VINCENNES UNIVERSITY

Logistics Training and Education Center (LTEC) Initiative

TAACCCT Round 2

Year 3 Evaluation Interim Report

EXECUTIVE SUMMARY

OVERVIEW

In 2012, Vincennes University (VU) in Plainfield, Indiana, received a $2,931,354 grant to deliver training to meet the needs of TAA-eligible workers and other participants in the logistics industry. The Logistics Training and Education Center (LTEC) Initiative focuses on the following programs: Global Logistics Associate, Tractor-Trailer, Supply Chain Logistics Management Associate degree and certificate, Fork-Lift, and Team Lead. The LTEC Initiative seeks to increase job placement for non-traditional and TAA-eligible learners by training participants for high-wage, skilled employment opportunities.

ACCELERATORS AND STRENGTHS

From October 1, 2014 through September 30, 2015, the project focused on program development and implementation. The Tractor-Trailer program was incorporated into the grant and equipment for the program was donated and purchased, internal processes and communication were enhanced and streamlined, and articulation agreements were finalized with a number of four-year institutions. The LTEC facility was expanded in terms of student capacity with the development of a mobile lab equipped with a computer lab, classroom, and offices for LTEC faculty and staff.

BARRIERS AND CHALLENGES

Despite progress in a number of areas, challenges surrounding student data collection, retention, and recruitment as well as internal obstacles (i.e., communication with remote staff, clarity of expectations, and rapid program expansion) emerged. Employer and WorkOne turnover challenged existing and new partnerships and the need for sustainability plan modifications surfaced due to fluctuations in program outcomes.

ACCELERATORS AND STRENGTHS
- Expanded LTEC Facility
- Streamlined Internal Communication
- Internal Process Improvement
- Increased Staff Capacity
- Refined Career Pathways
- Incorporated Soft Skills into Workforce Programs
- Established Articulation Agreements with Four-Year Institutions

BARRIERS AND CHALLENGES
- Internal LTEC Capacity
- WorkOne and Employer Turnover
- Student Post-Program Data Collection
- Communication with Remote Staff
- Faculty and Staff Expectations and Responsibilities
- Sustainability of Facilities
- Student Retention and Recruitment

RECOMMENDATIONS
- Develop and Implement a Structured Onboarding Process
- Document Institutional Knowledge for Scalability
- Establish a Written Program Operations and Management Plan
- Provide Opportunities for Student Feedback
- Create a System for Tracking Students
- Consider Program-Specific Assessments
- Launch a Formalized Marketing and Recruitment Plan

RECOMMENDATIONS FOR FUTURE PROGRAM IMPLEMENTATION
- Establish Communication Standards and Expectations Early
- Hire Staff Promptly to Specialize Roles
- Develop Basic Marketing Plan Prior to Program Implementation
- Implement Onboarding Policies and Practices Prior to Hiring Staff
- Create Implementation Plan Prior to Program Roll-Out
- Identify and Engage Target Employers
- Focus on Academic and Non-Academic Programs
- Establish Database Specialist Position

LOOKING AHEAD

As the implementation of the grant moves into the program extension period (PY 4), opportunities for continued growth include the following: creating a structured onboarding process for new faculty and staff; clarifying faculty, staff, and leadership expectations by developing a program operations and management plan; providing student feedback opportunities on courses (i.e., Plainfield High School and Amazon cohorts) for program improvement; determining route for marketing and outreach to ensure sustainability through development of a formal marketing and recruitment plan; and measuring student skillsets through assessments.

In general, there is a need to increase student enrollment and retention to ensure program and facility sustainability. Efficient and streamlined internal processes and expectations could help move the facility toward more sustainable practices.

TABLE OF CONTENTS

INTRODUCTION

PURPOSE AND BACKGROUND

In 2012, Vincennes University (VU) received a grant of $2,931,354 through the U.S. Department of Labor (USDOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT) program to fund the Logistics Training and Education Center (LTEC) Initiative. The purpose of LTEC is to prepare TAA-eligible workers and other participants for employment in the logistics industry. Ultimately, LTEC seeks to increase the number of qualified, employable candidates by providing them with increased opportunities to advance in their education and careers. Those following the career path developed through the program will progress to middle-skill and high-skill jobs and earn higher wages. The TAACCCT grant provides an opportunity for VU to expand the existing center to serve a larger number of students and carry out a comprehensive evaluation of program activities, outputs, and outcomes. *See Appendix A for detailed information on the programs currently available at LTEC.*

As part of grant requirements, VU procured an independent contractor, Thomas P. Miller & Associates, LLC (TPMA), to conduct an objective evaluation of the LTEC Initiative. This evaluation will provide VU main campus and LTEC, its partners, its funders, and other stakeholders with critical information regarding the effectiveness of implemented programs through September 2016.

This Project Year (PY3) Evaluation Report is the third of four yearly evaluation reports that examines the outputs and outcomes of the program to date, as well as the underlying processes, assumptions, modifications, successes, obstacles, and progress over the past year that have led to program results in PY3. It concludes with recommendations for LTEC staff and faculty to consider as part of the extension period (PY4 operations as well as progress made toward PY2 recommendations) and offers recommendations for institutions that may consider implementing a similar program in the future.

SUMMARY OF METHODOLOGY

This third evaluation report focuses on the implementation of the LTEC Initiative in PY3 of grant-funded operations. To understand program implementation and draw conclusions about successes and obstacles, this PY3 Evaluation Report relies on the content analysis of qualitative data as well as quantitative data from the following sources:

1. Interviews with LTEC staff and faculty;
2. Interviews with LTEC students;
3. PY2 quarterly reports prepared and submitted by LTEC staff; and
4. Enrollment data.

The final report will incorporate additional evaluation analyses still in development, including analysis of pre-/post-test knowledge gains and a quasi-experimental design that will measure student outcomes compared to similarly situated non-grant recipients.

SUMMARY OF FINDINGS

Overall, LTEC has made progress toward PY3 target activities and implementation goals. The Tractor-Trailer program was incorporated into the grant and launched new training cohorts each month. The Tractor-Trailer program also increased student enrollment numbers and expanded through the addition of faculty members due to the level of student interest in the program. The warehouse improved process flow, and new equipment was purchased for LTEC programs to allow LTEC to provide training to more students. In addition, internal communication and business processes became more efficient in regards to procedures and protocols. LTEC continues to progress through grant activities and deliverables.

Like all programs, a range of accelerators and barriers have impacted PY3 activities and outcomes resulting in a number of recommendations. These include:

ACCELERATORS AND STRENGTHS
- Expanded LTEC Facility
- Streamlined Internal Communication
- Internal Process Improvement
- Increased Staff Capacity
- Refined Career Pathways
- Incorporated Soft Skills into Workforce Programs
- Established Articulation Agreements with Four-Year Institutions

BARRIERS AND CHALLENGES
- Internal LTEC Capacity
- WorkOne and Employer Turnover
- Student Post-Program Data Collection
- Communication with Remote Staff
- Faculty and Staff Expectations and Responsibilities
- Sustainability of Facilities
- Student Retention and Recruitment

RECOMMENDATIONS
- Develop and Implement a Structured Onboarding Process
- Document Institutional Knowledge for Scalability
- Establish a Written Program Operations and Management Plan
- Provide Opportunities for Student Feedback
- Create a System for Tracking Students
- Consider Program-Specific Assessments
- Launch a Formalized Marketing and Recruitment Plan

RECOMMENDATIONS FOR FUTURE PROGRAM IMPLEMENTATION

- Establish Communication Standards and Expectations Early
- Hire Staff Promptly to Specialize Roles
- Develop Basic Marketing Plan Prior to Program Implementation
- Implement Onboarding Policies and Practices Prior to Hiring Staff
- Create Implementation Plan Prior to Program Roll-Out
- Identify and Engage Target Employers
- Focus on Academic and Non-Academic Programs
- Establish Database Specialist Position

SUMMARY OF ACTIVITIES

PY3, which encompasses the period from October 1, 2014 to September 30, 2015, included a variety of program development and implementation tasks. The Tractor-Trailer program was added to the grant-funded programs and expanded due to student interest, the warehouse improved process flow and technology solutions, new partnerships were developed and utilized, and internal processes and communication were streamlined.

MILESTONES

LTEC's focus for PY3 was largely in program implementation, as many program components have been launched and enhanced. These developments were in a number of areas including partnerships and staff capacity, as well as equipment purchases and warehouse improvements. These milestones are described in greater detail below.

PARTNERSHIPS

VULTEC established a number of different partnerships in PY3 with employers, establishing agreements for employee training and receiving quality equipment donations, as well as with four-year institutions, finalizing articulation agreements for the logistics programs, and local high schools, developing programs for articulated college credit. All existing partnerships to date are outlined below.

