Catalog of Grantee Products

MRTDL

Mississippi River Transportation, Distribution & Logistics Consortium

TAACCCT Round 3

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Prepared by:
PPM Associates
Annapolis, Maryland

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Introduction

The Mississippi River Transportation, Distribution and Logistics Consortium (MRTDL), a Trade Adjustment Assistance and Community College Career Training (TAACCCT) grantee, was committed to advancing economic development in the Mississippi River Region, from the headwaters to the Gulf, and was dedicated to the training and placement of dislocated and other workers in high-wage, high-skill occupations in the vital transportation, distribution and logistics and related industry sectors.[1]

Membership

The Consortium consisted of nine member institutions, led by Lewis and Clark Community College, covering eight states along the Mississippi River region: Lewis and Clark Community College, Godfrey, IL; Hinds Community College, Raymond, MS; John Wood Community College, Quincy IL; Arkansas State University-Mid-South Community College, West Memphis, AR; Minnesota State College-Southeast Technical, Winona, MN; St. Louis Community College, Bridgeton, MO; Southwest Tennessee Community College, Memphis, TN; West Kentucky Community & Technical College, Paducah, KY; and Delgado Community College, New Orleans LA.

In addition, two private entities provided technical assistance to the Consortium members: The National Network of Sector Partners (NSSP), an initiative of the Insight Center for Economic Development, and the Council for Adult and Experiential Learning (CAEL).

Mission

The MRTDL Consortium partners sought to establish transportation, distribution and logistics (TDL) sector partnerships in communities along the river; recalibrate programs to align with employer needs; build stacked and latticed credentials and integrate evidence-based strategies to serve Trade Adjustment Assistance (TAA)-eligible workers (those who have

[1] Lewis and Clark Community College, www.lc.edu/MRTDL

suffered job loss or whose jobs are threatened due to foreign trade) and solidify the Consortium for long-term collaboration.

All along the Mississippi River, businesses in TDL-related industries are poised to hire, train or retrain individuals for existing and future high-wage, high-skill occupations. At the same time, many TAA-eligible workers, unemployed veterans and other unemployed, underserved or low-income groups lack the training and skills they need to fill these positions.

"Our consortium members aim to match worker training and education programs to high opportunity occupations within the TDL industry sectors and to do so in a way that capitalizes on both the unique competencies of the individual colleges and the collective expertise and resources of the Consortium," Lewis and Clark Community College President Dale Chapman said. *"For this project, each of the nine member institutions is focusing its resources on occupations that meet the requirements of the local workforce."*[2]

Role of PPM Team

The PPM Team was charged with conducting a third-party quality review of all the federally-funded products developed by the MRTDL Consortium, as well as their technical assistance providers, prior to posting these products on Skills Commons. In addition, the PPM Team developed this catalog of all MRTDL products and technical assistance resources accompanied by program summaries reflecting the accomplishments of each college and technical assistance provider.

Sample Outcomes

As a result of the quality review, the PPM Team identified a number of promising practices and positive outcomes that are documented in the MRTDL Consortium program summaries.

[2] RiverBender.com, https://www.riverbender.com/articles/details/ninecommunity-college-consortium-representing-institutions-along-the-mississippi-river-receives-238-million-department-of-labor-grant-consortium-le-3531.cfm#.WMqS8vnyuUk

Hinds Community College received an additional $220,000 grant from the Walmart Foundation to boost their truck driving industry partnership with KLLM Transport Services. These funds will be used to support training women and underserved populations who enroll in the Driving Academy at KLLM.

Arkansas State University Mid-South realigned their existing AAS degree program in Aviation Maintenance Technology to meet state and Federal Aviation Authority standards. As a result, a three-year AAS degree program has now been divided into two separate two-year programs and students can choose to directly go to work in the aviation technology industry or continue to pursue a second credential.

Delgado Community College has been able to invest in new equipment, upgrade their facilities and offer training in transportation and material moving occupations to individuals who otherwise would not have had the opportunity to change careers.

Southwest Tennessee Community College was able to enhance its existing Advanced Integrated Industrial Technology program with a focus in industrial motion control equipment. The programs of study now consists of a two-year AAS degree/one-year technical certificate in Advanced Integrated Industrial Technology as well as a one-year technical certificate in Industrial Motion Control Technology.

Minnesota State College (MSC)-Southeast is now the only college in Minnesota that includes Snap-on Tools Diesel Scanner Diagnostics Certification as part of its Diesel Maintenance Technical program. Successful completers will be ready to test-drive and move large trucks because earning a Commercial Driver's License in part of the program.

West Kentucky Community and Technical College (WKCTC) has trained over 1,600 students in water transportation and logistics occupations with a placement rate exceeding 125 percent of targeted expectations. In response to industry needs, WKCTC has incorporated a certification from the Manufacturing Skill Standards Council into its Logistics Management program in response to growing industry interest in certified credentials.

John Wood Community College is now offering courses in its logistics management program of study that will transfer into a bachelor's degree in supply chain management offered by Western Illinois University.

Lewis and Clark Community College has launched a new logistics management course. All the logistics certificate classes can be used to earn an AAS degree in management, and the classes can eventually be used to complete a bachelor's degree in management.

St. Louis Community College created new programs to support the city's transportation and logistics sectors. The college used the same successful structure developed for two previous TAACCCT grants. It worked closely with industry partners to develop curriculum and provide student support such as comprehensive assessments, pathway coaches and accelerated developmental education in key portals throughout the training experience.

Conclusion

This catalog of MRTDL Consortium products and accompanying program summaries provide a wealth of resources for the workforce development community of interest. Although the products developed by the Consortium colleges are specific to the TDL industry sector, the processes and policies documented in the technical assistance products are of potential benefit to the broad workforce development system. Each entry includes the product title, a brief description of the contents and a URL link to the location of the resource on the Department of Labor's Skills Commons Web site.

ARKANSAS STATE UNIVERSITY MID-SOUTH

Introduction

Arkansas State University (ASU) Mid-South, a member of the MRTDL Consortium, expanded their existing Aviation Maintenance Technology AAS degree program of study through their participation in the TAACCCT grant. In addition, they built capacity in an industry-informed certification program entitled Diesel Maintenance Technology that includes a newly initiated Marine Technology component. The Aviation Maintenance Technology and the Diesel Maintenance Technology programs of study have proven to be the most successful of these initiatives.

Workforce Need

Employment of Diesel Service Technicians is projected to grow 12 percent between 2014 and 2024, almost double the six and one half percent average for all occupations.[3] Employment of Aircraft and Avionics Equipment Mechanics and Technicians is projected to show little or no change between 2014 and 2024.[4] However, job prospects will be best for mechanics who hold an Airframe and PowerPlant certificate. The ASU Mid-South program of study enables students to obtain both of these certifications.

[3] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/installation-maintenance-and-repair/diesel-service-technicians-and-mechanics.htm

[4] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/installation-maintenance-and-repair/aircraft-and-avionics-equipment-mechanics-and-technicians.htm

Approach

"We needed to realign our existing AAS degree program in Aviation Maintenance Technology to meet state and Federal Aviation Authority standards," says Pete Selden, Associate Vice Chancellor for Workforce Programs, ASU Mid-South. *"Specifically, we had to update our operations and curriculum manuals to meet industry standards. We used to have one AAS degree for both AirFrame Technology and PowerPlant Technology that took three years to complete. Now, students can take separate courses in either subject area and achieve an AAS degree in two years. This enables them to go directly to work in the aviation technology industry or continue to pursue a second credential."*

"For our Diesel Maintenance Technology and Marine Technology programs of study, we collaborated with several area industry partners, including Wepfer Marine and Southern Towing, to do a DACUM (Developing a Curriculum) analysis to identify needed skills and competencies for these occupations" says Mr. Selden. *"Our Diesel Maintenance Technology program has been very successful. We've incorporated online training modules designed to satisfy Automotive Service Excellence (ASE) programs certification standards for Medium/Heavy Truck Technician training programs into our curriculum. We are also working with J.J. Keller's Training on Demand program to provide a variety of industry recognized credentials for Diesel Maintenance Technicians."*

"In addition, we've increased the level of employer engagement," says Mr. Selden. *"One of our adjunct instructors in the Diesel Maintenance Technology program is a manager*

from Paschall Truck Lines, an area employer. In this capacity, he can observe students first hand, recommend high performers for hiring and arrange for scheduling flexibility for full- or part-time employment. He has also taken the class to Paschall for onsite training to expose students to a real life work environment. Paschall also brought trucks to our campus for lab work. We didn't have sufficient funds to buy new trucks so this enabled our students to have access to vehicles that have the latest technology."

