to help with sustainability past the end of the grant period for programs that proved to be efficacious. In addition, the **choices for program adoption and adaptation, including the strategies tested in those programs, honored and influenced the cultures of the institutions involved,** which is in line with the guiding principles for scaling transformative change.

Building Programs

One of the project priorities was to **build programs that meet industry needs, including developing career pathways.** Each of the colleges in the consortium increased its capacity to educate and train students in high demand and high wage fields. The executive leaders at each of the colleges in the consortium fully supported the programs offered through the project. Tribal Colleges rely on federal funding sources for the bulk of their operating funds, so space and other resources are very limited. The presidents at each institution ensured that instructional space was designated for the new programs of study. In some cases, this required significant remodeling. The project provided some of the funding for refurbishment but other funding sources were use as well. These other funding sources included Department of Education Title III and Economic Development Administration funds. In some cases,

---

\(^3\) Quickfacts.census.gov
construction and refurbishment were completed, in part, as student projects in authentic learning experiences.

Aaniiih Nakoda College was able to start new programs in Certified Nursing Assistant (C.N.A.), Phlebotomy, EMT, Truck Driving, Welding, Weatherization, and Hazardous materials and to enhance their Carpentry program and better target their Firefighting offerings to meet local needs. Carpentry and Firefighting were enhanced through the DeMaND project at ANC. Cankdeska Cikana Community College started new programs in Heating, Ventilation and Air Conditioning with Refrigeration (HVAC/R) and Plumbing. Fort Peck Community College started new programs in Welding and C.N.A. and enhanced several of their existing certificate programs, including Building Trades, Electrical Lineman, Truck Driving (CDL), and Heavy Equipment Operator (HEO). United Tribes Technical College started new programs in Welding, Heavy Equipment Operator/Commercial Driving (HEO/CDL), Electrical Technology, and Geographic Information Systems (GIS) and to enhance its existing Construction Technology program. A description of how each of the colleges developed or enhanced their programs is provided below.

**Aaniiih Nakoda College**

At the time of this grant award in 2011, **ANC** was in the process of building a new workforce training center building through a Department of Education construction grant under Title III. The workforce training center was christened the Returning Buffalo. The building provided lab and instructional spaces for workforce development programs. Classroom and laboratory space were allocated for Construction, Weatherization, and Welding programs in the Returning Buffalo building. Additional space was allocated for a health classroom and lab in another building on the campus. The Round 1 TAACCCT funding helped ANC purchase the instructional supplies and equipment it needed to fill the space and offer the programs. The grant helped ANC purchase welding equipment, a ventilation system for the welding space, carpentry supplies, SIMS equipment and supplies for the medical training lab, and a diesel truck and trailer for the CDL program.

As the college began to plan the enhancement of its Firefighting program, it further analyzed the firefighting training needs in the region. It became evident that a full firefighting certificate or degree would not lead to full time employment in that field. The communities in the area served by ANC are very rural and have a need for firefighters who could serve part time on a volunteer firefighting crew or to serve seasonally as a wildland firefighter. As a result, the college worked with the Bureau of Indian Affairs to better target the firefighting options. There were two courses offered that met the firefighting training needed. One was a forestry training course, which is a mandatory rookie training for wildland firefighting. The other was an advanced firefighting course appropriate for wildland firefighters or community volunteer firefighters.
The Carpentry program at ANC was expanded from a certificate program to an AAS program. It was redesigned in a blocked format and included broader concepts of building trades with a great deal of authentic hands-on experiences. The carpentry students were very involved in construction projects on the campus. They built a house that was sold as a single family residence. The carpentry students participated in building an addition to one of the buildings on campus. They also helped with the construction of a completely new building that will house the Carpentry program once completed.

ANC developed a new certificate program in Welding. The college had difficulty in acquiring a qualified welding instructor who was willing to relocate to the rural Montana highline in the beginning of the project. The college attempted to contract with an instructor from another area school without success. A qualified instructor was finally brought on staff in the third year of the project. He refined the welding certificate program of study and worked to format it for blocked scheduling. The college experienced complications in gaining approval to offer financial aid for the blocked scheduled welding certificate program. In order to provide financial aid opportunities for students, the college did not offer the welding certificate in a blocked format.

Like the Welding program, the college had difficulty finding a qualified instructor for the Commercial Driving (CDL) program. In order to address this, the college partnered with Sage Truck Driving School from Billings, Montana. Sage assisted with teaching the courses and supervising the over-the-road practice. Montana examiners came to the ANC campus to test CDL students for their state commercial driver’s license. This was a very popular program which drew primarily men (89%) who ranged in age from 19 to 69. Courses in HAZMAT/HAZWOPER were also offered to complement the CDL, which were attended by a variety of incumbent workers and short term certificate seekers.

The medical programs offered through the project at ANC met a particularly critical workforce need in the area. The C.N.A. program was a catapult for several students into additional medical field training. Many of the students who took the C.N.A. program also enrolled in Phlebotomy. These short term courses that could be completed in six weeks or less were observed to promote student confidence. There were some challenges that had to be addressed with regard to the medical training courses, however. The Phlebotomy course requires a clinical component and the EMT-B course of study require a ride-a-long component. The college attempted to work with the local Indian Health Service to provide these experiences for students. The paperwork and approval processes proved to be a roadblock for most, causing completion times, particularly for the EMT-B program to be longer than anticipated. Some of the students simply didn’t complete the ride-a-long.

Despite these difficulties, the college enrolled 120 student seats combined into the three medical-related training programs with a 74% combined completion rate. This has significantly expanded the enrollment in the college’s Allied Health program. The C.N.A. program worked with regional medical facilities so that students received experience onsite at the facilities when possible. Several students
who experienced success in the C.N.A. course enrolled in the Phlebotomy course. Some went on from there to enroll in the Allied Health Associate of Science degree program. This progression has helped the college toward developing an Associate of Science degree program in Nursing. In April of 2015, the college received official notification from the Montana State Board of Nursing that they were approved for the first phase toward offering a new Registered Nursing program. They are now working on Phase II of the program. This would not have been possible without the support of the TAACCCT funding.

**Cankdeska Cikana Community College**

At **CCCC**, TAACCCT grant funds were used to refurbish a space to accommodate the HVAC/R training program. The space designated for the HVAC/R program was an old elementary school gymnasium. The gymnasium was no longer useable as such and was not suitable for instructional use in its current state. The space was renovated and now houses the HVAC/R classroom, an office for the instructors, and a two-story lab space. The lab space houses various HVAC/R simulators on the first floor and provides a work shop space on the second floor where students can work on repairing air conditioners and practice installing duct work. **CCCC** offered its first HVAC/R courses in fall 2012 after the renovation was completed. To begin, **CCCC** offered only an AAS degree program in HVAC/R. In the third year of the project, the college added the HVAC/R Certificate option for students. The program utilizes a lot of hands-on practice on the simulators and on actual projects when possible. HVAC/R students were engaged in renovation of another space in the college that now houses other workforce training programs. They helped to install the ventilation duct work and heating/air systems in the new space.

**Fort Peck Community College**

At **FPCC**, is a central campus in Poplar, Montana. There are additional instructional buildings located in both Poplar and Wolf Point. **FPCC** leveraged the project to improve the educational facilities used for workforce development. The Building Trades, Welding, Truck Driving and Heavy Equipment classes were held in a building that was once a car dealership and repair shop. At the beginning of the project, the space for the Welding program was an open shop space shared with the Building Trades program. The CDL program was housed in the upper level of that area. There was no enclosed classroom space for either Building Trades not Welding. The Heavy Equipment program was in a different part of the
building. The college needed to provide spaces better suited for classroom learning and protected shop areas appropriate for safe hands-on learning. The Building Trades students assisted the general contractor in refurbishing the space. They created enclosed lab spaces for students to do hands-on shop work. Areas were sectioned off from the shop spaces and used for classroom spaces. This helped to provide a controlled environment appropriate for the simulators.

Four of the DeMaND programs offered at FPCC were enhanced, including the HEO, CDL, Building Trades, and Electrical Lineman. The college was able to quickly redevelop these programs in a blocked scheduled and accelerated format. The new Welding certificate and C.N.A. programs were set up similarly. Therefore, FPCC began enrolling students into programs during the second quarter of the project. The blocked scheduling format posed a sharp learning curve for the college. It took some time to help some of the instructors become comfortable with the new scheduling format. The blocked schedule went through iterations as project personnel learned more about what would best accommodate student needs and instructional scheduling challenges, particularly for the general education courses. The blocked schedules offered sustained time for instructors to work with students on authentic projects. The blocks of time, which were three or more hours long, allowed students to engage in hands-on learning in the labs or at project locations.

FPCC is located approximately 75 miles from Williston, North Dakota, which is considered the hub of the oil boom. Because of the excess number of jobs available in the nearby oilfields, FPCC offered Oilfield Training in the first year of the project. Oilfield Training was a short term industry-recognized certificate that prepared participants to work safely in the oil fields in an entry-level position. The college partnered with another entity that was qualified to provide several of the certifications required by the oil production and services companies who were hiring. After assessing the sustainability of the partnership, the college determined that it was too costly to continue the partnership. In terms of the program, the college determined it would not likely be able to develop internally the expertise needed to continue the program without the partnership. FPCC decided it was best to concentrate its efforts on those programs of study that were more likely to be sustained after the grant ended.

The C.N.A. program at FPCC has grown to be an important part of the college’s community outreach efforts. In the process, FPCC has also become the premiere provider of 1st Aid/CPR in the region. FPCC worked with a regional medical system, the North East Montana Health Services (NEMHS). NEMHS has five locations in Poplar and Wolf Point, including clinics, hospitals and a senior citizens facility. Classes were held at the facilities so that students were able to get first-hand experience with employers and get to know the environment. The state of Montana does not require a high school diploma or equivalent as a condition to obtaining state C.N.A. licensure. This made the C.N.A. program an attractive option for adults who did not have a high school diploma or GED. The C.N.A. program was recognized by the state because of its high certification pass rate and high scores achieved by students.
Part of the success of the C.N.A. program has been attributed to the pre-assessment process established through the DeMaND project. Students were admitted into the program of study only if they achieved pre-determined scores on the WorkKeys assessment. NEMHS has requested that FPCC continue the partnership and continue to do the pre-assessments after the life of the project. The original proposal included offering home health care. The changes in healthcare management caused more people than expected to access care within facilities rather than in-home care. Therefore, the college focused its resources on the widely successful C.N.A. training.

**United Tribes Technical College**

Through the DeMaND project, UTTC enhanced its existing Construction Technology program and started new programs in Welding, CDL/Heavy Equipment Operator, Electrical Technology, and GIS. In the original project proposal, UTTC planned to offer a certificate program in Energy Auditor. The Energy Auditor program of study was to be taught in conjunction with AEE, an out-of-state organization. AEE would provide certified trainers to conduct the Energy Auditor training and the college would provide the other general courses required for the certificate. The grant was to cover the travel and per diem costs for the AEE instructors. UTTC was unable to gain accreditation approval to offer the certificate program in that manner. It was not feasible to offer the training without accreditation approval because students would not be able to access Title IV financial aid support and the college would be unable to sustain the program without grant funding. With the approved change in scope of work in the second year, the college dropped the Energy Auditor program and added Construction Technology and CDL/Heavy Equipment Operator. The Construction Technology program was in session at the time of approval. The grant funds provided updated hand and power tools for the program. The certificate program was rescheduled into a blocked format. The grant also supplied much needed instructional supplies for the labs and classroom spaces and helped to address some safety issues that existed. The instructor position for Construction Technology became vacant after the spring 2013 semester and was unfilled until early fall 2014.

At the time of the grant award, **UTTC** also received a grant from the Economic Development Administration (EDA) designated to refurbish a space into a suitable welding training space. The EDA grant helped the college gut a 4000 square foot space, put in 12 welding stations, install a commercial size Robovent ventilation system, and upgrade the electrical capacity in that area. The TAACCCT funding provided the welders, gantry, welding simulators, truck with a mobile welder and instructional supplies. These sources have helped the college build what Job Service of North Dakota has deemed as the best welding instruction site in the state. The Welding program began accepting students in fall of 2012 after the renovation of the welding space was completed. The welding program worked with unions and employer partners to place students into employment. These employers have agreed to consider any student that completes the Welding certificate program at UTTC for employment. The program has engaged in training contracts with the local Ironworker’s Union and other large regional...
employers to provide training to their existing employees. UTTC is the designated training site for their existing employees who want or need to improve their welding skills. UTTC has applied to become an American Welding Society (AWS) certified testing center. If approved, UTTC will be the first AWS certified testing center in North Dakota. The college is awaiting final notification that it has been approved. This designation opens up other opportunities for the college to provide targeted training as well as welding testing services.