EMPLOYERS/ORGANIZATIONS

- Amazon – Total of 16 Amazon employees enrolled in the Tractor-Trailer program in mid-April in which Amazon paid employee tuition
- Conway and Schneider – Donated equipment for the Tractor-Trailer program (i.e., one tractor, two, 28 foot trailers and one 53 foot trailer)
- EmployIndy – Utilized Powertrain grant to fund students in the Global Logistics Associate program

FOUR-YEAR INSTITUTIONS

- Oakland City University – Articulate 60 credits for Supply Chain Logistics Management Associate degree into Bachelors of Applied Science in Operations Management
- Trine University – Articulate 60 credits for Supply Chain Logistics Management Associate degree into Bachelors of Applied Management
- Embry-Riddle Aeronautical University – Articulate 60 credits for Supply Chain Logistics Management Associate degree into Bachelors of Science in Logistics and Supply Chain Management

LOCAL HIGH SCHOOLS AND HIGH SCHOOL PROGRAMS

- Plainfield High School – Students pursue the Global Logistics Associate plus fork-lift certificate during fall semester of their senior year and are then placed in a logistics internship during the spring semester of their senior year
- The Excel Center – Adult learners working toward high school diploma enrolled in LTEC's Tractor-Trailer program or Global Logistics Associate program;
- TeenWorks – Summer Internship program for high school students where students are in the warehouse four days per week at six hours per day pursuing a fork-lift certification and obtaining hands-on logistics training
- Hire Tech – Students participating in an advanced manufacturing and logistics-based high school program (HireTech) in which the student earns their MSSC Certified Logistics Associate (CLA) and APICS-based Logistics and Operations certificates are then able to articulate those credentials earn into three-credit hours in PRDM100- Introduction to Supply Chain Management at VULTEC

TRACTOR-TRAILER PROGRAM

The inclusion of the Tractor-Trailer program into the grant was a significant activity in PY3.[1] The 16 credit hour course leads to a Commercial Driver's License (CDL) Class A, as well as a fork-lift license and meets for six weeks – equivalent of 240 hours – Monday through Friday with new courses beginning the first Monday of every month. The initial start of the program was in January 2015. To date the program has enrolled a total of 69 students with nearly all of the students passing the CDL certification exam (93 percent passage rate).

One full-time faculty member, one part-time faculty member, and the full-time CDL Coordinator (all industry retirees) are currently responsible for teaching the courses. The CDL Coordinator is also responsible for student recruitment and equipment procurement. The program has received a number of donations including a tractor and two 28-foot trailers donated by Conway and one 53 foot trailer donated by Schneider. Tractor-Trailer faculty are utilizing their connections with local industry to procure additional equipment donations, partnerships, and assistance with curriculum development. A total of four tractors and four trailers have been purchased through the TAACCCT grant to date. As the need for the Tractor-Trailer program continues to increase, the program is anticipated to experience persistent growth and expansion.

Other PY3 milestones include:

- Launched the mobile classroom that contains one classroom, a computer lab, and offices for the Warehouse Technician and Tractor-Trailer faculty.
- Improved warehouse process flow through revised warehouse training and workflow *(see Appendix B for VULTEC Library Workflow)*
- Hired Supply Chain faculty and adjunct, and Finance Specialist *(Tractor-Trailer/CDL Coordinator and faculty positions outlined above)*

---

[1] The Tractor-Trailer program existed in Central Indiana prior to the grant but was included into VULTEC's grant-funded programs as a way to increase the program's capacity (i.e., hire more instructors, purchase equipment, train additional students).

PROGRAM CHANGES

One change that occurred in PY3 included faculty turnover and increased specialization of LTEC staff. In previous years of the grant, a small group of LTEC staff would have a number of different responsibilities that overlapped depending upon availability. In PY3, LTEC staff began to specialize their responsibilities into department-like buckets (i.e., leadership, advising, finances, and faculty). These individuals have specific roles and responsibilities as they relate to the grant, creating more efficient and streamlined services. These responsibilities are outlined below.

- *Leadership* – oversees grant outcomes, deliverables, purchasing and budget, procurement, personnel, reporting, and partnerships
- *Academic Advisor* – provides student support, recruits students, monitors student progress and inquiries, and markets LTEC programs
- *Finance Specialist* – initiates and monitors student payment arrangements, invoices, purchase orders, and grant vs. non-grant money
- *Warehouse Technician* – oversees warehouse operations including First Book Marketplace output, inventory, special projects, facility management, and hands-on learning activities in the warehouse
- *Coordinator* – oversees progress of Tractor-Trailer/CDL program, documents curriculum and resources, and instructs Tractor-Trailer courses
- *Faculty* – instructs LTEC courses, establishes partnerships with employers, and markets programs
- *Adjunct Faculty* – instructs LTEC courses

In addition to increased staff specialization, VULTEC experienced faculty turnover in PY3. A total of two part-time CDL instructors, one Coordinator for the Tractor-Trailer program, and one staff member responsible for career services and training program advising were not suited for LTEC's vision and expectations. The turnover of faculty and staff impacted LTEC's ability to move forward with grant activities as replacements have to be hired, which slowed progress in program development and implementation. However, LTEC hired a CDL Coordinator to address the needs of the Tractor-Trailer program, full-time faculty for the Supply Chain program, and staff responsible with financing to address the recent turnover.

NEEDS

For future program improvements, LTEC staff identified two crucial needs: (1) to strengthen relationships with regional workforce agencies and (2) to increase student retention and recruitment. Although LTEC has continued to work toward improved relationships with WorkOne agencies, LTEC staff have not received sufficient student referrals from the regional agencies due to turnover at WorkOne and challenges establishing strong relationships. Although LTEC receives referrals from WorkOne for CDL students – an average of six students per month – LTEC staff are not receiving student referrals for the other programs. Strengthening these connections could increase student enrollment numbers as well as provide participants with funding assistance. Because LTEC has expressed concerns with student retention and enrollment, relationships with these agencies could improve these numbers for sustainability purposes.

LTEC staff have also expressed a need for increased student retention and recruitment. Staff emphasized that prospective students may not be aware of the programs and expectations leading to program withdrawal. This is especially true for students enrolled in online courses. In order to ensure future sustainability of LTEC programs, LTEC staff could revisit student recruitment and retention strategies.

LOOKING AHEAD

For PY4, LTEC staff will continue to develop and refine program components. These goals for PY4 are outlined as they relate to specific groups and include:

Leadership-Related
- Revise and adhere to sustainability plan to account for Tractor-Trailer growth and warehouse and program revenue downtrends
- Continue to build relationships/partnerships in the region
- Establish a written program operations and management plan

Staff-Related
- Hire Program Specialist and two additional Tractor-Trailer faculty to instruct courses
- Develop structured onboarding process for new staff

Program-Related
- Offer weekend and night classes in the Tractor-Trailer program *(likely post-grant implementation)*
- Implement Associate of Science in Career Technology degree *(likely post grant)*
- Launch a formalized marketing and recruitment plan

Student-Related
- Launch ALIGN program *(likely post grant)*
- Increase student recruitment and retention strategies
- Increase opportunities for student feedback

PROGRAM ACCELERATORS

Several PY2 accelerators have continued to propel program development and implementation progress into PY3. This progress is expressed below:

PY2 STRENGTHS	CONTINUED STRENGTHS	NEW STRENGTHS, PY3
- Implementation of Technology Solutions - Training Program Flexibility - Single Point of Contact for Students - Non-Academic Support for Students - Refined Marketing Strategies - Ease of Online Registration - Increased Collaboration - Fully Developed Sustainability Plan - Increased Main Campus and Employer Support - Established TAA Recruitment Strategy - Continual Program and Curriculum Improvement	- Implementation of Technology Solutions - Training Program Flexibility - Single Point of Contact for Students - Non-Academic Support for Students - Increased Main Campus and Employer Support - Continual Program and Curriculum Improvement	- Expanded LTEC Facility - Streamlined Internal Communication - Internal Process Improvement - Increased Staff Capacity - Refined Career Pathways - Incorporated Soft Skills into Workforce Programs - Established Articulation Agreements with Four-Year Institutions

LTEC INITIATIVE DEVELOPMENTS AROUND PY2 ACCELERATORS

Developments around key PY2 accelerators, in which activity has occurred in the past year, are described in greater detail on the following page.

DEVELOPMENTS AROUND KEY PY2 ACCELERATORS

IMPLEMENTATION OF TECHNOLOGY SOLUTIONS

In PY2, LTEC implemented a number of new technologies including RF scanning, Voice-Pick, and Pick-to-Light creating a more competitive facility for logistics training and education. These technologies are now fully integrated into warehouse operations and provide a more hands-on experience to the students in PY3. LTEC anticipates embedding these technologies into recruitment strategies and purchased a portable tabletop display of the Pick-to-Light technology that the Academic Advisor has been taking to educational fairs and other speaking engagements to spark interest in and provide a visual understanding of the supply chain.

TRAINING PROGRAM FLEXIBILITY

LTEC is continuing to offer a flexible program structure in PY3. For example, the Tractor-Trailer program begins new courses the first Monday of every month allowing students to enroll into the program at their own pace. LTEC also anticipates offering weekend and evening courses in the Tractor-Trailer program to accommodate working non-traditional students. Offering opportunities such as weekend and evening classes allows students to further tailor their education to their personal needs. LTEC will likely implement weekend and evening courses post-grant.