Next Steps

"The certifications and AAS degree program have become part of ASU Mid-South regular institutional operation budget," says Mr. Selden. *"We will continue to offer these programs of study after the grant ends."*

Related Links

ASU Mid-South Aviation Program:
http://www.asumidsouth.edu/aviation-technology/

ASU Mid-South Diesel Maintenance Program:
http://www.asumidsouth.edu/diesel-maintenance/

The following products were produced with federal funds and are available on Skills Commons:

ASU MID-SOUTH: Technical Certificate in Diesel Maintenance Technology

https://www.skillscommons.org//handle/taaccct/10395

The Technical Certificate in Diesel Maintenance Technology provides students with the technical skills expected in an entry-level position as a Heavy Truck Diesel Maintenance Technician.

ASU MID-SOUTH: Associate of Applied Science in Aviation Maintenance Technology/Airframe Certificate and/or PowerPlant Certificate

https://www.skillscommons.org//handle/taaccct/10396

This program of study, approved by the Federal Aviation Administration, prepares students to be Aviation Technicians. It contains 46 courses in the following subject areas: General curriculum, Airframe curriculum and PowerPlant curriculum.

ASU MID-SOUTH: Certificate of Proficiency in Marine Technology

https://www.skillscommons.org//handle/taaccct/10397

The Certificate of Proficiency in Marine Technology provides students with the practices, skills, and knowledge necessary for entry-level employment in marine diesel technology. Upon receiving the certificate, students are employed as Marine Maintenance Technicians, Marine Fitters, and Ship Repair Technicians.

DELGADO COMMUNITY COLLEGE

Introduction

Delgado Community College, a member of the MRTDL Consortium, has trained over 600 students in water transportation and material moving occupations with a nearly 100 percent placement rate for program completers. In addition, program completion rates, earned credentials and wage increases post-enrollment have all exceeded targeted expectations.

Workforce Need

In general, transportation and material moving occupations are projected to grow five percent from 2014 to 2024. An increased demand for shipping raw materials and finished products over highways, rail lines and waterways should contribute to employment growth.[5] Specifically, employment of water transportation workers is projected to grow nine percent from 2014-2024, faster than the six and one half percent average for all occupations. The growing demand for bulk commodities such as iron ore, grain, and petroleum should increase the need for these workers.[6]

Approach

Working with supportive industry partners, Delgado utilized TAACCCT funds to develop curricula in five occupations: Deckhand Certification; Tankerman Certification; Apprentice/Mate Steersman Certification; Licensed Mariner Certification and Forklift Operator Safety Certification. These programs of study prepare students to progress along sustainable career pathways in the Maritime sector. Successful completers are equipped with the skills needed to pursue their career path and, should they choose, continue their studies for an AAS degree.

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[5] U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 2016-2017 Edition https://www.bls.gov/ooh/transportation-and-material-moving/home.htm

[6] U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 2016-2017 Edition https://www.bls.gov/ooh/transportation-and-material-moving/water-transportation-occupations.htm

"We feel very successful," says Rick Schwab, Senior Director, Marine, Fire, Radar and Industrial Training Facility. *"We hit the ground running and the momentum continues. The TAACCT grant has changed many lives. It allowed us to invest in new equipment, upgrade our facilities and offer training to individuals who otherwise would not have had the opportunity to change careers. We are still training additional people even though the grant has already met its goals."*

Delgado Maritime Training Simulator

Next Steps

"We have a program in place that will sustain itself through employers willing to invest in their workers' training and professional development," says Mr. Schwab. *"We are committed to maintaining everything that we have built with TAACCCT support after the grant ends."*

Related Links

Delgado Community College Marine, Fire, Radar and Industry Training Facility:
http://www.dcc.edu/academics/workforce/maritime-fire/

The following products were produced with federal funds and are available on Skills Commons:

DCC: Deckhand Training Certification

https://www.skillscommons.org//handle/taaccct/10333

This is an introductory course for new students and incumbent workers to prepare students for careers in the Maritime industry. This Deckhand Certificate contains five courses: Basic Firefighter Awareness; Benzene & HazCom & Maritime Safety Awareness; First Aid/CPR/AED; Hydrogen Sulfide and Skiff/Man Overboard.

DCC: Tankerman Training Certification

https://www.skillscommons.org//handle/taaccct/10334

This course is intended for maritime workers and students with specialized training in handling hazardous materials. The Tankerman Certificate contains six courses: Basic Firefighting; Benzene with Confined Space Awareness; First Aid/CPR/AED; Hydrogen Sulfide Refresher; Person in Charge and Tankerman DL.

DCC: Apprentice Mate/Steersman Certification

https://www.skillscommons.org//handle/taaccct/10335

This Apprentice Mate/Steersman Certificate contains four courses: Apprentice Mate/Steersman; Radar Observer; Western Rivers Navigation and Wheelhouse Proficiency Management.

DCC: Licensed Mariner Certification

https://www.skillscommons.org//handle/taaccct/10336

This Licensed Mariner Certificate contains five courses: Basic and Advanced Firefighting; First Aid/CPR/AED; Marine Oil Spill Response; Radar Refresher; and Vessel Security Officer.

DCC: Forklift Operator Safety Certification

https://www.skillscommons.org//handle/taaccct/10337

This is a one day course for employees who operate a powered industrial truck. This training is required for certification in the use and inspection of equipment.

HINDS COMMUNITY COLLEGE

Introduction

Hinds Community College, a member of the MRTDL Consortium, expanded their existing Commercial Truck Driving program through their participation in this TAACCCT grant. In addition, based on their successful outcomes, Hinds received a $220,000 grant from the Walmart Foundation to boost their truck driving training industry partnership with KLLM Transport Services. The Walmart funds, awarded through the Jackson, MS Foundation for the Mid-South, will be used to support training for women and underserved populations who enroll in the Driving Academy at KLLM.

Workforce Need

Employment of Heavy and Tractor-trailer Truck Drivers is projected to grow five percent between 2014 to 2024, about as fast as the average of all occupations. 1,797,700 jobs were available nationwide in 2014, and it is anticipated that there will be 98,800 additional job openings in 2024. As the economy grows, the demand for goods will increase and more truck drivers will be need to keep supply chains moving.[7]

Approach

The college's partnership with KLLM to train truck drivers and boost their ranks began in fall 2012. KLLM handles the training and Hinds provides the coursework. The KLLM Driving Academy opened in March 2014.

The Hinds Commercial Truck Driving program has expanded through the availability of TAACCCT and Walmart Foundation funding. It is available as a nine-week course to both daytime and evening students. The program includes 22 days of classroom instruction and a six-week internship as well as an online module business course and a simulation laboratory. The

7 Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, https://www.bls.gov/ooh/transportation-and-material-moving/heavy-and-tractor-trailer-truck-drivers.htm

curriculum includes U.S. Department of Transportation rules and regulations, Mississippi requirements for obtaining a Commercial Driver's License and hands-on tractor-trailer operation.

KLLM's initial goal in partnering with the college was to ensure that there were sufficient trained personnel to drive the 3,000 plus trucks the company has and reduce turnover. Hinds' plan was to leverage the TAACCCT grant to help train the state's overall workforce and tap into a growing segment of the student population. The Walmart Foundation grant enables both partners to focus on a secondary goal: to increase the number of female Heavy and Tractor-trailer Drivers in the state. As one successful student, Andrea Gaston, a former fast food and factory worker attests, *"It was an exciting, exhilarating experience. I'm proud of myself and my family is too. If I can do it, anyone can do it. The opportunity is here for you to take."* Ms. Gaston is now a Licensed Truck Driver/Owner Operator.