The CDL/HEO certificate program began in fall semester 2013. The project helped the college purchase two semi-trucks with trailers, HEO and CDL simulators, and two pieces of heavy equipment machinery. In summer 2014, the college received state funding to add on to its collection of heavy equipment. The state funding of $532,000 augmented the program with a motor-grader, loader, bulldozer, excavator and skid-steer loader. UTTC designated ten acres for students to practice truck maneuvers and heavy equipment projects. Students receive over-the-road experience with the trucks and hands-on experience with heavy equipment. The program initially experienced difficulty in gaining approval from Department of Education to offer financial aid to students in this program. This was finally resolved in the third year of the project. The program became listed as a state-approved training center for truck driving and heavy equipment operations. It continues to work with local and regional employers to find on-the-job experience for students and to help with graduate placement. The college has decided to separate the CDL and Heavy Equipment Operator programs as independent certificate programs. They found that several students were more interested in one or the other rather than both as a combined program of study. Beginning the 2015 fall semester, the CDL and Heavy Equipment Operator programs are each offered as an independent certificate program. Students may elect to pursue both programs if they so choose.

The Electrical Technology program underwent some changes throughout the project. It was originally offered in conjunction with the International Brotherhood of Electrical Workers (IBEW). The first summer of the project, the IBEW taught the electrical courses and labs and the general education courses were taught by faculty at the college. After the first year, the partnership with the union was no longer viable. UTTC needed to offer the program more than once per year and offer a variety of employment placements while the union was only able to offer the training just once per year and preferred students be placed in union positions. The college hired an instructor for the Electrical Technology program in late summer 2013. The instructor worked to redevelop the certificate program of study and get it approved by the North Dakota Electrical Board for 300 toward the 8000 hours needed for a Journeyman license. The college began offering the revised certificate program in spring 2014.

The GIS program offered a short term certificate, a one-year certificate, and an associate’s degree. There have been very small enrollments in that program of study. A decision was made to offer GIS as a supplement to other degree programs to help graduates be more marketable given the proliferation of
need for GIS/GPS skills in the region. UTTC has determined that as of the end of the project period of performance, it will no longer offer GIS as a standalone program.

**USING SOCIAL MEDIA**

**Telling the DeMaND Story**

*Storytelling as a means to facilitating learning about innovation and transformative change is one of the guiding principles for scaling transformative change.* It is also a traditional method of teaching in Native American cultures. Oral tradition goes deep into tribal histories and remains an important part of Native American cultures. The DeMaND project used a variety of media as a means for promoting the project, for recruiting participants into the project, and for telling the story of how the project has impacted the colleges, the communities, and students. Social media has played a big part of telling the story as it has evolved. “Indian humor” is a well-known concept in Indian Country and it is considered to be an effective means for getting a message across. In the first year of the project, the project leadership wanted to take head-on a difficult topic. It was important to recruit more men to college for training.

American Indians are often the *invisible population* when it comes to national labor information because the populations are small. “Malia Villegas, director of the policy research center at the National Congress of American Indians, describes American Indian and Alaska native populations as ‘asterisk nations’ that in national studies are too small to be included when race and ethnicities are broken down.” However, we do know that the employment rates for Native Americans as compared to non-Native Americans in North Dakota and Montana are among some of the worst in the nation. In North Dakota, which ranked second poorest, Native Americans are 24.4% less likely than Caucasians to be employed and in Montana (ranked 17th poorest) they are 14.2% less likely to be employed than Caucasians. The labor participation rate for young American Indian men was believed by project stakeholders to be much lower than that of young American Indian women in the communities served by the project. In addition, enrollment of men was much lower than for women at the colleges in the project. Typically, the gender makeup at the colleges is about 60% or more women compared to 40% or less men. The DeMaND project offered new opportunities that were hoped to attract more men. The project needed to get the word out about those programs in a way that drew the attention of that target audience. Toward that end, the DeMaND project contracted with Makoche Studios to help develop high quality videos that could be distributed in a variety of ways.

**Recruiting Participants - *Your People are Waiting for You***

In the first two years, the project engaged the services of the 1491s, a Native American comic group known for its use of political and cultural satire to address difficult topics in their communities. The 1491s were gaining notoriety and attention, particularly among Native Americans, on YouTube. In the

---

first year, the 1491s developed a set of videos designed to tease and poke fun at what they termed as mama’s boys. The videos portrayed an exaggerated example of mama’s boys and challenged them to be modern day warriors so they could better support their families. One way they could become true modern day warriors was by getting training through DeMaND and getting a job. Although the term mama’s boys rarely appears in publications, it seemed to be well-understood by the audience. It refers to men who rely on their mother, auntie, girlfriend, wife, or other women to support them, often with their own income. One of the videos produced by the project, entitled “DeMaND Modern Day Warriors – Episode 4 – Mama Warrior” illustrates through satirical skits on video a day in the life of a mama’s boy. The videos end on a more serious note with a call to action to be a real modern day warrior.\(^6\) The project also produced shorter videos with the 1491s that could be used as public service announcements. The videos were distributed through the project’s YouTube channel and Facebook page. The audio from the shorter videos were played on tribal and mainstream radio to help promote the project.

In the second year, the DeMaND project worked with the 1491s to develop another set of short videos designed to highlight the individual programs in the project. Makoche Studios and the 1491s traveled to each of the consortium college sites. They worked with project personnel, instructors, students, and college administrators to develop videos that highlighted the programs offered through the project. Again, an element of humor was often included in the videos. Some of the videos highlighted students who talked about why they entered a DeMaND program. One of the videos, entitled “DeMaND Student Brandon Long Fox” featured Brandon talking about why he was enrolled and encouraged others to “get after it” and do something to better your life.\(^7\)

In the third year, videos highlighted each of the colleges overall to help potential students envision themselves in training there. Stories were told about the DeMaND programs and the colleges that offer the programs in the words of students, instructors and administrators. Sometimes the videos included potential employers, as in the video describing the Electrical Technology program at UTTC. Programs and instructors were highlighted using videos on YouTube and Facebook. In this way, anybody could see what life is like for a student and get a feel for who the instructors are. They could see what the training environment is like without coming on campus. They could see and hear their fellow community members in the videos talk about their experiences. That can be important to someone who may feel intimidated about coming to college.

Participants were asked at enrollment how they found out about the DeMaND programs. There were 902 participants who responded. The responses were coded according to type. While most of the participants indicated “Other” as a response, the second most prevalent means reported was through personal referrals. Personal referrals included those by family members or relatives, friends, or students

\(^6\) https://www.youtube.com/watch?v=IBfwkeuECY8
\(^7\) https://www.youtube.com/watch?v=8pwxmkEmDCI&index=5&list=PLnMljpSHUpkrM6jGuauUy7kZJYMoNctVPB
who had experience with one or more of the programs. It is unclear how some of the family and friends who referred the participants learned of the programs.

According to the intake surveys, only about 4% of respondents reported finding out about the programs directly from social media, radio, or television. While this may seem to be a small percentage, project personnel believe that the social media had a significant impact on their recruitment efforts. There were several posts on social media regarding training opportunities as they were offered through Facebook and Twitter. The DeMaND Facebook page has well over 1000 “likes” and is linked to each of the college’s Facebook pages. The YouTube channel is https://www.youtube.com/user/DeMaNDTraining.

The DeMaND YouTube channel had over 20,000 views and 60 subscribers. Analytics from the YouTube site indicated that a small majority of fans (about 54%) were females between the ages of 25 and 44 years old. The DeMaND Workforce YouTube channel has been an important tool in disseminating information. Since its launch in November 2012, the DeMaND YouTube channel has been viewed by people not only across the United States, but in 91 other countries worldwide. Over 30 views each have come from Spain, Russia, Australia, India, France, Philippines, United Kingdom, Germany, and Canada. Most of the viewers were male (55%) from the US between the ages of 24 and 35. This is the demographic that the social media efforts targeted. This is the first time that these colleges have utilized social media in this way. The experience has influenced how they now continue to approach recruitment and information dissemination.

The most watched video was “We Used to Run: The New Warriors” with over 14,700 views. This video was one of the first produced and distributed by the project with the 1491s to introduce what it means to be a Modern Day Warrior and challenge young men to go to school and learn a trade so they can better support their families. The story of Michelle Lonebear, a student from ANC who worked her way from earning a GED to nursing student, was among the top five watched with over 1000 views. Most of the views were accessed from computers (49%) and mobile phones (32%) with just over 9% using a tablet to access the videos. Demographics analytics are provided below for the lifetime of the channel:
Other more traditional media was used for recruitment, as well. The colleges participated in career fairs and visited area high schools. Each college developed a billboard near its location that helped advertise the project, the colleges, and the programs offered. These billboards were viewed by not only tribal and community members but by those from surrounding communities, as well. Reservation radio is a popular means of information dissemination. ANC and FPCC both regularly contributed to their respective community radio programming. The video narratives were used as the basis for radio PSAs, recruitment runs, and live radio shows. The movie theater at Fort Belknap is a well-attended venue in the community. ANC ran some of the videos produced through the project at the community movie theater as a preview show.

Using Social Media to Share Information

Most students and prospective students have smartphones and/or are connected to Facebook. Facebook is used to provide ongoing information and share stories of success and innovation. Program updates, messages of support, and inspirational graphics were distributed using social media. Registration dates and reminders were shared with students and potential participants using social media. These messages also included information about the project’s impact.
Forging New Partnerships

Tribal Colleges have historically worked closely with the tribal communities they serve. They are naturally aligned with tribal programs and businesses that exist in these communities. The DeMaND project has moved the colleges toward developing partnerships and working relationships with non-tribal businesses and organizations. Connecting with non-tribal businesses was new for the colleges in the project. Many of the regional businesses and industries were unfamiliar with the colleges. The DeMaND project was very instrumental in helping to build the colleges’ reputations among these regional employers as credible and valuable training and education facilities. They began by getting out and meeting the employers and educating them about what they had to offer. Instructors and key project personnel at times utilized their own professional connections. Some of the partnerships with key industries that were developed included those with BNSF Railroad, Knife River Corporation, Bobcat, and North Dakota Department of Transportation. Formal and active relationships have been formed with labor unions, including the Pipefitters, Operating Engineers, Boilermakers, and Ironworkers unions. Relationship-building requires consistent and intentional contact with key people in those organizations.

The DeMaND project helped the colleges strengthen their relationships with the public and tribal workforce systems in their respective states. The Tribal Employment Rights Offices (TERO) on the reservations referred students to the programs. Job Service of North Dakota coordinated the SkillBuild North Dakota project. Skillbuild was a demonstration grant project through the DOL designed to provide student support to individuals training for jobs related to the Bakken oil activity. The project targeted veterans and Native Americans, which directly helped students in the DeMaND project. SkillBuild North Dakota provided a total of $439,186 to assist with educational costs for 57 students in the project. ANC and FPCC have strengthened their relationships with the Montana Job Service providers located near them. Montana Job Service now includes FPCC and ANC in their planning and conversations and refers people to them for training and education. This was not the case prior to the DeMaND project.