SINGLE POINT OF CONTACT FOR STUDENTS

The Academic Advisor has continued to serve as the single point of contact for students in PY3. The Academic Advisor is currently responsible for academic advising, registration, student recruitment, training coordination and scheduling, course set-up, and event scheduling. The Academic Advisor is working to maintain one-on-one relationships with students to ensure students persist through the LTEC programs. For example, the Academic Advisor sends out weekly/biweekly emails to LTEC's academic students containing academic tips and outlining upcoming events to ensure that there is an open line of communication with students. A single point of contact for LTEC students encourages strengthened relationships between students and LTEC staff and provides students with the support they need to persist in LTEC programs.

INCREASED MAIN CAMPUS AND EMPLOYER SUPPORT

LTEC is continuing to gain credibility with the local businesses and main campus, especially with the Tractor-Trailer program. Because of the success of the Tractor-Trailer program, the main campus has begun to come to LTEC for resources and guidance on program implementation. In addition, local businesses are recognizing the quality of LTEC's Tractor-Trailer program in producing safe, professional drivers and have sought out LTEC for partnerships and equipment donations. LTEC has continued to utilize partnerships with local high schools to provide work-based learning opportunities for students. Partnerships with the Excel Center, Teenworks, Amazon, and Plainfield High School have been notably significant in LTEC student enrollment.

CONTINUAL PROGRAM AND CURRICULUM IMPROVEMENT

The LTEC programs have continued to expand and grow through PY3. LTEC implemented the Tractor-Trailer program in PY3, which experienced expansion (i.e., hired additional faculty and purchased additional equipment) due to the prevalent need for workers with this skillset in the region. The Tractor-Trailer program continues to enroll increasing numbers of students and anticipates program sustainability moving forward.

In addition, LTEC leadership has begun to refine career pathways for the programs to encourage continuing education. This involves reworking the courses under each program as well as the course level to align program difficulty with the target population's abilities and skill level. In addition, LTEC plans to launch an Associate of Science Career and Technical (ASCT) in Supply Chain Logistics Management degree pathway to encourage non-traditional students to pursue an academic degree. This degree adjusted math requirements to address barriers that students previously enrolled in academic programs at LTEC encountered. Previous math requirements for degree programs focused on theory while the adjusted math focuses on technical application. LTEC staff anticipate that these changes will encourage students to continue their education and could increase student retention. The degree program is anticipated to launch in Summer or Fall 2016, dependent upon degree approval.

NEW ACCELERATORS FOR PY3

Several new accelerating factors have emerged in the third year of the program. These include:

- Expanded LTEC Facility
- Streamlined Internal Communication
- Internal Process Improvement
- Increased Staff Capacity
- Refined Career Pathways
- Incorporated Soft Skills into Workforce Programs
- Established Articulation Agreements with Four-Year Institutions

Each accelerating factor is described in greater detail below.

KEY ACCELERATORS

EXPANDED LTEC FACILITY

In PY3, LTEC procured a mobile lab equipped with a classroom, a computer lab, and offices for the Warehouse Technician and Tractor-Trailer faculty. The extra classroom allows LTEC to enroll more students and to maximize student time by offering a site computer lab. Prior to the mobile lab, students had to complete coursework outside of the facility. Students have used the space to study for certification exams, research job openings in the area, and complete coursework. LTEC staff reported that keeping students on site has encouraged student persistence in completion of the programs.
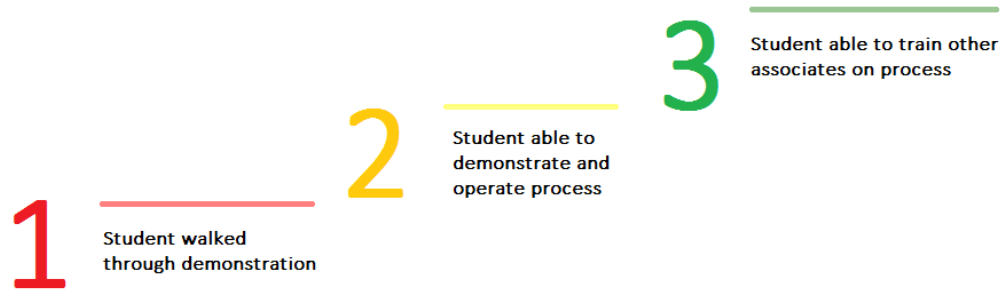
STREAMLINED INTERNAL COMMUNICATION

With the addition and expansion of programs, LTEC's capacity is evolving. To accommodate this change, LTEC leadership implemented weekly staff meetings to keep LTEC-based staff and faculty up-to-date on LTEC operations, procedures, and vision for the programs. The meetings also allow LTEC-based faculty and staff to share obstacles and challenges they are facing to create a forum of discussion around ways to address common barriers. The weekly meetings help maintain efficient program operations through streamlined internal processes and communication.

INTERNAL PROCESS IMPROVEMENT

LTEC staff are working to improve internal process flow to create more efficient systems. The warehouse is working to improve process flow through a process training check sheet (*see Appendix C for Process*

Training Check Sheet). This check sheet lists warehouse tasks and allows the Warehouse Technician to align tasks with differing levels of understanding outlined in the table below.

3 Student able to train other associates on process

2 Student able to demonstrate and operate process

1 Student walked through demonstration

The check sheet is a way for the Warehouse Technician to measure competency and contribute to the internal process improvement at the facility as a whole. Many of the LTEC programs bridge classroom material with warehouse, hands-on components so creating efficient internal processes allows LTEC to better serve its student population.

INCREASED STAFF CAPACITY

LTEC experienced a number of staffing changes in PY3. Despite staff and faculty turnover, LTEC hired a CDL Coordinator, Finance Specialist, and two faculty (Tractor-Trailer/CDL and Supply Chain). The CDL Coordinator was tasked with finding ways to document Tractor-Trailer program operations and curriculum. The CDL Coordinator initially started as a faculty member but has recently moved to more administrative tasks around improving the systems and organization practices that are in place. The Coordinator has emphasized the need for consistent program documentation and has been working toward establishing daily lesson plans and resources as well as a database to track students enrolled in LTEC programs.

The Finance Specialist is responsible for maintaining financial records for enrolled students as well as arranging payments. Additionally, the Finance Specialist oversees purchase orders and invoicing for grant and non-grant money. Throughout PY3, the Finance Specialist has worked to increase communication and streamline financial processes with the main campus.

The faculty are responsible for developing curriculum and daily lesson plans for the courses while also marketing the programs to potential employer partners and students. The faculty instruct the courses and ensure that the students are succeeding in the program while also modifying program components based on student feedback and needs. LTEC reported increased staff capacity and specialization of roles and responsibilities in PY3 as a result of the new hires.

REFINED CAREER PATHWAYS

LTEC is beginning to refine student career pathways to encourage continuing education. Prior to PY3, student career pathways were based off of Purdue University requirements as LTEC staff anticipated articulation agreements would be established. Because these agreements were not established and LTEC staff began to better understand the target population, LTEC staff started revising the career pathways to reflect the targeted population's skills and abilities. Therefore, courses and course levels will be reworked to align the level of difficulty with student abilities.

LTEC staff are creating an ASCT degree in Supply Chain Logistics Management degree option in hopes that this pathway would be more accessible for non-traditional students because of the adjusted math requirements (i.e., previous math requirements focused on theory, while the new math course will focus on technical application allowing students to focus on real-life application of math) and incorporation of employability skill development into course content. LTEC staff reported that one of the most difficult components of the degree program is the math portion, so addressing that barrier may increase academic program enrollment. Once these pathways are finalized, LTEC anticipates more students continuing their education beyond training programs.

LTEC will also be implementing the Advanced Logistics Internships and Graduation Network (ALIGN)[2] program to provide students with the opportunity to receive a paid internship while they are enrolled in an academic program. This program will likely be launched in Fall 2016 due to recruitment barriers (i.e., LTEC staff reported challenges in recruiting for a program mid-year). LTEC staff anticipate that providing this opportunity to students may significantly reduce barriers to academic program enrollment (i.e., need for paid work while in school). Because academic program enrollment has been consistently low, LTEC is attempting to redefine what it means to be in a degree program based on non-traditional student needs.

INCORPORATED SOFT SKILLS INTO WORKFORCE PROGRAMS
LTEC staff and faculty reported incorporating soft skills into programs to familiarize students with workforce expectations. For instance, the Warehouse Technician emphasizes team building in warehouse activities through joint accountability. The Warehouse Technician also coordinates with Supply Chain faculty to focus on teaching soft skills at the beginning of the program to help set expectations for the remainder of the course (i.e., coming to class on time, working as a team, etc.).

In addition, the Academic Advisor has partnered with Learning Unlimited[3] to provide free proctoring and tutoring services as well as résumé building assistance to students in LTEC programs. LTEC staff reported that students have been utilizing these services to prepare for the workforce. In addition, utilizing the services of Learning Unlimited provides LTEC staff with increased capacity to focus on other programmatic functions (i.e., services and marketing).

ESTABLISHED ARTICULATION AGREEMENTS WITH FOUR-YEAR INSTITUTIONS
In PY3, LTEC established a number of articulation agreements with four-year institutions including Oakland University, Trine University, and Embry-Riddle Aeronautical University. The three four-year institutions have articulated all 60 credits for the Supply Chain Logistics Management program at LTEC. Trine University, specifically, will articulate the credit into a Bachelor's of Applied Management degree because the management components of supply chain and business overlap. Oakland City University will articulate the LTEC Associate degree into a Bachelors of Applied Science in Operations Management and Embry-Riddle Aeronautical University will articulate into a Bachelor's of Science in Logistics and Supply Chain Management. With the three articulation agreements in place with four-year institutions, LTEC has met the grant deliverable.