Return on Investment

The Hinds program is achieving outstanding results with critical performance indicators, including the number of participants served, their program completion rates, earned credentials, and employment retention rates all exceeding targeted expectations.

Next Steps

Hinds Community College has a student body consisting of 65 percent females. This will facilitate the achievement of its mission of recruiting more women students for their partnership program of study with KLLM. The end goal is to continue to increase the number of female Heavy and Tractor-Trailer Drivers throughout the state, thereby empowering more women for non-traditional careers while meeting growing employer needs.

Related Links

Hinds Community College News:
http://news.hindscc.edu/index.php/tag/walmart-foundation/

Foundation for the Mid-South:
http://www.fndmidsouth.org/

Walmart Video:
https://vimeo.com/158663668/ 65fe5eda60

The following products were produced with federal funds and are available on Skills Commons:

HINDS CC: River Barge Deckhand and Tankerman Training

https://www.skillscommons.org//handle/taaccct/10377

The River Barge Deckhand Training Certificate contains one course: Deckhand Training. This program of study prepares students for careers in marine transportation technology. Students may elect to pursue a Career Certificate and/or Technical Certificate.

HINDS CC: Commercial Truck Driving Curriculum

https://www.skillscommons.org//handle/taaccct/10378

This instructional program prepares individuals to drive trucks and other commercial vehicles. It includes instruction in operating diesel powered vehicles; loading and unloading cargo; reporting delays or accidents on the road; verifying loads against shipping records and keeping necessary records.

HINDS CC: Orientation Syllabus for Students to Adjust to College Life

https://www.skillscommons.org//handle/taaccct/10359

This course is designed to help students adjust to college life. It includes a study of personal and social adjustment. The course teaches effective study habits, reading methods, use of the library, note taking, and report writing. It also provides the student with guidance about collegiate life, including an online portion that teaches competencies to manage personal finances.

JOHN WOOD COMMUNITY COLLEGE

Introduction

John Wood Community College, a member of the MRTDL Consortium, utilized TAACCCT grant funds to prepare students for careers in four occupations: Manufacturing Industrial Maintenance, Computer Networking, Welding and Logistics Management. JWCC has partnered with area employers to develop career and technical programs that provide the right training students need to move ahead or retrain for a new career. Students get hands-on experience using the latest equipment and are taught by professionals working in the industry.[8]

Workforce Need

Employment of Industrial Machinery Mechanics, Machinery Maintenance Workers and Millwrights is projected to grow 16 percent between 2014-2024, much faster than the six and one half percent average for all occupations.[9] Similarly, employment of Computer Support Specialists is projected to grow 12 percent during that time. [10] Although employment of Welders during that period is projected to grow four percent, slower than the average for all occupations, skilled welders with up-to-date training should have good job opportunities.[11] Similarly,

[8] John Wood Community College, Manufacturing, Logistics and Transportation, https://www.jwcc.edu/academics/choose/manufacturing-logistics-and-transportation/

[9] Bureau of Labor Statistics, U.S. Department of labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/installation-maintenance-and-repair/industrial-machinery-mechanics-and-maintenance-workers-and-millwrights.htm

[10] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm

[11] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/production/welders-cutters-solderers-and-brazers.htm

employment of Logisticians is projected to grow two percent, but growth will be driven by the need for logistics in the transportation of goods in a global economy. [12]

Approach

JWCC developed industry-informed curricula to provide training in these four occupations. Specifically, they met with Kohl Wholesale, Knapheide Manufacturing, ADM, Dot Foods, Titan Wheel International and members of the Great River Economic Development Foundation to determine the specific needs of the region and gaps in the existing workforce that the grant could address.[13] As a result of this industry input, JWCC developed multiple courses in all four occupational areas to prepare individuals for meaningful careers while meeting area employer needs.

In the logistics management program of study, JWCC is offering courses that will transfer into a bachelor's degree in Supply Chain Management offered by Western Illinois University. Students who begin at JWCC will earn a two-year associate degree in Supply Chain Management from which all completed courses will be accepted by the university as part of an articulation agreement. In addition to this option, JWCC offers a two-year AAS degree and 16-week certificate program in Logistics that enable students to immediately enter the workforce following successful completion at JWCC.[14]

Related Links

John Wood Community College, Manufacturing, Logistics and Transportation:
https://www.jwcc.edu/academics/choose/manufacturing-logistics-and-transportation/

[12] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/business-and-financial/logisticians.htm

[13] The Herald-Whig, October 10, 2013, http://mobile.whig.com/story/23473708/jwcc-receives-2-million-to-assist-its-role-in-mrtdl-consortium

[14] The Herald Whig, December 7, 2015, http://www.whig.com/article/20151207/ARTICLE/312079793/1444

The following products were produced with federal funds and are available on Skills Commons:

JWCC: Logistics Management Courses

https://www.skillscommons.org//handle/taaccct/10329

This Logistics Management curriculum contains five courses: Introduction to Logistics Management; Transportation; Supply Chain Management; Applied Supply Chain Management and Project Management.

JWCC: Welding Introduction Curriculum

https://www.skillscommons.org//handle/taaccct/10330

This program of study provides students with an introduction to the manufacturing world and provides specific instruction to facilitate safe work practices in industrial environments. It introduces manufacturing specializations such as mechatronics precision machining and welding. It also covers fire safety, pressurized gases, electrical hazards and safe machine usage. Students learn concepts of industrial noise; machine guarding electrical safety; chemical exposure; hazardous waste; Workers' Compensation laws; liability and general safety precautions in the workplace.

JWCC: Computer Network Support Curriculum

https://www.skillscommons.org//handle/taaccct/10331

This curriculum consists of six courses. This product package contains three of the six courses, which are: Computer Hardware Basics; Fundamentals of Networking and Linux Operating System. The additional three courses are available from the college.

JWCC: Manufacturing Industrial Maintenance Certification and/or AAS Degree

https://www.skillscommons.org//handle/taaccct/10332

This product contains seven syllabi, including an internship opportunity, to prepare students for careers in manufacturing industrial maintenance. In addition to the internship opportunity, the syllabi address the following subject areas: mechatronics; industrial wiring; industrial motors and controls; pumps/piping; fluid power (hydraulics and pneumatics); and mechanical systems rigging. Students can complete these courses to receive a certificate or receive an AAS degree if they complete the general course requirements.

LEWIS & CLARK COMMUNITY COLLEGE

Introduction

Lewis and Clark Community College (LCCC), the lead institution in the nine-member MRTDL Consortium, utilized grant funds to expand workforce training programs in four occupational areas: Integrated Truck Driving; Welding Technician; Process Operations Technology; and Automotive Technology. TAACCCT grant funds have enabled LCCC to strengthen partnerships with area employers who need trained employees to fill their job openings.

Workforce Need

Employment of Geological and Petroleum Technicians is projected to grow 12 percent between 2014-2024, much faster than the six and one half percent average for all occupations.[15] Employment of Heavy and Tractor-trailer Drivers is projected to grow five percent during that period about as fast as the average of all occupations. As the economy grows, the demand for goods will increase resulting in additional truck drivers needed to keep supply chains moving.[16] Although employment of Welders during that period is projected to grow four percent, slower than the average for all occupations, skilled welders with up-to-date training should have good job opportunities.[17] Employment of Automotive Service Technicians and Mechanics during that time period is projected to grow five percent about as fast as the average for all occupations. Job opportunities for qualified jobseekers should be good.[18]

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[15] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/life-physical-and-social-science/geological-and-petroleum-technicians.htm

[16] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/transportation-and-material-moving/heavy-and-tractor-trailer-truck-drivers.htm

[17] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook. 2016-17 Edition, https://www.bls.gov/ooh/production/welders-cutters-solderers-and-brazers.htm

[18] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/installation-maintenance-and-repair/automotive-service-technicians-and-mechanics.htm

Approach

"Employer engagement is a critical element of all of LCCC's workforce development programs," says Brett Reinert, Associate Vice President of Strategic Projects. *"We have established industry program advisory committees for each of the four MRTDL-funded programs of study. Employers helped to inform the college's curricula in these subject areas, provided access to equipment and facilities, and offered hiring and job advancement opportunities for program graduates."*

