



Missouri State University-West Plains (MSU-WP) Trade Adjustment Assistance Community College and Career Training Program Evaluation:

Final Report

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Executive Summary

MSU-WP TAACCCT Program

Missouri State University-West Plains (MSU-WP) received a Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant in the fall of 2013. The grant, funded by the U.S. Department of Labor (DOL), supported the implementation of a program designed to provide career training to workers who were eligible for trade adjustment assistance (TAA), other unemployed or underemployed adults, and veterans in south central Missouri by providing certificate and degree programs in health care (health informatics) and agriculture (agribusiness with a focus on green and/or sustainable jobs). Originally, the agriculture program also offered entrepreneurship and technology programs. As the program evolved, the entrepreneurship program was eliminated, but the technology program grew into the Greater Ozarks Center for Advanced Technology (GOCAT).

Additionally, TAACCCT supported the College Readiness Program (CRP). CRP provided an opportunity for students, or community members who were thinking about attending classes, to refresh or develop skills, such as math or reading, before they enrolled in courses. By taking these courses, they were prepared to enroll in the credit-bearing courses without having to take remedial courses that did not apply toward their degree.

TAACCCT also allowed MSU-WP to create a policy regarding Prior Learning Assessment and to develop a system of stacked and latticed credentials. Although there was staff turnover within the career development office, the importance of career development became clear through the grant. MSU-WP also funded a position for community outreach, which helped them create partnerships with local businesses. With these connections and advisory boards, the project staff were ensured that the curriculum met the needs of those in the fields and they had support from area businesses and industries.

Evaluation Design Summary

The complexity and multiple purposes of the evaluation required the use of an embedded mixed methods design. The mixed method design allowed the evaluation team to gather information through multiple methods (e.g., qualitative and quantitative) from multiple sources (e.g., students, program staff, and project records). Evaluators were able to triangulate the data to develop a deeper understanding of the processes and mechanisms that contribute to the outcomes.

A meaningful outcome evaluation (e.g., How many participants received employment after completing the program?) is built on a comprehensive understanding of program implementation (e.g., How are the program of study implemented)? Hence, the MSU-WP TAACCCT evaluation addressed questions related to *project implementation*—the structural and procedural fidelity of program implementation—and *project outcomes*—the degree to which the project goals are met and outcomes achieved. Implementation findings, examined alone and in concert with project objectives, allowed

the project team to make informed decisions for program improvement and refinement. Ultimately, the evaluation looked across project implementation and outcomes to make *summative* statements and recommendations about *what*, *how*, and *why* the program design and implementation worked to support the project outcomes.

Implementation Findings

- The grant was used to build institutional capacity in several different ways. First, MSU-WP was able to develop and Prior Learning Assessment policy. Second, this allowed the university the opportunity to develop a stacked and latticed credential system.
- The Adult Education Literacy (AEL) program expanded because of the CRP. The CRP was a success of the program because it allowed students and potential students the opportunity to place into credit-bearing courses without having to pay for developmental or remedial non-credit bearing courses.
- Career development and outreach offices became integral parts of the grant. Career development became intentional about reaching out to students by making presentations in their classroom. They also established ways to help students research potential career paths and how to reach those goals. The outreach office worked with TAACCCT project staff to make connections with local businesses and industries.
- The creation of the GOCAT facility was a success of the program. TAACCCT funds, in addition to other monetary partnerships, were used to purchase the facility and equipment to create GOCAT. This will provide advanced manufacturing training opportunities to the community.
- The GOCAT advisory board is composed of representatives from multiple businesses and industries across the region. These partnerships have supported GOCAT from the inception and will continue to ensure that the program offers the most updated curriculum and has the most relevant and advanced technology to serve the needs of the community.
- As a brand-new program, HIT also was a success of the TAACCCT program. Although it had several challenges in getting started, the result was the enrollment of over 20 students.
- Partnerships were also essential with HIT as the students need to complete an internship prior to earning their degree. By working with community health organizations, students were placed into relevant internships. The community organizations also support HIT in ensuring the curriculum is relevant and meets the current industry needs.
- TAACCCT support of the agriculture program allowed MSU-WP to create new certificates and programs and to purchase equipment, such as microscopes, to enhance student learning.
- Through TAACCCT, the agriculture program was able to purchase and construct a greenhouse and an aquaponics growing system. This not only will be a critical part for student learning, but ultimately, the food grown in the greenhouse will be used on campus.

- Finally, project staff indicated that this grant allowed them the opportunity to change the mindset of the university. Rather than seeing themselves as a two-year degree institution to prepare students to transfer to four-year universities, they now see themselves as being able to prepare students directly for the workforce through certificates, credentials, and degrees.

Participant Impacts & Outcomes

- Although the MSU-WP TAACCCT program did not have as many graduates as anticipated from the GOCAT and HIT programs, the number of students who enrolled and completed the agriculture program surpassed the targeted outcomes as shown in the chart below.

Outcomes	Target Total	Actual Total
1. Total unique participants served	69	284
2. Total number of participants completing a TAACCCT-funded program of study	44	46
3. Total number of participants still retained in their program of study or other TAACCCT-funded program	50	97
4. Total number of participants completing credit hours	57	284
5. Total number of participants earning credentials	51	53
6. Total number of participants enrolled in further education after TAACCCT-funded program of student completion	14	28
7. Total number of participants employed after TAACCCT-program of study completion	33	84
8. Total number of participants retained in employment after program of study completion	29	NA*
9. Total number of participants employed at enrollment who received a wage increase post-enrollment	13	NA*

*Note: At the time of this report, information from the Missouri South Central Workforce Investment Board (WIB) was not available to MSU-WP. They do plan on having it by the time the final APR is due in November, but due to new state policies, the WIB was having challenges gaining access.

- Based on information provided by MSU-WP, the percentage of students who completed the agriculture degree in 2011, 2012, and 2013 was only 12%. The percentage of TAACCCT agriculture students was 27%, indicating that students' retention and completion rates were higher for TAACCCT students than prior to TAACCCT.
- As noted above, information on wages is still being collected. The local Workforce Investment Board faced challenges with getting the information from the State. As data becomes available, employment and wage data will be updated.

Conclusions

- Key lessons learned from TAACCCT staff include that modifying a program is more challenging than starting a program from scratch. For example, project staff have said that if

they were going to do the agriculture program over again, they would create new programs rather than modifying what is available.

- By creating new programs rather than modifying classes, better data tracking systems can also be established. Knowing which students are in the TAACCCT programs from the very beginning will help with tracking and data collection purposes.
- Establishing positive relationships with partners also is key to a successful program. The TAACCCT program at MSU-WP benefitted because of the positive relationships they created with local communities and industry representatives.
- Because it took over a year to plan and implement, the progress made on the TAACCCT grant was slower than anticipated. MSU-WP project staff look forward to watching the programs continue to grow and expand over the course of the next three to five years. The programs will continue to be sustainable as long as students enroll in them. Project staff also intend to continue to look for other funding opportunities, such as through the National Science Foundation, to expand and build upon the work they were able to begin with TAACCCT.

Chapter I: Introduction

Missouri State University-West Plains (MSU-WP) received a Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant in the fall of 2013. The grant, funded by the U.S. Department of Labor (DOL), supported the implementation of a program designed to provide career training to workers who were eligible for trade adjustment assistance (TAA), other unemployed or underemployed adults, and veterans in south central Missouri by providing certificate and degree programs in health care (health informatics) and agriculture (agribusiness with a focus on green and/or sustainable jobs). Originally, the agriculture program also offered entrepreneurship and technology programs. As the program evolved, the entrepreneurship program was eliminated, but the technology program grew into the Greater Ozarks Center for Advanced Technology (GOCAT)¹. This evaluation report describes how MSU-WP implemented the program, successes and challenges faced, and available outcomes.

Need for the Program

MSU-WP is located in rural south central Missouri in the middle of the Ozark hills. Its original statement of need described how the economy had changed in the region over the past decade and its impact on TAA-eligible individuals:

The rural economy has undergone major demographic and economic changes over the last ten years. Manufacturing companies closed their facilities (usually in stages) and removed a number of higher-wage community jobs, due to foreign competition. . . . Even small numbers of TAA-eligible workers had a critical impact on smaller communities (Project Narrative, p. 1).

The proposal also explained the demographics of the TAA-eligible individuals in the region. According to the MSU-WP, three quarters of the workers were male with no formal education past high school and a quarter of the workers were over 55. The area also had challenges with employing veterans. A rationale for addressing the needs of these individuals through TAACCCT, as well as potential challenges that could arise, was included in the proposal:

One barrier to re-employment faced by TAA-eligible workers is a resistance to the prospect of returning to “school” if their immediate goal is to find a job. This resistance helps to explain why there are slightly more women than men participating currently in training opportunities. In addition, most adult learners are juggling family responsibilities, work, and school. Another barrier could be a lack of general and/or specialized technical computer and academic skills. Besides the

¹ It should also be noted that the original proposal named the program Rural Revitalization and Recovery or R³. As the program evolved, the R³ title became known to project staff, partners, and students as the TAACCCT program. Thus, throughout the report, the program at MSU-WP will be referred to as TAACCCT.

TAA-eligible identified above, this region has other unemployed or displaced adults and veterans who cannot find civilian jobs. Missouri's unemployment rate for veterans in 2011 was between 7.2% and 9.2% while the overall rate decreased to 8.6%. "This project" will address such barriers to attracting TAA-eligible and other unemployed adults by providing training that results in employer recognized credentials, creating non-traditional start times, accelerating developmental education, and providing training for occupations with hourly wages of \$12-\$15 (Proposal Narrative, pp. 3-4)

Goals of the Grant

Over the course of the grant, MSU-WP anticipated serving 69 individuals. In addition to increasing the number of students who complete the programs, TAACCCT aimed to improve the numbers of students who enroll in further education, are employed after graduation, are retained in employment (if incumbent workers), and/or who received a wage increase post-enrollment.

Figure 1 presents a logic model developed to provide a graphic overview of the TAACCCT project components. The logic model also displays the pathways in the project's theory of action, showing the connections between the project's strategies and activities, the planned outputs, and the intended outcomes. In addition to providing a graphic organizer of project activities, the logic model served as a guide for the evaluation, providing a blueprint to guide the evaluation questions, design, and methods.

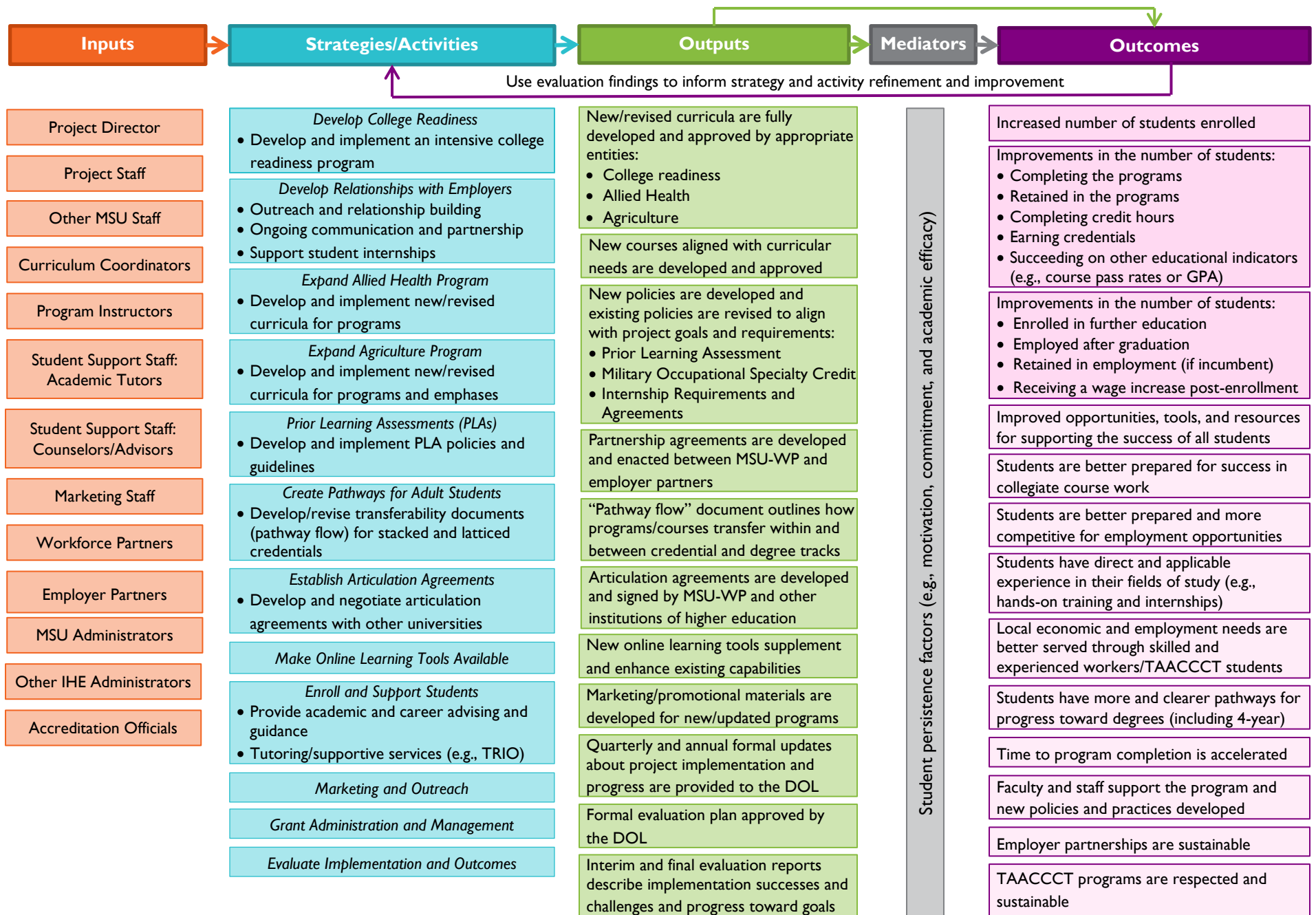


Figure 1. Logic Model

Chapter II: The Evaluation

McREL International became the external evaluator for MSU-WP's TAACCCT project in spring of 2014 and a kick-off meeting was held in April. Because the grant was awarded in fall 2013, the academic year of 2013-2014 was essentially a planning year for the grant; thus, data collection activities began in earnest in fall 2014. The following provides a brief description of the evaluation strategy and proposed methodology.

Evaluation Strategy

Following the philosophical paradigm of pragmatism (Mertens, 2005; Patton, 2002), the evaluation design used the most appropriate methodologies for the questions of interest. The complexity and multiple purposes of the evaluation required the use of an embedded mixed methods design. The original intention was to have comparison groups with students from similar institutions enrolled in similar programs; however, within the health and technology programs, students did not graduate until after the grant period ended. Because the agriculture curriculum did not change significantly over time, a historical cohort comparison was used to examine students who completed the program in 2011, 2012, and 2013.

The mixed method design allowed the evaluation team to gather information through multiple methods (e.g., qualitative and quantitative) from multiple sources (e.g., students, program staff, and project records). Evaluators were able to triangulate the data to develop a deeper understanding of the processes and mechanisms that contribute to the outcomes. Details about the implementation and outcome approaches to this evaluation are described below.

Evaluation Questions

A meaningful outcome evaluation (e.g., How many participants received employment after completing the program?) is built on a comprehensive understanding of program implementation (e.g., How are the program of study implemented)? Hence, the MSU-WP TAACCCT evaluation addressed questions related to *project implementation*—the structural and procedural fidelity of program implementation—and *project outcomes*—the degree to which the project goals are met and outcomes achieved. Implementation findings, examined alone and in concert with project objectives, allowed the project team to make informed decisions for program improvement and refinement. Ultimately, the evaluation looked across project implementation and outcomes to make *summative* statements and recommendations about *what*, *how*, and *why* the program design and implementation worked to support the project outcomes.

Implementation Evaluation Design and Questions

To address proposed evaluation questions, evaluators conducted a comprehensive evaluation using mixed methods to collect data via various means (e.g., surveys, interviews, and focus groups) from several stakeholder groups (e.g., project staff, faculty, workforce partners [i.e.,

South Central Workforce Investment Board and West Plains Career Center], and other key partners). The descriptive analyses of implementation strategies and activities documented the structural and procedural aspects of program implementation and any modifications or deviations from the original plan that took place.

Specifically, the implementation evaluation examined the extent to which program implementation strategies, services, and activities (i.e., program outputs) were implemented as planned and how well they were implemented (e.g., service quality, participant responsiveness, and engagement). Additionally, to support and enhance the feasibility and sustainability of the program at the local level, it is known that project leadership may occasionally need to make difficult decisions related to program adjustment, strategic refinement, or program modification. The focus of implementation evaluation was to measure and monitor all activities implemented (whether it was by original design or modification) over the first three years of the grant period.

Evaluators analyzed the steps taken by the MSU-WP TAACCCT team to create and run the TAACCCT program, and to assess the operational strengths and weaknesses of the program after implementation. The following evaluation questions were addressed (as required by the DOL SGA):

1. How was the particular curriculum selected, used, or created?
2. How was program and program design improved or expanded using grant funds?
3. What program delivery methods were offered?
4. What was the program administrative structure?
5. What support services and other services were offered?
6. Did the grantee conduct in-depth assessment of participants' abilities, skills, and interests to select participants into the grant program?
 - a. What assessment tools and processes were used?
 - b. Who conducted the assessment?
 - c. Were the assessment results useful in determining the appropriate program and course sequence for participants?
7. Was career guidance provided and if so, through what methods?
8. What contributions did each of the partners make in terms of (1) project design, (2) curriculum development, (3) recruitment, (4) training, (5) placement, (6) program management, (7) leveraging of resources, and (8) commitment to program sustainability?
9. What factors contribute to partners' involvement or lack of involvement in the program?

10. Which contributions from partners were most critical to the success of the grant program?
11. Which contributions from partners had less impact?

Outcome Evaluation Design and Questions

Regarding the evaluation of the program’s outcomes, the extent to which the project had an impact on the target participants’ TAACCCT outcomes was analyzed through educational records and student surveys. Data were collected from participants when they first enrolled in the program via an Entrance Survey. Participants who graduated by March 2017 were also asked to complete an Exit survey; however, response rates were poor on the exit surveys. TAACCCT program staff collected data about what participants did after they graduated. The key questions addressed was *to what extent does the TAACCCT project achieve program outcomes (i.e., TAACCCT outcome measures)?* Table 1 shows the projected yearly targets for the TAACCCT program:

Table 1. MSU-WP TAACCCT Yearly Targets

Outcomes	Year 1 Target	Year 2 Target	Year 3 Target	Total
1. Total unique participants served	16	22	31	69
2. Total number of participants completing a TAACCCT-funded program of study	8	16	20	44
3. Total number of participants still retained in their program of study or other TAACCCT-funded program	9	18	23	50
4. Total number of participants completing credit hours	12	19	26	57
5. Total number of participants earning credentials	11	17	23	51
6. Total number of participants enrolled in further education after TAACCCT-funded program of student completion	3	5	6	14
7. Total number of participants employed after TAACCCT-program of study completion	6	11	16	33
8. Total number of participants retained in employment after program of study completion	5	9	14	29
9. Total number of participants employed at enrollment who received a wage increase post-enrollment	2	5	6	13

Data Collection

Evaluators selected data sources to address each of the evaluation questions. Brief descriptions of the data collection activities used over the course of the grant are described below.