---

[2] ALIGN: http://www.vinu.edu/align

[3] Learn more: http://www.vinu.edu/learning-unlimited

PROGRAM BARRIERS

Several PY2 barriers have continued into PY3, which have hindered the launch of the LTEC Initiative and slowed the progress to date. However, progress was made in PY3 to mitigate PY2 barriers. This progress is expressed below:

PY2 CHALLENGES	CONTINUED CHALLENGES	NEW CHALLENGES, PY3
• Absence of Regional Referrals • Need to "Sell" the Program • No LTEC Alumni Marketing • Staff Capacity • Academic Recognition of Training Programs • Modification of Data Collection Requirements • Availability of Qualified Candidates and Main Campus Approval • Delays with Grant-Funded Purchasing	• Absence of Regional Referrals • Need to "Sell" the Program • No LTEC Alumni Marketing • Academic Recognition of Training Programs • Availability of Qualified Candidates and Main Campus Approval	• Internal LTEC Capacity • WorkOne and Employer Turnover • Student Post-Program Data Collection • Communication with Remote Staff • Faculty and Staff Expectations and Responsibilities • Sustainability of Facilities • Student Retention and Recruitment

LTEC INITIATIVE DEVELOPMENTS AROUND PY2 BARRIERS

Developments around key PY2 challenges, in which activity has occurred in the past year, are described in greater detail on the following page.

DEVELOPMENTS AROUND KEY PY2 BARRIERS

STAFF CAPACITY

In PY2, many of the student and administrative responsibilities overlapped with faculty and staff. Progress has been made in PY3 to further specialize roles and responsibilities at LTEC through the hiring of one Supply Chain faculty, one Tractor-Trailer/CDL faculty, one CDL Coordinator, and one Finance Specialist. The addition of these hires allows LTEC to increase capacity of staff and create more efficient internal business processes. Staff responsibilities are outlined above.

Although progress has been made toward increasing staff capacity, there are still opportunities to hire additional staff to address gaps in capacity. For instance, LTEC is looking to hire a Program Specialist to create and monitor a database containing student information (i.e., program enrollment, grades, etc.). The CDL Coordinator reported increased administrative responsibilities since coming on board because of the need for administrative personnel at LTEC, which will now be addressed through the Program Specialist position. LTEC is also looking to hire two additional faculty for the Tractor-Trailer program to accommodate the program's recent expansion and growth. LTEC continues to increase staff capacity, allowing for further specialization of roles and responsibilities of faculty and staff.

DELAYS WITH GRANT-FUNDED PURCHASING

In PY2, LTEC experienced challenges in grant-funded purchasing due, in part, to the main campus processes that were in place. In PY3, with the addition of a Finance Specialist, purchase processes have been more efficient due to process modifications and consistent contact with the main campus. The Finance Specialist reported that purchasing processes were initially extensive but has been working with the Purchasing department at the main campus to streamline processes to make purchasing easier for LTEC. This includes creating a checklist of information that the main campus requires to ensure that there is mutual understanding of purchasing requirements for both the main campus and LTEC. Also, the Finance Specialist reported a goal of shifting invoicing into Banner (the university's finance system), as currently invoices are completed manually. Restructuring purchasing processes will likely improve delays with grant-funded purchasing as the grant progresses and beyond grant operations.

NEW BARRIERS FOR PY3

Several new factors have hindered the launch of the LTEC Initiative and slowed the progress to date. These include:

- Internal LTEC Capacity
- WorkOne and Employer Turnover
- Student Post-Program Data Collection
- Communication with Remote Staff
- Faculty and Staff Expectations and Responsibilities
- Sustainability of Facilities
- Student Retention and Recruitment

Each barrier to program implementation is described in greater detail on the following page.

KEY BARRIERS

INTERNAL LTEC CAPACITY

The LTEC programs, most notably the Tractor-Trailer program, have been quickly expanding in terms of interest and regional/employer need. However, LTEC faculty and staff may not have the capacity to accommodate all interested students and employer needs with the current staffing and facility accommodations. LTEC continues to expand in regards to the amount of equipment housed in the facility to accommodate more interested students and plans to hire additional faculty to instruct LTEC courses. However, internal capacity has created challenges for LTEC in regards to program expansion and streamlined programmatic functions as the staff needed to operationalize these components did not exist. Increasing internal LTEC capacity could help ensure program sustainability by allowing for increased student enrollment and accommodation of diverse employer partnerships.

WORKONE AND EMPLOYER TURNOVER

Establishing relationships with WorkOne offices and local employers has been an ongoing, external challenge throughout the life of the grant. However, in PY3, many of the relationships that have been established with WorkOne offices and employers have been lost due to turnover. This creates challenges as LTEC staff must continually locate new contacts and establish new relationships with employers and WorkOne offices. These prolonged processes slow potential partnerships with employers and student referrals from WorkOne offices. LTEC will continue to reestablish these relationships moving into PY4.

STUDENT POST-PROGRAM DATA COLLECTION

Like many other institutions, LTEC has experienced challenges in collecting survey responses regarding student data beyond grant services. Previously, students were incentivized to follow-up with LTEC regarding employment outcomes through an Amazon gift card that was provided through non-grant funds. Although the incentive helped encourage some students to complete the post-graduation/completion survey, LTEC staff have not captured information on all student completers. Because changes in capturing student information did not occur, funds for incentives could not be supported, and LTEC staff did not have the capacity to provide post-enrollment data collection with fidelity, LTEC staff contracted a third-party – Thomas P. Miller & Associates – to assist with post-enrollment data collection.

LTEC staff also follow a system of contacting students including emailing the survey to the students, sending a letter to the student to initiate contact, and then a follow-up phone call from LTEC staff. However, LTEC staff have reported challenges in maintaining contact with students beyond graduation/completion, especially without an incentive to provide. LTEC plans to purchase a database – Salesforce – outlining student information as they are enrolled in LTEC programs to facilitate streamlined communication with students upon graduation/completion[4].

COMMUNICATION WITH REMOTE STAFF

LTEC remote staff expressed disengagement from the main LTEC facility in terms of LTEC staff communicating changes and progress, courses, and general operations with remote staff. With the changes that LTEC has been undergoing in PY3 (i.e. program implementation, warehouse downtrends, hired staff and faculty, etc.), communicating these changes to remote staff could encourage engagement with the main LTEC facility. LTEC staff have been working to streamline internal processes and could

---

[4] This activity will likely occur post-grant implementation

consider incorporating remote staff into those conversations to ensure they are actively engaged in the project's changes and progress to date.

FACULTY AND STAFF EXPECTATIONS AND RESPONSIBILITIES

LTEC has experienced a number of staffing changes and shifts in PY3. With the turnover of a number of faculty and staff as well as the hiring of two faculty, one CDL Coordinator, and one staff member, transitioning from a small operation into a larger facility has been a challenge. Prior to the influx of new staff, leadership fulfilled a number of roles internally and, thus, made many programmatic decisions (i.e., curriculum, purchasing, scheduling, course offerings, etc.). Grant leadership found it difficult to extend programmatic decisions and set clear expectations with new staff. The transition for new staff into LTEC created uncertainty surrounding staff and role expectations so leadership is attempting to retroactively provide clarity and transition their previous roles to new staff. This process has created challenges for grant leadership as they attempt to shift roles, responsibilities, and expectations for LTEC staff and faculty. Grant leadership will continue to work toward clearer expectations moving forward through appropriate onboarding and finalized role descriptions.

SUSTAINABILITY OF FACILITIES

In PY3, components of the LTEC facility were scaled back as targeted goals outlined for LTEC programs and the First Book Marketplace have experienced downtrends due to lower than expected program enrollment and warehouse revenue generation. The success of the Tractor-Trailer program has helped sustain other programs but leadership anticipate the need for increased program enrollment and revenue from the warehouse to ensure future sustainability of the facility as a whole. LTEC leadership and staff are working to revise the current sustainability plan based on these trends and will address program enrollment and retention through additional degree options.

STUDENT RETENTION AND RECRUITMENT

As LTEC moves into the final grant year, concerns with student retention and recruitment have resurfaced. LTEC staff reported that students entering LTEC programs typically cannot commit to academic programs due to barriers (i.e., employment, family, remedial needs, etc.). These students also may leave LTEC programs upon certification completion and/or employment resulting in low academic program enrollment and retention. In order to ensure sustainability of LTEC programs, student enrollment and persistence in academic programs is beneficial. LTEC staff are finding ways to address the barriers that keep students from persisting in academic programs by implementing an ASCT in Supply Chain Logistics Management degree option. This degree option has adjusted math requirements in attempts to address what has previously been a deterrent for non-traditional students considering academic program enrollment (i.e., previous math focused on theory while the adjusted math focuses on technical application that would be easily transferrable to a career).