"LCCC's most successful initiative under the grant has been the Process Operations Technology AAS degree and certificate program," says Mr. Reinert. *"It was developed in collaboration with ConocoPhillips, which operates the nation's third largest petroleum refinery. There is a 100 percent placement rate for Process Operations Technology graduates, with most securing jobs in the immediate area. However, our credentials are portable with placements recorded in other petroleum processing states such as Texas and Louisiana. In addition, the TAACCCT grant enabled us to buy state-of-the art equipment and materials, including LCCC's refinery simulator, a virtual on-the-job training experience. As an additional testament to the program's record of success, LCCC has observed that a significant number of students in this program entered with earned Associates and Bachelor degrees in other fields, but selected the Process Operations Technology program of study because of the outstanding employment prospects."*

"This collective effort brings the expertise and resources of industry, education, government and local communities to close the gap between business's need for high skilled workers and workers' need for high wage, high skilled and sustainable jobs," says Jay Churchill, Phillips 66 Wood River Refinery Manager, another LCCC industry partner. *"This grant funding and possible expansion of Lewis and Clark's Process Operations Technology program allows our long-standing partnership to add equipment and will supply our industry with the best and brightest candidates for employment from our region. It's great to see local people get these jobs of the future."* [19]

Related Links

Lewis and Clark Community College, Process Operations Technology:
http://www.lc.edu/program/processop/

The following products were produced with federal funds and are available on Skills Commons:

LCCC: Automotive Technology AAS Degree and Certificate Programs

https://www.skillscommons.org//handle/taaccct/10536

This program of study consists of 16 syllabi, including an internship opportunity, to prepare students for careers in Automotive Technology. This product contains the courses required to complete the following programs: Automotive Technology (AAS Degree), Automotive Drive Line, Suspension & Brakes (Certificate of Proficiency), Automotive Performance, Accessories and Electrical (Certificate of Proficiency), and Undercar Specialist (Certificate of Completion).

[19] Lewis and Clark Community College, http://www.lc.edu/News_Story/NineCollegesMissGrant-Sept2013/

LCCC: Logistics Management Certificate of Completion

https://www.skillscommons.org//handle/taaccct/10543

This program of study addresses business principles relating to logistics and supply chain management. Topics include logistic technology and software; financial aspects of logistics; procurement; inventory control; transportation; warehousing; package material handling; and facilities analysis. The Logistics Management Certificate of Completion also includes management courses.

LCCC: Process Operations Technology Certificate and AAS Degrees

https://www.skillscommons.org//handle/taaccct/10537

Process operations technology courses train students to operate, assess and troubleshoot the essential elements of all process industries: furnaces, distillation columns, reboilers, heat exchangers, steam systems, and cooling-water systems. This product includes the courses required to complete the Process Operations Technology - Biochemical (AAS Degree), Process Operations Technology - Petroleum (AAS Degree), and Process Operations Technology (Certificate of Proficiency).

LCCC: Welding Technology Certificates of Completion and AAS Degree

https://www.skillscommons.org//handle/taaccct/10538

This program of study offers hands-on training and covers the entire welding profession including state-of-the art modern welding bays along with an internship experience. This product contains an overview of the courses required to complete the following programs: Welding Technology (AAS Degree); Welding Technology (Certificate of Proficiency); Basic Welding (Certificate of Completion); General Welding (Certificate of Completion),;Gas Tungsten Arc & Pipe Welding (Certificate of Completion); Production/Fabrication Welding (Certificate of Completion); Shielded Metal Arc Welding (Certificate of Completion); Structural Welding (Certificate of Completion); Testing & Inspection in Welding (Certificate of Completion); TIG Welding (Certificate of Completion); and Wire-Feed Welding (Certificate of Completion).

LCCC: Integrated and Extended Truck Driver Training Certificates of Completion

https://www.skillscommons.org//handle/taaccct/10539

This program of study, which contains nine courses, provides an overview of the trucking industry. Students prepare for the state's Commercial Driver's License written test to acquire a driving permit.

MINNESOTA STATE COLLEGE - SOUTHEAST

Introduction

Minnesota State College (MSC)-Southeast, a member of the MRTDL Consortium, utilized TAACCCT grant funds to prepare students for two occupations: Truck Drivers and Diesel Service Technicians and Mechanics.

Workforce Need

Employment of Diesel Service Technicians and Mechanics is projected to grow 12 percent between 2014-2024, much faster than the six and one half percent average for all occupations. Job opportunities should be best for those who have completed postsecondary training in diesel engine repair.[20] Employment of Heavy and Tractor-trailer Drivers is projected to grow five percent between 2014-2024, about as fast as the average of all occupations. As the economy grows, the demand for goods will increase resulting in additional truck drivers needed to keep supply chains moving.[21]

Approach

MSC-Southeast, a Technical and Community College, worked with industry partners to develop a total of 15 curricula to prepare students for these occupations: 1) Introduction to Transportation Careers; 2) Auto Heating and Air Conditioning Lab and Theory; 3) Introduction to DC Electricity: 4)Introduction to Diesel Technology; 5) Diesel Electrical Systems; 6) Diesel Chassis/Suspension/Steering; 7) Diesel Tractor/Trailer Brake Systems; 8) Diesel Preventative Maintenance; 9) Diesel Drivetrain Systems; 10) Diesel Schematic Interpretation/Electronic Manuals; 11) Diesel Engine Service; 12) Diesel Diagnostics; 13) Introduction to Hydraulics and Pneumatics; 14) Straight Truck Proficiency and 15) Welding for Diesel Maintenance.

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[20] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/installation-maintenance-and-repair/diesel-service-technicians-and-mechanics.htm

[21] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/transportation-and-material-moving/heavy-and-tractor-trailer-truck-drivers.htm

Truck driving training begins with eight weeks of classroom and behind-the-wheel training, preparing students for the situations they may face on the road. During this eight-week sequence of training, the students will also prepare for the Class "A" Commercial Driver's License road test. To complete the program, each student must register for and complete an eight-week paid internship.[22]

The Diesel Maintenance program of study trains students to work with heavy–duty vehicles and other diesel engines, such as buses and large agricultural equipment. The emphasis is on how to maintain, service and repair diesel engines and transportation trailers.

MSC-Southeast is the only college in Minnesota that includes Snap-on Tools Diesel Scanner Diagnostics Certification as part of its Diesel Maintenance Technical program. Students will be ready to test-drive and move large trucks because earning a Commercial Driver's License is part of the program. With a certificate or diploma from MSC-Southeast, students can begin their careers in Diesel Maintenance with a solid foundation.[23]

Related Links

MSC Southeast Programs of Study, Truck Driving:
http://www.southeastmn.edu/academic_programs/_program/Default.aspx?pid=29

MSC Southeast, Programs of Study, Transportation, Diesel Maintenance:
http://www.southeastmn.edu/academic_programs/_program/Default.aspx?pid=77

[22] MSC Southeast, Truck Driving Program of Study, http://www.southeastmn.edu/academic_programs/_program/Default.aspx?pid=29

[23] MSC Southeast, Diesel Maintenance Program of Study, http://www.southeastmn.edu/academic_programs/_program/Default.aspx?pid=77

The following products were produced with federal funds and are available on Skills Commons:

MN-SETC: Introduction to Transportation Careers

https://www.skillscommons.org//handle/taaccct/10273

This course covers departmental procedures and practices as well expectations of the students in the programs. Safety, environmental concerns, and simulated Right to Know training are a significant part of the course. Basic tools, tool usage, basic power tools, and care of them are included. Threaded fasteners, drive types, torqueing, thread compounds, cutting methods, gluing, and adhesives are covered from a generic point and not vehicle-specific.

MN-SETC: Auto Heating and Air Conditioning Lab and Theory

https://www.skillscommons.org//handle/taaccct/10284

This course covers heating and A/C service and maintenance. The student will perform troubleshooting techniques on heating and A/C systems including automatic temperature control systems. It addresses basic heating and A/C theory, A/C safety, A/C environmental concerns, component and control identification. System services, maintenance, vacuum, and electrical circuits are also discussed as well as troubleshooting techniques of A/C and automotive temperature control systems.