Tribal Colleges have been in existence only since the late 1960s, so they are very young. They are typically located in very rural communities where not a lot of mainstream industry exists. A perception exists that Tribal Colleges are only for Native Americans. While it is true that the Tribal Colleges must maintain a certain percentage of students who are registered tribal members in order to preserve their Tribal College status, each of the colleges has an open enrollment policy. In the process of reaching out to the public workforce system, labor organizations, employers, and industry, the DeMaND project leadership and college executives have spoken explicitly about the colleges and their capacity to train. Some of these messages were included in the videos that were shared through social media. This has changed the regional perception of the colleges. Increasingly, students from non-tribal communities in the region are now choosing to attend the tribal colleges. Tribal Colleges are building reputations as high quality educational choices for anyone. And, they continue to build greater credibility with local employers and regional industries.
STRENGTHEN ONLINE AND TECHNOLOGY-ENABLED LEARNING

Another priority for this project was to *strengthen online and technology-enabled learning*. This was to be addressed by developing general education coursework to be portable across delivery systems and by integrating student supports using mobile technology. The DeMaND project moved the colleges in a bit of a different direction, however. As the colleges developed the certificate programs into blocked schedules, the general education requirements were reduced so that students could complete the programs more quickly by focusing on the skills needed for entry level positions. In addition, not all of the colleges utilize the same platform for online learning and each was at a different stage of development with online learning. There were, however, two courses that were developed for online delivery. The Pre-Professional Seminar and Soft Skills for Workforce Success were developed as open courses. No students enrolled in either of these two courses online.

The DeMaND project brought technology to the colleges that would not have otherwise been possible. Simulators were purchased for many of the programs offered. The simulators were attractive to the colleges because of the cost saving benefits but they are also attractive to current and potential students. Simulators provide a safe, fun, and interactive way for students to practice the skills and apply new knowledge while receiving targeted feedback and allowing instructors to monitor their performance and provide individualized and specific guidance. The technology enhanced instructors’ ability to provide high touch instruction and help students learn preliminary skills safely and efficiently.

The business community promotes the use of mobile devices to provide “just in time” learning supports and information such as reference materials or company policy updates. Mobile supports are also used to build communities of learners and communities of practice. The DeMaND project followed that concept to create a mobile app for students and instructors to use. The mobile app includes a collaborative space where students can talk about careers and challenges, stay connected with their instructors and others at the college, and talk with students at other colleges in similar programs. It features a section that lists regional job postings and includes a resume writing tool for students. The colleges in the project have been challenged with following up with students once they leave the college. The assumption is that most students go into the workforce but anecdotal evidence suggests that a number of participants had difficulty transitioning from training to employment. There were reports of students who did not show up for interviews or who got hired and then did not show up for work or quit after a short amount of time. The app was hoped to help the colleges stay in touch with participants to not only help students enter the workforce, but to better track them until a viable process for accessing administrative wage and employment data with the states can be forged. The late deployment of the app in July 2015, however, has left no time to test its effectiveness.
**DEMAND PROJECT PARTICIPANTS**

**Participant Enrollment**

The DeMaND Project’s total enrollment goal was 1800 students by the end of September 2015. The project enrolled 1050 qualified participants as of the end of the project, meeting 58% of its overall original enrollment goal. The project projected to meet 94% of the original goal, or 1690 students, according to its period of performance extension request. CCCC’s target enrollment was 134 participants. By the end of the project, CCCC enrolled 9% (91) of the project’s unique participants, meeting 68% of its enrollment target. FPCC’s target was to enroll 546 participants. FPCC enrolled 36% (380) of the project’s unique participants, meeting 70% of its enrollment target. It is important to note that there were 398 enrollments when considering duplicated enrollments; 12 students enrolled in two programs and 3 enrolled in three programs at FPCC. ANC’s target was to enroll 566 participants. ANC enrolled 29% (305) of the project’s unique participants, meeting 55% of its enrollment target. Like FPCC, several participants enrollment in more than one program. There were 404 enrollments when including the 54 participants who enrolled in two DeMaND programs, 19 who enrolled in three DeMaND programs, 6 who enrolled in four programs and 1 who enrolled in five DeMaND programs at ANC. UTTC’s target was to enroll 454 participants. UTTC enrolled 26% (274) of the project’s unique participants, meeting 60% of its enrollment target. Just one participant is pursuing a second DeMaND program at UTTC constituting 275 total enrollments.

By the end of the project, 597 participants entered 654 short term certificate programs, 383 participants entered 394 certificate programs, and 48 had entered AAS degree programs in the project. Of these enrollments, 91 participants enrolled in more than one program. Some participants changed programs after unsuccessful attempts and some enrolled in more than one training program to stack or lattice their skills and knowledge to make them more employable and versatile in their fields. Examples included participants taking Certified Nurse Assistance training and Phlebotomy, HAZMAT training and Truck Driving, or Welding and Carpentry.

**Participant Demographics**

Project participant demographics were collected. Some of the demographics that were collected in the project were self-reported and are not collected by the colleges as a regular practice. For example, not all of the colleges regularly collect employment status, wage data, marital status, or dependents. Race was self-reported. The majority of participants (85%) reported being Native American, which is typical of these tribal colleges. Project participants represented 52 different tribal nations and 13 different states. Some of the shorter term training programs have attracted increasing numbers of non-tribal participants through employer training contracts. Of the remainder of the participants who reported race, 9% reported being White, 1% reported being Hispanic, 4% reported being more than one race, and the remaining 1.3% represented other racial groups including African American, Native Hawaiian, and Asian.
“People who had never thought about going to school before came through our doors. We have had some of these students come in, and the next thing you know, their dads there, their uncles is there taking classes.”

The average age of project participants was 29.8 years, with ages ranging from ages 16 to 79. Most of the participants were over the age of 25, typically considered non-traditional college age. In fact, 17 participants were elders, or older than 60 years of age. The DeMaND project served 59 veterans and 17 individuals who reported having a disability. There were no TAA eligible participants who applied for or entered any of the DeMaND programs. This is not surprising as there are so few workers who lost their jobs due to overseas trade in the region served. The true challenge for this region is how to engage a chronically unemployed and underemployed potential labor force in employment opportunities that exist in the region. There were 976 participants who reported employment status at enrollment, of which 75% reported being unemployed. A primary target for the project, unemployed Native American men represented 43% (415) of the participants. Just 25% of Native American men who reported employment statuses were incumbent workers, and about 25% of those were participants in short term training programs sponsored by their employers.

### Table 2: Participant Demographics by College

<table>
<thead>
<tr>
<th></th>
<th>ANC</th>
<th>CCCC</th>
<th>FPCC</th>
<th>UTTC</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Male</td>
<td>185</td>
<td>61%</td>
<td>84</td>
<td>92%</td>
<td>173</td>
</tr>
<tr>
<td>Female</td>
<td>120</td>
<td>39%</td>
<td>7</td>
<td>8%</td>
<td>207</td>
</tr>
<tr>
<td>Native American</td>
<td>290</td>
<td>95%</td>
<td>63</td>
<td>69%</td>
<td>321</td>
</tr>
<tr>
<td>Full Time Student</td>
<td>210</td>
<td>69%</td>
<td>50</td>
<td>55%</td>
<td>185</td>
</tr>
<tr>
<td>Incumbent Worker</td>
<td>76</td>
<td>25%</td>
<td>12</td>
<td>19%</td>
<td>45</td>
</tr>
<tr>
<td>Unemployed</td>
<td>229</td>
<td>75%</td>
<td>50</td>
<td>81%</td>
<td>335</td>
</tr>
<tr>
<td>Single with Dependents</td>
<td>134</td>
<td>44%</td>
<td>23</td>
<td>43%</td>
<td>93</td>
</tr>
<tr>
<td>Married with Dependents</td>
<td>55</td>
<td>18%</td>
<td>1</td>
<td>2%</td>
<td>26</td>
</tr>
<tr>
<td>No Dependents</td>
<td>115</td>
<td>38%</td>
<td>30</td>
<td>56%</td>
<td>260</td>
</tr>
<tr>
<td>No High School Diploma/GED</td>
<td>9</td>
<td>3%</td>
<td>2</td>
<td>4%</td>
<td>44</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>156</td>
<td>51%</td>
<td>37</td>
<td>67%</td>
<td>131</td>
</tr>
<tr>
<td>GED</td>
<td>45</td>
<td>15%</td>
<td>14</td>
<td>25%</td>
<td>57</td>
</tr>
<tr>
<td>Age &lt;18</td>
<td>4</td>
<td>2%</td>
<td>0</td>
<td>0%</td>
<td>12</td>
</tr>
<tr>
<td>Age 18-24</td>
<td>103</td>
<td>39%</td>
<td>29</td>
<td>42%</td>
<td>181</td>
</tr>
<tr>
<td>Age 25-30</td>
<td>47</td>
<td>18%</td>
<td>10</td>
<td>14%</td>
<td>78</td>
</tr>
<tr>
<td>Age 31-45</td>
<td>71</td>
<td>27%</td>
<td>20</td>
<td>29%</td>
<td>63</td>
</tr>
<tr>
<td>Age &gt;45</td>
<td>32</td>
<td>12%</td>
<td>8</td>
<td>12%</td>
<td>36</td>
</tr>
</tbody>
</table>

| Total Enrollment:      | 305    | 91     | 380    | 274    | 1050   |

8 Deb Eve, ANC DeMaND Site Coordinator, (September 2015) Video Interview
Most of the participants in the project had completed high school or had attained a GED as their highest level of school attainment at the time of enrollment. There were 456 (49%) who completed a high school degree and 139 (15%) who completed a GED. There were 57 participants who came into the project without having completed high school diploma or the equivalent. Sixteen of these participants were under the age of 18 and still in high school. These high school students entered the C.N.A. program, and some were employed after program completion. The other 41 participants who did not have a high school degree or GED ranged in age from 20 years to 46 years of age. Approximately 27% (247) of the participants had completed some college but not completed a degree or certificate. There were 23 participants who had previously completed an associate level degree and 10 who had completed a bachelor level degree or higher.

Only 162 (23%) of the project participants were documented as PELL eligible. Reasons for this are varied. Some participants have exhausted their PELL eligibility or were not of age to be eligible for PELL. Some of the programs were not PELL-eligible because the program length was too short or issues existed with the number of contact hours. Some of the programs had not yet been approved for Title IV funding or the college was awaiting approval for Title IV. In some cases, the government shutdown in late 2013 and early 2014 was cited as one cause for program approval delays for Title IV by Department of Education.

Seventy-two percent (759) of the participants reported they were single (including divorced). Of these, 297 reported having one or more dependents, with an average of 2.6 dependents. Of single participants with dependents, 234 reported being unemployed. Of these unemployed single participants with dependents, 55% (128) were male and 45% (106) were female. There were 135 single participants who reported being incumbent workers. The monthly income they reported ranged from $300 to $5200 per month. The mean monthly income for the participants who reported their income at enrollment was $1,532 or approximately $18,385 annually. There were 207 participants who were incumbent workers who reported income at the time of enrollment. The mean monthly income reported by these incumbent workers was $1,444.17, constituting an average annual income of just $17,330. According to the US Department of Health and Human Services for 2014, the poverty guideline for a household of three is $19,790 and for a household of four is $23,850. The mean of reporting participants with dependents are earning an average income that is only at the about the poverty line. This suggests that even incumbent workers entering the project earned less than the poverty level at the time of enrollment.

**STUDENT RETENTION**

One of the project’s priorities was to **improve retention and achievement rates and/or reduce time to completion**. Activities designed to address this priority included blocked scheduling and flexible career pathways with stackable courses. Some of the certificates were blocked scheduled so that a one-year certificate could be completed in just 16 weeks. Some of the certificates could be stacked where students could earn a short term or one-year certificate and build on it to earn further credentials or degrees.
The colleges served students from communities with historic and chronic low employment, low performing high schools, and generational poverty. Tribal College students typically exhibit risk factors that can impact college retention and completion. These risk factors include delayed enrollment, financial independence, dependents or children, single parenthood, no high school diploma, and working full time. Several of these risk factors were illustrated in the demographics described earlier. For example, 54% of the students were older than average (25 years or older), which implies financial independence from parents. There were 390 (37%) of the participants who reported having dependents and 297 (28%) who reported being single parents. A large number of participants reported earning a GED rather than a high school diploma as their highest level of education.