Document Review

Data were collected regularly from project staff, such as course schedules, quarterly reports, and meeting notes. The evaluation team met monthly with project staff for frequent updates on what was happening, changes being made to the program, successes and challenges.

Interviews and Focus Groups

Annual interviews were conducted with project staff, including the project director, program faculty, and university leadership. Interview protocols included a mix of structured and semi-structured questions asking about implementation activities, perceived impacts, successes, and challenges.

Interviews were also conducted annually with workforce partners from the South Central Workforce Investment Board and the West Plains Career Center. Questions focused on their experiences with the project team, leadership, and perceptions of the success and impact of the program. This also was an opportunity to discuss their role and efforts in recruiting participants, challenges encountered with recruitment, and experiences with program and employment placement.

Additionally, focus groups were conducted with advisory group members. The members were asked to reflect on their experiences with project leadership, their involvement with the project, and identification of barriers within the program itself or in the local community that might hinder success of the program. Furthermore, because members of the committees represented the local workforce and businesses, they were asked about the impact they anticipated the program would have on the local community.

Educational and Employment Data

MSU-WP contracted with the South Central Workforce Investment Board to track participants and share data with the university, who was tasked with sharing the information with the evaluator. MSU-WP also supplied the evaluation team with information about the students, including their unique identifier so all data could be de-identified while allowing the evaluation team to track the students throughout their enrollment in the program.

Student Surveys

Students beginning the program received an Entrance Survey during the first semester they began their program. The survey asked students a series of questions about respondents' motivation and barriers to learning. The questions were obtained from a validated instrument known as the College Persistence Questionnaire (CPQ), created by BD Advising and Retention Instruments (BDI) (Davidson, Beck, & Milligan, 2009). The short form of the CPQ, validated with community and technical college populations, contained 30 items assessing 10 factors that are associated with college retention and persistence.

During the semester that the students planned to graduate, they were asked to complete an Exit Survey. The Exit Survey asked the same questions as the entrance survey so that growth could be measured. The Exit Survey also included questions regarding program quality.

Chapter III: Project Components

Brief Project History

Project staff shared that the idea for the TAACCCT project originated from the unique needs of the area and the push to enrich everyone’s “capability to become employable.” The TAACCCT project originally offered two distinct programs of study: Health Information Technology (HIT) and Agriculture, with the agriculture department offering programs in entrepreneurship and technology. According to project leaders, the university’s allied health advisory board identified the need for education tailored to specific positions in healthcare informatics and technology. The focus for the second program of study, agriculture, was decided upon for two main reasons: (1) the prevalence of farming in the region, and (2) the interest in agriculture from local high school students, including animal agriculture, equine studies, greenhouse farming, and natural resources.

The following summarizes the progress that the TAACCCT program made on the various components of the grant, including the college readiness program; stacked and latticed credentials/prior learning assessments (PLAs), transferability and articulation; online and technology-enabled instructional options; partnerships with industry, education, and workforce; student support services; participant recruitment and enrollment; sustainability and the quality of the project. More detailed information about each specific program (i.e., advanced manufacturing, health information technology, and agriculture) is provided in later sections.

College Readiness Program

Project leaders stated that the College Readiness Program or CRP has “gone through many reiterations since the beginning of planning.” Originally, it was supposed to have been an intensive 10-week program to prepare students for college-level English, math, and writing if they did not meet the minimum score required on the admissions test to be placed into the higher-level courses needed for the TAACCCT programs. However, after the CRP planning had already taken place, the developmental education director was hired and she decided to modify the process because they discovered that “one size does not fit all” students. As a result, project leaders and the Adult Education and Literacy (AEL) director held more planning meetings to discuss the CRP. A key factor being discussed was the length of the program (i.e., eight, 10, or 12 weeks). It was decided that the program length should be determined on a case-by-case basis since every student comes in at a different level.

Project staff shared that before the students even take the ACT Compass® assessment to determine their course placement, the CRP is available for tutoring and assistance. One project leader called it a “pre-assessment stage,” and then elaborated on the process, explaining that when students come into admissions thinking they might need some refresher courses due to being out

of school for a while, they are sent to the AEL labs. From there, the students are provided assistance and tutoring until they feel comfortable that they can pass the admissions test and enroll in their chosen program of study. The leader explained that this works better for the students

**For More Information
about CRP:**

<https://youtu.be/hLa4-og7DEA>

CRP Math Star Presentation

<https://www.youtube.com/watch?v=...>

stated,

The bottom line is, if they've not been in school for quite a while or they're coming out of high school not really prepared for college, they can get discouraged very quickly and then they essentially end up in that vortex that continues to be a low-paying job . . . so the fact that they can save a whole semester of tuition or more is huge to them.

One academic leader noted that it makes the TAACCCT programs accessible for students who might not have been ready or prepared for college courses, saying that the CRP component will “continue to be key” for the success of the TAACCCT project.

Speaking to the successes, the CRP leaders shared the three main things that students like best about the program: (1) it is individualized based on their test scores, (2) it is free, and (3) they determine their own timeline. The students also have the option of completing the curriculum online, allowing for a more flexible schedule. Another success that the leaders mentioned was the communication that took place with the advising department, stating that there has been a “mindset change for the university,” and it has been beneficial for the students as they have more support available to them, especially as they begin the college process. The project director explained the success and impact the CRP has had on students and potential students,

I believe the goals started out by just being a support for those students who were not really ready for college but were enrolled in a college class because they didn't have anything other than that. And it evolved from that into us being their actual instructor to be able to really support them on a daily, weekly basis, and being their teacher. So, my teachers got to know them better and their strengths and weaknesses, and then it was a long-term thing. It was self-paced, so if it took them a year, a year and a half to finish, which in the past the college gave them a semester to finish a course, and they were paying for it.

So, it's evolved from being just a support, I think, for the students into being a program for them, and the support that they can do it along with taking regular classes. They weren't paying for it, so there wasn't a financial burden for them. And the times were available pretty much all day long, so it would work into their regular schedule. And then of course they could always use the tutoring at

the college and other supports, but I feel like that it's, now, they really see it as a benefit. And I've had some students say, "If I hadn't had that program, I wouldn't have been able to go on and be successful in my next math class." And so my teachers developed a really close relationship with a lot of the students, and they see it as that, that it's valuable for the students. Because some of them probably would not have made it through that math class they would have been in previously, before we got involved in doing the CRP program.

Stacked and Latticed Credentials/Prior Learning Assessments (PLAs)

By the end of the grant, the stacked and latticed credentials and prior learning assessments (PLAs) had been developed and were waiting on final faculty approval. Leaders noted that there was a learning curve among staff and faculty with this aspect of the project, but that an initial plan had been drafted to address how the certificates connect to each other, how they build on each other, and where the degrees will take students in their careers. Additionally, a faculty member said that while drafting the plan for stacked and latticed credentials, the goal was to “provide a range of knowledge that will allow [students to be successful in a particular field].” A challenge that the university found with this process was that university policy did not allow a student to earn both a degree and a certificate within the same year. As the grant evolved, staff became more aware and began to encourage students to apply for their certificate or credential each semester or year rather than waiting until the program was complete. If they waited, they may have only been able to earn an associate’s degree and not the certificate or credential.

Regarding prior learning, an academic leader explained that this component required a mindset change for the university, further stating that the faculty should “figure out a range that they are comfortable with providing that prior credit.” The grant allowed MSU-WP to hire an individual to receive training on implementing PLAs and that the individual drafted a policy to share with faculty and staff, which was still under review in summer 2017.

Transferability and Articulation

Although project staff reached out multiple times to various universities in Missouri and Arkansas, no official transferability or articulation agreement was created. Because of MSU-WP’s relationship with the main MSU campus in Springfield, MO, many of the students who completed their degrees transferred to the Springfield campus after completing their degree at MSU-WP.

Online and Technology-Enabled Learning

MSU-WP project staff acknowledged that the online and technology-enabled component had been an important part of implementation because it is integral to the TAACCCT project and the programs of study being offered. Many staff members reported having a general knowledge of the technology components that have been implemented. For example, project staff listed some of the software and technology equipment that has been implemented at various points in the grant,

including some used by the students such as Blackboard for overall coursework, MyMathLab[®] for assistance in math courses, Tutor Talk to contact the writing lab, and Tegrity[®] for efficient studying. Faculty and staff also use a variety of programs to support student work. Although it was eventually eliminated from the university, at the beginning of the grant, advisors used MAP-Works[®], an assessment system used to identify at-risk students in need of support. Banner[®], a student information system used throughout the university, was used to collect student demographic and education information.

Partnerships with Industry, Education, and Workforce

Project leaders were asked to elaborate on the relationships with workforce partners, specifically about how the partners support program objectives. Additionally, three workforce partners from the South Central WIB and Missouri Career Center were asked in detail about their involvement in planning and implementation, as well as their role in supporting each component of the grant. Project directors stated that they have a very strong working relationship with their partners. One leader elaborated on the partnership with the Missouri Career Center, explaining that they share information and work together to promote the programs. They have a mutually beneficial relationship as project staff help students access career guidance services from the center and the partners recruit students to the university's programs and pay for their tuition. Furthermore, the leader mentioned that while the partners did not play a big part in the curriculum development process, they have been very involved in the program design, specifically in supporting recruitment efforts and being committed to sustainability. Allied health faculty said that the stakeholders at the hospital who have been attending advisory board meetings are "very excited that we are graduating students in billing and coding specialties."

Workforce partners described their general involvement with the program since the fall of 2013, and how this may have helped shape the TAACCCT project's development and goal setting. They reported actively participating in advisory board meetings to provide input on the skills and training necessary for their employees to succeed, as well as keeping an eye on the local labor market to determine what training and information would be valuable to students, and to generate ideas for sustainability. Partners indicated that they are in constant communication with project leaders via e-mail and through in-person meetings, which take place approximately once a week. One workforce partner noted that a large factor contributing to their involvement is the university's willingness to have them involved, stating that they "don't have to fight for that relationship." The partners indicated that their ultimate goal is for the students to be employed and earning a livable wage.

Student Support Services

MSU-WP project staff and partners were asked to discuss the support services being offered to students through the TAACCCT grant. One academic leader reported that many students take advantage of the tutoring labs and choose to participate in TRIO, a federally funded

program that serves as a support group for students and provides them with a contact person from campus, frequent tutoring, as well as assistance with things like financial aid and scholarships, degree planning, and course selection. Although not all students have the time in their schedules to utilize these services, staff indicated that it was important to at least make sure they were aware of the resources available. A TRIO staff member indicated that support was individualized based on the students' needs, stating that they look at their backgrounds and determine what social and academic needs they may have, and then develop a plan with the student each semester.

Regarding academic advising at the university, one leader explained that staff try to get students from the centralized advising center to individual faculty advisors as quickly as possible, because they want students to be able to engage in personalized career conversations from the beginning of their program of study. A project manager mentioned that the advisors in the Advisement and Academic Coaching Center for Empowering Student Success (AACCESS) have done a great job, noting that the grant funds allowed them to be fully staffed for the first time.

Career Guidance and Job Placement Services

Over the life of the grant, career services staff changed multiple times making it difficult to create consistency within the office. Each person who had a role with career guidance contributed to building this office on the MSU-WP campus. For example, one staff member mentioned a plan to use the Focus™ program, which helps students identify possible careers based on their strengths, weaknesses, academic interests, and personal characteristics. Another career services staff member mentioned a list of assessments that they plan to give to students to assess their values, interests, aptitude, skills, and employability characteristics that they can further develop.

Elaborating on another plan in progress, a career services staff member indicated that they wanted to develop a portfolio for each student that will act as an ongoing academic and personal profile. The career plan will be used “to establish the basis of a resume, a portfolio, job credentials, and so forth” in hopes of helping the students realize what they have already accomplished, and then identify personal and academic areas where they might be lacking based on future workplace expectations. When the student has a tangible portfolio to guide them, the goal is to help them see areas where they may be weak or have a deficit that needs to be shored up before the end of the program through their participation in internships, extracurricular activities, volunteer work, etc. One staff member stated that they want to help students realize that

Successful careers and successful lives depend not only on their education in the classroom, but upon other common employer expectations. It also depends upon whether or not they can articulate through their portfolio, resumes, cover letters, and their interview skills that 'I'm the person you need because . . . ' and not only emphasize those academic skills, training, experiences, and internships, but also additional characteristics. That's going to be the major role of Career Services.

Essentially, career services staff plan to track and document each student's academic and personal progress throughout the program and hold students accountable for their own success.

Another piece of the Career Services that was developed was having members of the office visit the classrooms at the beginning of each semester. The purpose of these visits was to introduce the students to the office and make them aware of the services the office provided.

Job placement services became a more important part of the program in the last couple of years as students were closer to graduating. A community liaison was hired to forge partnerships with local employers and businesses. At the end of the grant, this position was still being funded at a half-time level. Although the agriculture program already had mechanisms in place to find student internships, the HIT program developed those partnerships and in spring and summer 2017, the students who were preparing to graduate received placements to complete their degree. When asked about this aspect of student support services, project leaders discussed the importance of their close working relationships with partners and how those relationships will be a vital part of successful job and internship placement for the MSU-WP TAACCCT students.

The Career Guidance and job placement offices also became responsible for much of the recruitment of students and well as partners. TAACCCT staff participated in multiple regional Career Fairs, sponsored high school tours of the school, and arranged for companies and local businesses to participate in round table discussions with students and to participate in career fairs on campus so students could see the possibilities, ask questions, and network with potential recruiters.

Sustainability

Project staff and partners shared the perception that many components of the MSU-WP TAACCCT project would be sustained after the TAACCCT grant funding ends. One academic division leader discussed the importance of not only making it successful throughout the life of the grant, but making it sustainable within the university as a “legacy program.” This leader suggested that to fulfill this goal, staff and partners would need to work together to answer questions like, “How does [the TAACCCT program] fit into the university’s mission and vision,” and “How does it fit into the community as far as their needs?” Furthermore, many staff members acknowledged that a vital factor in sustaining the program beyond the life of the grant would be collaboration and maintaining strong relationships among the staff, faculty, workforce partners, healthcare providers, and the local agriculture industry.

Additional Comments

Overall, MSU-WP project staff were universally excited about the project’s potential for success. One staff member commented, “The university seems to be growing really well and there’s a lot of new ideas coming up, and progress appears to be happening.” Another added, “I think that the program has an extreme amount of potential in our area. I think that there’s a lot of potential to serve the people in our surrounding communities with a program like this.”

Additionally, university and project leaders commented on how the program has instigated a change in mindsets about the role of the MSU-WP program. Historically, the focus has been on providing two-year degrees and allowing students to transfer to other institutions. The TAACCCT grant has allowed the university to create a new mindset and start thinking about workforce development. In other words, the university now has the capability of preparing students to be ready for the workforce in two years or less by providing certificates, credentials, and degrees that provide them with the necessary training for immediate careers, which is an added benefit for the community who has an urgent need to fill these jobs.

Other leaders focused on the growing opportunities for students stating that the program created opportunities for students when they might not have had hope before. The leader stated,

What I've appreciated about the process of the TAACCCT grant is that we are making it possible for everybody to go to college and everybody to have a future in something, and that's exciting. It's really exciting to have these pathways that have spurred other ideas.

Finally, one student support staff member commended project staff members' commitment to the success of the grant because of the benefits that it will provide not only to students but also to the community as a whole. The staff member shared,

We've all talked about the future. I think [we] have some very dedicated people and all of us really care about our community. Some of us have lived here all our lives practically, and we care about the students, and we care about the success of everybody.

Chapter IV: GOCAT

Introduction

Supported by the TAACCCT grant, MSU-WP established the Greater Ozarks Center for Advanced Technology (GOCAT). Although TAACCCT provided funding and support, GOCAT was forged through partnerships among MSU-WP, the South Central Career Center (SCCC) and the City of West Plains. Renovation funding was supported by the DOL (via TAACCCT funds), the Delta Regional Authority, U.S. Economic Development Administration, and the Great State of Missouri. The GOCAT facility is approximately 16,000 square feet; includes four classrooms, a computer lab, a community conference room, and Fab Lab²; and has a large shop area with six bay doors. Pictures of the facility can be found in Appendix A.

GOCAT has two intended purposes: (1) provide degree and certificate programs in technology and (2) provide customized training opportunities. The marketing brochure states that GOCAT is “intended to provide advanced, hands-on manufacturing training to individuals, from high school age through adulthood, that are looking to expand their skills in a technical field. These degrees are designed to match the skills needed by employers to fill high-wage, high-skill positions in a growth industry.” Area manufacturers (i.e., DRS Technologies, Armstrong, and Caterpillar) helped develop the training programs. Other employers and industry partners in the area include Perennial Energy, Arlee, and Regal and Eminence Manufacturing, Inc.

Both degree and certificate programs are available through this program. A full listing of degrees and certificates from the MSU-WP Career and Technical Programs department can be found in Appendix B. There are four technology concentrations that students can earn with an Associate of Applied Science (AAS) degree. See the inset for a description of those four programs.

MSU-WP celebrated GOCAT with its grand opening in April 2017. Partners, stakeholders, and other interested community members along with state legislative officials were invited to tour the facility. Unfortunately, about a week after the event, heavy rain struck the West Plains area, and the facility was flooded. Project leaders worked with university leaders and community volunteers to clean out the building and to try to replace the ruined equipment.

² MSU-WP’s Fab Lab is adapted from the Massachusetts Institute of Technology (MIT) Fab Lab. The MIT website defines a Fab Lab as: “A Fab Lab is a technical prototyping platform for innovation and invention, providing stimulus for local entrepreneurship. A Fab Lab is also a platform for learning and innovation: a place to play, to create, to learn, to mentor, to invent. To be a Fab Lab means connecting to a global community of learners, educators, technologists, researchers, makers and innovators- -a knowledge sharing network that spans 30 countries and 24 time zones. Because all Fab Labs share common tools and processes, the program is building a global network, a distributed laboratory for research and invention.” (<https://www.fablabs.io/labs/map>)

The State of Missouri applied for Federal Emergency Management Agency (FEMA) funds, and the university planned to use FEMA funds on the GOCAT facility. By fall 2017, classes were being held at the facility. At the writing of the report, no students had completed any of the technology programs promoted by the GOCAT facility; thus, no student outcomes are available to report.