MN-SETC: Introduction to DC Electricity

https://www.skillscommons.org/handle/taaccct/10285

This course covers the general information, theory, and problem solving techniques required for an analysis of DC circuits. It places emphasis on the meter measurements, current flow, and voltage division.

MN-SETC: Introduction to Diesel Technology

https://www.skillscommons.org/handle/taaccct/10286

This course is designed as a prerequisite for all technical diesel courses. It covers the basics of the diesel industry. It also addresses employer expectations as well as common working conditions.

MN-SETC: Diesel Electrical Systems

https://www.skillscommons.org//handle/taaccct/10291

This course builds on the knowledge gained from the pre-requisite Introduction to Electrical and Battery Service course. It will apply this knowledge and expand to cover other purposes and functions of the various truck electrical systems, including components and instruments. It also addresses electrical theory, application and diagnosis using typical test equipment.

MN-SETC: Diesel Chassis/Suspension/Steering

https://www.skillscommons.org//handle/taaccct/10301

This course covers the identification, inspection techniques, repair and adjustment procedures, and alignment checks of the components associated with the variety of frames and suspensions common to heavy trucks. Students will be instructed in identifying the various types of truck steering systems and components. They will learn and practice inspection, disassembly, reassembly and alignment procedures. Manual and power steering sectors and pumps are included.

MN-SETC: Diesel Tractor/Trailer Brake Systems

https://www.skillscommons.org//handle/taaccct/10302

This course draws from previous knowledge gained in the Automotive Brake Theory and Lab courses; applies content gained in the Introduction to Hydraulics and Pneumatics course; and builds new related content and application to the heavy duty truck systems. Air system components will be identified and their functions studied individually and within the entire system. Multiple components will be removed, replaced, inspected, repaired and tested. Emphasis will be placed on general repairs and trouble-shooting.

MN-SETC: Diesel Preventative Maintenance

https://www.skillscommons.org//handle/taaccct/10303

This course covers the importance of proper procedures of preventative maintenance and inspection schedules used for various types of heavy trucks and their applications. Students learn to perform inspections according to the standards of the U.S. Department of Transportation.

MN-SETC: Diesel Drivetrain Systems

https://www.skillscommons.org//handle/taaccct/10304

This course covers theory and operation of all drive system components including manual transmissions, automatic transmissions, clutches, drivelines and differentials. Other studies include component troubleshooting, inspecting, service, repair operations, removal, replacement and preventive maintenance practices.

MN-SETC: Diesel Schematic Interpretation/Electronic Manuals

https://www.skillscommons.org//handle/taaccct/10305

This course addresses the description, operation, diagnosis, and service procedures related to all systems by interpreting schematic drawings used in the service industry. Major vehicle systems will be covered including, but not limited to electrical, air, hydraulic, fuel, cooling, and diagnostics.

MN-SETC: Diesel Engine Service

https://www.skillscommons.org//handle/taaccct/10306

This course is designed to give students an understanding of diesel engine system operation. It examines the theory, operation, troubleshooting, and repair of diesel engine intake, exhaust, cooling, lubrication, and fuel systems. Tune up procedures will be performed on a variety of truck diesel engines.

MN-SETC: Diesel Diagnostics

https://www.skillscommons.org//handle/taaccct/10307

This course is designed to give the student an understanding of systems operation, service, diagnosis, troubleshooting, repair, and programming of electronic computer- controlled diesel engines.

MN-SETC: Introduction to Hydraulics and Pneumatics

https://www.skillscommons.org//handle/taaccct/10308

This course covers hydraulic and pneumatic principles along with basic components. It addresses the physical laws that govern hydraulics and pneumatics along with the relationships of the various components and common hydraulic circuits and symbols.

MN-SETC: Straight Truck Proficiency

https://www.skillscommons.org//handle/taaccct/10309

This class provides students, 18 years or older, with an opportunity to operate a straight truck with a gross vehicle weight (GVW) if 26,000 pounds or more. This hands-on course is designed to give students actual driving experience. In the final class, they take the test for the CDL Class B license. Students must have a Class B permit with air brakes to start the class.

MN-SETC: Welding for Diesel Maintenance

https://www.skillscommons.org//handle/taaccct/10310

Students will be introduced to different welding and cutting processes. This course covers proper weld fusion, heat distortion, penetration, and their effects to the parent material. Students will learn the basics of proper welding and cutting machine set up from turning the machine on and off and identification of machine parts to demonstrating and identifying the differences between good quality welds and poor quality welds. They will be introduced to and demonstrate weld shop safety and practice, and proper compressed cylinder transport and storage.

SOUTHWEST TENNESSEE COMMUNITY COLLEGE

Introduction

Southwest Tennessee Community College a member of the MRTDL Consortium, utilized TAACCCT grant funds to enhance its existing Advanced Integrated Industrial Technology (AIIT) program with a focus in industrial motion control equipment. The programs of study, consisting of a two-year AAS degree and two one-year technical certificates, are designed primarily to train Maintenance Technicians in the fields of manufacturing, industrial process control, distribution, warehousing and transportation.[24]

Workforce Need

Employment of Industrial Machinery Mechanics, Machinery Maintenance Workers and Millwrights is projected to grow 16 percent between 2014-2024, much faster than the six and one half percent average for all occupations. The need to keep increasingly sophisticated machinery functioning and efficient will drive demand for these workers.[25] The graphic below depicts AIIT students at work.

[24] SW Tennessee Advanced Integrated Industrial Technology Website, http://www.tn.edu/aiit/

[25] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/installation-maintenance-and-repair/industrial-machinery-mechanics-and-maintenance-workers-and-millwrights.htm

Approach

The college developed three AIIT program options, as described below:

Advanced Integrated Industrial Technology Associate's Degree

The Associate of Applied Science in Advanced Integrated Industrial Technology (AIIT) is a tw- year AAS degree program designed to prepare graduates for many different careers related to manufacturing with an emphasis on technology, critical thinking, and problem solving. Students will take courses in the basic fundamentals of industrial maintenance and move on to very advanced applications including Programmable Logic Controllers (PLCs) and robotics.[26]

Advanced Integrated Industrial Technology Technical Certificate

The Technical Certificate in Advanced Integrated Industrial Technology (AIIT) is designed to prepare graduates for many different careers related to manufacturing with an emphasis on technology, critical thinking, and problem solving. Students will take courses in the basic fundamentals of industrial maintenance and move on to very advanced applications including Programmable Logic Controllers (PLCs) and robotics.[27]

Industrial Motion Control Technology Technical Certificate

A Technical Certificate in Industrial Motion Control Technology is designed to prepare graduates with skills needed for working with and maintaining equipment used in a distribution, warehousing, or manufacturing environment with an emphasis on technology, critical thinking, and problem solving. Students will take courses in the basic fundamentals of electrical controls and move on to advanced applications including Programmable Logic Controllers (PLCs), Robot Operations and Conveyor Support Systems.[28]

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[26] SW Tennessee Advanced Integrated Industrial Technology website, http://www.tn.edu/aiit/
[27] SW Tennessee Advanced Integrated Industrial Technology website, http://www.tn.edu/aiit/
[28] Ibid

Related Links

Southwest Tennessee Advanced Integrated Technology Website:

http://www.tn.edu/aiit/

The following products were produced with federal funds and are available on Skills Commons:

SW TENN: Industrial Motion Control Technology Technical Certificate

https://www.skillscommons.org//handle/taaccct/10540

This Technical Certificate in Industrial Motion Control Technology is designed to prepare graduates with the skills needed for working with and maintaining equipment used in a distribution, warehousing, or manufacturing environment. The program places emphasis on technology, critical thinking, and problem solving.

SW TENN: Advanced Integrated Industrial Technology AAS and/or Certificate

https://www.skillscommons.org//handle/taaccct/10541

The Advanced Integrated Industrial Technology program consists of a two-year Associate Degree and/or two one-year Technical Certificates. The program is designed to train maintenance technicians in the fields of manufacturing, industrial process control, distribution, warehousing, and transportation.