Retention is typically defined as those students who were enrolled the previous semester and are currently enrolled in the current semester. That definition did not apply evenly across the programs in this project because of the blocked scheduling and the short-term programs of study that did not cross semesters. Because of the nature of the project and of the participants, students were allowed more than one attempt at success in a degree or training program. Therefore, retention for this project includes those students who continued to study whether or not they failed or withdrew from another course of study. There were some students who attempted a program of study, were unsuccessful, and then enrolled in a different program of study. This means that a participant who may have failed or withdrawn from one program of study but returned and is currently enrolled or has successfully completed another program of study is included in the count toward retention calculations. Therefore, project retention is defined as all students currently enrolled plus students who complete programs divided by the number of participants who entered training. The project had an overall retention rate of 65%. A table illustrating retention rates by colleges is provided below:

<table>
<thead>
<tr>
<th>College</th>
<th>Students Enrolled</th>
<th>Students Retained</th>
<th>Retention Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC</td>
<td>305</td>
<td>205</td>
<td>67%</td>
</tr>
<tr>
<td>CCC</td>
<td>91</td>
<td>55</td>
<td>60%</td>
</tr>
<tr>
<td>FPCC</td>
<td>380</td>
<td>203</td>
<td>53%</td>
</tr>
<tr>
<td>UTTC</td>
<td>274</td>
<td>216</td>
<td>79%</td>
</tr>
<tr>
<td>Total</td>
<td>1050</td>
<td>679</td>
<td>65%</td>
</tr>
</tbody>
</table>

Overall, student retention rates were strong. At the end of the project, there were 679 participants either currently enrolled or who had completed programs of study, constituting an overall project retention rate of 65%. The retention rates are based on all programs of all lengths and all delivery styles (blocked and typical schedules). At UTTC, when the 102 employer sponsored short term training participants are removed from calculations, the retention rate at UTTC is 66% and the overall project retention rate is 61%. This report takes a closer look at the impact of blocked scheduling on completion in the next section. The information can be useful in making decisions regarding continued blocked scheduling, since it impacts instructional loads and student Title IV funding allocations.

---

PARTICIPANT COMPLETION

The project’s goal for program completion was 900 students. The updated target per the project’s period of performance extension request was to exceed its goal with 1023 participants completing programs. The results were analyzed in terms of the original goal. As of the end of the project (September 30, 2015), 599 unique participants had successfully completed 645 training certificates or college programs of study. That means that the project met 67% of its original target for completion. There were an additional 38 participants who earned industry-recognized certifications including OSHA 10, GIS, and Pre-Apprenticeship who didn’t complete their entered program of study. When including these participants in the calculation for “completion”, the project met 71% of its target for completion.

The colleges are small and the goals for enrollment and completion were aggressive. The project met just 58% of its enrollment goal. Therefore, it follows that the project would not meet its numerical goal for completion. However, the project exceeded its goal for “completion rate” of 50%. The completion rate was calculated as the number of completed divided by the number of those entered minus the number still enrolled. Students who were still enrolled at the end of the project were subtracted from the number of students entered because those students have not had the opportunity to complete the program. Using this formula, the overall completion rate for the DeMaND project was 62%, which exceeded its original projection of a 50% completion rate.

The project’s completion rate far exceeds the graduation rate of community colleges nationwide. According to the National Center for Educational Statistics, the graduation rate with a certificate or associate degree from first institution attended within 150 percent of normal time for first-time, full-time degree/certificate-seeking students at public 2-year postsecondary institutions for the cohort beginning 2010 was 19.5%. The graduation rate for Native American students at these institutions was even lower at just 15% with 14.1% for males and 15.7% for females. Following is a description of the completion rates for each college’s programs in the project.

United Tribes Technical College offered five programs of study through the project. The highest completion rates were for participants who enrolled in short term training programs. The CDL/Heavy Equipment and Welding programs at UTTC offered short term training for incumbent workers through employer sponsored contracts in addition to the blocked one-year certificate programs. These were separated from the certificate program completion calculations because they are so different from the certificate offerings in terms of participant characteristics and program length. When the short term training data is removed from the calculation, the overall retention rate for the UTTC DeMaND programs is still 59%.

The lowest completion rate was for GIS at 0%. The GIS program was offered as a standalone stackable option as a short term certificate, one-year certificate, or AAS degree program. It is unclear why more students didn’t enter the program but some in the project suggested that there was not a clear understanding of what GIS is among recruiters or potential students. Others suggested that GIS is best

10 http://nces.ed.gov/programs/digest/d14/tables/dt14_326.20.asp
offered as an add-on skill to other degrees rather than as its own degree. Regardless, there was only one student who enrolled in the project. That student was within 2 courses of completing an AAS degree in GIS, but was hired in a position that requires GIS skills with a tribal entity located on the student’s home reservation.

**Table 4: Completion Rates by Program at UTTC**

<table>
<thead>
<tr>
<th>Program</th>
<th># Entered</th>
<th># Completed</th>
<th># Still Enrolled</th>
<th>Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDL/HEO Program Short Term Training</td>
<td>29</td>
<td>29</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Welding Short Term Training</td>
<td>86</td>
<td>73</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>CDL/HEO Certificate (Blocked)</td>
<td>30</td>
<td>15</td>
<td>6</td>
<td>63%</td>
</tr>
<tr>
<td>Welding Certificate (Blocked)</td>
<td>104</td>
<td>47</td>
<td>17</td>
<td>54%</td>
</tr>
<tr>
<td>Electrical (Blocked)</td>
<td>19</td>
<td>12</td>
<td>0</td>
<td>63%</td>
</tr>
<tr>
<td>Carpentry</td>
<td>9</td>
<td>8</td>
<td>0</td>
<td>89%</td>
</tr>
<tr>
<td>GIS</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>OVERALL:</strong></td>
<td><strong>278</strong></td>
<td><strong>184</strong></td>
<td><strong>36</strong></td>
<td><strong>76%</strong></td>
</tr>
</tbody>
</table>

Aaniiih Nakoda College offered eight different training and education programs. Completion rates at ANC were very strong for most programs. They ranged from 24% with the EMT program up to 91% in the Phlebotomy and Firefighting programs. The EMT program was offered early in the project and experienced several unanticipated challenges that included student readiness for the material as well as difficulty in placing students for ride-a-long experiences. The overall completion rate at ANC was 70%, which exceeds its published graduation rate of 43%.

**Table 5: Completion Rates by Program at ANC**

<table>
<thead>
<tr>
<th>Program</th>
<th># Entered</th>
<th># Completed</th>
<th># Still Enrolled</th>
<th>Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZ/HWP</td>
<td>27</td>
<td>17</td>
<td>0</td>
<td>63%</td>
</tr>
<tr>
<td>Firefighting</td>
<td>34</td>
<td>31</td>
<td>0</td>
<td>91%</td>
</tr>
<tr>
<td>C.N.A.</td>
<td>54</td>
<td>41</td>
<td>2</td>
<td>79%</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>45</td>
<td>41</td>
<td>0</td>
<td>91%</td>
</tr>
<tr>
<td>EMT</td>
<td>21</td>
<td>5</td>
<td>0</td>
<td>24%</td>
</tr>
<tr>
<td>CDL (Blocked)</td>
<td>70</td>
<td>49</td>
<td>5</td>
<td>75%</td>
</tr>
<tr>
<td>Welding (Blocked)</td>
<td>43</td>
<td>24</td>
<td>2</td>
<td>59%</td>
</tr>
<tr>
<td>Carpentry (Blocked)</td>
<td>44</td>
<td>16</td>
<td>9</td>
<td>46%</td>
</tr>
<tr>
<td><strong>OVERALL:</strong></td>
<td><strong>338</strong></td>
<td><strong>224</strong></td>
<td><strong>18</strong></td>
<td><strong>70%</strong></td>
</tr>
</tbody>
</table>

Cankdeska Cikana Community College offered three different program options with the HVAC/R as a stackable option from certificate to degree. Completion rates at CCCC were strong for the OSHA 10 training program but not as strong for the other programs. Project personnel and instructors indicated that many of the students who withdrew either lacked a valid driver’s license or struggled with substance abuse. It should be noted that 9 of the participants who withdrew from the HVAC/R program prior to completion left with an OSHA certification. If these were included as “completed”, the completion rates would be 45% and 27% for the HVAC/R certificate and AAS programs respectively.
Table 6: Completion Rates by Program at CCCC

<table>
<thead>
<tr>
<th>Program</th>
<th># Entered</th>
<th># Completed</th>
<th># Still Enrolled</th>
<th>Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA 10</td>
<td>37</td>
<td>37</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>HVAC/R Cert</td>
<td>15</td>
<td>2 (3)</td>
<td>4</td>
<td>18%</td>
</tr>
<tr>
<td>HVAC/R AAS</td>
<td>37</td>
<td>1 (6)</td>
<td>11</td>
<td>4%</td>
</tr>
<tr>
<td>Plumbing AAS</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>OVERALL:</strong></td>
<td><strong>91</strong></td>
<td><strong>40</strong></td>
<td><strong>15</strong></td>
<td><strong>53%</strong></td>
</tr>
</tbody>
</table>

Fort Peck Community College offered six different programs through the DeMaND project. The welding and truck driving programs were only part of the project through the first three years of the project. Completion rates at FPCC averaged 49% with the strongest completion rates in the short term certificate programs. The Building Trades program struggled when its instructor was hired by a large construction firm located in the middle of oil country. While this fact is notable, it is unclear if this contributed to the low completion rates for that program. The strongest completion rates were in the C.N.A. program. Much of this success is contributed to the pre-qualifying testing process and the NEMHS partnership.

Table 7: Completion Rates by Program at FPCC

<table>
<thead>
<tr>
<th>Program</th>
<th># Entered</th>
<th># Completed</th>
<th># Still Enrolled</th>
<th>Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.N.A.</td>
<td>203</td>
<td>125</td>
<td>0</td>
<td>62%</td>
</tr>
<tr>
<td>Oilfield Training</td>
<td>26</td>
<td>13</td>
<td>0</td>
<td>50%</td>
</tr>
<tr>
<td>Building Trades (Blocked)</td>
<td>52</td>
<td>4</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>Truck Driving (Blocked)</td>
<td>53</td>
<td>27</td>
<td>0</td>
<td>51%</td>
</tr>
<tr>
<td>Heavy Equipment (Blocked)</td>
<td>17</td>
<td>3</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Electrical Lineman (Blocked)</td>
<td>15</td>
<td>5</td>
<td>3</td>
<td>42%</td>
</tr>
<tr>
<td>Welding (Blocked)</td>
<td>20</td>
<td>4</td>
<td>1</td>
<td>21%</td>
</tr>
<tr>
<td><strong>OVERALL:</strong></td>
<td><strong>386</strong></td>
<td><strong>181</strong></td>
<td><strong>16</strong></td>
<td><strong>49%</strong></td>
</tr>
</tbody>
</table>

Of the 59 military veterans who enrolled, 2 were still enrolled at the end of the project and 32 successfully completed their programs of study, constituting a completion rate of 56% among veterans in the project. Of the 17 participants who indicated they had a disability, 8 successfully completed their programs, and 5 were still enrolled at the end of the project and, constituting a 67% completion rate for those with disabilities.

The DeMaND program has been one of the best things that has happened to Fort Peck Community College. It forced us to take a really in-depth look at how we were offering vocational programs.11

The completion rates for shorter term programs were higher than programs of longer length. Short term training programs, which included C.N.A., phlebotomy, safety training, and employer-sponsored training, had the highest completion rates. The project targeted participants not previously targeted by

---

11 Larry Wetsit, Director of Community Services, Fort Peck Community College (2014) Video Interview
the colleges. Providing shorter term programs in which students could experience success appears to have provided options for people who would not otherwise have had access to college. For example, the nursing assistant program was offered for continuing education as well as for credit. The continuing education option made it possible for people without a high school degree or GED to come to college.

### Table 8: Completion Rates by Program Length/Type (Duplicated Count)

<table>
<thead>
<tr>
<th>Program Type</th>
<th># Entered</th>
<th># Completed</th>
<th># Still Enrolled</th>
<th>Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term (&lt; 24 credits)</td>
<td>652</td>
<td>568</td>
<td>22</td>
<td>90%</td>
</tr>
<tr>
<td>Certificate (≥ 24 credits)</td>
<td>398</td>
<td>163</td>
<td>50</td>
<td>47%</td>
</tr>
<tr>
<td>AAS Degree</td>
<td>48</td>
<td>6</td>
<td>10</td>
<td>16%</td>
</tr>
<tr>
<td><strong>OVERALL:</strong></td>
<td><strong>1098</strong></td>
<td><strong>737</strong></td>
<td><strong>82</strong></td>
<td><strong>73%</strong></td>
</tr>
</tbody>
</table>

While the short term programs offered opportunities for “quick wins” for participants, they also served as opportunities for the colleges to provide employer-sponsored and safety trainings, which helped to build greater awareness of the colleges and helped promote stronger relationships with businesses.