LTEC student recruitment has also been a challenge due, in part, to delays in marketing material development. For instance, LTEC staff designed truck wraps for the Tractor-Trailer program with three different messages but have been waiting for the completion since early summer 2015. Although the Tractor-Trailer program has not required formal marketing to date, – marketing has been accomplished through word-of-mouth – LTEC staff are attempting to create a strengthened regional presence. This has been difficult to accomplish without proper marketing materials. In addition, there is a need to develop a strengthened marketing plan for the LTEC programs to ensure future sustainability and regional presence. LTEC staff are working to develop this plan for marketing moving forward.

PROGRAM RECOMMENDATIONS

In light of LTEC progress from PY2 strengths and barriers, what follows is progress that has been made toward PY2 recommendations by the end of PY3:

PY2 RECOMMENDATIONS	CONTINUED RECOMMENDATIONS	NEW RECOMMENDATIONS, PY3
• Establish Communication Standard between Campuses • Focus on Student Recruitment • Explore More Potential TAA Channels • Increase Specialization of Staff and Staff Capacity • Strengthen Regional Marketing Presence	• Focus on Student Recruitment • Increase Specialization of Staff and Staff Capacity • Strengthen Regional Marketing Presence	• Develop and Implement a Structured Onboarding Process • Document Institutional Knowledge for Scalability • Establish a Written Program Operations and Management Plan • Provide Opportunities for Student Feedback • Create a System for Tracking Students • Consider Program-Specific Assessments • Launch a Formalized Marketing and Recruitment Plan

LTEC INITIATIVE DEVELOPMENTS AROUND PY2 RECOMMENDATIONS

Developments around key PY2 recommendations, in which activity has occurred in the past year, are described in greater detail on the following page.

DEVELOPMENTS AROUND KEY PY2 RECOMMENDATIONS

ESTABLISH COMMUNICATION STANDARD BETWEEN CAMPUSES

In PY2, LTEC staff reported challenges in communicating with the main campus, which resulted in slowed processes. It was recommended that LTEC consider a formal communication standard with the main campus and although this has not officially occurred, communication with the main campus has improved. LTEC staff have located key staff at the main campus that expedite LTEC requests (i.e., purchasing and financing) and communicate main campus requirements and expectations. Establishing more formal communication standards including providing updates to the main campus on LTEC progress, involving the main campus in marketing efforts, and encouraging main campus visitation could be beneficial.

INCREASE SPECIALIZATION OF STAFF AND STAFF CAPACITY

LTEC staff experienced an increase in the volume of staff work and expansion of LTEC programs. Because of this, LTEC hired two faculty (Tractor-Trailer and Supply Chain), one Finance Specialist, and one Tractor-Trailer/CDL Coordinator to accommodate the influx of students and staff work tied to the grant. In PY2, roles and responsibilities for LTEC staff typically overlapped because LTEC is a small facility with a need for more staff and clearer roles. With the new additions to the staff in PY3, LTEC has been able to begin specializing roles and responsibilities to create more efficient internal processes. Role specializations has also helped LTEC increase communication with the main campus as the staff that contact the main campus are more clearly defined, especially around finances. Although LTEC staff are still working to specialize roles and increase capacity, progress is being made toward more efficient internal processes. *Faculty and staff responsibilities are outlined here.*

NEW RECOMMENDATIONS

In light of LTEC's strengths and barriers, what follows are recommendations to consider for program improvement for the final year of the grant. These include:

- Develop and Implement a Structured Onboarding Process
- Document Institutional Knowledge for Scalability
- Establish a Written Program Operations and Management Plan
- Provide Opportunities for Student Feedback
- Create a Cohesive System for Tracking Students
- Consider Program-Specific Assessments
- Launch a Formalized Marketing and Recruitment Plan

Each recommendation for program implementation and improvement is described in greater detail below.

KEY RECOMMENDATIONS

DEVELOP AND IMPLEMENT A STRUCTURED ONBOARDING PROCESS

In PY3, LTEC added a number of new staff to further streamline internal business processes and accommodate expanding programs. LTEC staff recognized the need to develop and implement a structured onboarding process to ensure that new hires are provided with clear expectations and roles as

well as provide leadership and staff with opportunities for feedback and growth. As LTEC continues to grow and expand, the need for streamlined business processes increases.

The benefits of implementing a structured onboarding process include increased retention, productivity, and job satisfaction. In order to achieve these benefits, a successful onboarding process typically has key components including explaining rules and regulations, defining expectations, presenting cultural norms, and developing relationships, some of which begins prior to the new hire's first day. An effective onboarding program will have a bottom line impact and will result in newly hired employees becoming productive sooner, which is necessary for a smaller facility such as LTEC.[5] The information below outlines a number of priorities, best practices, tools, and timelines that LTEC staff could consider when developing a structured onboarding process.

Onboarding Priorities. An efficient onboarding program should have the following priorities. Beginning on the first day, LTEC leadership and staff should work to **train** the new hire. This includes face-to-face training that covers on-the-job essentials such as roles and expectations as well as any changes to these expectations moving forward. LTEC leadership and staff should continually **assess** the skills of the new hire – a critical component to onboarding – to establish potential areas for growth. One way to assess a new hire's skillsets and knowledge gaps is to administer a series of job assessments. Potential workplace assessments include the following:

- Myers-Briggs assessment measures personality, which could be used to determine fit with the company culture.[6]
- Strengthscope assesses performance strengths, which can be used to help the LTEC team build awareness of the staff's strengths and how they can be used to optimize performance and engagement in the workplace.[7]
- DiSC assesses work personality and behaviors, which can be used to improve work communication, productivity, and teamwork among LTEC staff.[8]

Once areas for growth are assessed, LTEC leadership and staff can then **coach** the new hire by providing tailored assistance that addresses the skills that exist and identifies knowledge gaps. Leadership should continually **analyze** and address knowledge gaps moving forward to ensure there is continual clarity around roles and expectations. Finally, information that was provided during onboarding should be **reinforced** to ensure the knowledge is retained by using tools and one-on-one discussions. When developing an onboarding process, the priorities listed above should be considered to ensure that new hires are properly and efficiently prepped for a position at LTEC.[9]

---

[5] Retrieved from http://hrcloud.com/launching-a-successful-onboarding-initiative-how-to-incorporate-technology-and-measure-roi/

[6] For more information on this type of assessment, see http://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/

[7] Retrieved from http://www.strengthscope.com/

[8] For more information, see https://www.discprofile.com/what-is-disc/overview/

[9] Information retrieved from http://www.mindtickle.com/blog/sales-rep-training-practices-robust-sales-onboarding-program/

Onboarding Best Practices. Although onboarding should be customized to each organization, there are a number of best practices to consider when developing and implementing a structured onboarding program. These best practices include information to distribute prior to the first day on the job – including work attire, parking, work hour expectations, and other basic information – as well as ways to engage new employees in the onboarding process – making the first day special by tailoring it to the individual, developing and providing a written onboarding plan so the employee can be prepared, and allowing other LTEC staff to participate in the new hire's onboarding. The list below outlines additional best practices to consider throughout the entire onboarding process.

Best Practices for Onboarding[10]
✓ Implement the basics (e.g. work attire, parking, etc.) prior to the first day on the job
✓ Make the first day on the job special by tailoring to each new hire's needs
✓ Develop a written onboarding plan to provide to the new hire
✓ Make onboarding participatory among all staff
✓ Be sure your onboarding is implemented consistently
✓ Ensure that the onboarding is monitored over time through employee reviews and follow-up
✓ Use technology to facilitate the process (i.e. through email communication and calendar invites)
✓ Use milestones, such as 30, 60, 90, and 120 days on the job – and up to one year post-organizational entry – to check in on employee progress
✓ Include key stakeholder meetings as part of the onboarding to familiarize new employee with company relationships
✓ Be clear with new employees in terms of: • Objectives • Timelines • Roles • Responsibilities

Onboarding Tools and Timeline. A number of tools can be used to orient new employees to LTEC operations. These tools are launched at different points in the new hire's first few months with the facility. For instance, the initial orientation process – outlining information on the business, history, company culture, and values – should be provided to the new employee during the first day on the job while peer-to-peer shadowing – providing new employees with the opportunity to examine processes, approach, and techniques used by team members in the position – should be completed within the first month of employment. Formalizing this onboarding process requires awareness of the tools that will be utilized in the onboarding process, why they are being used, and at what point should the new employee be exposed to these tools. Examples of onboarding tools and potential timelines are outlined in the table on the following page.

---

[10] Retrieved from Onboarding New Employees: Maximizing Success
http://www.shrm.org/about/foundation/products/documents/onboarding%20epg-%20final.pdf

Onboarding Tool[11]	Why is it Used?	When is it Used?
Orientation Process	Includes information on the business, history, culture, and values	Held on the first day on the job
Written Onboarding Plan	Helps new staff organize and prioritize the onboarding process	Provided in the first week after entry
One-on-One Meetings with Leadership	Allows for important flows of information and for expectation setting	Complete within the first week of employment
New Peer Integration	Helps accelerate the development of relationships between the new staff and the rest of the team	Complete within the first week of employment
Peer-to-Peer Shadowing	Allows new staff to observe key team members to examine processes, approaches, structures, and techniques to position	Complete within first month of employment
Key Stakeholder Forums	Help new staff connect with external stakeholders	Occurs between two and three months after entry
360-Degree Feedback	Help new staff gauge how they are performing on key metrics as measured by those around them	Occurs after 90 days of employment and set timeframes after that

DOCUMENT INSTITUTIONAL KNOWLEDGE FOR SCALABILITY

LTEC staff reported a need to document the daily course content and resources that LTEC instructors use in their classes, especially in the Tractor-Trailer program. The instructors in the LTEC programs are knowledgeable with ample industry experience. However, many of the instructors are not documenting all of the resources that are being taught to the students (i.e., Youtube videos and websites). In other words, although a general framework is in place that outlines course content, specific resources are not always documented in these course. In order to ensure the program is scalable and sustainable in the future, the internal institutional knowledge should be documented. Once this information is captured, it can also be incorporated into the onboarding process for new faculty.