ST. LOUIS COMMUNITY COLLEGE

Introduction

St. Louis Community College (STLCC), a member of the MRTDL Consortium utilized TAACCCT grant funds to serve 340 individuals for jobs in the transportation, distribution and logistics industry sectors in the St. Louis region. Specifically, STLCC offered programs of study in Aviation Maintenance, Avionics, Logistics and Commercial Driver's License (CDL) Truck Driving. Participant completion rates and earned credentials both met targeted expectations.

Workforce Need

Employment of aircraft and avionics equipment mechanics is projected to show little or no change from 2014 to 2024. However, job prospects will be best for mechanics who hold an Airframe and PowerPlant certificate.[29] Employment of Heavy and Tractor-trailer Truck Drivers is projected to grow five percent during this period, about as fast as the average six and one half percent for all occupations. As the economy grows, the demand for goods will increase and more truck drivers will be needed to keep supply chains moving. [30] Employment of logisticians is projected to grow two percent during this period, slower than the average six and one half percent for all occupations. Employment growth will be driven by the need for logistics in the transportation of goods in a global economy.[31]

[29] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/installation-maintenance-and-repair/aircraft-and-avionics-equipment-mechanics-and-technicians.htm

[30] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/transportation-and-material-moving/heavy-and-tractor-trailer-truck-drivers.htm

[31] Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, https://www.bls.gov/ooh/business-and-financial/logisticians.htm

Approach

When STLCC created these new programs of study to support St. Louis's thriving transportation and logistics sectors, it used the same successful structure developed for MoHealthWINS and MoManufacturingWINS, two previous TAACCCT grants. It worked closely with industry partners to develop curriculum and provide important student support such as comprehensive assessments, pathway coaches and accelerated developmental education in key portals throughout the training experience. The image below depicts one of the vehicles used in STLCC's CDL Truck Driving program of study.

The grant focus was on innovating the way in which adult workers are engaged and trained in technical curriculum including:

- Accelerated job training programs within the fields of transportation, distribution and logistics providing the opportunity to earn appropriate industry certifications, such as the Federal Aviation Administration's General Airframe and PowerPlant licensing exams
- A learning framework that provided students with the basic reading, writing and math skills they needed to succeed in a college setting through contextualized courses

- Student services, such as pathway and career coaching, to take full advantage of accelerated, flexible and technology-enabled programs.[32]

"The return on investment for our participation as a member of the MRTDL Consortium has been substantial," says Rene Dulle, Senior Project Coordinator, Workforce Solutions Group, STLCC. *"Grant funds enabled us to focus on the transportation, distribution and logistics industry. We were able to establish new industry relationships and partnerships. For example, we became critical members of the St. Louis Regional Freightway, helping the Executive Director at the ground level to bring in other industry members, from both sides of the Mississippi River, to work collaboratively on the growth of the region's manufacturing and distribution sector within St. Louis and seven adjacent counties in Missouri and Illinois. Our participation as a member of the MRTDL consortium will pay benefits for years to come as a result of new business and industry investment and the availability of our programs of study in this industry sector."*

Related Links

St. Louis Community College, MRTDL:
http://www.stlcc.edu/Workforce-Solutions/MRTDL/

St. Louis Regional Freightway;
http://www.thefreightway.com/

The following products were produced with federal funds and are available on Skills Commons:

STLCC: Truck Driving Program - Class A CDL

https://www.skillscommons.org//handle/taaccct/10591

This course prepares students for careers as professional truck drivers. It enables them to acquire the skills necessary to pass the Commercial Driver License exam.

[32] St. Louis Community College, http://www.stlcc.edu/workforce-solutions/mrtdl/MRTDL-Background-Info.html

STLCC: Logistics, Warehouse and Distribution Specialist

https://www.skillscommons.org//handle/taaccct/10592

This product prepares students to enter into the warehousing and logistics career field. Students will learn foundational knowledge which front-line material handling workers should master, not only to perform well in this career field, but to be positioned for advancement into lead or supervisory roles. The course includes a mixture of textbook study and review, classroom activities, field trips as well as hands-on activities that a material handler would experience.

STLCC: Avionics

https://www.skillscommons.org//handle/taaccct/10593

This product contains a syllabus, workbook and outreach flyer to introduce students to Avionics: the science and technology of the development and use of electrical/electronic devices in aviation.

STLCC: Aviation Maintenance

https://www.skillscommons.org//handle/taaccct/10594

This program prepares students to diagnose and complete repair work on aircraft engines and assemblies including hydraulic and pneumatic systems. The FAA- approved curriculum is offered in cooperation with the St. Louis Public School System and prepares students for both the General Airframe and PowerPlant licensing exams from the Federal Aviation Administration. Licensed PowerPlant Mechanics are employed by airlines, manufacturers, repair stations and general aviation companies.

WEST KENTUCKY COMMUNITY and TECHNICAL COLLEGE

Introduction

West Kentucky Community and Technical College (WKCTC), a member of the MRTDL consortium, has trained over 1,600 students in water transportation and logistics occupations with a placement rate exceeding 125 percent of targeted expectations for program completers. In addition, program completion rates, earned credentials, and placement rates have also surpassed targeted expectations.

Workforce Need

In general, transportation and material moving occupations are project to grow five percent from 2014 to 2024. An increased demand for shipping raw materials and finished products over highways, rail lines and waterways should contribute to employment growth.[33] Specifically, employment of water transportation workers is projected to grow nine percent from 2014-2024, faster than the five percent average for all occupations. The growing need for bulk commodities such as iron ore, grain and petroleum should increase the need for these workers.[34] Employment of Logisticians is projected to grow two percent from 2014 to 2024, slower than the average for all occupations. Employment growth will be driven by the need for logistics in the transportation of goods in a global economy.[35]

Approach

WKCTC worked with an industry advisory committee on a periodic basis to inform their efforts to enhance their curricula. For marine occupations, area industry partners include Ingram

[33] U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 2016-2017 Edition, https://www.bls.gov/ooh/transportation-and-material-moving/home.htm

[34] U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 2016-2017 Edition, https://www.bls.gov/ooh/transportation-and-material-moving/water-transportation-occupations.htm

[35] U.S. Department of Labor, Bureau of Labor Statistics, Occupation Outlook Handbook, 2016-2017 Edition, https://www.bls.gov/ooh/business-and-financial/logisticians.htm

Barge, Crounse Corporation, American Commercial Barge Line. For logistics occupations, area industry partners included the P & L Railroad and Petter Supply.

As a result of these deliberations, WKCTC utilized TAACCCT funds to promote and complement the training offered at their Inland Marine & Logistics Training Institute. Three key deliverables emerged: 1) a variety of outreach materials to recruit students for the college's online Marine and Logistics training courses; 2) a collection of YouTube videos used for online course enhancement; and 3) an array of interactive 3D and panoramic photos for two Marine Technology courses.

"We're focused on providing a competency-based education that prepares students with the skill sets they will need for their occupation," says Stan Wallace, Marine Technology Program Coordinator. *"WKCTC utilizes a "Learn on Demand" format which makes it easier for students to complete their online coursework and obtain an industry credential. These enhancements have made our programs of study more engaging to students."*

In response to industry needs, WKCTC has incorporated a certification from the Manufacturing Skill Standards Council (MSCC) into its Logistics Management program in response to growing industry interest in certified credentials. The college has incorporated these

credentials to the extent that if students transfer into the WKCTC logistics program with this MSCC certification, they will receive credit for the relevant courses.

"We're also working with area high schools on our Logistics course," says Dr. Tena Payne, Vice President for Academic Affairs. *"High school students can take our online Logistics coursework, get college credit and emerge with two Manufacturing Skills Standards credentials, Certified Logistics Technician and Logistics Associate."*

Next Steps

WKCTC partners with other colleges in Kentucky to deliver its online curriculum and expand its reach. *"We continue to build partnerships with other schools in the KCTCS system,"* says Troy Courtney, Director, Inland Marine and Logistics Training Institute. *"We have Memoranda of Understanding (MOUs) with KCTCS schools in Jefferson, Maysville, Henderson, and Ashland. We offer our online program, a program those schools don't offer. They enroll the students, and we deliver the core courses; they get to increase their enrollment by using our program."*

WKCTC would like to formalize MOUs with other members of the MRTDL Consortium as well, once the challenges of using different technology platforms are resolved.