**IMPACT OF STRATEGIES FOR ACCELERATED PROGRESS ON COMPLETION**

### Pre-Professional Seminar

The project implemented a Pre-Professional Seminar designed for each project participant to complete prior to beginning training. The purpose was to help prepare low-skilled and other workers for the career in which they are entering. The Pre-Professional Seminar includes concepts such as financial literacy, communication, career pathways, critical thinking, and other skills needed in the workforce. The project believed this was important, especially for participants who may have never been a full time employee before. This requirement, however, was not applied consistently across the consortium and not all students were required to complete the Pre-Professional Seminar. A chi-square test was conducted to measure differences with respect to the students’ Pre-Professional Seminar (PPS) enrollment status and program completion. Employer sponsored participants in short term training programs were not included in the calculations.

### Table 9: PPS Enrollment and Completion Status

<table>
<thead>
<tr>
<th></th>
<th>Successful Completion</th>
<th>Left Before Completion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Enrolled and passed or failed</td>
<td>264</td>
<td>66.0%</td>
<td>136</td>
</tr>
<tr>
<td>Did not enroll</td>
<td>221</td>
<td>56.7%</td>
<td>169</td>
</tr>
<tr>
<td>Total</td>
<td>485</td>
<td>61.4%</td>
<td>305</td>
</tr>
</tbody>
</table>

*p=0.007
Excludes students still enrolled (n=69) and enrolled but pass/fail status unknown (n=24)

A correlation was found between enrollment in PPS and training completion. Statistically significant differences were noted (p=0.007) between those who enrolled and those who did not enroll. Specifically, 66.0% of the students who were enrolled and passed or failed successfully completed the program, while only 56.7% who did not enroll in the PPS program successfully completed the program of
Students in the DeMaND project were more likely to complete their program of study if they enrolled in the Pre-Professional Seminar.

National Career Readiness Certificate

The ACT WorkKeys system, a nationally recognized, research based assessment system that measures student skills required for the workplace, was implemented as part of the project. The ACT WorkKeys is designed to measure three workplace skill areas required by most occupations: 1) reading for information, 2) locating information, and 3) applied mathematics. In addition, participants can earn a National Career Readiness Certificate (NCRC) based on their scores on the assessment. The NCRC is a nationally-recognized credential earned based on the WorkKeys scores. It is recognized by several states and employers across the nation. Each participant’s certification can be verified by potential employers through the NCRC website. This certification provides additional value to each graduate’s training certificate or degree earned.

As of the end of the project year, 702 participants and were tested. Of those, 626 earned an NCRC at the Bronze or higher level. There were 33 participants who earned an NCRC but did not start training; they either did not complete the full registration process or they did not attend at least one day of class. The majority of participants who tested (53%) earned a Silver NCRC. Only 11% of the participants tested below the Bronze level. Of qualified participants who earned an NCRC, 191 withdrew prior to successful program completion. That means that 191 participants who did not complete a program of study still left with an industry-recognized National Career Readiness Certificate. Employer sponsored participants in short term training programs were not included in the calculations.

<table>
<thead>
<tr>
<th></th>
<th>Successful Completion</th>
<th>Left Before Completion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Gold</td>
<td>38</td>
<td>77.6%</td>
<td>11</td>
</tr>
<tr>
<td>Silver</td>
<td>227</td>
<td>69.6%</td>
<td>99</td>
</tr>
<tr>
<td>Bronze</td>
<td>97</td>
<td>53.3%</td>
<td>85</td>
</tr>
<tr>
<td>None</td>
<td>33</td>
<td>45.8%</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>395</td>
<td>62.8%</td>
<td>234</td>
</tr>
</tbody>
</table>

$p=0.001$

Excludes students still enrolled (n=69) and not yet tested (n=196). No students reached the Platinum level.

A chi-square test was conducted to measure differences with respect to the students’ test result levels and program completion status. Statistically significant differences were noted ($p<0.001$) between the two. Generally, the higher the test result levels (proportions), particularly Gold and Silver, the greater the likelihood of completing the program successfully.

Blocked Scheduling

A key strategy for accelerating progress in the DeMaND project was to use blocked scheduling. Blocked scheduling, utilized by several of the programs, made it possible for students to complete training programs in a shorter amount of time. For example, the C.N.A. program could be completed in just two-four weeks with the clinical portion included. Some one-year certificates could be completed in just 16
weeks, virtually cutting the training time in half for these participants. Students attended classes similar to a work day in which they started at 7:30 or 8:00 in the morning and ended at 4:30 or 5:00 in the afternoon. They also occasionally had to attend courses in the evening. This schedule was fairly demanding for students. Some students reported that they would have liked more time in terms of weeks to develop the skills and knowledge required. Sometimes the program was more intensive than they would have liked, but this perspective was not consistent among all students. Some students reported that they appreciated the fact that they could get the training as quickly as possible and get out into the workforce.

Support from the executive leadership at each college was vital to the implementation of the blocked schedule format. One of the principles for transformative change is that leaders envision, encourage, and support innovation that supports all learners. The blocked schedule format in which students completed a one-year certificate in just 16 months doubled per semester instructor contact time with students. The executive leadership at each college that offered blocked scheduling supported offering salaries commensurate with workforce salary demands as an incentive for the qualified instructors when necessary. The college administrations also worked hard to address accreditation and Department of Education Title IV challenges posed by this accelerated format. A significant number of the students who attended the colleges in the consortium were low income. Their primary funding source for education included PELL, WIA, or tribally sponsored funding. These funding sources were only available for students in training programs that were approved for Title IV support by the Department of Education. The Department of Education required in-depth justification for clock hours before approving accelerated programs for Title IV approval. Those programs that were unsuccessful in gaining Title IV approval for the blocked schedule format were offered as traditionally scheduled programs so that students could access financial aid.

Sometimes, the colleges arranged specialized student support for the students in accelerated programs. Understanding that students who are enrolled in the accelerated certificate programs had different needs than other degree-seeking students, UTTC has set aside special housing arrangements for them. Students in the blocked certificate programs had the option to stay in the housing units for up to three months after they completed their training. This gave them a chance to build up their financial resources so they could afford to get an apartment of their own. At FPCC, the college shortened the curriculum for certificates in order to get to the “meat” of the training so students could finish training and get to work more quickly. The completion rates for students in blocked programs at FPCC is significantly higher than those in more traditionally scheduled programs wherein students attend courses in one hour increments several times per week. Therefore, the academic leaders at FPCC are considering blocked schedules for other programs of study they offer. Overall completion rates will be discussed more thoroughly later in the report.

Comparative Analyses of Student Characteristics with Regard to Completion

The project was not able to establish strong comparison groups of students who were not affected by the project. The programs offered were distinctive from many of the other programs offered at the
colleges. In addition, the small student populations at the colleges in the consortium precluded the formation of a meaningful comparison group that could be used to measure overall project impact. Instead, internal groups were studied in order to learn about what factors may correlate with successful completion. Chi-square tests were conducted to measure differences with respect to student characteristics and project treatments with regard to program completion status. There were statistically significant differences noted with regard to enrollment in the Pre-Professional Seminar and how well participants scored on the NCRC, as previously discussed. There were also statistically significant differences with regard to gender, highest level of education completed prior to project enrollment, marital status and incumbent worker status, which may be of interest. Employer-sponsored trainees were excluded from the calculations.

**Gender and Completion**

A chi-square test was conducted to measure differences with respect to the student’s gender and program completion. Statistically significant differences were noted (p<0.017) between males and females with regard to program completion. Specifically, larger successful completion proportions were noted for females compared to males; 65.5% and 57.1%, respectively. The project was successful in recruiting more men to college. The typical Tribal College enrollment is 35% male and the enrollment in the DeMaND project was approximately 66% male overall. The low completion rates for males may be an indication that the colleges investigate strategies that may be implemented toward better supporting male students toward completion.

**Table 11: Internal Project Participant Gender Comparisons with Respect to Completion**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Successful Completion</th>
<th>Left Before Completion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Male</td>
<td>282</td>
<td>57.1%</td>
<td>212</td>
</tr>
<tr>
<td>Female</td>
<td>209</td>
<td>65.5%</td>
<td>110</td>
</tr>
<tr>
<td>Total</td>
<td>491</td>
<td>60.4%</td>
<td>322</td>
</tr>
</tbody>
</table>

*p=0.017
Excludes students still enrolled (n=69) and not stated gender (n=1).

**Highest Education Achieved at Enrollment and Completion**

Statistically significant differences were noted (p<0.001) between the program completion and highest education completion prior to enrollment. Specifically, smaller successful completion proportions were noted for participants who earned a GED as their highest education prior to enrollment, 46.0%, compared to the other education levels. The implication for this may be important for the colleges. Students who earned a GED may need additional assistance with acclimating to the college classroom or developing a stronger sense of self-confidence. One student who came to the project with a GED was interviewed as part of a focus group. He was on his second attempt to complete a specific certificate program and shared how this time he was determined to successfully complete the project. By chance, this was the second time this particular student was interviewed. He talked about how his self-confidence was growing and that the first time he was in that program, he let bad influences impact his choices. He credited his instructor for continually encouraging him, even when he dropped out the first
time. While this student does not represent all of the students who have earned a GED, his story is consistent with statistics others nationwide. Arguably, many GED certificate holders may have poorer social and emotional and other soft skills that result in poor attendance and other behaviors not conducive to successful college achievement. They often have other challenges, as well. “Often they have excessive financial burdens, a result of finding work only at more menial jobs; their academic skills are poorly developed, so academic success is more difficult to achieve.” Researchers are working on strategies to improve college outcomes for GED earners. While many of the strategies begin during the GED process, there are some that may be applicable to the community college level, including bridge programs and concurrent enrollment programs.

### Table 12: Internal Project Participant Education Comparisons with Respect to Completion

<table>
<thead>
<tr>
<th>Previous Highest Education at Enrollment</th>
<th>Successful Completion</th>
<th>Left Before Completion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No GED or HS Equivalent (incl. working on)</td>
<td>( N = 40 )</td>
<td>71.4%</td>
<td>( N = 16 )</td>
</tr>
<tr>
<td>GED Only</td>
<td>( N = 57 )</td>
<td>46.0%</td>
<td>( N = 67 )</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>( N = 206 )</td>
<td>55.7%</td>
<td>( N = 164 )</td>
</tr>
<tr>
<td>All Other (some college/degree)</td>
<td>( N = 144 )</td>
<td>68.9%</td>
<td>( N = 65 )</td>
</tr>
<tr>
<td>Total</td>
<td>( N = 447 )</td>
<td>58.9%</td>
<td>( N = 312 )</td>
</tr>
</tbody>
</table>

\( p=0.001 \)

Excludes students still enrolled \( (n=69) \) and not stated previous higher education \( (n=59) \).

### Employment Status at Enrollment and Completion

A chi-square test was conducted to measure differences with respect to the student’s employment status and program completion. Statistically significant differences were noted \( (p<0.001) \) between employment status and program completion status. Specifically, 71.4 \% of students who were incumbent workers successfully completed the program while 56.0\% who were not incumbent workers successfully completed the program. Work experience may play an important part toward successful workforce development program completion.

### Table 13: Internal Project Participant Employment Status Comparisons with Respect to Completion

<table>
<thead>
<tr>
<th>Incumbent Worker Status</th>
<th>Successful Completion</th>
<th>Left Before Completion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed at Time of Enrollment</td>
<td>( N = 105 )</td>
<td>71.4%</td>
<td>( N = 42 )</td>
</tr>
<tr>
<td>Unemployed at Time of Enrollment</td>
<td>( N = 357 )</td>
<td>56.0%</td>
<td>( N = 280 )</td>
</tr>
<tr>
<td>Total</td>
<td>( N = 462 )</td>
<td>58.9%</td>
<td>( N = 322 )</td>
</tr>
</tbody>
</table>

\( p=0.001 \)

Excludes students still enrolled \( (n=69) \) and not stated incumbent worker status \( (n=32) \).