The Evolution of GOCAT

Originally, the technology program for the MSU-WP TAACCCT grant was included as part of the alternative energy program within the agriculture department. During the first couple of years of the grant, the faculty were excited about the equipment the TAACCCT grant allowed them to purchase and the potential to grow the program. As a faculty member described,

That got me involved and excited because I'm interested in alternative energy. That's where it all began. The money was made available from the TAACCCT grant to purchase electricity and electronics equipment, and we got a lot of awesome equipment, from the basic components, passive electricity and electronics like resistors and capacitors to simple components.

Partnerships have been key for creating the GOCAT. Specifically, MSU-WP formed a partnership with the SCCC as well as multiple other regional

TECHNOLOGY A.A.S. DEGREES

Technology Management

Graduates have knowledge and experience in areas of management, quality, safety, project management, and supervision. Jobs may include Supply Chain Technician, Safety Technician, Quality Control Technician, and Project Coordinator.

Manufacturing Technology

Graduates have knowledge and experience in materials, automated manufacturing applied electricity and electronics, mechanical systems and fluid power, welding, and supervision. Jobs may include Manufacturing Technician, Maintenance Technician, Welding Technician, Electrical Technician, and Supply Chain Technician.

Alternative Energy

Graduates have knowledge and experience in chemistry, plant science, agricultural business, biofuels, solar, wind, and sustainable agriculture. Jobs may include Agricultural Technician, Electrical Technician, Customer Service, Solar Installer, Renewable Energy Technician, and Operations Technician.

Agri-Business

Graduates have knowledge of how science and technology direct and enhance farming operations. You will learn the latest technology, like hydroponics, and use of machinery and farming concepts that will help run a successful business operation.

Source: Missouri State University-West Plains Associate of Applied Science Technology Brochure

industry partners. One of the partners explains this significance of establishing these partnerships and why MSU-WP was so successful in bringing everyone together,

Speaking on behalf of the community employer, employers were brought together and they were asked what our needs were. Not only what we can do to meet those needs, but we were asked what [the university] was not doing and if they were failing to meet any needs. And there were classes being offered and those curriculums were evaluated. [Partners were asked] Does that meet your needs? And what's messy? Curriculums were totally rewritten based on the needs of employers and what these students, once the classes were completed were going to have that got them in the door and got them a paycheck.

GOCAT Ribbon Cutting Ceremony

<https://www.youtube.com/watch?v=0phi1w52D2c&t=7s>

More importantly, the GOCAT facility is seen as a major accomplishment of the grant, not because of the number of graduates it produced but because of the partnerships and the potential that the advanced manufacturing. According to a project leader, “I think it’s important to say a year from now, when we have 20, 50, 100 students that are graduating or two years down the road, the investment made a difference.”

Partner Surveys

As noted above, many partners were actively involved to make GOCAT successful. The success of TAACCCT programs is dependent upon the relationships that the programs forge with community and industry partners. MSU-WP created an advisory board for the GOCAT program to ensure that the program matches the needs of the community and to receive assistance in creating and implementing the programs.

Members of the GOCAT advisory board were asked to submit a survey four times over the course of the grant (i.e., spring 2015, spring 2016, fall 2016, and summer 2017). Because the GOCAT advisory board was forming and being implemented during 2015 and 2016, those surveys focused on what the members thought the advisory board priorities should be. The last survey, administered in summer 2017, was designed to have the advisory board members reflect on what they had accomplished over the past few years. The survey asked them about their perceptions of how they or their organization have supported the TAACCCT program, suggestions as to different ways they would like to support the organization, and other comments they have about the program. The following summary shows the results of the final survey (administered in summer 2017) completed by members of the GOCAT advisory board members. Results from previous versions of the survey can be found in the Survey Summary document, a supplemental document of the evaluation.

GOCAT Survey: 2017 Summer Administration

In summer 2017, 33 members of the GOCAT Advisory Board were invited to take the survey online. Of those 33, members, 16 responded (48%). The following provides a summary of the survey results. The survey was conducted online (except for one person who completed a paper version). After the initial invitation, two reminders were sent to those who did not complete the survey. The survey was designed to collect information from advisory board members about their participation as a board member, their perceptions about the program, how they thought their company/organization could support GOCAT, and ideas or suggestions for improvement. Results from the survey are included below.

General Information

In the first section of the survey, participants provided information about their professional roles and involvement with the program. Respondents addressed questions about: (1) field in which their company or organization works; (2) job title/position; (3) length of time they have been involved with the GOCAT and the advisory board; and (4) other roles they hold within the TAACCCT project. Tables 2 – 6 show the results of those questions. Bulleted summaries follow each table.

Table 2. Field(s) in Which Your Organization or Company Operates

In which field(s) does your organization or company operate? (Select all that apply) (N = 16)		
n	Percent	Field
6	37.5%	Economic Development
6	37.5%	Education or Training
10	62.5%	Industry and/or Business Development
6	37.5%	Workforce Development
1	6.3%	Other (please specify): • Entrepreneurship

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Almost two thirds (63%) of the GOCAT advisory board members who completed the survey said that their organization or company operates in the industry and/or business development field.
- Over one third (38%) of the survey respondents indicated that they worked in the economic development, education or training, or workforce development fields.
- One respondent indicated that he or she worked in the entrepreneurship field.

Table 3. Job Title/Position

What is your job title/position? (Please choose the category that best describes you) (N = 16)		
n	Percent	Job Title/Position
2	12.5%	Owner, President, or CEO
5	31.3%	Division Manager or Director
1	6.3%	Business Services staff
4	25.0%	Human Resources staff
4	25.0%	Other (please specify): <ul style="list-style-type: none"> • Executive Director • Mentor and Board Member • Operations Manager • Vice President Operations

Note. Due to rounding, percentages may not add up to 100.0%

- Almost one third (31%) of the GOCAT advisory board members who responded to the survey indicated they served as Division Managers or Directors.
- A quarter (25%) of the respondents said they were Human Resources staff.
- Of the 16 respondents, two (13%) responded that they were owners, presidents, or CEOs.
- Twenty-five percent of the respondents selected “other” as their response and described their titles or positions as executive director, mentor and board member, operations manager, and vice president of operations.

Table 4. Length of Involvement with Project

When did you personally become involved with the TAACCCT project? (N = 16)		
n	Percent	When TAACCCT Involvement Began
2	12.5%	Before the project was funded
3	18.8%	Fall of 2013
2	12.5%	Spring of 2014
1	6.3%	Summer of 2014
1	6.3%	Fall of 2014
1	6.3%	Spring of 2015
1	6.3%	Summer of 2015
2	12.5%	Fall of 2015
3	18.8%	Spring of 2016

Note. Due to rounding, percentages may not add up to 100.0%

- Members of the GOCAT advisory board became involved with the TAACCCT project at various times throughout the grant project. Nearly a fifth (19%) joined in fall 2013.

- Approximately 13% joined before the project was funded, in spring of 2014 or fall of 2015.
- Of the survey respondents, one member each joined in summer of 2014, fall of 2014, spring of 2015, and fall of 2015.
- No respondent reported joining the TAACCCT team after spring of 2016.

Table 5. Length of Involvement with Advisory Board

How long have you been a member of the advisory board? (N = 15)		
n	Percent	When Advisory Board Membership Began
5	33.3%	Since fall 2013
2	13.3%	Since spring 2014
1	6.7%	Since summer 2014
1	6.7%	Since spring 2015
2	13.3%	Since fall 2015
4	26.7%	Since spring 2016

Note. Due to rounding, percentages may not add up to 100.0%. If no one reported becoming a member during a particular timeframe, that timeframe (e.g., since fall 2014) was removed from the results.

- One third of the respondents (33%) have been members of the advisory board since fall 2013.
- Over a quarter (27%) have been members since spring 2016.
- The remainder of the respondents (40%) joined between spring 2014 and fall 2015.

Table 6. Other Roles within TAACCCT

Do you have other roles within the TAACCCT project? (Select all that apply) (N = 7)		
n	Percent	Role
0	0.0%	Adjunct faculty
4	25.0%	Subject matter expert
3	18.8%	Subcommittee member (please specify which committee): <ul style="list-style-type: none"> • Advisory committee member • Economic development • Industry partner

- Only seven people chose to respond to the question regarding other roles within TAACCCT. No respondent reported being an adjunct faculty member.
- A quarter (25%) indicated they served as subject matter experts.
- Other respondents described “other” roles as advisory committee members, economic development, and industry partner.

Project Development and Planning

The next section of the survey asked GOCAT advisory board members to indicate how often they were involved with different project activities. Project activities included: (1) participant recruitment; (2) curriculum design and development; (3) technology and equipment support; (4) partnership support; and (5) student support and placement services. A five-point Likert scale was used to report these results (5 = *Monthly*; 4 = *Once a semester*; 3 = *Once a year*; 2 = *Once during the project*; and 1 = *Never*). Table 7 includes the responses for each of these activities.

Table 7. Partner Involvement with TAACCCT

As a partner, how often were you involved in supporting the following project activities?								
Project Activities	n	Frequency					Mean	SD
		Monthly	Once a semester	Once a year	Once during the project	Never		
Participant recruitment								
Recruiting incumbent workers	15	26.7%	26.7%	0.0%	6.7%	40.0%	2.93	1.79
Recruiting TAA-eligible participants	15	26.7%	13.3%	6.7%	0.0%	53.3%	2.60	1.84
Recruiting veterans or spouses of veterans	14	21.4%	14.3%	0.0%	14.3%	50.0%	2.43	1.74
Recruiting underemployed participants	15	26.7%	20.0%	6.7%	0.0%	46.7%	2.80	1.82
Recruiting long-term unemployed participants	14	21.4%	21.4%	7.1%	0.0%	50.0%	2.64	1.78
Recruiting other program participants	15	26.7%	20.0%	6.7%	0.0%	46.7%	2.80	1.82
Curriculum design and development								
Assisting in curriculum design and redesign to ensure the training provided is aligned with industry needs	16	12.5%	18.8%	37.5%	25.0%	6.3%	3.06	1.12
Identifying credentials that meet industry needs	16	25.0%	25.0%	18.8%	12.5%	18.8%	3.25	1.48
Identifying important knowledge and skill sets that meet industry needs	16	18.8%	25.0%	31.3%	18.8%	6.3%	3.31	1.20

As a partner, how often were you involved in supporting the following project activities?								
Project Activities	n	Frequency					Mean	SD
		Monthly	Once a semester	Once a year	Once during the project	Never		
Technology and equipment support								
Providing equipment or software to support project success	16	6.3%	0.0%	0.0%	0.0%	93.8%	1.25	1.00
Providing facilities and equipment for training activities	16	6.3%	0.0%	6.3%	6.3%	81.3%	1.44	1.09
Partnership support								
Assisting in creating new partnerships to support project success	15	20.0%	6.7%	33.3%	20.0%	20.0%	2.87	1.41
Sharing information about the TAACCCT project with local or regional stakeholders	16	25.0%	25.0%	25.0%	6.3%	18.8%	3.31	1.45
Student support and placement services								
Providing contextualized learning opportunities (e.g., paid or unpaid internships, or company visits)	15	0.0%	26.7%	13.3%	0.0%	60.0%	2.07	1.39
Identifying services needed to support participant success	16	18.8%	18.8%	37.5%	6.3%	18.8%	3.13	1.36
Providing graduate placement services (e.g., mock interviews or assistance developing résumés)	16	12.5%	12.5%	12.5%	0.0%	62.5%	2.12	1.59
Providing information related to job openings in the agriculture, health information technology, or technology field(s) to the college and students	16	25.0%	6.3%	31.3%	31.3%	6.3%	3.12	1.31
Offering job opportunities for TAACCCT program graduates	16	6.3%	12.5%	0.0%	18.8%	62.5%	1.81	1.33

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- In terms of participant recruitment, advisory board members most *frequently recruited incumbent workers* ($M = 2.93$; $SD = 1.79$). Of the respondents, 27% indicated that they recruited incumbent workers **monthly** or **once a semester**. Survey respondents were least likely to *recruit veterans or spouses of veterans* ($M = 2.43$; $SD = 1.74$). Half (50%) said they **never recruited veterans or spouses of veterans** while 21% said they *recruited veterans or spouses of veterans monthly*. For the other four components under participant recruitment, the means were 2.60 (*Recruiting TAA-eligible participants*); 2.64 (*Recruiting long-term unemployed participants*); and 2.80 (*Recruiting underemployed participants* and *Recruiting other program participants*).
- Three items were included under the curriculum design and development construct. Survey respondents indicated that they most frequently *identified important knowledge and skill sets that met industry needs* ($M = 3.31$; $SD = 1.20$). Almost a fifth (19%) said that they *identified important knowledge and skill sets that met industry needs monthly*, while 25% and 31% said they *identified important knowledge and skill sets that met industry needs once a semester* or **once a year**, respectively. Half of the respondents (50%) said they *identified credentials that met industry needs monthly* (25%) or **once a semester** (50%). *Assisting in curriculum design and redesign to ensure the training provided is aligned with industry needs* had the lowest mean ($M = 3.06$; $SD = 1.12$). Only 13% of the survey respondents said they did this **monthly** while 38% said they did this activity **once a year**.
- Two items about partnership support were asked. Both items had low means. The mean for the item, *Providing equipment or software to support project success* was 1.25 ($SD = 1.00$) while the mean for *Providing facilities and equipment for training activities* was 1.44 ($SD = 1.09$). Fifteen out of 16 respondents (94%) said they **never provided equipment or software to support project success**. Thirteen out of 16 respondents said they **never provided facilities and equipment for training activities**.
- The last construct in this section was about student support and placement services. Means ranged from 3.31 ($SD = 1.45$) (*Sharing information about the TAACCCT project with local or regional technology stakeholders*) to 1.81 ($SD = 1.33$) (*Offering job opportunities for TAACCCT program graduates*). Half of the respondents (50%) said they *shared information about the TAACCCT project with local or regional technology stakeholders monthly* or **once a semester**. Respondents less often *offered job opportunities for TAACCCT program graduates* with 63% indicating they **never had offered job opportunities**.
- Four of the items had means ranging from 2.07 to 3.13. These items included *providing contextualized learning opportunities (e.g., paid or unpaid internships, or company visits)* ($M = 2.07$; $SD = 1.39$); *providing graduate placement services (e.g., mock interviews or assistance in developing resumes)* ($M = 2.12$; $SD = 1.59$); *providing information related to job openings in the technology field to the college and students* ($M = 3.12$; $SD = 1.31$); and *identifying services needed to support participant success* ($M = 3.13$; $SD = 1.36$).

The last question asked in the *Project Development and Planning* section asked respondents to rate the level of quality of each project from 1 (*poor*) to 5 (*high*). Table 8 shows the results of that question.

Table 8. Board Members’ Perception of Quality of Project Components

What is your perception about the quality of the following project components? (Note that respondents who reported NIA were excluded from the analysis).								
Project Component	n	Rating of level of quality from 1 (poor) to 5 (high)					M	SD
		1	2	3	4	5		
Participant recruitment	11	0.0%	0.0%	18.2%	45.5%	36.4%	4.18	0.75
Curriculum design and development	14	0.0%	0.0%	0.0%	50.0%	50.0%	4.50	0.52
Technology and equipment support	14	0.0%	0.0%	14.3%	50.0%	35.7%	4.21	0.70
Partnership support	15	0.0%	6.7%	6.7%	53.3%	33.3%	4.13	0.83
Student support and placement services	12	0.0%	0.0%	25.0%	25.0%	50.0%	4.25	0.87

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- Overall, GOCAT advisory board members indicated high levels of support for each project component. All respondents (100%) ranked *curriculum design and development* as a “4” or a “5” resulting in a mean of 4.50 ($SD = 0.52$). Similarly, *student support and placement services* received a mean of 4.25 ($SD = 0.87$). Out of 12 respondents, 9 (75%) rated *student support and placement services* as a “4” or “5.”
- The survey respondents provided a mean of 4.21 ($SD = 0.70$) for *technology and equipment support*. Nine out of 14 (86%) rated it as a “4” or “5” while 92% of the respondents rated *participant recruitment* as a “4” or “5” ($M = 4.18$; $SD = 0.75$). The item, *partnership support* received the lowest mean ($M = 4.13$; $SD = 0.83$); however, 87% still rated it as a “4” or “5”.

Levels of Satisfaction

The GOCAT Advisory Board survey asked two questions regarding participants’ level of satisfaction with their involvement and engagement with the project. Table 9 shows the results of that question where 5 = *strongly satisfied* and 1 = *very dissatisfied*.

Table 9. Board Members' Level of Satisfaction with Project

Overall, how satisfied are you with . . .								
	<i>n</i>	Strongly satisfied	Satisfied	Neutral	Dissatisfied	Very dissatisfied	M	SD
your level of involvement with the project?	16	25.0%	50.0%	25.0%	0.0%	0.0%	4.00	0.73
the TAACCCT project staff's efforts to engage you in the project?	16	37.5%	37.5%	25.0%	0.0%	0.0%	4.13	0.81

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- Overall, survey respondents were satisfied with their level of involvement with the project ($M = 4.00$; $SD = 0.73$). Three quarters (75%) of the GOCAT advisory board members are *very satisfied* or *satisfied* with their current level of involvement. No respondents indicated any level of dissatisfaction.
- Similarly, survey respondents were satisfied with the TAACCCT project's staff efforts to engage them in the project. Seventy-five percent the respondents are *very satisfied* or *satisfied* with the staff's efforts to engage them in the project.

Project Impact on Local Industry and the Community

The next seven questions asked GOCAT advisory board members to rate their level of agreement with a series of statements regarding the impact they thought TAACCCT, specifically technology, would have on the local industry and the community. Results were calculated based on a 4-point Likert scale (1 = *Strongly disagree*; 2 = *Disagree*; 3 = *Agree*; and 4 = *Strongly agree*). Table 10 shows the results.