One way to document daily course content and resources used in the classroom is to create a template that allows faculty to easily document this information. For instance, this could be a simple Word or Excel document that allows faculty to input information on the resources used and content taught for a single class meeting. Once this information is documented, a more structured syllabus outlining course topics and timelines can be provided to students at the beginning of the class. A syllabus can ensure that clear expectations have been set for the class and allows students to be prepared for each class meeting. In addition, the syllabi for each course could then be shared to new faculty to expedite the onboarding process.

ESTABLISH A WRITTEN PROGRAM OPERATIONS AND MANAGEMENT PLAN

To ensure future sustainability, LTEC staff indicated a need to increase student retention and recruitment. In addition, there is a need to document curriculum, strengthen employer partnerships, and develop a structured onboarding process. While different LTEC staff and faculty are working on these priorities, no

---

[11] Retrieved from Onboarding New Employees: Maximizing Success
http://www.shrm.org/about/foundation/products/documents/onboarding%20epg-%20final.pdf

guiding document exists to outline tangible milestones and action steps as well as facilitate a coordinated and effective program operations and management process. More specifically, there is no specific plan for macro level and day-to-day activities and processes that will support and enable the vision of the LTEC facility. A comprehensive program operations plan delineating each staff member's role and required tasks to achieve the macro level and day-to-day milestones should be developed and implemented.

This operations and management plan will help clarify staff and leadership roles as well as empower employees to meet internal objectives by improving accountability. This document can be adjusted depending on unforeseen obstacles that may impact timelines and progress; having a project management tool available is critical to ensuring adequate time and resources are being dedicated to significant activities. Moving forward, LTEC staff should examine the overall strategic objectives and determine the tangible actions and milestones that will be set to meet those objectives.[12]

PROVIDE OPPORTUNITIES FOR STUDENT FEEDBACK

Plainfield High School students in the pilot Supply Chain program indicated an appreciation for providing feedback that was incorporated into program improvements. Encouraging this feedback loop for students enrolled in LTEC programs could facilitate continual program improvements moving forward. The feedback provided by students, if incorporated into LTEC programs, could improve student retention and enrollment as improvements to LTEC programs would originate from student input.

LTEC staff could consider administering course evaluations in the middle of each course so instructors could make program improvements for the second half of the semester. Staff reported challenges in reaching students upon program and/or course completion, so providing opportunities for feedback while students are still attending courses could be an efficient way to gather input. Feedback could also be gathered from students at a number of different points in the student's time at LTEC (i.e., upon enrollment, course completion, program completion, etc.).

CREATE A COHESIVE SYSTEM FOR TRACKING STUDENTS

The student information being tracked is duplicated in two different systems – Aceweb for non-academic program students and Banner for CDL/academic program students. LTEC and VU main campus staff should consider integrating these systems and creating a streamlined approach for student tracking. LTEC could consider hiring a staff member to develop and continually update this system and/or investing in a technology platform that supports this data integration coupled with designated staff for student follow-up. Capturing student information is important to grant and long-term program success, allowing LTEC to track completers and student success for future sustainability and funding purposes. The VU main campus could facilitate this system integration.

CONSIDER PROGRAM-SPECIFIC ASSESSMENTS

LTEC staff reported challenges in adjusting course content for the diverse skillsets of LTEC students, especially when student skillsets are initially unknown. Although LTEC faculty are able to assess student aptitude during a course for some programs, it may be beneficial to administer program-specific assessments to students prior to the start of the course and for all LTEC programs. Early identification of student skillsets would allow faculty to modify course content early on to ensure (1) the course is

---

[12] For more information on operational plans, see http://study.com/academy/lesson/what-are-operational-plans-for-a-business-definition-types-examples.html

appropriate to student aptitude levels, and (2) the instructor is prepared with an appropriate instruction timeline.

In order to properly assess students' abilities and skillsets prior to the first day of the course, assessments should accurately reflect the skillsets and competencies needed in the specific course or program. For instance, another TAACCCT recipient developed a program-specific assessment for a Line Service program that contained a physical assessment to ensure that incoming students were aware of the expectations in the program (i.e., carry two 5-gallon buckets – 80 pounds – of sand up and down the stairs in two minutes). This has helped the college increase student retention as students in the programs were typically more committed as they were aware of the course expectations and requirements from the beginning. Moving forward, LTEC staff could consider implementing assessments for each program to ensure that students persist in LTEC programs and faculty can adjust course content for students' abilities.

LAUNCH A FORMALIZED MARKETING AND RECRUITMENT PLAN

In PY2, LTEC staff worked to develop a number of different marketing materials but changes in PY3 (i.e., program additions, new partnerships, etc.) have led staff to revisit marketing strategies. Formally documenting marketing and recruitment strategies could afford LTEC staff the opportunity to better align marketing efforts with revised sustainability strategies. A formalized marketing and recruitment plan, including strategies tailored for different kinds of students (i.e., non-traditional, high school, etc.), would lend structure and accountability to the effort.

This plan should clearly, and in detail, describe the steps of the recruitment process, expected outcomes and goals, resources utilized, staff roles and responsibilities, target population, timeline, and budget. The relationship between these components is outlined below. As an example, a **goal** could be to promote the substantive, innovative, and adaptive programs at LTEC so that the facility is a recognized leader in post-secondary education and in the region. An **action** to achieve this goal could be to produce press releases promoting opportunities at the facility through newspapers, social network sites, and internet calendars. The **target** population could be college aged students, specifically targeting veterans, displaced workers, and adult learners. The **timeline** could be ongoing and **budget** may be a designated amount paid through grant funds.

In order to begin development of this marketing and recruitment plan, LTEC could use a number of resources including:

- Other main campus work-learning programs to examine how students are recruited for those programs and incorporate successful strategies into LTEC's plan;
- Coordinating with the main campus' recruiters for assistance with recruitment efforts; and
- Meeting with high school counselors to better clarify the opportunities that are available at LTEC.

Utilizing these resources could provide LTEC staff with efficient and all-encompassing marketing and recruitment efforts. Moving forward, LTEC staff should consider formalizing a marketing and recruitment plan to ensure future sustainability.

RECOMMENDATIONS FOR FUTURE PROGRAM IMPLEMENTATION

In light of the project's strengths, barriers, and recommendations, TPMA provides recommendations for adopting and scaling this program in other areas. These include:

- Establish Communication Standards and Expectations Early
- Hire Staff Promptly to Specialize Roles
- Develop Basic Marketing Plan Prior to Program Implementation
- Implement Onboarding Policies and Practices Prior to Hiring Staff
- Create Implementation Plan Prior to Program Roll-Out
- Identify and Engage Target Employers
- Focus on Academic and Non-Academic Programs
- Establish Database Specialist Position

Each recommendation for future program implementation is described in greater detail below.

KEY RECOMMENDATIONS FOR FUTURE IMPLEMENTATION

ESTABLISH COMMUNICATION STANDARDS AND EXPECTATIONS EARLY

Successful implementation of a new program is dependent on clear and well-articulated lines of communication. As a new program will often require hiring new staff and faculty, it is important for program leadership to proactively engage with new hires to establish (1) communication standards, (2) new hire roles and expectations, and (3) how the new hire fits into the program structure. Establishing communication standards early encourages staff to exchange ideas and collaborate to produce quality programs and services. Clarifying new hire roles and expectations ensures staff are aware of their responsibilities, increasing accountability and empowerment of new hires. Communicating how a new hire fits into the program structure allows staff to see the program at a higher-level so the staff understand the relationships between each other.

HIRE STAFF PROMPTLY TO SPECIALIZE ROLES

In addition to setting clear roles and expectations, LTEC staff emphasized the importance of hiring all necessary staff early. Hiring staff at the beginning of program start-up allows a program to streamline and expedite business processes and operations. Each staff member could begin with a clear understanding of his/her role and how he/she relates to the overall program, and dedicate program start-up time to specializing in the specific roles and responsibilities of the position.

DEVELOP BASIC MARKETING PLAN PRIOR TO PROGRAM IMPLEMENTATION

Marketing and recruitment efforts are necessary in enrolling sufficient students to sustain program implementation and future improvements. A basic outline of a marketing plan prior to program implementation would allow staff to develop tangible goals and action items for achieving those goals. The marketing plan could include general avenues for marketing (i.e., brochures, radio, newspaper, etc.) and encourage staff to find the most efficient ways to reach the target population. Educating themselves on the target population could promote better marketing practices as the programs launch and expand. Along with general goals and marketing avenues, the plan should also include target outcomes, timeline, and budget to ensure that there is a plan moving forward.