---


**Marital Status and Completion**

A chi-square test was conducted to measure differences with respect to the student’s marital status and program completion. Statistically significant differences were noted (p=0.012) between the two. Specifically, 70.3% of the students who were married successfully completed the program, while 57.7% of the students who were single (including those divorced) successfully completed the program. There was no significant difference for completion between students who had dependents and those who did not. Therefore, it may be useful to look at what supports are needed for single students toward successful program completion.

<table>
<thead>
<tr>
<th>Table 14: Internal Project Participant Marital Status Comparisons with Respect to Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Single / Divorced</td>
</tr>
<tr>
<td>Married</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

*p=0.012
Excludes students still enrolled (n=69) and not stated marital status (n=72).

**STUDENT REACTION**

The DeMaND project collected reactionary data regarding their course experiences from students through course evaluations each year during the second and third year of the project. The course evaluation asked students to respond to a serious of statements with the level at which they agree with each. The statements referred to instruction as well as various aspects of the course. Statements regarding instruction included:

1. My Instructor cared about my success in this course.
2. My Instructor treated me with respect as a pre-professional.
3. My Instructor invited me to share my own perspectives and ideas in the classroom.
4. My Instructor was open to my ideas and perspectives.
5. My Instructor demonstrated confidence in me as a pre-professional.
6. My Instructor used teaching methods that were appropriate for the content of the course.
7. My Instructor used teaching methods that were appropriate for my learning style.
8. My Instructor provided timely feedback to me about my progress.
9. My Instructor provided helpful feedback to me about my progress.
10. My Instructor provided opportunities for me to practice what I learned throughout the course.
11. My Instructor was available to me outside of class time.

Statements regarding aspects of the course included:

12. The content of the course was well organized.
13. The textbook supported my learning in this course.
14. Course materials provided by my instructor supported my learning in this course.
15. The scheduling of the course met my needs as a learner.
16. The pace of the course was appropriate for me as a learner.
17. The grading for this course was fair.
18. All of the objectives listed in the syllabus were addressed in the course.
19. I would recommend this course to other students.

The response options were: Strongly Agree; Agree; Disagree; and Strongly Disagree. Student responses were converted to numerical values as follows: Strongly Agree=4; Agree=3; Disagree=2; and Strongly Disagree=1. The mean scores and z-scores were calculated from the students’ responses. The following table illustrates the analysis of the patterns of response:

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Z-Score</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cared about Success</td>
<td>3.69</td>
<td>2.12</td>
<td>0.017</td>
</tr>
<tr>
<td>Treated with Respect</td>
<td>3.53</td>
<td>0.77</td>
<td>0.22</td>
</tr>
<tr>
<td>Share Perspectives</td>
<td>3.33</td>
<td>-0.91</td>
<td>0.181</td>
</tr>
<tr>
<td>Open to Ideas</td>
<td>3.38</td>
<td>-0.48</td>
<td>0.316</td>
</tr>
<tr>
<td>Confidence in Me</td>
<td>3.50</td>
<td>0.55</td>
<td>0.291</td>
</tr>
<tr>
<td>Methods right for Content</td>
<td>3.53</td>
<td>0.79</td>
<td>0.215</td>
</tr>
<tr>
<td>Methods right for Learning Style</td>
<td>3.53</td>
<td>0.74</td>
<td>0.23</td>
</tr>
<tr>
<td>Timely Feedback</td>
<td>3.47</td>
<td>0.26</td>
<td>0.397</td>
</tr>
<tr>
<td>Helpful Feedback</td>
<td>3.46</td>
<td>0.21</td>
<td>0.417</td>
</tr>
<tr>
<td>Opportunities to Practice</td>
<td>3.55</td>
<td>0.93</td>
<td>0.176</td>
</tr>
<tr>
<td>Instructor available to Me</td>
<td>3.26</td>
<td>-1.45</td>
<td>0.074</td>
</tr>
<tr>
<td>Organized Content</td>
<td>3.28</td>
<td>-1.28</td>
<td>0.1</td>
</tr>
<tr>
<td>Textbook</td>
<td>3.42</td>
<td>-0.17</td>
<td>0.433</td>
</tr>
<tr>
<td>Materials</td>
<td>3.43</td>
<td>-0.03</td>
<td>0.432</td>
</tr>
<tr>
<td>Scheduling</td>
<td>3.31</td>
<td>-1.08</td>
<td>0.14</td>
</tr>
<tr>
<td>Pace</td>
<td>3.31</td>
<td>-1.06</td>
<td>0.145</td>
</tr>
<tr>
<td>Fair Grading</td>
<td>3.36</td>
<td>-0.63</td>
<td>0.264</td>
</tr>
<tr>
<td>Objectives Addressed</td>
<td>3.34</td>
<td>-0.80</td>
<td>0.212</td>
</tr>
<tr>
<td>Recommend</td>
<td>3.62</td>
<td>1.52</td>
<td>0.064</td>
</tr>
</tbody>
</table>

N=160

The response rates were lower than hoped; however, a representative sample was collected. The sample provides 90% confidence level with 6% confidence interval. All of the items had very positive responses with mean scores of 3.26 or higher, indicating generally high student satisfaction with both the instruction and the courses. This is supported by focus group and exit survey data. In the exit survey, 90% (n=211) of respondents indicated they were moderately or extremely satisfied with the overall quality of instruction. In addition, 88% of the exit survey respondents indicated they were moderately or extremely satisfied with the amount of student support they received.

The patterns of responses for most of the items were not statistically significantly different from the others. There was one item, however, that was statistically different from the other patterns of responses. The item regarding the instructors caring about students’ success was statistically significant at p ≤ .05, which indicates that students strongly believe that their instructors cared about their success in the courses. Focus group data supports this. Project wide, student focus group participants indicated...
a high level of trust in their instructors. Students view their instructors as job coaches and attribute much of their success to their instructors. They indicated that their instructors helped them to believe in themselves. Students appreciated when instructors worked with them on authentic projects.

**Preparedness**

Students were asked in focus groups about how prepared they felt for entering employment in their chosen career field. They were asked to provide a written response on a sticky note and then place it on a Likert scale that was prepared on chart paper. Most of the students responded that they felt fairly well or more prepared. Students at each of the colleges indicated that they understand that they are being prepared for entry level positions. They expect that they will learn more once they are on the job. Exit survey data supported this perspective with 83% of the respondents indicating they feel well or extremely prepared to enter the career field for which s/he trained or studied. Comments from both groups indicated that the hands-on and experiential learning helped them feel prepared.

Students were also asked about how confident they feel about entering their career field. Similarly, they were asked to provide a written response on a sticky note and then place it on a Likert scale that was prepared on chart paper. Most of the students responded that they felt fairly or more confident about entering employment in their field. They indicated that the hands-on experiences in the shops and on real-world projects helped to build their confidence. While they know they will learn more once employed in the field, they feel that these authentic experiences have given them a feel for what it will be like for them actually working in that field. Focus group participants attribute some of their confidence to their instructors. According to one participant, “My instructor’s confidence in me helps me to be confident in myself.” The exit survey data also supported these findings with 86% of the respondents indicating that they were quite or extremely confident about entering the career field for which he or she trained or studied.

> “Instructors go above and beyond to help you...you just have to show up.” Focus Group Participant

The exit survey asked students to share the most positive aspects of their experience with the program of study. There were 180 respondents to this question. Among the top responses were the learning,
hands-on activities, the instructor, and the opportunity to meet and work with new people. These responses were mirrored in the focus groups. Students indicated that they really liked working on the simulators, in the labs, and on actual work sites when they can. They expressed appreciation for instructors who work alongside them and share their own experiences in the field with them. Students talked about how they liked the fact that they got a chance to meet the other people in the classes. They built a kind of family within the courses of study because they spent so much time together, particularly in the blocked scheduled format.

The exit survey also asked students to describe the challenges they had. Most of the challenges shared had to do with personal responsibilities and attendance. Students indicated that they sometimes struggled with daycare or reliable transportation. Just getting to school every day was a challenge. One participant indicated, “The most challenging thing is to have a ride or gas to get here every day.” Another of the project participants, a grandmother, shared in a focus group that she often hitchhiked to school 30 miles each way. Many of the responses referred to financial challenges. There was little opportunity for students to work while going to school, especially for those in blocked scheduled programs. Other challenges had to do with learning new concepts and skills and completing projects they had started. Testing for certifications was another challenge cited by students.

**Placement, Employment, and Wages**

**Tracking Participants**

Participant placement after training completion has been difficult to track. Under North Dakota statute, the state is not allowed to share Unemployment Insurance data with non-state entities. The state has in the past year determined that the State Longitudinal Data System is a viable option for data sharing to improve workforce development efforts statewide. However, this was not accomplished in time for this project to collect that data. And, it does not resolve the challenge of collecting data across state lines into Montana. Tribal Colleges are not members of the state systems. In lieu of administrative employment and wage date, the colleges attempted to track participants using internal structures.

Some participants stayed in touch with their instructors, but most did not keep the colleges informed of what they were doing after training. The project employed a Data Collector at each consortium site who helped to track students. The Data Collectors worked with each of their respective college data and placement departments and utilized alternative means, such as connecting with participant friends and family to inquire about participants after they left the programs. They utilized social networks and social
media to keep up with participants as much as possible. One college’s regular practice is to have faculty review the list of graduates to see if they were aware of what they were doing after graduation.

**Placement**

Of the 599 students who successfully completed programs, there were 319 participants whose placements were recorded. While this does not constitute all of the graduates, it represents a sample size of 53% of the number of participants who completed DeMaND programs. There were 48 who enrolled into higher education, 268 who entered employment, 1 who went into the military, and 2 who reported being unemployed. Although the data is self-reported, this constitutes a placement rate of 53% and an employment rate of 45% for completers. The sample of 319 participants for which the project has data recorded provides a 95% confidence level with a ±3.75 margin of error. It should be noted that 2 participants who successfully completed programs of study are now deceased.

The project attempted to track project participants even if they did not complete the program of study. There were some students who were hired prior to program completion. There were 319 participants who left their DeMaND programs of study, either voluntarily or involuntarily, prior to successful program completion and did not return or attempt another program of study. Involuntary departures occurred when students had too many absences, got into legal trouble, when the grades were below acceptable standards, or when students broke a significant college policy or rule. Voluntary withdrawals occurred when participants purposely decided to withdraw from the college and formally withdrew from the college. This was typically because of unreliable transportation, family challenges, or financial hardships. According to project records, there were 22 participants who were unincumbent workers at the time of enrollment who became employed after withdrawing from a program of study.

It may be of interest to look at the employment rates specifically of those who were unincumbent workers at the time of enrollment. There were at total of 365 unincumbent workers who successfully completed their programs in the project. Of these, 215 (43%) have been reported to be placed into employment, higher education, or the military, of which 168 were reported to have entered employment. This constitutes an employment rate of 46% for this group. Again, although the data is incomplete, the sample of 218 unincumbent worker participants for which the project has recorded data provides a 95% confidence level with a ±4 margin of error.

**Wages**

Earnings data was collected on 760 of the participants at the time of enrollment. There were 553 unincumbent workers who reported wage data ($0 monthly income) and 207 incumbent workers who reported wage data at the time of enrollment. The average monthly income for incumbent workers at the time of enrollment was $1,444.17 or $17,330 annually. There were 116 program completers who reported income after they left the program, of which 64 were unincumbent workers and 52 were incumbent workers at the time of enrollment. Unincumbent workers at the time of enrollment reported earning an average monthly income of $738.76 or $47,279 annually after training. This is a significant increase from the average wage of $0 at the time of enrollment. However, the sample size of just 64 participants of the 365 represents a response rate of just 18% with a margin of error that approaches ±9. There were 52 incumbent workers who reported wage data after they left the program. They
reported an average monthly income of $3,573.06 or $185,799 annually. This is an increase of almost 150% of the salary prior to training. Again, the sample size of just 64 reporting post training wage data of the 176 incumbent workers who completed represents a response rate of just 36% with a margin of error that exceeds ±9. The table below illustrates the project’s progress towards its projected outcome measures as stated in the project work plan and as calculated per DOL requirements:

<table>
<thead>
<tr>
<th>Table 16: Outcomes for the TCC DeMaND Workforce Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Measure</strong></td>
</tr>
<tr>
<td><strong>&lt;One Year Certificate</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>One Year Certificate</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Associate Level Degree</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Credit Attainment</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Entered Employment Rate</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>^Employment Retention Rate</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>^Average Earnings (6 months)</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

^Employment Retention and Average Earnings are reported according to the limited data available to the project and are not considered reliable due to low response rates. They are provided for informational purposes only.