Table 10. Impact on Local Industry and Community

To what extent do you agree with the following statements?						
Statement	Strongly agree	Agree	Disagree	Strongly disagree	M	SD
The TAACCCT program offers certificate, diploma, and degree programs that meet industry needs.	46.7%	53.3%	0.0%	0.0%	3.47	0.52
The TAACCCT program prepares workers with the knowledge and skills needed to be successful in the program's focus industries (e.g.,	40.0%	60.0%	0.0%	0.0%	3.40	0.51

To what extent do you agree with the following statements?						
Statement	Strongly agree	Agree	Disagree	Strongly disagree	M	SD
agriculture, health information technology, or technology).						
The TAACCCT project offers programs that support local workforce development.	56.3%	43.8%	0.0%	0.0%	3.56	0.51
The TAACCCT program prepares highly skilled workers who meet local industry needs.	42.9%	50.0%	7.1%	0.0%	3.36	0.63
The TAACCCT program prepares highly skilled workers who meet my company's/ organization's needs.	25.0%	58.3%	16.7%	0.0%	3.08	0.67
The partnership between my company/ organization and the TAACCCT program will continue and expand beyond the life of the grant period.	60.0%	40.0%	0.0%	0.0%	3.60	0.51
I will consider collaborating with MSU-WP on other projects in the future.	56.3%	12.5%	6.3%	25.0%	3.00	1.32

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- All means ranged between 3.00 and 3.56. The highest mean (3.60; SD = 0.51) was with the statement, “*The partnership between my company/ organization and the TAACCCT program will continue and expand beyond the life of the grant period.*” In addition to that statement, three other statements also had 100% of the respondents indicating they *strongly agreed* or *agreed* with the statements. These items included: (1) *The TAACCCT project offers programs that support local workforce development* (M = 3.56; SD = 0.51); (2) *The TAACCCT program offers certificate, diploma, and degree programs that meet industry needs* (M = 3.47; SD = 0.52); and (3) *The TAACCCT program prepares workers with the knowledge and skills needed to be successful in the program's focus industries (e.g., agriculture, health information technology, or technology)* (M = 3.40; SD = 0.51).
- A small percentage of survey respondents indicated that they disagreed with the statements, “*The TAACCCT program prepares highly skilled workers who meet my company's/ organization's needs*” (17%) and “*The TAACCCT program prepares highly skilled workers who meet local industry needs*” (7%).
- Just over 30% *disagreed* or *strongly disagreed* (31%) that they would “*consider collaborating with MSU-WP on other projects in the future.*”

Company/Organizational Roles in Supporting the Project

The next section of the survey requested information regarding how the GOCAT advisory board members' company or organization supported or planned to support components of the TAACCCT project after TAACCCT funds ended. This section asked about intentions towards recruiting participants, providing internships, and recommending the program to employees or collaborators.

Table 11 shows the results of whether the company/organization would continue to recruit participants. All respondents indicated "yes." Respondents were then asked to explain why they would continue to recruit participants. Answers to that question focused on training the local workforce to be prepared for jobs needed in the region.

Table 11. Referrals

To support project success, partners play an essential role in supporting participant recruitment. Will your company/organization help to identify or refer participants to MSU-WP programs after TAACCCT ends? (N = 16)	
100.0%	Yes
0.0%	No
Please explain why you chose that response:	
<ul style="list-style-type: none"> • I feel that GOCAT will be good for training for years to come. • If I understand the question right, the best answer is yes because it's the right thing to do. • Skilled workforce is needed to support the needs of local companies and to attract new companies to the region. • The MSU-WP programs ultimately will be very beneficial, specifically for my organization and generally, for our community so recruitment/networking about the program will further enhance its success. • This program has brought local employers to the table in developing the training program to meet their specific needs. We know they will value the certifications received by participants. • This recruitment will help our shop find skilled employees and also help the economic growth we need here in our area. • We believe in the benefit of training and skill for our community. • We feel the criteria and program is suited toward our industrial field. • We have a stake in the success of GOCAT. We will need students to become workers for us in the future. • We work with cities and counties in the seven-county region. Industries and companies that need special training for their employees often come to our attention, and we refer the needs to the Workforce Investment Board or MSU-WP so they will be knowledgeable of the services and opportunities for training at the GOCAT. • Work with the Trade Act Program and WIOA programs. 	

The next question asked participants about their company’s willingness to provide paid or unpaid internships to MSU-WP TAACCCT participants. Table 12 displays the results of that question.

Table 12. Internships

Is your company offering or will offer any paid or unpaid internships for MSU-WP participants who are currently enrolled or will enroll in agriculture, health information technology, or technology? (Select all that apply) (N = 14)		
n	Percent	Role
1	6.3%	Yes, we are currently offering <u>unpaid</u> internships and will continue to do so.
3	18.8%	Yes, we will offer <u>unpaid</u> internships in the future.
1	6.3%	Yes, we are currently offering <u>paid</u> internships and will continue to do so.
3	18.8%	Yes, we will offer <u>paid</u> internships in the future.
3	18.8%	No
3	18.8%	I don't know

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- One individual (6%) responded that the company is offering unpaid internships while three respondents (19%) said they would offer unpaid internships in the future.
- Similarly, one individual (6%) indicated that paid internships are currently being provided while three respondents (19%) said they would offer paid internships in the future.
- The remaining six participants (38%) indicated that they would not offer internships in the future or did not know what the company would do in the future.

Ultimately, the goal of the TAACCCT program is to have graduates hired in the field; thus, the GOCAT advisory board members were asked if they would consider hiring MSU-WP TAACCCT graduates, if positions opened in the future. Table 13 shows how the survey respondents answered that question.

Table 13. Hiring of Graduates

Will your company consider hiring MSU-WP agriculture, health information technology, or technology program graduates if new positions open in the future? (N = 12)		
n	Percent	Role
10	76.9%	Yes
2	15.4%	I don't know

Note. Due to rounding, percentages may not add up to 100.0%.

- Over three quarters (77%) said they would hire TAACCCT graduates, if new positions opened in the future.
- Two respondents (15%) said that they did not know.

The last question in this section asked the GOCAT advisory board two questions about their likeliness to recommend MSU-WP programs to current or prospective employees or to companies, organizations, and community partner with which they collaborate. Answers to these questions were scored using a 5-point Likert scale where 5 = *Very likely*; 4 = *Likely*; 3 = *Neither likely or unlikely*; 2 = *Unlikely*; and 1 = *Very unlikely*. Table 14 shows the results of those questions.

Table 14. Likeliness to Recommend MSU-WP Programs

How likely are you to recommend MSU-WP programs . . .								
	<i>n</i>	Very likely	Likely	Neither likely or unlikely	Unlikely	Very unlikely	M	SD
to your current or prospective employees?	14	56.3%	18.8%	12.5%	0.0%	0.0%	4.50	0.76
to companies, organizations, and community partners with which you collaborate?	16	56.3%	12.5%	6.3%	0.0%	25.0%	3.75	1.73

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- GOCAT advisory board members were likely to recommend MSU-WP programs to current or prospective employees ($M = 4.50$; $SD = 0.76$). Seventy-five percent were *very likely* or *likely* to do so while 13% provided a more neutral response of *neither likely or unlikely*.
- The advisory board members were slightly less likely to recommend MSU-WP programs to companies, organizations, and community partners with which they collaborate ($M = 3.75$; $SD = 1.73$). While nearly 70% were *very likely* or *likely* to recommend the program, 25% were *very unlikely* to recommend the program.

Open-Ended Responses

The final section of the survey consisted of four open-ended responses. These questions included the following:

- From your perspective, what are the strengths of the agriculture, health information technology, or technology programs at MSU-WP?
- From your perspective, what areas of these programs need to be strengthened?
- From your perspective, what can MSU-WP do to continue to sustain the agriculture, health information technology, and technology programs after the TAACCCT grant ends?

- What other comments or suggestions do you have about the agriculture, health information technology, or technology programs at MSU-WP?

Tables 15 – 18 list out the responses provided for each of the open-ended questions. Brief summaries of the prevalent themes follow each table.

Table 15. Program Strengths

From your perspective, what are the strengths of the agriculture, health information technology, or technology programs at MSU-WP? (N = 12)
Community support. MSU-WP sought industry/community input and requested partnership with the greater community stakeholders.
Do not know.
Each program has high demand with job openings within our region.
Good training locally for our people.
I feel the strength of all these programs lies within the communities, industry, and all technology fields that support and also employ graduates from this technology center.
It allows local students to train local to stay local.
Job Readiness going into the manufacturing field.
Local industry focused. Based on the needs of the local employers.
Medical billing is a niche industry that is not being met locally. Agriculture is already here, and if this program can help growers develop businesses around producing, it would be great. Technology is needed in every field.
Strong collaborative commitments from all involved. Education to employment.
Tremendously dedicated staff. Good collaboration and outreach to local government and business partners with a holistic outcome approach.
Very diverse and a solid group.

When asked about the program strengths, many responses discussed how the program would fill local workforce needs. Another theme that emanated from the comments was the strength of the partnership with the university and the local community stakeholders.

Table 16. Program Areas that Need to be Strengthened

From your perspective, what areas of these programs need to be strengthened? (N = 11)
At this time, I feel this is an area that I do not have enough involvement to answer fairly.
Automation, technical gauging language.
Do not know.
Graduation rates.
Greater community awareness.
MSU-WP needs to share graduates of these programs so employers know who is out there (i.e., like a reverse job fair).

None that I see.
Reaching out to smaller manufacturing companies in the area.
The machine shop needs to get up and going and a good Cadcam system.
The technology training and hands-on real life training.
Transition from academic to work.

When asked to list areas of the program that need to be strengthened, the list was quite diverse. Some comments focused on curriculum issues:

- *Automation, technical gauging language;*
- *The machine shop needs to get up and going and a good Cadcam system;*
- *The technology training and hands-on real life training; and*
- *Transition from academic to work*

Other comments seemed to be focused on reaching out to the community:

- *Greater community awareness;*
- *MSU-WP needs to share graduates of these program so employers know who is out there (i.e., like a reverse job fair); and*
- *Reaching out to smaller manufacturing companies in the area*

Because the official TAACCCT funding period has ended, the GOCAT advisory board members were also asked to reflect on how the TAACCCT programs could remain sustainable. Nine surveys include responses, as shown in Table 17.

Table 17. Sustaining the Program

From your perspective, what can MSU-WP do to continue to sustain the agriculture, health information technology, and technology programs after the TAACCCT grant ends? (N = 9)
By having success from the existing program along with strong partners. Hopefully, funding can be continued.
Continue outreach and seek out students.
Continue the programs and celebrate the successes and share them with the public.
Continue to look at local employer needs for skilled workforce.
Continue to strengthen and rely on partnerships.
Provide financial assistance for students and have a good placement service upon training completion.
Regular round table type meetings with educators and industry to maintain a solid effective course of instruction.

Try to consult with your advisors on ways to keep these programs intact to help find resources to keep programs strong.

When students see others being placed into actual jobs, then the program will sustain.

Four of the nine comments recommended that the program continue what they are doing:

- *Continue outreach and seek out students;*
- *Continue the programs and celebrate the successes and share them with the public;*
- *Continue to look at local employer needs for skilled workforce; and*
- *Continue to strengthen and rely on partnerships*

Other comments, such as “*By having success from the existing program along with strong partners. Hopefully, funding can be continued*” and “*When students see others being placed into actual jobs, then the program will sustain*” suggest that the programs will build and sustain themselves over time as they achieve more success.

Finally, a few recommendations were made as suggestions to help the programs continue to become more sustainable:

- *Provide financial assistance for students and have a good placement service upon training completion;*
- *Regular round table type meetings with educators and industry to maintain a solid effective course of instruction; and*
- *Try to consult with your advisors on ways to keep these programs intact to help find resources to keep programs strong.*

The last question asked GOCAT advisory board members to add any additional comments or suggestions they may have about the TAACCCT programs. The five comments are listed in Table 18.

Table 18. Comments or Suggestions about Programs

What other comments or suggestions do you have about the agriculture, health information technology, or technology programs at MSU-WP? (N = 5)
Continue to be open to improvement of programs.
I know these programs are needed to help establish growth in all high technology fields and support economic growth in our area.
Keep it up!
Keep up the momentum of putting out good students.
MSU-WP could do a better job explaining what careers the graduates are going to be prepared for.

Three of the comments indicate that MSU-WP can continue to do what they are doing. Another comment reaffirms that these programs are needed in the region. The final comment

makes a recommendation MSU-WP to better explain what careers the students will be prepared for once the graduate.

Chapter IV: Health Information Technology

Introduction

The original proposal stated that the West Plains community had a large demand for people in the healthcare field. It specifically stated that the medical and health information technician occupation is projected to increase 12% statewide and 4% regionally” (Proposal, p.4). The proposal also emphasized that the Ozarks Medical Center noted that community health leaders and local residents “ranked an ability to share data as one of ten county health priorities. This means one of the area’s largest employers sees a need for electronic health communication training” (Proposal, p. 4).

Although the HIT program changed over time, as explained in the following section, it ultimately ended up providing an associate of applied science (AAS) and certificate options for students. The AAS was in health information technology while certificates can be earned in three areas: (1) medical billing and coding; (2) medical office administration and assistance; and (3) electronic health records specialist.

The informational brochure about the HIT program includes a career pathways diagram (see Appendix C). It also includes a description of the HIT program (see inset for the description):

The Evolution of HIT

The allied health advisory board for MSU-WP identified a need in the healthcare field, specifically for medical billing and coding. Allied health faculty decided to model the curriculum for the HIT certificate from similar successful programs at surrounding universities and colleges. Along with developing the curriculum so it could be transferable to other institutions of higher education, faculty also aligned it with the AHIMA’s curriculum requirements. Because this program was new, it had to go through several

HEALTH INFORMATION TECHNOLOGY

HIT technicians are healthcare professionals in charge of processing patient data. They ensure quality, accuracy, accessibility and security in both paper and electronic systems.

The Health Information Technology associate degree program will help you earn credentials employers recognize and prepare you for a career in the growing health information field. This program is part of a stackable degree path that allows you to earn your degree one credential at a time.

Earn a certificate in Medical Billing & Coding at Missouri State University-West Plains and you may be eligible to take a nationally recognized exam for certification to enhance your career as a medical biller or coder. If you want to continue your education, Missouri State-West Plains will apply all courses towards the Health Information Technology associate degree program.

Source: Missouri State University-West Plains Health Information Technology Flyer

approval processes before it could become an official program of the university. While the HIT program was going through these processes, students could take courses within the curriculum during the Fall 2014 and Spring 2015 semesters. However, they could not count those courses towards qualification for financial aid nor declare the program as a major until the final approvals were completed, which occurred in February 2015.

HIT faculty explained that they designed the certificate program to require 33 credit hours for completion and that it is very quantitative in nature with a lot of application-based learning being offered through case studies. Faculty also shared that the curriculum design could be seamlessly integrated into an AAS degree program. By fall 2015, the HIT program was in the early stages of implementation, having only been running for eight weeks. Program staff acknowledged that they were still trying to figure out what is working and what was not, noting specifically that

For More Information about HIT:

Health Information Technology Discussion with Dr. Robert Jones
<https://www.youtube.com/watch?v=h0mCUq-82gc>

they plan to deliver the curriculum via online and web-based virtual labs.

This program faced many challenges during implementation. First, there was faculty turnover.

The first director of the program did not understand the policies and procedures of the program and was replaced. However, it took several months before MSU-WP could find a fulltime faculty member to take on this role. Overall, it was difficult to hire faculty for this program because working in the field of healthcare informatics is more lucrative than teaching.

A second challenge was the lengthy curriculum approval process and having to go through so many different boards before the program could get up and running. This also affected student enrollment numbers because students could not officially enroll in the program at the beginning, nor would financial aid recognize the program before it was approved.

By the middle of the grant, a new director was brought on a few months later, a fulltime faculty member joined the team. The director summarized the changes that program went through over the last year and a half of the grant,

Well, when I started a year and a half ago we kind of overhauled the program and added a couple of certificates. We redesigned the HIT degree itself to make sure that we were up to part with the accrediting agency so that when we're ready to get accredited, we can say that part's done. We now have taught every class in the associate's program. We've got a student completing this semester, and I've got four completing in the summer, five in December, and I think give in January.

There are still a couple of remaining challenges for the program. One is making sure all the students can find internships. Although employers express interest in creating opportunities for students, it has been somewhat difficult in finding actual placements, per staff. A second issue that faculty raised was having students develop communication and critical thinking skills. They are

reluctant to add another credit-bearing course to students' course loads, but they thought that students would be more prepared for the workplace if they had more training in being able to communicate with others and having opportunities to improve their writing skills.

Student Entrance Survey

Over the course of the grant, all incoming HIT students were asked to complete an entrance survey. Twenty-nine students who were enrolled in the HIT program completed the survey. The following section provides the results of the surveys. The survey included background information about the students, their familiarity with student support services, and their expectations of the program. Additionally, the students were asked to complete the CPQ, described in the methodology section to learn more about their persistence and motivation in applying to MSU-WP and the HIT program.

General Information

The first section asked students to answer questions regarding their intentions about the program, why they decided to go attend, and how they heard about the program. Tables 19 – 22 provide a summary of these results.

Table 19. Educational Outcomes

What educational outcomes do you expect to achieve as a result of attending this college? (Select one that best describes your most important education goal) (N = 29)		
n	Percent	Expectations
2	6.9%	Earn some credits
1	3.4%	Earn a certificate or multiple certificates
25	86.2%	Earn an associate degree (with or without certificates)
1	3.4%	Earn a bachelor's degree or higher

Note. Due to rounding, percentages may not add up to 100.0%

- The majority of the respondents (86%) indicated that they expected to earn an associate degree (with or without certificates) as a result of attending the college.
- One individual (3%) stated that he or she intended to earn a certificate or multiple certificates while another individual (3%) said that the goal was to earn a bachelor's degree or higher.
- Only two people responded that they intended to earn some credits.

Table 20. Important reasons for attending this college

In deciding to attend this college, which of the following were important for you? (Select all that apply) (N = 29)		
n	Percent	Reasons
12	41.4%	It has a good reputation.
13	44.8%	It is affordable.
27	93.1%	It is close to where I live or work.
22	75.9%	It offers flexible schedules that meet my needs.
12	41.4%	It offers online courses.
7	24.1%	It offers short-term programs.
9	31.0%	My family or friends attended this college.

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Almost all the respondents (93%) said that an important reason for selecting this college was because it was “close to where I live or work.” Approximately three quarters (76%) also said that “it offers flexible schedules that meet my needs.”
- Over 40% also cited the following as important reasons for attending MSU-WP: (1) *it is affordable* (45%); (2) *it has good reputation* (41%); and (3) *it offers online courses*.
- Nearly a third also stated that they had *family or friends attend this college* (31%) while almost a quarter (24%) selected *it offers short-term programs* as an important reason for attending the college.

Table 21. Reasons for deciding to go to college

There may be a lot of reasons you decided to go to college. Which of the following describes your situations? (Select all that apply) (N = 29)		
n	Percent	Reasons
17	58.6%	I can receive financial aid to go to school.
9	31.0%	I cannot find a job without more education.
15	51.7%	I lost my job, and I am eligible for educational funds through the workforce center or some other program.
10	34.5%	I need to advance my education to get a job that is better than the one I have now.
20	69.0%	I want to advance my education to earn more money.
21	72.4%	I want to advance my education to better my life.
0	0.0%	I want to get a job in manufacturing.
1	3.4%	My current employer is encouraging me to advance my education.
0	0.0%	My current employer is paying for me to take classes.

There may be a lot of reasons you decided to go to college. Which of the following describes your situations? (Select all that apply) (N = 29)		
n	Percent	Reasons
0	0.0%	My current employer promised me a pay raise if I earn a certificate, diploma, or degree.
14	48.3%	My family is encouraging me to go to school.

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- The majority of survey respondents said that they wanted to *advance their education to better their lives* (72%), *I want to advance my education to earn more money* (69%), *I can receive financial aid to go to school* (59%), and *I lost my job, and I am eligible for educational funds through the workforce center or some other program* (52%).
- Just under half (48%) indicated that their *family is encouraging me to go to school*.
- Approximately a third (35%) said that they needed to *advance their education to get a job that is better than the one they have now* and a just under a third (31%) said that they could *not find a job without more education*.
- Only one person indicated that their *current employer is encouraging me to advance my education* (3%).