Related Links

West Kentucky Community and Technical College inland Marine and Logistics Training Institute:
https://westkentucky.kctcs.edu/academics/academic_divisions/at/ilmi/

The following products were produced with federal funds and are available on Skills Commons:

WKCTC: Inland Marine & Logistics Institute Outreach Materials

https://www.skillscommons.org//handle/taaccct/10356

This product package contains a variety of outreach materials to recruit students for the college's online marine and logistics training courses.

WKCTC: Interactive 3D and Photos for Marine Technology Courses

https://www.skillscommons.org//handle/taaccct/10357

This product consists of a collection of hyperlinks to interactive 3D and panoramic photos that are utilized in Marine Technology courses.

WKCTC: Inland Marine & Logistics Institute YouTube Course Enhancement Videos

https://www.skillscommons.org//handle/taaccct/10358

This product consists of a collection of videos used for online Marine and Logistics training course enhancement as well as other general education coursework. The link which follows directs the end user to a YouTube playlist which contains course enhancement videos. https://www.youtube.com/playlist?list=PLTFeooS0Xe-Sm4boE3Vxjlw60Xe899eUQ.

CAEL

Introduction

The Council for Adult and Experiential Learning (CAEL) is one of two technical service providers for the MRTDL Consortium. The organization has taken a dual approach to this task: 1) development of products intended to assist all MRTDL participant colleges fulfill their grant responsibilities, and 2) provision of onsite consulting upon request of individual MRTDL partners to address specific concerns and issues.

Approach

CAEL has produced five product deliverables: 1) St. Louis Community College Logistics Pathway; 2) Delgado Community College Prior Learning Assessments; 3) Delgado Maritime Career Paths; 4) TDL Pathways Models; and 5) TDL Credentials Research. Although the first three products were developed for specific colleges, all members of the MRTDL consortium can benefit from these five products. In addition, CAEL has provided onsite consulting to ASU Mid-South, Southwest Tennessee and Hinds Community Colleges.

"In undertaking this project, we have placed particular emphasis on the establishment of policies and procedures for Prior Learning Assessment (PLA)," says Joel Simon, Vice President, CAEL. *"Assessing students' prior learning experiences is a more efficient way to get them a credential than requiring them to sit through a class. Many trade-impacted workers have attained the knowledge, skills and abilities outside the classroom that would align with college level learning outcomes."*

Prior learning assessment can offer many benefits to students, such as the time and cost savings by earning a degree faster with the opportunity to receive credit for knowledge and work experience gained outside the traditional classroom. Employers can benefit by an increased pipeline of qualified workers, ready to start their careers.[36]

[36] Maritime Assessment, CAEL

[37] *"In the course of our research, we discovered that PLA is often 'the best kept secret' on campus,"* says Mr. Simon. *"If an institution has a PLA policy in place, faculty may not understand it, or choose not to implement it. Colleges need to market PLA policies to current and prospective students as well as provide professional development for faculty to inform them of this option and its advantages."*

In support of these objectives, CAEL developed the Maritime Assessments Report for Delgado Community College. This review and analysis of learning outcomes and assessment methods in the college's Maritime program was aimed at identifying whether and to what degree existing assessments could be utilized as PLAs. This review resulted in recommendations for how existing tools can be used in PLAs and how additional methodologies are needed in order to maintain appropriate academic standards while facilitating students' use of prior learning to advance towards completion more efficiently. Six overall recommendations, potentially applicable to the other MRTDL member colleges, are documented: 1) double-check alignment of final exams with course content; 2) revise/add learning outcomes; 3) increase cognitive level

[37] Source: CAEL – Prior Learning Assessment Presentation

of learning outcomes; 4) make assessments an integral part of instruction; 5) expand types of assessments used; and 6) revise checklists to address criteria for proficiency.

Next Steps

"Our plan is to institute self-assessments for all MRTDL colleges to determine if they have a PLA policy in place and if it has been actualized," says Mr. Simon. *"The MRTDL Consortium needs to look at each other's policies to develop a more expansive, consistent vision for PLA among all the member colleges. We also plan to create a process map to enable the MRTDL colleges to support the achievement of this goal."*

Related Links

The following products were produced with federal funds and are available on Skills Commons:

CAEL: Transportation, Distribution, and Logistics Credentials Research

https://www.skillscommons.org//handle/taaccct/10413

This research reviews various credentials and credentialing strategies, from an array of entities, related to Transportation, Distribution, and Logistics programming. The entities include industry associations, educational institutions and military organizations.

CAEL: Career Pathways & Competencies in the Maritime Industries

https://www.skillscommons.org//handle/taaccct/10406

This review and analysis of occupations and careers in the maritime industry is intended to provide current and prospective students with information on job and career opportunities in the maritime industry. It also identifies how aligned skills and competencies can be applied across industries to position participants for career success and application of prior learning.

CAEL: Delgado Community College Maritime Prior Learning Assessments Opportunities

https://www.skillscommons.org//handle/taaccct/10408

This review and analysis of learning outcomes and assessment methods explores to what degree the existing assessments could be utilized to evaluate prior learning. The review resulted in recommendations of how existing tools can be used in Prior Learning Assessment and how additional assessment methodologies are needed in order to maintain appropriate academic rigor, authenticity and reliability while facilitating students' use of Prior Learning to advance towards completion more efficiently.

CAEL: Transportation, Distribution, and Logistics Pathway Models Research

https://www.skillscommons.org//handle/taaccct/10409

This research report reviews various credentials and credentialing strategies related to Transportation, Distribution, and Logistics (TDL) programming. It also outlines the TDL Pathways Models.

CAEL: St. Louis Community College Logistics Pathway

https://www.skillscommons.org//handle/taaccct/10410

This review and analysis of occupations and careers in the warehousing/logistics industry provides current and prospective students with information on job and career opportunities in the industry in the St. Louis region. It correlates credentials, ranging from certification to graduate degrees, to specific jobs in the Transportation, Distribution, and Logistics sector.

INSIGHT

Introduction

The National Network of Sector Partners (NNSP), an initiative of the Insight Center for Community Economic Development, is one of two technical service providers for the MRTDL Consortium. Its overall goal was to help the member colleges develop and implement individual sector strategies for the Transportation, Distribution and Logistics industry.