Retained employment and retained earnings for DeMaND project participants were not trackable in a way that was reliable. The data collectors attempted to follow up with participants at six months after employment. However, without an automatic mechanism, like what is used by the state workforce systems, the information is not reliable enough to have any real meaning. Timing of contact varied too far outside of the six-month time frame. This, combined with the process of self-reporting, created an unreliable data set. One useful point of reference might be the SkillBuild North Dakota project outcomes. SkillBuild, the project that targeted funding of Native Americans and military veterans, reported an entered employment rate of 73.8% and an employment retention rate of 75.5%. SkillBuild also reported average earnings of $8,142 for those employed the first quarter after completion.
DEMAND SUCCESS STORIES

The DeMaND project changed lives. **The 32 graduates of the C.N.A. program at Fort Peck Community College who were hired by the NEMHS represent a great success for that community.** Another story is that of Patrick Schmid who completed an AAS degree in HVAC/R at Cankdeska Cikana Community College. He talks about how he had spent much of his life going down a wrong path. He entered the HVAC/R training program. As a result of his training, he started his own HVAC business on the Spirit Lake Reservation.

An example from ANC is Michelle Lonebear. Michelle first got involved with the DeMaND project at Aaniiih Nakoda College while she was working on earning her GED. The success she experienced with the C.N.A. program led her to also get a certification in phlebotomy. She then went on to take classes in Allied Health at the college. She is now working toward a nursing degree at Montana State University Northern. She says that she built confidence in herself as she completed her programs of study.

Justice Johnson who earned a welding certificate at United Tribes Technical College is another face of success for the DeMaND project. He went into business with his father. Now he is pursuing a certificate in Heavy Equipment Operation to make himself even more marketable. Some of these and other stories of student and program successes are available for viewing on the project’s YouTube channel.

A video summary is available to accompany this report. The video provides a visual representation of the context of the project. It includes images of the colleges and the communities they serve. The video shows the faces of participants who have been impacted by the project. It provides information regarding the lessons that were learned, how the project impacted the lives of people, and how the colleges have been transformed through the project. Narrated by the project evaluator, highlights include testimonials from the project director and the site coordinators about the challenges and successes they each experienced through the project.

*The DeMaND Project Executive Summary video can be accessed at:* [https://vimeo.com/140594050](https://vimeo.com/140594050).
DISCUSSION OF FINDINGS

Project Challenges

1) Acquiring Skilled Instructors

The booming economy caused by the oil activity in the region provided job opportunities but sometimes made it difficult to find qualified instructors at these rural colleges. As nationally reported, wages for skilled (and even unskilled) labor were very high in the region. There were reports of McDonald’s offering sign-on bonuses and paying about $18 per hour for workers. Welders and semi-truck drivers could easily make six figures. This sometimes caused challenges to finding qualified instructors who were willing to work for typical faculty pay. The more rural colleges were further challenged by their location. There were occasions where faculty were recruited away by industry because of the shortage of qualified workers and high wages.

2) Learning Curve

One of the biggest challenges identified by project personnel was the “learning curve.” The first round of TAACCCT grants required several issues to be worked out prior to starting the project, including how the relationship among the partners was to be defined. The consortium members were anxious to begin the project and understood that the targets they had set for themselves were aggressive. They were very appreciative to have the project’s period of performance extended.

Another learning curve had to do with testing new strategies, such as the blocked scheduling, particularly in combination with starting new programs. Project personnel indicated that it might have been beneficial for the project to have taken a little more time to more closely study data prior to making changes. While they understand that this is part of the nature of grant projects, a longer period of time with the project would have allowed the colleges to be more proactive than reactive in decision-making. Project personnel utilized the data available to them to make decisions, but there is no replacement for data collected over time, especially when student groups are so small.

Another learning curve had to do with developing partnerships with non-tribal employers, employer organizations, and industries. Many of these non-tribal employers were not familiar with the Tribal Colleges. It took some time to develop relationships with these non-tribal entities because, like any new relationship, mutual understanding and trust needed to be developed.

I don’t ever remember the college before DeMaND having any employer coming to the college and saying, ‘...do you have any carpenters? Or do you have any truck drivers?'

While there is still a lot of work to be done with regard to expanding partnerships with employers, the DeMaND project helped the colleges made great strides in this area. Increasing numbers of employers now view the Tribal Colleges as important workforce resources for them. United Tribes Technical College, the lead college in the consortium, built partnerships with regional industry, ND Department of

14 Paula Firemoon, DeMaND Project Site Coordinator, Fort Peck Community College (2015) Video Interview

40 •
Transportation, and unions to not only supply great employment opportunities for graduates, but to provide ongoing training for those industries, particularly for welders and heavy equipment operators. These partnerships can play an important part of sustaining the programs and scaling the partnerships to support other programs. Aaniiih Nakoda College also developed partnerships with regional industries, which helped to elevate awareness of the college in the region. With assistance from the project, the college achieved approval of Phase I from the Montana Board of Nursing for a new RN nursing education program. The theme of the request for approval was “Grow Our Own” which was the foundation from which ANC operated throughout the DeMaND project. Cankdeska Cikana Community College leveraged community expertise to meet a critical community need in HVAC. The instructor is a former HVAC business owner who is giving back to his community through teaching. Fort Peck Community College utilized the project to bolster its workforce training programs and to take a closer look at how they served students who wanted to learn a trade. They also built stronger relationships with the workforce system in their region. As a result, FPCC’s credibility as a valuable training provider has been strengthened in the region.

At times, the programs and students in the project were viewed as “DeMaND” programs and students rather than typical college programs and students. This distinction sometimes caused friction within college departments. This was sometimes complicated by the separate enrollment procedures that were necessary because of the additional DOL data requirements. The project personnel at each of the colleges were largely responsible for the enrollment of students into the project rather than the admissions and registration offices. In hindsight, it may have been better for the colleges to have integrated the project enrollment processes into the processes used for non-project students.

### 3) Student Transition from Training to Employment

In the second year of the project, the project identified that some students had difficulty transitioning from training to employment. There were thought to be several reasons for this based on broader studies regarding poverty and unemployment trends, including family responsibilities, substance abuse challenges (self or family members), insecurity, and lack of reliable transportation. Focus groups and interviews uncovered some clues as to why some of the participants were not successful in transitioning from training to employment. One of the reasons identified was lack of support away from home. Reservation communities are very close knit. Extended families include cousins, aunties and uncles, grandparents, and other adopted relatives. The family and cultural systems operate as a significant support system for individuals. It can be difficult for people to leave their homes and their support systems in search of employment. The mainstream environment is very different from reservation life and the adjustment can seem overwhelming without support.

Other reasons identified were logistical and financial in nature. There is not much economic activity and job opportunity on the reservations. Most of the jobs were located in the oil region, away from the

---


reservations where the consortium colleges were located. The oil activity in the region had driven up the cost of housing where most of the jobs were. The oil development and production areas, where some of the best paying jobs were, had housing shortages. Man camps were built to accommodate many of the workers. The limited housing caused rental prices to rise to as much as $1800 per month for a one bedroom apartment. Even the man camps were expensive and all of the housing options required deposits. Most of the students, as described prior, had very little if any income prior to training. They didn’t have the money saved necessary to put down deposits. And many of them didn’t have reliable transportation to get them to the job sites. Simply put, they couldn’t afford to go to work where the jobs were. Even those who got to their employment destinations struggled. One participant was hired as a semi-truck driver in the oil fields. He got to the job site and was required to go to a month-long training in another state. The company paid his way for the training, but he didn’t receive a paycheck for almost 6 weeks after being hired. In the meantime, his wife was at home dealing with trying to keep the electricity on so she and their children could stay warm. This happened during the time of the government shutdown so she was no longer receiving the social services assistance she needed. The only reason he didn’t quit his job and go home to help his wife was because of the support and encouragement he received from his extended family, which included project staff. This is just one story of many who struggled.

4) Accessing Administrative Data

Accessing administrative employment and wage data was a struggle for the DeMaND project. There were many interactions with the Unemployment Insurance (UI) office of the Job Service North Dakota (JSND) over the period of the project. The main issue precluding the project from accessing the data was a state statute preventing any sharing of that kind of data with non-state entities. Tribal Colleges, and even the state colleges for that matter, were not considered to be state entities. The North Dakota Indian Affairs Commissioner, governor’s office, and ND University System representatives were all involved in the conversations with JSND to try and resolve the issue. A resolution was finally established through the State Longitudinal Data System (SLDS), but too late for this project. The Tribal Colleges in North Dakota will need to develop a data sharing agreement with the ND SLDS in order to access UI data. There was not enough time to complete this process prior to the end of the project. The Montana UI data was not available to the colleges located in Montana, either. The Project Director was told by Montana Department of Labor and Industry that once the issues regarding the UI data in North Dakota were settled, they would work with the project to get the data from Montana. It is important to reiterate that the progress made toward Tribal Colleges accessing UI data may not have progressed to this point without the work of the project.

Project Strengths

1) Committed Instructors

Each college had instructors who cared about their students and were committed to their success. These highly qualified instructors assisted with aspects of the project that went beyond daily instruction. Instructors assisted with recruitment, building industry partnerships, adjusting curricula to blocked scheduling, encouraging students through hardships, and helping to build a community of learners who
could depend on each other when challenges threatened their success. Students were provided substantive opportunities to practice new skills in labs that were equipped with state-of-the-art equipment or onsite at helping to build lasting structures right on campus. As a result, students, many of whom have never been full time workers, grew to be well-prepared and confident about entering that workforce.

2) Student Centered Programs

The DeMaND project was aligned with the missions of the Tribal Colleges involved in the project. Each of the colleges’ missions includes a focus on an aspect of Native American culture and helping students to become successful and self-sufficient. The ways that the programs of study were offered and the approaches utilized to recruit students targeted a population in the communities who were among the underserved. In order for communities to be truly healthy, each member needs to be engaged. The DeMaND project engaged more men into training than was the case prior to the project.

The DeMaND project was highly student centered. The programs of study offered hands-on and authentic experiences. The blocked schedule mimicked a typical work day for participants, some of whom had no experience with full time employment. The colleges focused on the specific needs of short term students, which were different than full degree-seeking students. Sometimes this meant tuition waivers. Sometimes it meant specialized student services. Sometimes it meant working with workforce entities such as JSND and TERO to help find funding for students to cover educational costs. Sometimes it meant helping students pick themselves back up after failing a course or program to come back and try again. The stackable certificates helped students gain confidence by accomplishing smaller steps. The incredible instructor commitment and college support helped to promote strong retention and completion rates for project participants.

3) Evaluation Integrated into the Project

The TAACCCT project required a significant amount of data collection. The project included an evaluation plan from the beginning. The project offered an opportunity for the colleges to look at data that is not typically available. As part of the DeMaND project, each college hired a project coordinator and a data collector. The data collector and the site coordinator at each site assisted in the process of coordinating focus groups, interviews with key stakeholders, community meetings, and other evaluation and project management activities. The data collectors were responsible for collecting and collating participant data for their colleges. The data was shared with the evaluator who organized it in aggregate and shared it back to the colleges. The evaluator was invited to each project meeting and to national level meetings and trainings. In fact, evaluation became part of project management in terms of continually monitoring project progress. The data collectors, and sometimes the college administrators, would review and study the data. In the spirit of transparency, the colleges would see the extent to which the other colleges in the consortium were meeting their goals and targets. The Site Coordinators would discuss the challenges they each experienced at their institutions and celebrate their successes along the way. During these meetings, they would support each other and offer assistance or advice as appropriate. They would discuss project-wide strategies and make plans to make project adjustments based on the data and the discussions.
There was turnover with the DeMaND project manager position. There were also changes that occurred at the executive leadership level at each of the colleges. In fact, two of the colleges had new presidents appointed during the life of the project. The project evaluator was with the project from the beginning, and the data collectors consistently collected data through the project, which helped the project continue its efforts through the leadership changes. One college in the consortium utilized the data collector to develop informational presentations to the wider college community. Data sharing varied at each college but data was generally shared with executive level leadership at board meetings and other executive meetings at the colleges.