Table 22. Reasons for deciding to go to college

How did you hear about the program in which you are currently enrolled? (Select all that apply) (N = 29)		
n	Percent	Reasons
4	13.8%	Advertisements (such as TV, radio, newspaper, online ads, or billboards)
1	3.4%	News or media reports (such as TV interviews, news releases, or a story in the paper)
0	0.0%	Newsletter from the program
0	0.0%	Newsletter from a company or trade union/association
3	10.3%	Social media or social networking (such as Facebook, Twitter, LinkedIn, YouTube, blogs, or RSS feeds)
0	0.0%	E-mail (such as through a listserv)
11	37.9%	College or program website
1	3.4%	Other websites (such as a workforce/unemployment center)
8	27.6%	Program brochures, flyers, postcards, or posters
3	10.3%	Online search I initiated

4	13.8%	Community events (including college, career, or unemployment fairs)
9	31.0%	From family and friends
8	27.6%	From workforce center staff (such as job counselor, social services, or public assistance programs)
4	13.8%	From employers/potential employers
3	10.3%	Personal contact with college faculty or staff

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- HIT students heard about the program in a variety of ways. Eleven (38%) said they that found out about the program through the *college or program website*.
- Almost a third (31%) said that they heard about it *from family and friends* while 28% indicated that *program brochures, flyers, postcards, or posters* or *from workforce center staff (such as job counselors, social services, or public assistance programs)* told them about the program.
- Four respondents (14%) heard about the program from *advertisements (such as TV, radio, newspaper, online ads, or billboards)*, *community events (including college, career, or unemployment fairs)*, or *from employers/potential employers*.
- Of the 29 respondents, three or 10% said they had heard about the program from *social media or social networking (such as Facebook, Twitter, LinkedIn, YouTube, blogs, or RSS feeds)*, *online searches they initiated*, or *personal contact with college faculty or staff*.

Experience with Student Support Services

Student support services were a large part of the TAACCCT grant. In the Entrance Survey students were asked to provide information about what services they were familiar with, if they had met with a member of the support services team, the frequency they used student support services, the likelihood they would use student support services, and their expectations of the Career Services. Tables 23 – 28 show the results of these questions.

Table 23. Reasons for deciding to go to college

In terms of student support services, with which of these are you familiar? (Select all that apply) (N = 29)		
n	Percent	Reasons
8	27.6%	Advisement and Academic Coaching Center for Empower Student Success (AACCESS)
24	82.8%	Assigned advisor
1	3.4%	Assigned faculty member
9	31.0%	TRIO

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Most the survey respondents (83%) replied that they had met with their assigned advisor.

- Nearly a third (31%) indicated that they were familiar with the TRIO program and 28% said they were familiar with AACCESS.
- Only one person at the time of the survey had reported meeting with an assigned faculty member. However, since these surveys were administered during the first semester of the program, it is likely that the students had only met with the university advisor and would likely meet with the faculty advisor moving forward in the program.

Table 24. Reasons for deciding to go to college

Have you met with a member of the student support services staff? (Select all that apply) (N = 29)		
n	Percent	Reasons
5	17.2%	I have met with an academic tutor from AACCESS.
23	79.3%	I have met with a counselor or advisor.
9	31.0%	I have met with both an academic tutor and counselor or advisor.
5	17.2%	I have met with a faculty member who provided me with academic support.
1	3.4%	I have met with a member of TRIO.
2	6.9%	I have not met with any member of the student support services staff.
1	3.4%	I would like to meet with a member of the student support services staff, but I do not know who to contact.

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- When asked if they had met with a member of the student support services staff, 79% indicated that they had met with *a counselor or advisor*.
- While 31% said they had met with *both an academic tutor and counselor or advisor*, only 17% indicated they had *met with an academic tutor from AACCESS* or *a faculty member who provided them with academic support*.
- Less than 10% said they had *met with a member of TRIO* (3%).
- Although two respondents (7%) said they had *not met with any member of the student support services staff*, only one persons selected that he or she *would like to meet with a member of the student support services staff, but I do not know who to contact*.

Table 25. Likelihood to go to a member of the student support services staff

How likely is it that you will go to a member of the student support services staff in the following situations?						
	Definitely not	Probably not	It depends	Probably yes	Definitely yes	N/A
If you have personal problems (e.g., family problems, financial problems, child care issues, or transportation issues).	17.2%	34.5%	24.1%	17.2%	6.9%	0.0%
If you have problems with course work .	13.8%	3.4%	51.7%	27.6%	27.6%	3.4%
If you have problems with your instructors .	6.9%	6.9%	24.1%	37.9%	24.1%	0.0%

Note. Due to rounding, percentages may not add up to 100.0%

- When asked if they would use student support services if they had problems with instructors, 62% selected *probably yes* or *definitely yes*.
- Similarly, 56% gave positive results when asked if they would use student support services if they had problems with course work.
- In contrast, only 24% indicated they would go to student support services with personal problems, such as family problems, financial problems, child care issues, or transportation issues).

Table 26. Frequency of using student support services

How often do you use the student support services? (N = 28)		
n	Percent	Reasons
1	3.4%	Daily
5	17.2%	Once or twice a week
2	10.3%	Weekly
2	6.9%	Twice a month
5	17.2%	Monthly
5	17.2%	Once or twice a semester
0	0.0%	Once a semester
8	27.6%	Never

Note. Due to rounding, percentages may not add up to 100.0%

- Of the 28 respondents, 28% said they had never used the student support services.
- Five (17%) said they used them *monthly, twice a month, or once or twice a week.*

Table 27. Frequency of using Career Services

How often do you use the Career Services? (n = 28)		
n	Percent	Reasons
1	3.6%	Daily
1	3.6%	Once or twice a week
2	7.1%	Weekly
2	7.1%	Twice a month
3	10.7%	Monthly
5	17.9%	Once or twice a semester
3	10.7%	Once a semester
13	46.4%	Never

Note. Due to rounding, percentages may not add up to 100.0%

- HIT students were also asked how often they used Career Services. Almost half (46%) said *never.*
- Almost a fifth (18%) responded they used Career Services *once or twice a semester.*
- Three of the respondents (11%) indicated they used Career Services *monthly or once a semester.*

Table 28. Expectations of Career Services

What are your expectations of Career Services? (Select all that apply.)		
n	Percent	Reasons
24	85.7%	Provide resources on careers available to me
18	62.1%	Provide information on local companies that may be hiring
20	71.4%	Provide resume-writing tips
19	67.9%	Assist with job searching

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Respondents had a variety of expectations for the Career Services. Eighty-six percent wanted Career Services to *provide resources on careers available to them.*
- Similarly, 71% hoped Career Services would *provide resume-writing tips*, 68% wanted *assistance with job searching*, and 62% wanted *information on local companies that may be hiring.*

Potential Barriers for Program Completion and Persistence

In order to help program staff think about challenges that students may face, survey questions also asked to get a sense of student financial struggles, level of family support, struggles

with personal issues, and the strength of the students' persistence. Results from these questions can be found in Tables 29 – 32.

Table 29. Financial Struggles

In the past two months, to what extent did you struggle financially? (N = 28)		
n	Percent	Reasons
4	14.3%	Very much
9	32.1%	Somewhat
4	13.8%	Neutral
8	27.6%	Little
3	10.3%	Not at all

Note. Due to rounding, percentages may not add up to 100.0%

- Approximately a third (32%) indicated that they *somewhat* had struggled financially over the course of the past two months.
- Another 14% reported they had struggled *very much*.
- Thirty-eight percent responded that they had struggled a *little* or *not at all*.

Table 30. Family Support

How supportive is your family of your decision to continue your education? (N = 28)		
n	Percent	Reasons
22	78.6%	Very supportive
4	14.3%	Somewhat supportive
0	0.0%	Neutral
1	3.6%	Somewhat unsupportive
1	3.6%	Very unsupportive

Note. Due to rounding, percentages may not add up to 100.0%

- The majority of the respondents (93%) said their families were *very supportive* or *somewhat supportive* in their decisions to continue their education.
- Only two respondents (7%) said their families were *somewhat* or *very unsupportive*.

Table 31. Family Support

In the past two months, to what extent did you struggle with personal issues (e.g., child care, transportation, health, work schedule, or family responsibilities) that make it difficult for you to continue your program? (N = 28)		
<i>n</i>	Percent	Reasons
4	14.3%	Not at all
9	32.1%	Little
6	21.4%	Neutral
8	28.6%	Somewhat
1	3.6%	Very much

Note. Due to rounding, percentages may not add up to 100.0%

- When asked to what extent did you struggle with personal issues, such as child care, transportation, health, work schedule, or family responsibilities, over the past two months that may have made it difficult to continue the program, 46% said *not at all* or *a little*.
- Almost a third (32%) indicated they struggled *somewhat* or *very much*.

Table 32. Persistence

How strong is your intention to persist in your pursuit of the certification, diploma, or degree, here or elsewhere?		
<i>N</i>	Percent	Reasons
26	92.9%	Very strong
2	7.1%	Somewhat strong

Note. Due to rounding, percentages may not add up to 100.0%

- The students were also asked about the strength of their persistence in pursuing their certification, diploma, or degree. All 28 respondents (100%) said it was *very strong* or *strong*.

Student Factors Associated with Retention

Table 33. Factors Associated with Retention

Survey Items	<i>N</i>	<i>M</i>	<i>SD</i>
Academic Efficacy			
How confident are you that you can get the grades you want?	29	4.03	0.78
When you are waiting for a submitted assignment to be graded, how assured do you feel that the work you have done is acceptable?	29	4.17	0.60
How much doubt do you have about being able to make the grades you want?	28	3.79	1.07

Survey Items	N	M	SD
Academic Integration			
How would you rate the quality of the instruction you are receiving here?	29	4.48	0.63
How much do the instructors and the courses make you feel like you can do the work successfully?	29	4.10	0.72
In general, how satisfied are you with the quality of instruction you are receiving here?	29	4.59	0.57
Advising Effectiveness			
How satisfied are you with the academic advising you receive here?	29	4.69	0.60
How easy is it to get answers to your questions about things related to your education here?	13	4.54	0.52
How would you rate the academic advisement you receive here?	29	4.48	0.63
Career Integration			
How likely is it that the training you are receiving here will help you to get the job you want?	29	4.62	0.68
A goal of education is to provide you with what you need to know in order to succeed in your future job. How optimistic are you that the career training you receive here will give you the necessary knowledge?	29	4.66	0.61
Students sometimes believe that some of what they are asked to learn is irrelevant to their future jobs. How much of what you are learning at this school do you think is irrelevant?	28	3.07	1.18
How much do you know about the duties and responsibilities of the career and field in which you are receiving training?	29	3.69	0.89
Collegiate Stress			
How much pressure do you feel when trying to meet deadlines for course assignments?	13	2.85	1.14
Students differ quite a lot in how distressed they get over various aspects of college life. Overall, how much stress would you say that you experience while attending this institution?	13	2.62	0.87
How often do you feel overwhelmed by the academic workload here?	13	2.62	0.65
Degree Commitment			
There are so many things that can interfere with students making progress toward a certificate, diploma, or degree, feelings of uncertainty about finishing are likely to occur along the way. At this moment in time, how certain are you that you will earn a certificate, diploma, or degree?	13	4.69	0.63

Survey Items	N	M	SD
After beginning college, students sometimes discover that a college training is not quite as important to them as it once was. How strong is your intention to persist in your pursuit of the certification, diploma, or degree, here or elsewhere?	13	4.77	0.44
At this moment in time, how strong would you say your commitment is to earning a certification, diploma, or college degree, here or elsewhere?	13	4.69	0.63
Grit			
How likely are you to finish whatever you begin?	28	4.86	0.36
How typical is it for you to be very interested in an activity and then lose interest a short time later?	27	3.85	0.99
Institutional Commitment			
How confident are you that this is the right college or university for you?	13	4.23	0.83
How likely is it you will earn a certificate, diploma, or degree from here?	13	4.31	1.49
How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?	12	3.08	1.51
How likely is it that you will reenroll here next semester?	13	2.54	1.56
Financial Strain			
How often do you worry about having enough money to meet your needs?	13	1.85	0.80
How difficult is it for you or your family to be able to handle college costs?	12	2.17	0.84
When considering the financial costs of being in college, how often do you feel unable to do things that other students here can afford to do?	12	2.58	1.24
How much of a strain is it for you to purchase the essential resources you need for courses such as books and supplies?	13	2.54	1.56
Motivation to Learn			
Students vary widely in their view of what constitutes a good course, including the notion that the best course is one that asks students to do very little. In your own view, how much work would be asked of students in a really good course?	29	3.72	0.70
In general, how enthused are you about doing academic tasks?	29	3.86	0.74
Scholastic Conscientiousness			
How often do you miss class for reasons other than illness or participation in school-related activities?	26	4.46	0.81
How often do you arrive late for classes, meetings, and other college events?	22	4.68	0.65

Survey Items	N	M	SD
How often do you turn in assignments past the due date?	22	4.50	1.01
Social Integration			
How much do you think you have in common with other students here?	13	3.31	0.63
How much have your interactions with other students had an impact on your personal growth, attitudes, and values?	13	3.15	1.07
How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?	13	3.38	0.65

Note. All items were rated on a 5-point scale between 1 and 5; a higher score indicates a better outcome. Items were reverse coded as necessary to fit this schema.

Expectations

Finally, the students were asked some open-ended questions about what their expectations were for the school year. Verbatim comments are listed below in Table 34.

Table 34. Student Expectations

What are your expectations for the school year?
Attending school. Finishing my degree. Going on to better things.
Get through the semester! Remembering everything!
Graduate!
Hope to get more of my required classes taken.
I am hoping to finish with a high GPA and get accepted into the nursing program for the fall 2016 semester.
I hope to get my degree and to get through college with good grades.
I made the dean’s list this summer. I would really like to make it this fall. I just want to get a good education and good grades.
I plan to finish the program fall 2017.
I will be able to have all certificates approved through financial aid so that I don’t have to pay out of my pocket for my books and course costs.
My expectations are to do well in my classes and learn important info for future careers. I hope to job shadow this time. I should be able to get most of my classes out of the way.
My expectations are to have A’s and B’s in all my classes, learn all I can and eventually graduate at the end of 2017.
None that come to mind.
Pass my classes! Move on to the semester.
Passing my classes.
To continue with my education, working, towards my associates in Health Information Technology.

To continue with my goals.
To get good grades!
To learn health information technology. I want to graduate and get a good job in this field. Pursue my dream job.
To learn more and to grow academically and mentally.
To maintain a good GPA and work towards my associate's degree.
To pass all of my courses with A's and B's. To get better in math.
To pass.
To see my education hopefully being finished.

Student Perspectives and Achievements

In spring 2017, HIT students were asked to talk about their experiences in the program. Overall, they enjoyed it and thought it was beneficial for their future careers. As one student explained,

[HIT] is one of the best programs, I think, this school has and that's why I'm in it. It gives you an opportunity, and you can stop here, or you can keep going. You can get a bachelor's and do something else, or you can just get a certificate and do that, or you can have the associate's. But I like that you have options.

Some of the challenges that the students discussed included the workload. This was challenging because some had been out of school for several years, and if they did want to earn an associate's degree in two years, they had to take a full load of classes, which was hard to balance with family and other responsibilities. Financial challenges also were raised as students had to pay tuition, books, fees, and other expenses. In terms of academics, a few students also mentioned that math was difficult but they found support services, such as AEL and TRIO as effective.

During the interview, one of the students already was participating in her internship so she could discuss that with the class and answer their questions about her experiences. The internship had been very positive, as the intern explained,

It has been a very positive experience. I was really unsure about it and super nervous, and then once you go in there, there's so much hands-on that it's reassuring. Okay, I am learning something and I was learning something this whole time in class. I was like, "I don't even know if I know how to do this", but when they put the work in front of me, I'm like, "Oh yeah, I do know how to do this." You still have to learn computer programs and the way they do things, but the fundamentals are there. You know how to code, and the rules. It was a very, very great experience. I feel a lot more confident about it now.

With the delay in getting the HIT program approved and the time it takes to successfully complete a degree, no HIT students completed the program before March of 2017, when the grant

could no longer count graduates. However, one person graduated from the program in spring 2017. Four graduated in summer 2017, and one was anticipated to graduate in fall 2017.

Despite the fact that the outcomes for HIT were limited in terms of TAACCCT outcomes, the overall importance of the program cannot be overemphasized. For example, in fall of 2015, one of the HIT students was highlighted in an MSU-WP Student Spotlight. This brief article was sent out from the Office of the Chancellor and told the story of a HIT student, including the fact that he was out of work after serving for 17 years at a local plant. The student worked with the Missouri Job Center where the HIT program was presented as an option. In this article, the student explains that he the importance of the program to his life stating that he was “grateful that he has been given this opportunity to turn devastating news for him and his family into a positive transition to a new and better life.” The student was quoted as saying, “It’s amazing how the state of Missouri looks after its displaced workers, and I’m thrilled they’ve extended these benefits to my fellow workers at Robertshaw.” He also added that *“I hadn’t been in a classroom since 1987, and I was really nervous, being 46 and going to college for the first time. But I saw students my own age, and the teachers really made me feel comfortable in my classes.”*

Partner Surveys

Similar to GOCAT, many partners were actively involved to make HIT successful. MSU-WP created an advisory board for the HIT program to ensure that the program matches the needs of the community and to receive assistance in creating and implementing the programs.

Members of the HIT advisory board were asked to submit a survey three times over the course of the grant (i.e., spring 2015, fall 2016, and summer 2017). Because the HIT advisory board was forming and being implemented during 2015 and 2016, those surveys focused on what the members thought the advisory board priorities should be. The last survey, administered in summer 2017, was designed to have the advisory board members reflect on what they had accomplished over the past few years. The survey asked them about their perceptions of how they or their organization have supported the TAACCCT program, suggestions as to different ways they would like to support the organization, and other comments they have about the program. The following summary shows the results of the final survey (administered in summer 2017) completed by members of the HIT advisory board members. Results from previous versions of the survey can be found in the Survey Summary document, a supplemental document of the evaluation.

GOCAT Survey: 2017 Summer Administration

In summer 2017, 20 members of the HIT Advisory Board were invited to take the survey online. Of those 20 members, four responded (20%). The following provides a summary of the survey results. The survey was conducted online. The survey was designed to collect information from advisory board members about their participation as a board member, their perceptions about the program, how they thought their company/organization could support HIT, and ideas or suggestions for improvement. Results from the survey are included below.

General Information

In the first section of the survey, participants provided information about their professional roles and involvement with the program. Respondents addressed questions about: (1) field in which their company or organization works; (2) job title/position; (3) length of time they have been involved with the HIT and the advisory board; and (4) other roles they hold within the TAACCCT project. Tables 35 – 39 show the results of those questions. Bulleted summaries follow each table.