IMPLEMENT ONBOARDING POLICIES AND PRACTICES PRIOR TO HIRING STAFF

Efficient and effective staff is depending upon successful implementation of onboarding policies and practices. An appropriate onboarding process ensures that new hires are aware of the roles, expectations, company culture, and norms moving forward as well as provides opportunities and input for future growth. Onboarding directly impacts employee retention and satisfaction, leading to employees being productive sooner.

CREATE IMPLEMENTATION PLAN PRIOR TO PROGRAM ROLL-OUT

An implementation plan includes setting goals and timelines, establishing concrete items to work from, and identifying staff and leadership ownership over specific components of the plan. A concrete plan will help promote progress and consistency in program implementation. A component of this plan should include establishing marketing efforts early in the program (as detailed above) and looking for early successes and employer "champions" who can advertise the program to their peer-employers.

IDENTIFY AND ENGAGE TARGET EMPLOYERS

Identifying priority industry sectors and the key regional employers within these sectors is critical to curriculum development and post-program student employment. It is important for a community college to understand its key employer groupings. This allows the college to actively target and engage regional employers in identifying program gaps and curriculum enhancements. Employers understand the job market, skillsets needed for new employees, and new and emerging trends within the industry. Engaging employers to provide this feedback to the college will strengthen college programming and increase the competitiveness of program graduates. In addition, engaging employers through internships, informational sessions, job fairs, and facility tours increases student and faculty understanding of industry needs and can build ties between students and industry that are beneficial for student job placement.

FOCUS ON ACADEMIC AND NON-ACADEMIC PROGRAMS

Both academic and non-academic programs are important when creating a pipeline of stackable credentials. This is especially true when an institution caters to a diverse range of student skills and interests. Non-academic programs directly address the needs of non-traditional students (i.e., provide training and certification as quickly as possible to deliver the student back into the workforce). On the other hand, academic programs provide justification for sustainability (i.e., lengthened program enrollment results in increased funds through student tuition). In order to address the needs of both academic and non-academic programs, it is beneficial to visualize and map out credential pathways to identify gaps in programming (e.g., addressing middle-skill gaps in programs) to ensure that credentials are stackable and accessible for students.

ESTABLISH DATABASE SPECIALIST POSITION

Accurate and consistent data reporting is key to evaluating the impact and success of a new program. As new program implementation will likely include new data tracking requirements and new data definitions, it is important that there is a point-person for data questions and data quality review. Elements of a grant-funded data position could include:

- *Data Definitions* – Creating a clear understanding of what the workforce areas were looking to track and what the definitions were for the data.
- *Data Tracking* – Fluency with the current database to know what is possible within the database. Then communicate with database programmers about what needs to be added for collection (as needed).
- *Staff Training* – Training all staff on how to record all the program data. Training elements can include 1) a data manual with data definitions and "how to" guide for entering information into the database, 2) in-person training for staff, and 3) ongoing staff training either in-person, via webinars, or via email.
- *Regular Data Monitoring* – Reviewing the data reports regularly, at least monthly, to identify data trends and identify reporting gaps.
- *Data Reporting* – Reporting out numbers to USDOL, or other funder, for the required reports.
- *Troubleshooting* – Responding to staff data challenges, database issues, and other problems as they arise.

CONCLUSIONS

In PY3, LTEC continued to implement and expand programmatic and administrative processes. Success in the program extension period (PY4) will require formalized internal plans for moving forward beyond grant operations (i.e., management plan, marketing plan, and revised sustainability plan). A structured onboarding process, opportunities for student feedback, and streamlined student tracking can help facilitate sustainability and streamlined business processes. The grant extension will focus on developing practices that encourage program and facility sustainability.

APPENDIX A. LTEC PROGRAM DESCRIPTIONS[13]

NON-ACADEMIC PROGRAMS

CDL TRACTOR-TRAILER DRIVER TRAINING + FORK-LIFT

<u>Course Description:</u> The Tractor-Trailer Driver Training (TTDT) program is designed to prepare students to enter the Tractor-Trailer driver marketplace at an entry-level driving position. Training including classroom instruction, lab practice and on-the-road driving. Students can expect to pull loaded trailers under a variety of conditions, including two-lane roads, expressways, night driving, and hilly terrain and driving city streets during heavy traffic.

<u>Length:</u> Up to six weeks (240 contact hours)

<u>Course Modules:</u>

- **TTDT 100- Basic Commercial Motor Vehicle Operation**
  - o CDL Rules and Regulations
  - o Driver Qualifications
  - o Hours of Service
  - o Map Reading
  - o Hazmat Endorsement Preparation
  - o NSC's DDC-PTD Course

- **TTDT 125- Preventive Maintenance**
  - o Air Brakes Systems
  - o Pre-trip Inspection Criteria
  - o Engine Operation
  - o Transmissions and Differentials
  - o Suspensions Systems
  - o Trouble Shooting

- **TTDT 150- Tractor-Trailer Basic Control Skills**
  - o Coupling/Uncoupling
  - o Straight Line Backing
  - o Parallel Parking
  - o Alley Docking
  - o Backward Serpentine

- **TTDT 175- Tractor-Trailer Road Driving**
  - o Daylight and Night Driving
  - o Loaded Trailers
  - o A Variety of Terrain
  - o City Driving

---

[13] Course and program description information drawn from http://vulogistics.com/

GLOBAL LOGISTICS ASSOCIATE (GLA) CERTIFICATE

Course Description: Sponsored by APICS, this nationally-recognized certificate focuses on the general knowledge of transportation, logistics and the associated functions necessary for the delivery of goods.

Length: 80 hours

Course Modules:

1. Workplace Essentials: The purpose of this unit is to teach you a variety of knowledge-based skills related to employability and personal interaction with supervisors, co-workers, and subordinates. In addition it will help enhance your understanding of essential job functions.
2. Supply Chain Management: Supply chain management involves management of the physical flow of materials from the original point of manufacturing to the final point of consumption at the end consumer. Supply chain management includes both physical material as well as the data that corresponds to planning and execution of the material. The purpose of this unit is to help you understand the various functions involved in managing a company's supply chain.
3. Logistics and Transportation: Upon completion of this unit you will understand the various modes of transportation, be able to describe a domestic freight system, and know the various government compliance entities and rules that govern transportation operations.
4. Warehouse Operations: Warehouse management is an important element in supply chain management. The receipt, storage, handling, and shipping of materials are all warehouse functions that play a critical role in the supply chain. Upon completion of this unit you will be well versed in understanding the complex role of warehousing, its role, and compliance regulations.
5. SCM Information Technology: Information technology is the force behind the explosion of the global market. In order to succeed in the logistics world an associate must have basic knowledge of the computer systems and software that oversee the supply chain. This unit gives you working knowledge of basic office computer applications as well as an overview of software specific to supply chain functions.
6. Safety Compliance: Safety is the number one priority of today's supply chain leaders. Manufacturing, warehousing, transportation, and distribution can all be dangerous work environments if not managed appropriately. Companies and government have moved to mandatory practices to ensure that employees are not at risk.

FORK-LIFT ESSENTIALS

Course Description: Using the Occupational Safety and Health Administration (OSHA) standards as a basis for this course (*OSHA 29 CFR 1910.178-Powered Industrial Truck*), students will learn safety and proper material handling equipment operation. Training will consist of a combination of formal instruction (lecture, discussion, interactive computer learning, video tape, and written material), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee) and evaluation of the operator's performance in the workplace.

Length: *One-day experienced:* 6 hours

Two-Day Beginner: 12 hours (two, six-hour classes)

Course Modules:

1. Introduction
   - Overview of the program
   - Goal of the program: to provide a training program based on the trainee's prior knowledge, the types of vehicles used in the workplace, and the hazards of the workplace.
   - Course will utilize video, group discussion and hands-on practice. Each operator must obtain the knowledge and skills needed to do their job correctly and safely.
2. Types, Features, and Physics
   - Familiarize each operator with the basic types and functions of powered industrial trucks.
   - Develop an understanding of the information shown on a data plate.
   - Understand the critical truck measurements that affect safety.
   - Understand the forces that cause tip overs, and the truck design considerations and safety ratings that help prevent them, including the "stability triangle."
3. Inspecting the vehicle
   - Understand the purpose and importance of pre-operational checkouts.
   - Provide a basic understanding of areas covered during a pre-operational checkout.
   - Familiarize each operator with a checklist for pre-operational checkouts, and what to do if a problem is discovered.
4. Driving the Truck
   - Understand the elements of safe movement of a powered industrial truck.
   - Understand the differences between an automobile and a powered industrial truck.
   - Recognize the safety hazards associated with operating a powered industrial.
5. Load Handling
   - Understand the elements of load lifting safety.
   - Understand the safe operating procedures for raising and lowering loads in aisles.
6. LPG for Lift Trucks
   - Discuss LPG and its properties.
   - Understand the elements and procedures of safely refueling internal combustion vehicles.
   - Describe tank components: service valve, surge valve, relief valve, etc.
   - Discuss related safety issues.
7. Battery and Charging
   - Understand the elements and procedures of safely changing and charging batteries.