4) Strong Administrative Consortium Team

Each college had dedicated champions, including the Site Coordinators, Data Collectors, and Instructors, who helped to work through challenges and ensure optimum project success. According to the Transformative Change Initiative, “[t]ransformative change refers to implementing, sustaining, and scaling change that produces unprecedented results without sacrificing the historic commitment of community colleges to access, opportunity, and equitable outcomes.” 17 Although the outcome targets for participants were not met for the project, the DeMaND project impacted the lives of many people and helped the colleges to further their individual and collective missions.

The Tribal College Consortium for Developing Montana and North Dakota (DeMaND) Workforce was a unique network. One of the guiding principles for scaling transformative change is that practitioners engage in networks to gain access to expertise, professional development, and other vital resources. Historically, Tribal Colleges have banded together and collaborated, but never to the degree that they have in the DeMaND project. The DeMaND project has brought together four Tribal Colleges around a common goal: workforce training. Bringing the colleges together in this project has helped each to see themselves in comparison to other Tribal Colleges. There is a great deal of comfort in knowing that the institutional struggles are not uncommon. The colleges have found it helpful to share information regarding their successes and challenges among the consortium.

Lessons Learned

1) Pay Attention to Needs of Low Skilled and Long Term Unemployed

The colleges in the consortium serve some of the poorest populations in the nation. Along with poor socio-economic conditions, American Indians also have some of the poorest educational outcomes, with on time high school graduation rates of only 60% and 62% in North Dakota and Montana respectively. 18 These conditions have contributed to very low employment rates, especially among Native American men in these communities. Many of the DeMaND project participants were older than average, had not completed a high school diploma, were single parents, and were new to college. Their needs were different than more traditional college students. Services, beginning with recruitment through to help with finding employment, need to address their particular needs, which are different than typical college students coming out of high school.

17 http://occrl.illinois.edu/projects/TCI/
18 http://datacenter.kidscount.org/
Recruitment was continual and invitations to enter training were often extended until the day the training started. Students appreciated the assistance they received in the registration process and the specialized financial aid assistance they had when available. The Tribal Colleges provide the only opportunity for job training for many of the constituents who are place bound to the community, whether by choice or by circumstance. It is important that low skilled and long term unemployed students, in particular, “…have greater access not only to the institution, but to resources proven to support students’ persistence to completion.”\(^{19}\) Seventy-five percent of the participants were unemployed and 45% had dependents. They worry about taking care of their families while in training, how to pay for their training, and often struggle with confidence about going to school. Interest in the programs grew through students’ stories of success. The Tribal Colleges provide hope for getting out of poverty for low skilled and long term unemployed people in these communities.

2) Employer Partners are Important

The DeMaND project pushed the consortium colleges past their historic boundaries in terms of industry partners. As stated previously, the colleges have always maintained relationships with tribal workforce organizations such as TERO and tribal employers. On many of the reservations, the tribe is the largest employer, followed by the health care system (i.e. Indian Health Service) and the education systems which include K-12 and the colleges. The DeMaND project propelled the colleges to connect with industries, employers, employer organizations, and unions. This has served to better inform a wider base about the nature of the colleges and the programs they offer and has resulted in reciprocal agreements where the colleges serve as training resources for those employers.

3) Short Term Hands-On Programs Meet an Important Need

The DeMaND project offered many short term programs. These programs included trainings that lasted from a couple of days or weeks in length as well as one-year certificate programs that lasted just 16 weeks. The short term programs provided options for people who were not interested in or able to go to school for an extended period of time. Several focus group participants indicated that they liked focusing on building their skills in the field rather than having to spend a lot of time with general courses. They liked getting the training they needed to get entry level work. They understood that they would need additional training once on the job and they were prepared for that. Some students developed confidence through shorter term program successes and were motivated to go on for

additional training and/or education. The program format that mimics a workday and training programs held onsite at employer locations helped participants develop a better understanding of the work environment for which they were training. This is believed to have helped build confidence for entering employment. While Tribal Colleges move toward offering more advance baccalaureate degrees, it is important to not forget about those who are more interested in learning a trade and may not be ready for or interested in a full academic track.

4) **Instructors are Very Important in Student Success**

Student focus groups, exit surveys, and course surveys all indicate that caring faculty is a key ingredient to student success. The instructors at the Tribal Colleges in the project were very involved with their students. Students talked about how they knew their instructors were preparing them well and how they appreciated the extra time instructors took with them. Comments from instructors made it evident that they knew their students well and that they cared about them. Instructors would hold students accountable for poor decisions but encourage them to try again when they failed. It takes time to build confidence and the instructors in the project were more than willing to take the time.

5) **Social Media is a Great Way to Communicate and Share Information**

The DeMaND project helped the colleges to dive into social media like never before. Project personnel received training on best practices for using various types of social media for various purposes. A project Facebook page was set up and managed by the lead college. Each college in the consortium who did not previously have a Facebook page set one up. All of the colleges connected their pages to the DeMaND Facebook page. In this way, they were able to easily share information and resources.

The project contracted with professional videographer services, Makoche Studios, who was experienced with telling stories from Indian Country. The 1491s contributed expertise and recognizable personalities to draw in the targeted demographic for the project. The project utilized social media to promote the colleges and programs offered, to provoke young men into making a decision to become a “modern day warrior”, and to share with a wider audience what the colleges and students are accomplishing. Because of this, the colleges have reached a wider audience than they would have been able to through traditional means. The colleges continue to use what they've learned from the DeMaND project experience. The combination of video and social media proved to be a promising strategy for expanding awareness of the colleges and recruiting students. Analytics from their social media efforts can continue to drive their future plans for social media use. The project utilized video to share an executive summary of the project. The executive summary is designed to provide an overview in an interesting way that can engage a wider audience than one who may be interested in reading a 50 page report, or even a two page executive summary. And the video format allows for stakeholders with deep knowledge to tell the story.
6) Need to Investigate Strategies to Better Support Employment Outcomes

The DeMaND project sparked a conversation that had not previously occurred. The colleges have always been concerned with retention and completion rates, but had never really thought about what happens to the students after graduation. Placement rates were reported but those placement rates were not really considered in terms of what they mean in terms of student services. This project prompted the colleges to think more deeply about the importance of **entered and retained employment** as a goal rather than program completion. The first step is to access reliable employment data through the workforce systems in the states. If employment rates upon program completion are not strong for a particular group, it is important to find out why. Is it because of unclear workplace expectations? Is it because of reluctance to relocate away from extended family structures? Is it because of financial or logistical reasons? Employment rates can help colleges better understand the impact they have in the lives of students and can help them identify areas in which they can better serve their students. The project developed an app that was hoped to be used with students during and after their program completion. It took more time than anticipated to complete the app, but it is done and now available. The app provides tools for instructors to stay connected with students, connecting students to employment opportunities, a resume building tool, and other tools. It may be of value to test the app with faculty and students to see if it serves the purpose for which it was designed.

7) Use Data to Make Decisions – Eye on the Prize

The DeMaND project helped the colleges better understand how to use data to monitor progress and make decisions regarding program implementation and delivery. The colleges worked closely with the project evaluator to monitor their progress toward the targeted outcomes and outputs of the project.

*That data become very instrumental in how the college could evaluate programs.*

*Paula Firemoon, FPCC Site Coordinator*

Site Coordinator meetings included strategy sessions. The evaluator provided project wide data that included data specific to each institution. Placemats were used to visualize the data and discuss how well each college was meeting its projected outcomes. Keeping the focus on the targets for student outcomes was very helpful in monitoring project progress. The logic model became a great tool for focusing the discussions on the original plan and brainstorming ideas about how to address unexpected challenges. This approach to discussing project data was replicated to varying degrees at each of the campuses internally.

**Closing Comments**

The colleges in the DeMaND consortium took on some innovations that challenged their existing processes, including the use of social media, blocked scheduling, short term training, employer partnerships, and employer-sponsored training. They enhanced existing and developed new high quality workforce development programs in a short amount of time. While retention and completion remain important, the colleges now place greater emphasis on placement as an indicator of program relevance.
and quality than before. These are fundamental shifts for the colleges. The guiding principles for scaling transformative change can serve as a guide for sustaining, replicating, or scaling innovations to other programs in the colleges that show the potential to spread and endure. The innovations that are chosen will need to align with institutional needs and honor and influence the culture of the institutions.

Ongoing assessment and evaluation will be important. It will be important that the colleges access administrative data that can help to inform strategies for improving workforce outcomes for low skilled students.

As stated previously, some of the colleges endured changes in executive leadership. The Site Coordinators in the project served as champions for the project. Now that the project funding period has ended, it will be important that leaders clearly understand the impact of the innovations so they can encourage and support those innovations that support students. Leaders will need to help ensure that the new champions for those innovations have an opportunity to engage in networks that can provide expertise, professional development and other resources. Network engagement can be enhanced with technology. Technology can be used to accelerate sharing of information and collaboration and to assist with connecting new champions to support systems. The project institutions have become quite adept at melding storytelling and social media to share information and promote their colleges. Those with deep knowledge of the colleges and settings should continue to utilize storytelling to disseminate information.

Evaluation Strengths and Weaknesses

Evaluation Strengths

The project evaluation utilized a participatory mixed methods approach to evaluation. While qualitative research is typically less generalizable to a larger population, a mixed methods approach can help increase the generalizability of the results. Qualitative and quantitative research used together to help produce a more thorough understanding required to inform theory and decision-making. The evaluator utilized not only the qualitative data collected through formalized efforts such as focus groups, but also those collected through other efforts directed by the stakeholders, such as the videos produced. The participative nature of the evaluation process helped to ensure that community and stakeholder values and voice were considered. In addition, it helped to empower participants and to build capacity within the community, which is in line with the overall purpose of the TAACCCT funding for community colleges. Participative evaluation can help to sustain organizational learning and growth. And it was an ethical decision in working with the Tribal Colleges. This evaluation describes in rich detail phenomena as they are situated and embedded in context. This approach to evaluation enabled the evaluator to study the project in its natural setting in a way that was respectful and responsive to the local situation and needs. The evaluator was involved with the project from the beginning and worked very closely with the project throughout the period of performance. Frequent visits to the campuses helped to build trust for the evaluator among stakeholders. Project personnel assisted with bringing together students,

---

20 http://occrl.illinois.edu/projects/tci
faculty, and community members for focus groups, interviews, and other conversations. Reports were distributed to stakeholders for comment and/or perspective as a means for member-checking prior to publication. Once complete, reports were made publicly available.

**Evaluation Limitations**

There are some limitations to this evaluation. As is with any process and impact study using mixed methods approaches, the results may not be generalizable to other contexts. The evaluator was involved in the writing of the grant proposal. While this gives the evaluator great insight into the project, the data may have been subject to researcher bias. However, because the researcher worked very closely with project personnel and collected qualitative data from a wide variety of stakeholders. The participatory approach helped to provide rich data. The employment and wage data were self-reported and were not verifiable by administrative means. Small participant group sizes limited the evaluator’s ability to conduct experimental or quasi-experimental techniques to determine statistically significant effects of overall project impact.

**About the Evaluation Team**

The TCC DeMaND Workforce project contracted with Woodke360 Consulting to conduct an external summative evaluation project. Dr. Woodke, President of Woodke360, has almost 30 years of experience in education ranging from early childhood to higher education. She has an extensive background working with federal grant programs and is an experienced project consultant and evaluator. Dr. Woodke has worked with organizations in the private, public and tribal sectors. Research assistance was provided by Dr. Karen Sitting Crow. Dr. Sitting Crow has over 20 years in education. She provided cultural expertise and assisted with focus groups at each of the sites.

**Sincere Thank You to Contributors and DeMaND Team**

The Woodke360 evaluation team takes this opportunity to thank all the students, faculty, project staff, and community members who contributed to the DeMaND project and to the contents of this final report. We’d like to especially commend the project Director, Site Coordinators and Data Collectors for their energy, passion, and commitment to the project and to your institutions. Your personal and professional efforts are inspirational and it was a true pleasure to work with you! Finally, thank you to Dave Swenson and Mike Glatt at Makoche Studios who captured in words, faces, and emotions