Table 35. Field(s) in Which Your Organization or Company Operates

In which field(s) does your organization or company operate? (Select all that apply) (N = 4)		
n	Percent	Field
1	25.0%	Education or training
1	25.0%	Workforce development
3	75.0%	Other <ul style="list-style-type: none"> • Healthcare (N = 2) • Medical clinic

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- One of the participants (25%) reported that his or her company operated in the *education or training* field.
- Another individual identified (25%) as *workforce development*.
- Because participants could multiple fields, two also reported themselves specifically in the *healthcare* field (50%) and one said *medical clinic* (25%).

Table 36. Job Title/Position

What is your job title/position? (Please choose the category that best describes you) (N = 4)		
n	Percent	Job Title/Position
1	25.0%	Owner, President, or CEO
2	50.0%	Division Manager or Director
1	25.0%	Other (please specify): <ul style="list-style-type: none"> • Department Manager

- A quarter (25%) of the respondents said they were an *owner, president, or CEO*.
- Two of the respondents (50%) identified as *division managers or directors*.
- The fourth respondent added *department manager* as his or her job title/position.

Table 37. Length of Involvement with Project

When did you personally become involved with the TAACCCT project? (N = 4)		
n	Percent	When TAACCCT Involvement Began
1	25.0%	Summer of 2016
3	75.0%	Fall of 2016

Note. Due to rounding, percentages may not add up to 100.0%

- Members of the HIT advisory board became involved with the TAACCCT who responded to the survey primarily joined in fall of 2016 (75%).
- One member reported becoming involved a semester prior, in summer of 2016.

Table 38. Length of Involvement with Advisory Board

How long have you been a member of the advisory board? (N = 4)		
n	Percent	When Advisory Board Membership Began
1	25.0%	Since summer 2016
3	75.0%	Since fall 2016

- One respondent (25%) said he or she had been involved since summer 2016.
- The remaining respondents (75%) said they had been a member since fall 2016.

Table 39. Other Roles within TAACCCT

Do you have other roles within the TAACCCT project? (Select all that apply) (N = 4)		
n	Percent	Role
0	0.0%	Adjunct faculty
1	25.0%	Subject matter expert
0	0.0%	Subcommittee member (please specify which committee):

- Only one person indicated having an additional role within the TAACCCT project. That person indicated that he or she also was a subject matter expert.

Project Development and Planning

The next section of the survey asked HIT advisory board members to indicate how often they were involved with different project activities. Project activities included: (1) participant recruitment; (2) curriculum design and development; (3) technology and equipment support; (4) partnership support; and (5) student support and placement services. A five-point Likert scale was used to report these results (5 = *Monthly*; 4 = *Once a semester*; 3 = *Once a year*; 2 = *Once during the project*; and 1 = *Never*). Table 40 includes the responses for each of these activities.

Table 40. Partner Involvement with TAACCCT

As a partner, how often were you involved in supporting the following project activities?								
Project Activities	n	Frequency					Mean	SD
		Monthly	Once a semester	Once a year	Once during the project	Never		
Participant recruitment								
Recruiting incumbent workers	3	0.0%	0.0%	0.0%	66.7%	33.3%	1.67	0.58
Recruiting TAA-eligible participants	2	0.0%	0.0%	0.0%	50.0%	50.0%	1.50	0.71
Recruiting veterans or spouses of veterans	2	0.0%	0.0%	0.0%	50.0%	50.0%	1.50	0.71
Recruiting underemployed participants	2	0.0%	0.0%	0.0%	50.0%	50.0%	1.50	0.71
Recruiting long-term unemployed participants	2	0.0%	0.0%	0.0%	50.0%	50.0%	1.50	0.71
Recruiting other program participants	2	0.0%	0.0%	0.0%	50.0%	50.0%	1.50	0.71
Curriculum design and development								
Assisting in curriculum design and redesign to ensure the training provided is aligned with industry needs	3	0.0%	0.0%	0.0%	66.7%	33.3%	1.33	0.58
Identifying credentials that meet industry needs	3	0.0%	0.0%	0.0%	66.7%	33.3%	1.67	0.58
Identifying important knowledge and skill sets that meet industry needs	3	0.0%	0.0%	0.0%	66.7%	33.3%	1.33	0.58
Technology and equipment support								
Providing equipment or software to support project success	4	0.0%	25.0%	0.0%	0.0%	75.0%	1.75	1.50
Providing facilities and equipment for training activities	4	25.0%	0.0%	0.0%	0.0%	75.0%	2.00	2.00

As a partner, how often were you involved in supporting the following project activities?								
Project Activities	n	Frequency					Mean	SD
		Monthly	Once a semester	Once a year	Once during the project	Never		
Partnership support								
Assisting in creating new partnerships to support project success	4	0.0%	25.0%	0.0%	0.0%	75.0%	1.75	1.50
Sharing information about the TAACCCT project with local or regional stakeholders	4	25.0%	0.0%	0.0%	0.0%	75.0%	2.00	2.00
Student support and placement services								
Providing contextualized learning opportunities (e.g., paid or unpaid internships, or company visits)	4	25.0%	0.0%	0.0%	0.0%	75.0%	2.00	2.00
Identifying services needed to support participant success	4	0.0%	25.0%	0.0%	25.0%	50.0%	2.00	1.41
Providing graduate placement services (e.g., mock interviews or assistance developing résumés)	4	0.0%	25.0%	0.0%	25.0%	50.0%	2.00	1.41
Providing information related to job openings in the agriculture, health information technology, or technology field(s) to the college and students	4	0.0%	25.0%	0.0%	25.0%	50.0%	2.00	1.41
Offering job opportunities for TAACCCT program graduates	4	0.0%	50.0%	0.0%	0.0%	50.0%	2.50	1.73

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- In terms of participant recruitment, the advisory board members who responded were consistent across the items. Five of the six items were rated with means of 1.50 ($SD = 0.71$) with one of the two respondents *never* participating and one participating *once during the project*. On the first item, *recruiting incumbent workers* ($M = 1.67$; $SD = 0.58$),

two respondents indicated that they participated *once during the project* and one respondent *never* participated.

- Respondents answered the three items describing curriculum design and development the same way. Two of the three respondents (68%) said they had participated in the activities *once during the project* while one respondent (33%) said that he or she had *never* participated in the activities.
- For technology and equipment support, responses were varied. One person (25%) indicated that he or she *provided equipment or software to support project success once a semester* and a respondent (25%) reported that he or she *provided facilities and equipment for training activities monthly*. The other respondents reported that they *never* participated in either of these activities.
- Results were the same for activities related to partnership support. While three of the four respondents (75%) indicated that they *never* participated in the activities, one of the respondents reported that he or she *once a semester assisted in creating new partnerships to support project success* and one respondent indicated that he or she *shared information about the TAACCCT project with local or regional stakeholders monthly*.
- The last construct in this section was about student support and placement services. There was variation in responses across these items. For example, on the item *offering job opportunities for TAACCCT program graduates*, 50% of the respondents said this happened *monthly* while 50% said they *never* did it ($M = 2.50$; $SD = 1.73$). On three items: (1) *identifying services needed to support participant success*; (2) *providing graduate placement services (e.g., mock interviews or assistance developing resumes)*; and (3) *providing information related to job openings in the agriculture, health information technology, or technology field(s) to the college and students*, two (50%) of the respondents indicated that they *never* participated, one (25%) said he or she participated *once during the project*, and one (25%) reported participating *once a semester*. On the final item, *providing contextualized learning opportunities (e.g., paid or unpaid internships, or company visits)*, 75% of the survey respondents said they *never* participated while one person (25%) reported participating *monthly*.

The last question asked in the *Project Development and Planning* section asked respondents to rate the level of quality of each project from 1 (*poor*) to 5 (*high*). Table 41 shows the results of that question.

Table 41. Board Members' Perception of Quality of Project Components

What is your perception about the quality of the following project components? (Note that respondents who reported N/A were excluded from the analysis).								
Project Component	n	Rating of level of quality from 1 (poor) to 5 (high)					M	SD
		1	2	3	4	5		
Participant recruitment	2	0.0%	0.0%	0.0%	100.0%	0.0%	4.00	0.00

What is your perception about the quality of the following project components? (Note that respondents who reported N/A were excluded from the analysis).								
Project Component	n	Rating of level of quality from 1 (poor) to 5 (high)					M	SD
		1	2	3	4	5		
Curriculum design and development	2	0.0%	0.0%	0.0%	100.0%	0.0%	4.00	0.00
Technology and equipment support	2	0.0%	0.0%	0.0%	50.0%	50.0%	4.50	0.71
Partnership support	3	0.0%	33.3%	0.0%	66.7%	0.0%	3.33	1.16
Student support and placement services	2	0.0%	0.0%	0.0%	50.0%	50.0%	4.50	0.71

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- Overall, HIT advisory board members indicated high levels of support for each project component. All respondents (100%) ranked *participant recruitment, curriculum design and development, technology and equipment support, and student support and placement services* as a “4” or a “5.”
- Although two people rated *partnership support* as a “4,” (68%), one person rated it as a “2” (33%) ($M = 3.33$; $SD = 1.16$).

Levels of Satisfaction

The HIT Advisory Board survey asked two questions regarding participants’ level of satisfaction with their involvement and engagement with the project. Table 42 shows the results of that question where 5 = *strongly satisfied* and 1 = *very dissatisfied*.

Table 42. Board Members’ Level of Satisfaction with Project

Overall, how satisfied are you with . . .								
	n	Strongly satisfied	Satisfied	Neutral	Dissatisfied	Very dissatisfied	M	SD
your level of involvement with the project?	4	0.0%	50.0%	50.0%	0.0%	0.0%	3.50	0.58
the TAACCCT project staff’s efforts to engage you in the project?	4	0.0%	75.0%	25.0%	0.0%	0.0%	3.75	0.50

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- Overall, survey respondents were satisfied with their level of involvement with the project ($M = 3.50$; $SD = 0.58$). Half (50%) were *satisfied* with their level of satisfaction while half remained neutral. No respondents indicated any level of dissatisfaction.

- Similarly, survey respondents were satisfied with the TAACCCT project’s staff efforts to engage them in the project. Seventy-five percent the respondents were *satisfied* with the staff’s efforts to engage them in the project while the remaining quarter selected a *neutral* response.

Project Impact on Local Industry and the Community

The next seven questions asked GOCAT advisory board members to rate their level of agreement with a series of statements regarding the impact they thought TAACCCT, specifically technology, would have on the local industry and the community. Results were calculated based on a 4-point Likert scale (1 = *Strongly disagree*; 2 = *Disagree*; 3 = *Agree*; and 4 = *Strongly agree*). Table 43 shows the results.

Table 43. Impact on Local Industry and Community

To what extent do you agree with the following statements?						
Statement	Strongly agree	Agree	Disagree	Strongly disagree	M	SD
The TAACCCT program offers certificate, diploma, and degree programs that meet industry needs.	100.0%	0.0%	0.0%	0.0%	4.00	0.00
The TAACCCT program prepares workers with the knowledge and skills needed to be successful in the program’s focus industries (e.g., agriculture, health information technology, or technology).	100.0%	0.0%	0.0%	0.0%	4.00	0.00
The TAACCCT project offers programs that support local workforce development.	100.0%	0.0%	0.0%	0.0%	4.00	0.00
The TAACCCT program prepares highly skilled workers who meet local industry needs.	100.0%	0.0%	0.0%	0.0%	4.00	0.00
The TAACCCT program prepares highly skilled workers who meet my company’s/ organization’s needs.	100.0%	0.0%	0.0%	0.0%	4.00	0.00
The partnership between my company/ organization and the TAACCCT program will continue and expand beyond the life of the grant period.	100.0%	0.0%	0.0%	0.0%	4.00	0.00

To what extent do you agree with the following statements?						
Statement	Strongly agree	Agree	Disagree	Strongly disagree	M	SD
I will consider collaborating with MSU-WP on other projects in the future.	100.0%	0.0%	0.0%	0.0%	4.00	0.00

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- Although all respondents indicated that they *strongly agreed* with the statements, it should be noted that only two HIT advisory board members selected that option.
- Respondents also had an option to select “Don’t Know.” Although this response was excluded from the analysis, the other two survey respondents selected that option.

Company/Organizational Roles in Supporting the Project

The next section of the survey requested information regarding how the HIT advisory board members’ company or organization supported or planned to support components of the TAACCCT project after TAACCCT funds ended. This section asked about intentions towards recruiting participants, providing internships, and recommending the program to employees or collaborators.

Table 44 shows the results of whether the company/organization would continue to recruit participants. All respondents indicated “yes.” Respondents were then asked to explain why they would continue to recruit participants. Answers to that question focused on adequately preparing and training the local workforce.

Table 44. Referrals

To support project success, partners play an essential role in supporting participant recruitment. Will your company/organization help to identify or refer participants to MSU-WP programs after TAACCCT ends? (N = 4)	
100.0%	Yes
0.0%	No
Please explain why you chose that response:	
<ul style="list-style-type: none"> • I believe we are committed to further education for current job markets. • When job openings arise, we are better served by employees that have had official training and start out with appropriate qualifications. 	

The next question asked participants about their company’s willingness to provide paid or unpaid internships to MSU-WP TAACCCT participants. Table 45 displays the results of that question.

Table 46. Internships

Is your company offering or will offer any paid or unpaid internships for MSU-WP participants who are currently enrolled or will enroll in agriculture, health information technology, or technology? (Select all that apply) (N = 1)		
n	Percent	Role
1	25.0%	Yes, we are currently offering <u>unpaid</u> internships and will continue to do so.

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Only one individual provided a response to this question by indicating that his or her company currently offers unpaid internships and will continue to do so. The other respondents indicated that they did not know.

Ultimately, the goal of the TAACCCT program is to have graduates hired in the field; thus, the HIT advisory board members were asked if they would consider hiring MSU-WP TAACCCT graduates, if positions opened in the future. Table 46 shows how the survey respondents answered that question.

Table 46. Hiring of Graduates

Will your company consider hiring MSU-WP agriculture, health information technology, or technology program graduates if new positions open in the future? (N = 4)		
n	Percent	Role
4	100%	Yes

Note. Due to rounding, percentages may not add up to 100.0%.

- All respondents (100%) said they would consider hiring MSU-WP program graduates if they opened up in the future.

The last question in this section asked the GOCAT advisory board two questions about their likeliness to recommend MSU-WP programs to current or prospective employees or to companies, organizations, and community partner with which they collaborate. Answers to these questions were scored using a 5-point Likert scale where 5 = *Very likely*; 4 = *Likely*; 3 = *Neither likely or unlikely*; 2 = *Unlikely*; and 1 = *Very unlikely*. Table 47 shows the results of those questions.

Table 47. Likelihood to Recommend MSU-WP Programs

How likely are you to recommend MSU-WP programs . . .								
	<i>n</i>	Very likely	Likely	Neither likely or unlikely	Unlikely	Very unlikely	M	SD
to your current or prospective employees?	4	50.0%	50.0%	0.0%	0.0%	0.0%	4.50	0.58
to companies, organizations, and community partners with which you collaborate?	4	0.0%	0.0%	25.0%	25.0%	50.0%	1.75	0.96

Note. Due to rounding, percentages may not add up to 100.0%; M = Mean and SD = Standard Deviation.

- HIT advisory board members were *likely* or *very likely* to recommend MSU-WP programs to their current or prospective employees.
- However, the majority (75%) were *unlikely* or *very unlikely* to recommend the MSU-WP programs to companies, organizations, and community partners with which they collaborate. The fourth advisory board member reported that he or she was *neither likely or unlikely* to make that type of recommendation.

Open-Ended Responses

The final section of the survey consisted of four open-ended responses. These questions included the following:

- From your perspective, what are the strengths of the agriculture, health information technology, or technology programs at MSU-WP?
- From your perspective, what areas of these programs need to be strengthened?
- From your perspective, what can MSU-WP do to continue to sustain the agriculture, health information technology, and technology programs after the TAACCCT grant ends?
- What other comments or suggestions do you have about the agriculture, health information technology, or technology programs at MSU-WP?

Tables 48 - 51 list out the responses provided for each of the open-ended questions. Brief summaries of the prevalent themes follow each table.

Table 48. Program Strengths

From your perspective, what are the strengths of the agriculture, health information technology, or technology programs at MSU-WP? (N = 2)
Good teaching staff.
Location is the key strength of this program.

When asked about the program strengths, two members of the advisory board responded. One person commented about the quality of the teaching staff while a second person said that the location was the strength of the program.

Table 49. Program Areas that Need to be Strengthened

From your perspective, what areas of these programs need to be strengthened? (N = 2)
More involvement with local employers.
Not sure

One substantive comment was made about program areas that needed to be strengthened. The comment encouraged more involvement with local employers.

Because the official TAACCCT funding period has ended, the HIT advisory board members were also asked to reflect on how the TAACCCT programs could remain sustainable. Two surveys include responses, as shown in Table 50.

Table 50. Sustaining the Program

From your perspective, what can MSU-WP do to continue to sustain the agriculture, health information technology, and technology programs after the TAACCCT grant ends? (N = 2)
Contract with health care systems to train staff.
Keep offering these classes so that we have educated applicants.

One person suggested continuing to contract with health care systems to better train staff. In thinking about the sustainability of the program throughout the community, one person suggested to keep offering classes so employers had educated applicants.

he last question asked HIT advisory board members to add any additional comments or suggestions they may have about the TAACCCT programs. The five comments are listed in Table 51.

Table 51. Comments or Suggestions about Programs

What other comments or suggestions do you have about the agriculture, health information technology, or technology programs at MSU-WP? (N = 1)
I was unable to attend roundtable and after that I received no communication.

The only comment discussed that there was a lack of communication after the initial roundtable meeting.

Agriculture

Introduction

There were several reasons outlined in the proposal as to why it was important for MSU-WP to continue to expand its agricultural or agribusiness specializations. Specifically, there was a regional need for such a system. Several regional organizations in addition to MSU-WP, such as the Ozark Small Business Incubator and the Ozark Farmers' Cooperative discussed developing a "Center for Agribusiness and Natural Resource Management" to provide career pathway training for adults. MSU-WP concisely described the growth potential for this field in the proposal,

*According to the O*NET Resource Center, agricultural technician jobs will show increased growth because of enhanced skills training while farm-related occupations under business operations have a "bright outlook." Food manufacturing is also one of the fastest growing long-term industries in North Central Arkansas and management occupations, including farmers, ranchers and other agricultural managers are projected to be "in-demand" source of jobs.*

MSU-WP's informational page about the associate of applied science in general agriculture explains the type of work one can do if studying general agriculture. The description can be found in the inset.