- Discuss filling procedures and maintenance.
- Discuss related safety issues.

8. Safety Concerns
    - Review/reinforce potential of serious injury
    - Review/reinforce safety procedures in your facility.

9. Specific Truck and Workplace Training/Hands-On
    - Review features of specific PIT's to be operated.
    - Review operating procedures of specific PIT's to be operated.
    - Review safety concerns of specific PIT's to be operated.
    - Review workplace conditions and safety concerns of areas where PIT's will be operated.
    - Learn/practice actual operation of specific PIT's to be operated and specific workplace conditions where PIT's will be operated.
    - Demonstrate proficiency performing the powered industrial truck operator duties specific to the trainee's position and workplace conditions.

10. Certification of Completion of the Course (upon passing assessments)

TEAM LEAD ESSENTIALS

The goal of the Team Lead Essentials program prepares team members for Team Lead positions within their company. The 12-hours of course content will provide individuals the necessary education and practical application that will allow them to be effective leaders of a team. Course content specifically covered in the Team Lead Essentials program includes:

- The Role of the Leader
- Soft Skills
- Leadership Styles
- Effective Communication
- On-the-Job Training
- Leadership vs. Management
- Team Work
- Conflict Resolution
- Motivating Employees
- Performance Metrics

ACADEMIC PROGRAMS

SUPPLY CHAIN LOGISTICS MANAGEMENT ASSOCIATE DEGREE

<u>Course Description</u>: This program prepares students for a variety of entry-level positions in the field of Supply Chain, Logistics and Distribution. The curriculum includes a core of business and general education courses as well as extensive specialized training in procurement, transportation, production planning/scheduling and materials management. The development of managerial skills useful in a variety of job situations is emphasized.

<u>Hours</u>: 60 credit hours

<u>Courses</u>:

Major Program Requirements:

> ACCT 201- Financial Accounting
> COMP 201- The Computer in Business
> MGMT 250- Introduction to Management
> MGMT 275- Introduction to Business Finance
> MGMT 284- Operations Management
> PRDM 100- Supply Chain Logistics Management
> PRDM 215- Quality Management
> PRDM 220- Warehousing and Procurement
> PRDM 272- Transportation
> PRDM 293- Integrated Logistics Project

University Core Curriculum Requirements:

> ENGL 101- English Composition I
> MATH 102- College Algebra
> COMM 143- Speech or COMM 148- Interpersonal Communication
> PHYT 101- Technical Physics or PHYT 105/105L:- General Physics with Lab
> ECON 201- Microeconomics or ECON 202- Macroeconomics
> HUMN 245- Cultural Diversity or PHIL 212- Introduction to Ethics
> ENGL 205- Business Communications or ENGL 102- English Composition
> MATH 104- Trigonometry or MATH 115- Survey of Calculus

Electives- 6 credit hours from Humanities, Math, Science, Social Science or Writing

SUPPLY CHAIN LOGISTICS MANAGEMENT CERTIFICATE

Course Description: This certificate is a condensed program with a main focus on the Supply Chain Logistics educational core. The SCLM certificate provides a background for an individual who is interested in more efficient ways to distribute and manage products. This program is an excellent stepping-stone to the SCLM Associate Degree program with a seamless transfers of all required credits.

<u>Hours</u>: 30 credit-hours

<u>Courses:</u>

Major Program Requirements:
ACCT 201- Financial Accounting
COMP 201- The Computer in Business
ENGL 101- English Composition I
MATH 102- College Algebra
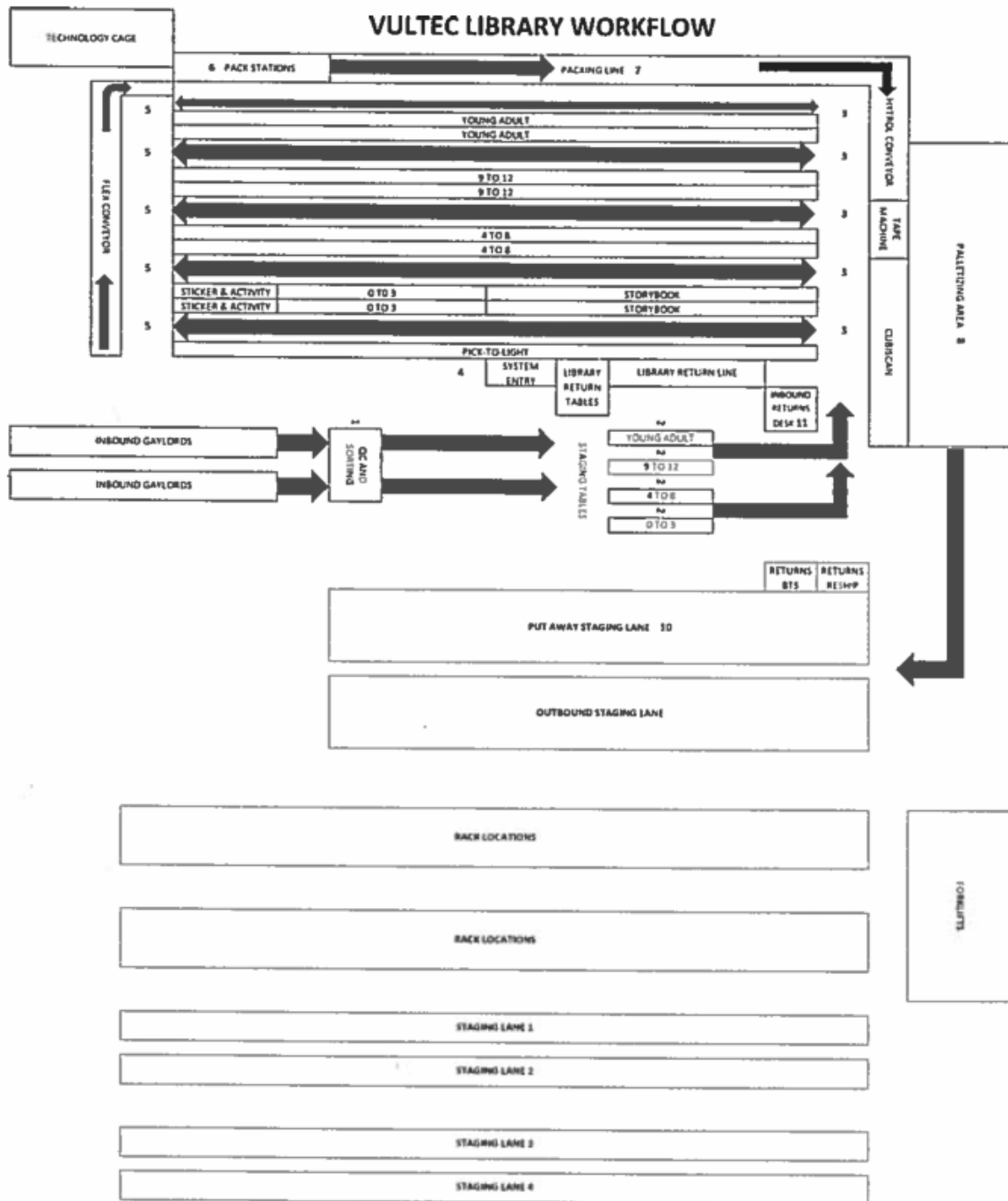MGMT 284- Operations Management
PRDM 100- Supply Chain Logistics Management
PRDM 215- Quality Management
PRDM 220- Warehousing and Procurement
PRDM 272- Transportation

APPENDIX B. VULTEC LIBRARY WORKFLOW

APPENDIX C. PROCESS TRAINING CHECK SHEET

PROCESS TRAINING CHECK SHEET

(1) Walked through demonstration
(2) Able to demonstrate and operate process
(3) Able to train other associates on process

Process													
QC AND SORTING (1)													
QC AND SORTING (2)													
QC AND SORTING (3)													
INBOUND RECEIVING (1)													
INBOUND RECEIVING (2)													
INBOUND RECEIVING (3)													
PUT AWAY (1)													
PUT AWAY (2)													
PUT AWAY (3)													
SYSTEM ENTRY (1)													
SYSTEM ENTRY (2)													
SYSTEM ENTRY (3)													
CREATING PO (1)													
CREATING PO (2)													
CREATING PO (3)													
OUTBOUND PROCESSING (1)													
OUTBOUND PROCESSING (2)													
OUTBOUND PROCESSING (3)													
RF PICKING (1)													
RF PICKING (2)													
RF PICKING (3)													
VOCOLLECT PICKING (1)													
VOCOLLECT PICKING (2)													
VOCOLLECT PICKING (3)													
PTL PICKING (1)													
PTL PICKING (2)													
PTL PICKING (3)													
PACKING (1)													
PACKING (2)													
PACKING (3)													
INVENTORY MANAGEMENT (1)													
INVENTORY MANAGEMENT (2)													
INVENTORY MANAGEMENT (3)													
RETURNS PROCESSING (1)													
RETURNS PROCESSING (2)													
RETURNS PROCESSING (3)													
BASIC MATERIAL HANDELING (1)													
BASIC MATERIAL HANDELING (2)													
BASIC MATERIAL HANDELING (3)													
WAVE CREATION (1)													
WAVE CREATION (2)													
WAVE CREATION (3)													