The Evolution of the Agriculture Program

At the beginning of the program, agriculture division leaders noted that the curriculum for the agriculture program was modeled after a similar program at the MSU-Springfield campus and modified to fit the needs of MSU-WP students. Specifically, the academic leaders designed the program so students could earn either a certificate or complete credit hours that would be transferable towards an associate's degree at another institution of higher education. One leader commented that the curriculum focuses on application-based and stackable learning, which helps to provide students with a clear career path and demonstrates the importance of planning ahead. For instance, when some of the more

GENERAL AGRICULTURE

What type of work would I do if I studied General Agriculture?

Career possibilities range from a farmer, rancher, or farm manager to an agricultural technician supervisor at a greenhouse or nursery. Farmers and ranchers grow and cultivate crops and/or raise and breed animals for the nation's food supply. Farm and agricultural managers, as well as greenhouse and nursery managers, oversee the day-to-day operations of farms, ranches, greenhouses, and nurseries, carrying out production, financial and marketing decisions based on the owner's guidelines. Agricultural technicians work with agricultural scientists in food, fiber and animal research, production and processing. Under the scientist's supervision, they will conduct tests and experiments to improve yield and quality of crops or to increase the resistance of plants and animals to disease or insects.

Source: Missouri State University-West Plains Associate of Applied Science in General Agriculture Informational page

specialized courses are only offered one semester per year, students must decide far in advance in which courses they need to enroll. The division leaders explained that the agriculture program is a hybrid of online and on-campus courses. One faculty member acknowledged that although the online option provides more flexibility for the students, they tend to not be as engaged. Throughout the course of the grant, faculty brainstormed ways to increase the engagement of online students to maintain high retention rates in the program. MSU-WP project staff said that students seem to be “fired up” about the agriculture program and have shown “tremendous growth.” A faculty member mentioned that the excitement among students has generated awareness in the community and acted as an effective marketing strategy as they have used word-of-mouth to share their positive experiences in the program.

To Watch Videos of the Greenhouse

Greenhouse Construction Time Lapse:
<https://www.youtube.com/watch?v=3m6OiMz2X4o>

Greenhouse Ribbon-cutting:
<https://www.youtube.com/watch?v=5tVqjWrGNtI>

Faculty in the agriculture division mentioned that program leaders have done a good job of keeping a “close finger on the pulse of employment in the community.” In particular, staff are looking at the demographics of community members who are losing their jobs in the agriculture industry. They are using this information to decide what education opportunities could

be offered to those populations through the university. In addition, project staff want to provide programs in which farmers can enroll to learn how to improve their own agricultural production. One faculty member commented,

We think that might be an opportunity to really impact the area as far as employment goes if we look at those who have farms that might take this opportunity for retraining, and perhaps figure out a way that they could make a family living on the farm. You know, essentially improving their agricultural production so they can sustain themselves.

Regarding challenges to the implementation of the agriculture courses, program staff stated that the biggest adjustment was the delay in getting the greenhouse installed and operational. Staff first ran into difficulties during the designing phase and then delays in the approval process caused the timeline for the ground-breaking process to be pushed back. Originally, the greenhouse was expected to open in September 2014; however, it was delayed until 2015.

Overall, the program was able to build a greenhouse³ (see Appendix E for pictures) and a horticulture certificate program, purchase microscopes and lab materials that could be used across

³ The greenhouse established an aquaponics system to grow fresh vegetables. This effort was led by one of the leaders of the West Plains Cooperative. The goal is to have MSU-WP use the food in their campus food production processes and also potentially sell the produce to the community to make it self-sustaining.

all classes, including plant science courses and equine studies. A faculty member best summarized it,

Through the TAACCCT grant we have a beautiful greenhouse through which we are doing a variety of different types of horticultural experiments, and we're using it as a laboratory. It's got multiple production techniques in it. Also, we purchased microscopes and some lab materials through the TAACCCT grant. We used those in Ag 103 where we were looking at plant cells, and also at some insects under the dissecting microscope.

We've added a new certificate program, which is a horticulture program, and we've added, I think it's eight new classes with that and then restructured some classes to further give students more of an opportunity to get the information and education they need to be successful in a horticulture endeavor.

Although the agriculture program had an advisory board, they only met one time over the course of the grant. When asked to complete an advisory board survey, no responses were provided. During spring of 2017, the agriculture department, with the leadership of the career development office, created an agriculture roundtable event. Partners from across the state were asked to come in to meet with students to discuss careers and if they may have any job openings. The businesses were set up at tables and students were free to visit and network with the exhibitors. The lists of partners who participated follows:

- Arvest Bank
- Dickerson Park Zoo
- Howell-Oregon Electric
- Missouri Forest Products Association
- Missouri State University Extension
- National Forest Service
- National Park Service
- Penmac
- SWTDC
- U.S. Department of Agriculture

Student Entrance Survey

Over the course of the grant, all incoming students taking courses affiliated with the TAACCCT grant were asked to complete an entrance survey. Sixty-four students who were enrolled in these courses completed the survey. For students who were primarily on campus,

TAACCCT staff physically handed them the survey in envelopes. Students were asked to complete it and seal the survey in an envelope provided to them. Online students were asked to complete the survey via email invites. Although students who were on campus tended to provide completed surveys, the online surveys had low response rates. As noted previously, instructors had challenges with keeping the online students engaged so it was not surprising that conducting an online survey did not have the expected responses.

The following section provides the results of the surveys. The survey included background information about the students, their familiarity with student support services, and their expectations of the program. Additionally, the students were asked to complete the CPQ, described in the methodology section to learn more about their persistence and motivation in applying to MSU-WP and the agriculture program.

General Information

The first section asked students to answer questions regarding their intentions about the program, why they decided to go attend, and how they heard about the program. Tables 52 – 55 provide a summary of these results.

Table 52. Educational Outcomes

What educational outcomes do you expect to achieve as a result of attending this college? (Select one that best describes your most important education goal) (N = 63)		
n	Percent	Expectations
3	4.8%	Earn some credits
2	3.2%	Earn a certificate or multiple certificates
3	4.8%	Earn a diploma
30	47.9%	Earn an associate degree (with or without certificates)
25	39.7%	Earn a bachelor's degree or higher

Note. Due to rounding, percentages may not add up to 100.0%

- Almost half (48%) indicated they planned to earn an associate degree with or without certification while 40% reported that they expected eventually to earn a bachelor's degree.
- Five percent of the respondents indicated they would earn some credits or a diploma.
- Two individuals (3%) indicated that they planned to earn a diploma.

Table 53. Important reasons for attending this college

In deciding to attend this college, which of the following were important for you? (Select all that apply) (N = 64)		
n	Percent	Reasons
29	45.3%	It has a good reputation.
50	78.1%	It is affordable.
50	78.1%	It is close to where I live or work.
44	69.8%	It offers flexible schedules that meet my needs.
22	34.9%	It offers online courses.
9	14.3%	It offers short-term programs.
12	18.8%	My family or friends attended this college.

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Approximately three quarters (78%) of the respondents said that *it is affordable* and *it is close to where I live or work*.
- Similarly, 70% responded that an important reason for attending this college was that it *offers flexible schedules that meet my needs*.
- Over 40% (45%) selected *it has a good reputation* and 35% said that offering line courses was an important reason for attending this college.
- Smaller percentages of respondents listed *my family or friends attended this college* (19%) and *it offers short-term programs* (14%).

Table 54. Reasons for deciding to go to college

There may be a lot of reasons you decided to go to college. Which of the following describes your situations? (Select all that apply) (N = 64)		
n	Percent	Reasons
37	57.8%	I can receive financial aid to go to school.
17	26.6%	I cannot find a job without more education.
2	3.1%	I lost my job, and I am eligible for educational funds through the workforce center or some other program.
36	56.3%	I need to advance my education to get a job that is better than the one I have now.
44	68.8%	I want to advance my education to earn more money.
53	82.8%	I want to advance my education to better my life.
11	17.2%	I want to get a job in manufacturing.
3	4.7%	My current employer is encouraging me to advance my education.

There may be a lot of reasons you decided to go to college. Which of the following describes your situations? (Select all that apply) (N = 64)		
n	Percent	Reasons
0	0.0%	My current employer is paying for me to take classes.
1	1.6%	My current employer promised me a pay raise if I earn a certificate, diploma, or degree.
44	68.8%	My family is encouraging me to go to school.

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- The majority of survey respondents said that they wanted *to advance their education to better their life* (83%), *their family was encouraging them to go to school* (69%), *they want to advance their education to earn more money* (69%), *they can receive financial aid to go to school*, and *they need to advance their education to get a job that is better than the one they have now* (56%).
- Over a quarter (27%) indicated that they *cannot find a job without more education*.
- One 3% indicated that they had *lost their job and were eligible for education funds through the workforce center or some other program*.
- Very small percentages indicated that they chose to attend the program because of their current employer. None of their current employers were *paying them to take classes*. Almost five percent indicated that the current employer *is encouraging me to advance my education*, but only 2% or one individual indicated that the current employer promised a pay raise for earning a certificate, diploma, or degree.

Table 55. How You Heard about the Program

How did you hear about the program in which you are currently enrolled? (Select all that apply) (N = 64)		
n	Percent	Reasons
9	14.1%	Advertisements (such as TV, radio, newspaper, online ads, or billboards)
7	10.9%	News or media reports (such as TV interviews, news releases, or a story in the paper)
2	3.1%	Newsletter from the program
0	0.0%	Newsletter from a company or trade union/association
9	14.1%	Social media or social networking (such as Facebook, Twitter, LinkedIn, YouTube, blogs, or RSS feeds)
4	6.3%	E-mail (such as through a listserv)
30	46.9%	College or program website
3	4.7%	Other websites (such as a workforce/unemployment center)
14	21.9%	Program brochures, flyers, postcards, or posters

10	15.6%	Online search I initiated
11	17.2%	Community events (including college, career, or unemployment fairs)
29	45.3%	From family and friends
3	4.7%	From workforce center staff (such as job counselor, social services, or public assistance programs)
3	4.7%	From employers/potential employers
21	32.8%	Personal contact with college faculty or staff

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Agriculture students heard about the program in a variety of ways. Just under half heard about it through the *college or program website* (47%) or *from family and friends* (45%).
- A third (33%) reported that they had *personal contact with college faculty or staff*.
- Other ways in which over 10 respondents said they had heard about the program was through *online searches* (16%), *community events (including college, career, or unemployment fairs)* (17%), *program brochures*, and *flyers, postcards, or posters* (22%).
- No one reported hearing about the program via a *newsletter from a company or trade union/association*.

Experience with Student Support Services

Student support services were a large part of the TAACCCT grant. In the Entrance Survey students were asked to provide information about what services they were familiar with, if they had met with a member of the support services team, the frequency they used student support services, the likelihood they would use student support services, and their expectations of the Career Services. Tables 23 – 28 show the results of these questions.

Table 56. Reasons for deciding to go to college

In terms of student support services, with which of these are you familiar? (Select all that apply) (N = 64)		
n	Percent	Reasons
14	21.9%	Advisement and Academic Coaching Center for Empower Student Success (AACCESS)
50	78.1%	Assigned advisor
10	15.6%	Assigned faculty member
15	23.4%	TRIO

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Most the survey respondents (78%) replied that they had met with their assigned advisor.

- Over a fifth (23%) indicated that they were familiar with the TRIO program and 22% said they were familiar with AACCESS.
- Ten respondents (16%) at the time of the survey had reported meeting with an assigned faculty member. However, since these surveys were administered during the first semester of the program, it is likely that the students had only met with the university advisor and would likely meet with the faculty advisor moving forward in the program.

Table 57. Reasons for deciding to go to college

Have you met with a member of the student support services staff? (Select all that apply) (N = 64)		
n	Percent	Reasons
5	7.8%	I have met with an academic tutor from AACCESS.
50	78.1%	I have met with a counselor or advisor.
13	20.3%	I have met with both an academic tutor and counselor or advisor.
14	21.9%	I have met with a faculty member who provided me with academic support.
6	9.4%	I have met with a member of TRIO.
8	12.5%	I have not met with any member of the student support services staff.
1	1.6%	I would like to meet with a member of the student support services staff, but I do not know who to contact.

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- When asked if they had met with a member of the student support services staff, 78% indicated that they had met with *a counselor or advisor*.
- While 20% said they had met with *both an academic tutor and counselor or advisor*, only 8% indicated they had *met with an academic tutor from AACCESS*. However, 22% reported meeting with *a faculty member who provided them with academic support*.
- Less than 10% said they had *met with a member of TRIO* (9%).
- Although eight respondents (13%) said they had *not met with any member of the student support services staff*, only one person selected that he or she *would like to meet with a member of the student support services staff, but I do not know who to contact*.

Table 58. Likeliness to go to a member of the student support services staff

How likely is it that you will go to a member of the student support services staff in the following situations? (N = 64)						
	Definitely not	Probably not	It depends	Probably yes	Definitely yes	N/A
If you have personal problems (e.g., family problems, financial problems, child care issues, or transportation issues).	37.9%	25.9%	17.2%	13.8%	5.2%	0.0%
If you have problems with course work .	8.3%	8.3%	40.0%	21.7%	21.7%	0.0%
If you have problems with your instructors .	8.6%	13.8%	32.8%	19.0%	25.9%	0.0%

Note. Due to rounding, percentages may not add up to 100.0%

- When asked if they would use student support services if they had problems with instructors, 45% selected *probably yes* or *definitely yes*.
- Similarly, 43% gave positive results when asked if they would use student support services if they had problems with course work.
- In contrast, only 19% indicated they would go to student support services with personal problems, such as family problems, financial problems, child care issues, or transportation issues).

Table 59. Frequency of using student support services

How often do you use the student support services? (N = 63)		
n	Percent	Reasons
3	4.7%	Daily
2	3.2%	Once or twice a week
9	14.1%	Weekly
7	10.9%	Twice a month
6	9.5%	Monthly
13	20.6%	Once or twice a semester
2	3.2%	Once a semester
21	33.3%	Never

Note. Due to rounding, percentages may not add up to 100.0%

- Of the 63 respondents, 33% said they had *never used the student support services*.
- Thirteen (21%) said they used them *once or twice a semester* while nine (14%) indicated they used them *weekly*.

Table 60. Frequency of using Career Services

How often do you use the Career Services? (n = 64)		
n	Percent	Reasons
7	10.9%	Daily
0	0.0%	Once or twice a week
1	1.6%	Weekly
2	3.1%	Twice a month
2	3.1%	Monthly
5	7.8%	Once or twice a semester
4	6.3%	Once a semester
43	67.2%	Never

Note. Due to rounding, percentages may not add up to 100.0%

- Agriculture students were also asked how often they used Career Services. Two thirds (67%) said *never*.
- Seven (11%) said they used it *daily*.

Table 61. Expectations of Career Services

What are your expectations of Career Services? (Select all that apply.) (N = 64)		
n	Percent	Reasons
48	75.0%	Provide resources on careers available to me
28	43.8%	Provide information on local companies that may be hiring
34	53.1%	Provide resume-writing tips
36	56.3%	Assist with job searching
25	39.1%	Practice interviewing strategies
5	7.8%	Other <ul style="list-style-type: none"> • Didn't know about them

Note. Because participants could select more than one response, percentages may not add up to 100.0%

- Respondents had a variety of expectations for the Career Services. Seventy-five percent wanted Career Services to *provide resources on careers available to them*.
- Similarly, 53% hoped Career Services would *provide resume-writing tips*, 56% wanted *assistance with job searching*, and 44% wanted *information on local companies that may be hiring*.
- Over a third (39%) said they expected Career Services to *practice interview strategies*.
- One specific comment noted that the individual *did not know about Career Services*.

Potential Barriers for Program Completion and Persistence

In order to help program staff think about challenges that students may face, survey questions also asked to get a sense of student financial struggles, level of family support, struggles with personal issues, and the strength of the students' persistence. Results from these questions can be found in Tables 62 – 65.

Table 62. Financial Struggles

In the past two months, to what extent did you struggle financially? (N = 64)		
n	Percent	Reasons
13	20.3%	Very much
17	26.6%	Somewhat
6	9.4%	Neutral
14	21.9%	Little
14	21.9%	Not at all

Note. Due to rounding, percentages may not add up to 100.0%

- Just over a quarter (27%) indicated they had *somewhat* struggled financially.
- Another 20% reported they had struggled *very much*.
- However, 44% responded they had struggled *little* or *not at all*.

Table 63. Family Support

How supportive is your family of your decision to continue your education? (N = 64)		
n	Percent	Reasons
57	89.1%	Very supportive
5	7.8%	Somewhat supportive
0	0.0%	Neutral
2	3.1%	Somewhat unsupportive
0	0.0%	Very unsupportive

Note. Due to rounding, percentages may not add up to 100.0%

- The majority of the respondents (97%) said their families were *very supportive* or *somewhat supportive* in their decisions to continue their education.
- Only two respondents (5%) said their families were *somewhat unsupportive*.

Table 64. Personal Issues

In the past two months, to what extent did you struggle with personal issues (e.g., child care, transportation, health, work schedule, or family responsibilities) that make it difficult for you to continue your program? (N = 64)		
n	Percent	Reasons
19	29.7%	Not at all
14	21.9%	Little
12	18.8%	Neutral
13	20.3%	Somewhat
6	9.4%	Very much

Note. Due to rounding, percentages may not add up to 100.0%

- When asked to what extent did you struggle with personal issues, such as child care, transportation, health, work schedule, or family responsibilities, over the past two months that may have made it difficult to continue the program, 52% said *not at all* or *a little*.
- Almost a third (30%) indicated they struggled *somewhat* or *very much*.

Table 65. Persistence

How strong is your intention to persist in your pursuit of the certification, diploma, or degree, here or elsewhere? (N = 64)		
N	Percent	Reasons
52	81.3%	Very strong
8	12.5%	Somewhat strong
3	4.7%	Neutral
0	0.0%	Somewhat
1	1.6%	Very weak

Note. Due to rounding, percentages may not add up to 100.0%

- The students were also asked about the strength of their persistence in pursuing their certification, diploma, or degree. Almost all 64 respondents (94%) said it was *very strong* or *strong*.
- Although three (5%) rated this question as *neutral*, one person (2%) responded that their persistence was *very weak*.

Student Factors Associated with Retention

As noted previously, the entrance survey included a variety of questions from the CPQ regarding factors associated with retention. Table 66 provides descriptive statistics for those items.

Table 66. Factors Associated with Retention

Survey Items	N	M	SD
Academic Efficacy			
How confident are you that you can get the grades you want?	64	4.36	0.74
When you are waiting for a submitted assignment to be graded, how assured do you feel that the work you have done is acceptable?	64	4.22	0.79
How much doubt do you have about being able to make the grades you want?	64	3.42	1.23
Academic Integration			
How would you rate the quality of the instruction you are receiving here?	64	4.33	0.69
How much do the instructors and the courses make you feel like you can do the work successfully?	64	4.23	0.73
In general, how satisfied are you with the quality of instruction you are receiving here?	64	4.23	0.83
Advising Effectiveness			
How satisfied are you with the academic advising you receive here?	64	4.47	0.76
How easy is it to get answers to your questions about things related to your education here?	18	4.06	1.00
How would you rate the academic advisement you receive here?	64	4.36	0.76
Career Integration			
How likely is it that the training you are receiving here will help you to get the job you want?	63	4.29	0.97
A goal of education is to provide you with what you need to know in order to succeed in your future job. How optimistic are you that the career training you receive here will give you the necessary knowledge?	63	4.21	0.90
Students sometimes believe that some of what they are asked to learn is irrelevant to their future jobs. How much of what you are learning at this school do you think is irrelevant?	64	3.30	1.06
How much do you know about the duties and responsibilities of the career and field in which you are receiving training?	60	3.88	0.98
Collegiate Stress			
How much pressure do you feel when trying to meet deadlines for course assignments?	18	4.17	0.86
Students differ quite a lot in how distressed they get over various aspects of college life. Overall, how much stress would you say that you experience while attending this institution?	18	2.78	1.44

Survey Items	N	M	SD
How often do you feel overwhelmed by the academic workload here?	18	2.67	1.19
Degree Commitment			
There are so many things that can interfere with students making progress toward a certificate, diploma, or degree, feelings of uncertainty about finishing are likely to occur along the way. At this moment in time, how certain are you that you will earn a certificate, diploma, or degree?	17	4.41	0.87
After beginning college, students sometimes discover that a college training is not quite as important to them as it once was. How strong is your intention to persist in your pursuit of the certification, diploma, or degree, here or elsewhere?	17	4.82	0.39
At this moment in time, how strong would you say your commitment is to earning a certification, diploma, or college degree, here or elsewhere?	18	4.44	0.71
Grit			
How likely are you to finish whatever you begin?	63	4.76	0.43
How typical is it for you to be very interested in an activity and then lose interest a short time later?	64	2.84	1.31
Institutional Commitment			
How confident are you that this is the right college or university for you?	18	2.56	1.37
How likely is it you will earn a certificate, diploma, or degree from here?	16	4.56	0.89
How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?	18	3.17	1.72
How likely is it that you will reenroll here next semester?	16	4.50	1.10
Financial Strain			
How often do you worry about having enough money to meet your needs?	18	2.67	1.19
How difficult is it for you or your family to be able to handle college costs?			
When considering the financial costs of being in college, how often do you feel unable to do things that other students here can afford to do?	17	2.76	1.35
How much of a strain is it for you to purchase the essential resources you need for courses such as books and supplies?	17	3.29	1.36
Motivation to Learn			
Students vary widely in their view of what constitutes a good course, including the notion that the best course is one that asks students to do very little. In your own view, how much work would be asked of students in a really good course?	64	3.72	0.60

Survey Items	N	M	SD
In general, how enthused are you about doing academic tasks?	64	3.73	0.95
Scholastic Conscientiousness			
How often do you miss class for reasons other than illness or participation in school-related activities?	59	3.76	1.56
How often do you arrive late for classes, meetings, and other college events?	60	3.82	1.50
How often do you turn in assignments past the due date?	61	3.62	1.37
Social Integration			
How much do you think you have in common with other students here?	18	3.28	0.96
How much have your interactions with other students had an impact on your personal growth, attitudes, and values?	18	3.33	1.24
How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?	18	3.39	1.24

Note. All items were rated on a 5-point scale between 1 and 5; a higher score indicates a better outcome. Items were reverse coded as necessary to fit this schema.

Expectations

Finally, the students were asked some open-ended questions about what their expectations were for the school year. Verbatim comments are listed below in Table 67.

Table 67. Student Expectations

What are your expectations for the school year? (N = 52)
A+ in all my classes.
Advancement in my education and career.
Boost my GPA and continue with my BS degree.
Continue to get credits I need for my major.
Earn my associates in May for general studies.
Getting through my first year of college.
Go class, learn stuff, do good, pass.
Good instruction from top notch instructors.
Graduate.
I am finishing up my last classes for my associates degree, and beginning my low-level agriculture classes towards my bachelors' degree.
I expect to get my associates and move onto a bachelor's in agriculture.
I expect to learn a lot.

I expect to learn much and continue to learn until I get my degree and feel confident that I can display my knowledge.
I expect to learn what I need to know and improve my education.
I plan to continue towards my associates degree. Then, I would like to attend the two-year nursing program in the future.
I plan to transfer to Lincoln University in Jefferson City to finish my schooling.
I wish to get all A's in all my classes.
Learn more about agriculture and graduate with my associates.
Learn the skills to further my education and better myself. I hope to learn what I need to know to keep going down the path to a job for the Missouri State Conservation.
My expectations are to complete coursework that prepares me for vet school and to work toward my MSU degree completion.
My expectations are to get A's in most of my classes.
My expectations for the school year is to make passing grades for my courses.
NA
One more step to graduation.
Pass all my classes with a 4.0.
Pass all of my classes.
Pass classes.
Successful, good start to the rest of the next three years.
To be a good first year.
To be able to juggle a full-time job, a husband, two kids under six, and keep my grades up. I'm also hoping to take more hours next semester.
To complete college.
To continue pursuing my career goals.
To do my best and get my courses done with good grades and lots of knowledge.
To earn some credits and transfer to the College of the Ozarks.
To gain more knowledge to better myself for the future.
To get better grades and be able to work more hours on studying schoolwork.
To get through school year.
To graduate with AA in general studies.
To graduate with associates degree.
To graduate with my associates degree this fall. Leave West Plains MSU with enough of a good start to be successful at my next college.
To just make it through.
To keep my grades up, to succeed, to pass.
To learn as much as I can and do the best I can and continue getting the help I am getting from tutors and my instructors.
To learn what I need to move forward in life.

To make good grades and further my education.

To make good grades and to be able to accomplish.

To not flunk any of my classes and to get my main classes out of the way.

To pass my classes and get closer to earning an associate's degree. Maybe find someone who can point me in the direction of place I can work in the field I want to be in.

Available Outcomes

Challenges

Unfortunately, many of the outcomes were unavailable at the writing of the report. First, the evaluation team had planned on sharing results of the exit survey to review changes between when students first entered the program and when they left the program. Students who were known to be graduating who invited to take the survey online or on campus, if they attended courses on campus. Three students on campus completed the survey while only one online student agreed to complete the survey. Because IRB processes require a minimum of five respondents when subjects can be identified, those results are not available.

As noted in the report, no HIT or GOCAT students completed the program prior to the deadline; thus, they are counted as continuing students and outcomes, such as comparisons to people enrolled in similar programs are unavailable. Several students were counted as completers from the agriculture program; however, many of those completers enrolled in specific courses earning a general studies degree. Although it is not a perfect comparison because of the way the agriculture students were counted, MSU-WP pulled information about students enrolled in the agriculture program from 2011, 2012, and 2013 to serve as a proxy comparison group. Students who took the same agriculture classes in the historical cohort that counted as TAACCCT classes throughout the program were counted. From fall 2011 to fall 2013, 145 students had registered for a class similar to those offered by TAACCCT. Of those 145, 17 graduated within that timeframe (12%). When only counting the TAACCCT students who enrolled in an agriculture program, 207 entered the program between 2014 and 2016. Of those 207, 56 (27%) earned a degree or certificate (i.e., 27 Associate of Arts degrees; 11 Associate of Applied Science degrees; 15 Associate of Science degrees; and three certificates). Thus, the retention and completion rate of the students enrolled in the agriculture courses was higher after TAACCCT than prior to TAACCCT.

Available Outcome Measures

As noted previously, MSU-WP had set specific targets for each year of the grant. Table 68 shows how the target total versus what MSU-WP anticipates to include in the final Annual Performance Review.

Table 69. Outcome Measures as of September 30, 2017

Outcomes	Target Total	Actual Total
1. Total unique participants served	69	284
2. Total number of participants completing a TAACCCT-funded program of study	44	46
3. Total number of participants still retained in their program of study or other TAACCCT-funded program	50	97
4. Total number of participants completing credit hours	57	284

5.	Total number of participants earning credentials	51	53
6.	Total number of participants enrolled in further education after TAACCCT-funded program of student completion	14	28
7.	Total number of participants employed after TAACCCT-program of study completion	33	84
8.	Total number of participants retained in employment after program of study completion	29	NA*
9.	Total number of participants employed at enrollment who received a wage increase post-enrollment	13	NA*

*Note: At the time of this report, information from the Missouri South Central Workforce Investment Board (WIB) was not available to MSU-WP. They do plan on having it by the time the final APR is due in November, but due to new state policies, the WIB was having challenges gaining access.

As shown in the table, MSU-WP met their targets over the course of the grant. It should be emphasized that unlike many of the TAACCCT recipients, MSU-WP is a two-year campus and not a community college. Thus, there may be a higher tendency for students to transfer to MSU-Springfield after completing their degree or to another institution of higher education before joining the workforce.

Conclusions and Lessons Learned

Through the TAACCCT grant, MSU-WP was able to expand and create new programs. Additionally, it allowed for new policies and practices to be integrated across the West Plains campus. The following section briefly summarizes the findings of the overall project components and lessons learned over the course of the grant.

Overall Project Components

The TAACCCT grant allowed MSU-WP the opportunity to expand the agriculture program, create the HIT program, and receive the funding to make advanced manufacturing training possible in the West Plains area. Additionally, TAACCCT provided MSU-WP with an opportunity to create university policies and procedures, such as developing and implementing a PLA and a system for stacked and latticed credentials. The growth of the CRP also was made possible from the TAACCCT grant. This allowed both potential and current students the opportunity to fully prepare for the courses, which was especially important for adults who may have been out of school for decades. A major benefit of the CRP is that students do not have to pay for non-credit courses; any introductory or remedial courses that they may need are available free of charge.

Perhaps most importantly, this project allowed MSU-WP leadership and staff to have a discourse about the institution's goals as well and to help shift the mindset from being solely about granting two-year degrees so students can transfer to other universities to thinking about how workforce development can play a significant role within the program. Because of the region's economic needs, the MSU-WP campus has a great opportunity to become a key training ground for students to complete certificates and/or degrees and be immediately ready for the workforce.

This will be greatly influenced by continuing the career development and outreach offices. Despite turnover within these positions, the career development office and outreach offices were able to put items in place, such as community roundtables, connecting directly students, and reaching out to community partners. As the programs continue to grow and develop, these offices will be integral parts of working with area and local businesses to help students navigate the workforce and find employment opportunities once they complete their education.

GOCAT

Although the GOCAT facility was completed too late within the grant cycle to have students enroll and graduate, the TAACCCT funds allowed GOCAT to be created. According to project staff, the success of the GOCAT will be determined in a few years as more students become familiar with it and complete the trainings. Already, project staff are setting up customized trainings for local businesses who request it with the anticipation that this will help recruit students.

The partnerships that MSU-WP TAACCCT staff forged with the local community was also another key area that made this program successful. TAACCCT project staff brought representatives from area businesses and workforce development to create this program. Through

these partnerships, they anticipate that they will be able to create and implement cutting-edge curriculum to help businesses with their current needs. Additionally, through the partnership with SCCC, another goal is to get children and youth excited about these types of programs at a young age. Ultimately, this will set up partnerships with area high schools for students to start programs while still enrolled in high school and/or make the transition to secondary education seamless.

HIT

The HIT program was created from the ground up at MSU-WP. Despite several challenges at the beginning with faculty turnover and not having approval from the university to officially offer the program so students could not declare the program until mid-way through the grant cycle, by the end of the grant, the program was functioning well. Although few students graduated from the HIT program prior to the TAACCCT deadline, several students were expected to graduate in summer and fall 2017.

Because the HIT program required an internship experience prior to completion, this program provided opportunities for the Allied Health and HIT staff to work with the community to ensure that these opportunities were available for students. Additionally, by the end of the grant, the HIT program had received its AHIMA credentials.

Agriculture

TAACCCT funds were used to expand the agriculture program by creating more certificate and degree programs. The curriculum was modified from the previous programs to ensure that this happens. However, staff realized that making modifications to a current program was more challenging than originally anticipated and recommend that future grant programs would involve creating brand-new programs rather than trying to modify current programs.

A major success of the agriculture program was the creation of the greenhouse on the MSU-WP campus. The greenhouse not only allowed students opportunities to learn the science behind the agriculture, it provided practical purposes. For example, the goal is to use the food grown in the greenhouse on campus. There are also opportunities for partnerships with the West Plains Cooperative. Staff also have looked for opportunities to partner with the USDA on grant opportunities and hope to continue to grow the program.

As noted, students enrolled in the agriculture program counted for most of the program completers. When compared to those who enrolled in graduated in 2011, 2012, and 2013, the completion rate increased from 12% to 27%.

In terms of other outcomes, because of the number of students graduating from the agriculture program, MSU-WP met its intended outcomes. As noted previously, the wage data from the WIB is not available yet. Updates will be provided when that information is known. Although MSU-WP has reached out to former students to collect this data from self-attestation, responses have been low, as expected.

Sustainability

MSU-WP is in a good place to keep the TAACCCT programs sustainability with the goal that student enrollment will maintain the programs. Because of the partnerships formed with the GOCAT, project staff anticipate that companies will take advantage of the opportunities it provides. As area residents learn more about it and the opportunities it can provide, they expect more people to register for classes. Helping youth at the elementary, middle, and high school levels become more aware of the program should excite young people and help them transition to post-secondary education.

The HIT and agriculture programs have similar goals—continue enrolling students and help them graduate. Through programs such as CRP, student success rates should continue to increase. The more success the programs have, the more likely positive information about the school and programs will continue to spread throughout the community.

Project and university staff also plan to continue to look for funding through grants and partnerships. For instance, they are focusing on receiving a mentorship through the National Science Foundation (NSF) and hope that NSF grants will arise. Finding opportunities with the USDA is also a possibility for continuing to grow the agriculture program.

Overall, program staff find the TAACCCT grant was successful. They met their target goals primarily through one program. However, they anticipate that over the next five years, the student graduate and sequential employment status will continue to increase. TAACCCT provided them with the support needed to launch these programs, and the expectation is that they will be sustainable and continue to grow over time.

Appendix A: Pictures of the GOCAT Facility







Appendix B: CTE Options



Career and Technical Programs

Associate of Applied Science

- Business - Accounting
- Business – Computer Information Systems
- Business - Management
- Business – Technology Management
- Child & Family Development
- Computer Graphics & Programming
- Enology
- Entrepreneurship – Agricultural Business
- Entrepreneurship – Culinary Arts
- Entrepreneurship – General Business
- General Agriculture
- Health Information Technology
- Law Enforcement
- Technology – Alternative Energy
- Technology – General Technology
- Technology – Manufacturing
- Technology – Technology Management
- Viticulture
- Wine Business & Entrepreneurship

Certificates

- Agricultural Business
- Alternative Energy
- Animal Science
- Applied Entrepreneurship
- Basic Bookkeeping
- Basic Business Studies
- Basic Office Management
- Enology
- Equine Studies
- General Agriculture
- Law Enforcement
- Medical Billing & Coding
- Natural Resources
- Plant Science
- Public Outreach & Education
- Small Business Management
- Technology Management
- Viticulture
- Wildlife Management
- Wine Business & Entrepreneurship

For More Information

<http://www.wp.missouristate.edu>



Associate of Science

- Agriculture
- Business
- Pre-Engineering

Bachelor's & Master's Degrees

The Missouri State University Outreach program offers the following Bachelor's and Master's degrees on the West Plains Campus or online:

- Bachelor of Science in Criminology (online)
- Bachelor of Applied Science in General Agriculture
- Bachelor of Science in Child & Family Development
- Bachelor of Science in Finance (online)
- Bachelor of Science in General Business
- Bachelor of Applied Science in Technology Management (online)

Explanation of Programs

• Certificate

Certificate programs meet specific, short-term training and educational needs of students by combining core and specialty courses into focused, flexible training packages that more immediately meet employment needs. If a student later decides to seek advanced education, many of the certificate courses may be combined with the advanced courses for associate of science or associate of applied science degrees.

• Associate of Science Degree (AS)

A specialized degree intended to transfer into a pre-professional degree, the AS allows students to enter the workforce and/or transfer into a bachelor's degree completion program.

• Associate of Applied Science Degree (AAS)

A specialized degree that is primarily an occupationally oriented degree, the AAS allows recipients of this degree to enter a particular job market. While not designed as transfer degrees, some AAS degrees can be used as the first two years of a Bachelor of Applied Science degree; however, students will need to take additional general education courses, as well as courses in the major field.

• Bachelor's and Master's Degrees

Missouri State University-Springfield offers bachelor's, master's and specialist degree programs on the West Plains campus through the Missouri State Outreach program. By using interactive video, online, and on-site instruction, entire degree programs can be completed on the Missouri State University-West Plains campus.

- Refer to www.wp.missouristate.edu for information about additional degree programs available from MSU-WP.

Appendix C: Definition of HIT

HIT

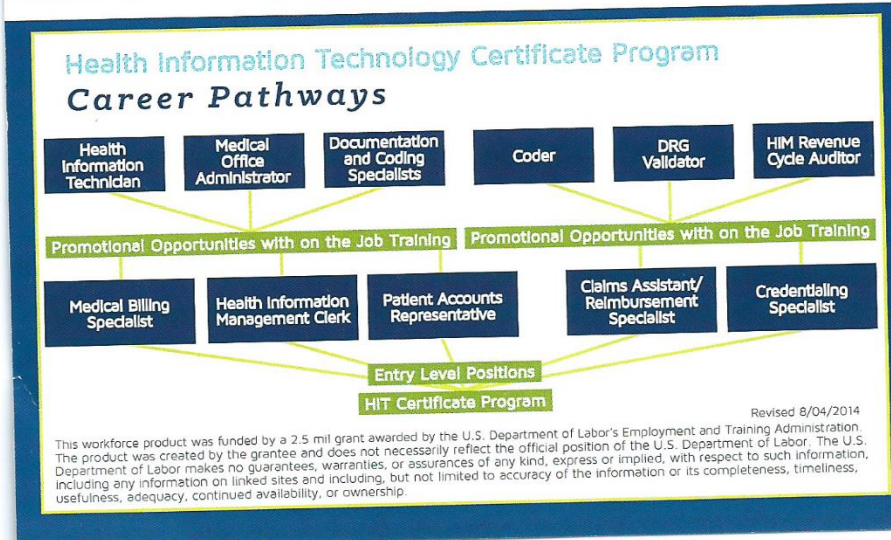
Health Information Technology

HIT technicians are healthcare professionals in charge of processing patient data. They ensure quality, accuracy, accessibility and security in both paper and electronic systems.

The Health Information Technology associate degree program will help you earn credentials employers recognize and prepare you for a career in the growing health information field. This program is a part of a stackable degree path that allows you to earn your degree one credential at a time.

Earn a **certificate** in Medical Billing & Coding at Missouri State University-West Plains and you may be eligible to take a nationally recognized exam for certification to enhance your career as a medical biller or coder. If you want to continue your education, Missouri State-West Plains will apply all courses towards the Health Information Technology **associate degree** program.

To learn more, visit
wp.missouristate.edu/



Appendix D: Greenhouse Pictures









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