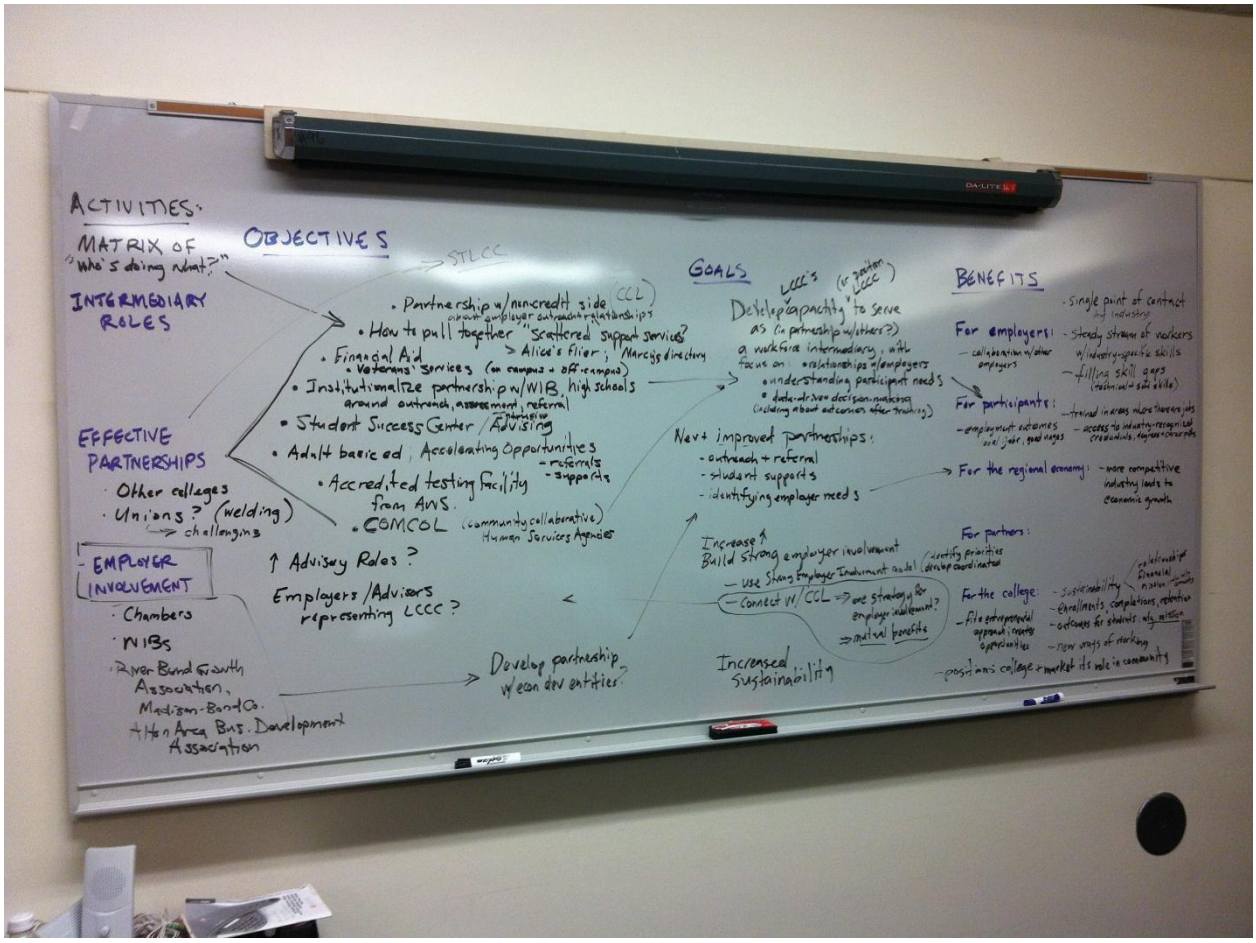
NNSP utilized multiple strategies to fulfill this role: 1) development of products intended to assist all MRTDL colleges fulfill their grant responsibilities; 2) provision of in-person and web-based training on sector strategies; and 3) assistance in developing action plans to guide development and implementation of these strategies. NNSP also provided ongoing customized consultation to each of the nine Consortium member colleges.

Approach

"As a technical assistance provider, we focused on building three core capacities essential to the sector approach," says Jim Torrens, Associate Director for Workforce Innovation and the NNSP. *"These are strong employer involvement, effective partnerships and intermediary roles, the latter being the functions that are necessary to make a sector strategy work."* Three of NNSP's product deliverables directly support these core capacities: 1) Employer Involvement Presentation; 2) Program Planning Resources; and 3) Partnerships Presentation. In addition, NNSP has developed four additional product deliverables, specifically a Building Work Readiness Webinar, two annual reports and a final report.

"The Program Planning Resources product contains an Action Planning Template which provides a conceptual framework for sector strategies," says Mr. Torrens. *"We also offered online training on the use of this tool. Our intent was to have the member colleges use it as a means to work from vision to achievement of goals relative to the three core capacities. It's essentially a tool for managers to decide what they want to do and how they want to implement their goals."*

The template captures objectives, activities, responsibilities and timelines for implementation of the three core capacities. NNSP conducted site visits at all nine colleges and worked with each college to refine their action plans and interviewed Consortium members about common and replicable elements of their sector strategies. The organization shared these materials with the Consortium's member colleges and used them to support the technical assistance provided. The White Board graphic below depicts an example of NNSP's Action Planning Template process.



Return on Investment

Employer Engagement. *"One of our biggest successes has been with Paschall Truck Lines,"* says Pete Selden, Vice Chairman, Workforce Education, ASU-Mid-South. *"They had a manager there who has agreed to adjunct teach in our Diesel Maintenance program. He's looking at it as a way to recruit talent from the program. I think at the last count he had hired eight students in the last year out of our program. He continues to adjunct teach in the evenings. He sees what kind of work ethic these students have, what they bring to the table. He can work around their schedules. That's a real successful approach – I wish more would take that same approach to recruitment. It allows us to see how things are done at a particular company. There are times when he has the whole class over at his shop; he may have a truck in with a certain problem that we don't have and he wants them to see it."*[38]

Effective Partnerships. West Kentucky Community and Technical College (WKCTC) has also partnered with K-12 education, teaching its Introduction to Logistics Management course to students at a high school near Louisville, Kentucky, an area with a high concentration of logistics employment. According to West Kentucky's Troy Courtney, *"We're reaching out to more schools about dual-credit. We want to do it, the schools want to do it, and the companies are expressing concern about the number of young people leaving the area who might want to go into the field. The Maritime industry is described as the silent industry; people aren't familiar with it. We're working hard with our high school and middle school partners to take advantage of that; we want to get that career pathway out in front of students."*[39]

Intermediary Roles. In New Orleans, Delgado Community College established itself in an intermediary role with the April 1, 2016, launch of the Center of Excellence for Inland Waterways, a 19,000 square foot facility with three simulators and other state-of-the-art equipment. The building serves as a physical embodiment of the college's commitment to lead the way in development of solutions for inland waterways workforce needs and, in the words of

[38] NSSP, Sector Strategies in the MRTDL Consortium, Final Report, https://drive.google.com/drive/folders/0B1jEwj4if4KHcElYZmhXeloyTzQ

[39] Ibid

Delgado's Rick Schwab, *"to make us the center of excellence and the preferred training provider in the Southeast."*[40]

Next Steps

"Institutionalizing the Consortium colleges' action plans is key to sustaining the MRTDL sector strategy initiative," says Mr. Torrens. *"After grant funding ends, the colleges are committed to a 'systems change' that will have a long standing effect now and in the future."*

Related Links

The following products were produced with federal funds and are available on Skills Commons:

INSIGHT: Sector Strategies in the MRTDL Consortium – Final Report

https://www.skillscommons.org//handle/taaccct/10398

This report describes the common and replicable elements of sector strategies that the Mississippi River Transportation, Distribution, and Logistics (MRTDL) Consortium and its nine member colleges have pursued over a three-year period from October 2013 through September 2016. The report provides valuable models and lessons learned to colleges within the Consortium and around the country, as well as to the U.S. Department of Labor, the workforce system, and its partners as requirements of the Workforce Investment and Opportunities Act (WIOA) regarding how sector partnerships are implemented.

INSIGHT: Sector Strategies in the MRTDL Consortium – 2015 Report

https://www.skillscommons.org//handle/taaccct/10399

This report describes the common and replicable elements of sector strategies that the Mississippi River Transportation, Distribution, and Logistics (MRTDL) Consortium and its nine member colleges have pursued over a two-year period from October 2013 through September 2015. The report provides valuable models and lessons learned to colleges within the Consortium and around the country, as well as to the U.S. Department of Labor, the workforce system, and its partners as requirements of the Workforce Investment and Opportunities Act (WIOA) regarding sector partnerships are implemented.

[40] Ibid

INSIGHT: Sector Strategies in the MRTDL Consortium – 2014 Report

https://www.skillscommons.org//handle/taaccct/10400

This report describes the common and replicable elements of sector strategies that the Mississippi River Transportation, Distribution, and Logistics (MRTDL) Consortium and its nine member colleges have pursued over a one-year period from October 2013 through September 2014. The report provides valuable models and lessons learned to colleges within the Consortium and around the country, as well as to the U.S. Department of Labor, the workforce system, and its partners as requirements of the Workforce Investment and Opportunities Act (WIOA) regarding sector partnerships are implemented.

INSIGHT: Presentation – Sector Strategies, Effective Partnerships, Intermediary Roles, Action Planning

https://www.skillscommons.org//handle/taaccct/10401

This presentation focuses on guidance for implementing successful sector strategy action plans. It is organized by four key topic areas: Effective Partnerships, Intermediary Roles, Employer Involvement and Action Plans.

INSIGHT: Project Management and Implementation Tools – Sector Strategy Action Planning

https://www.skillscommons.org//handle/taaccct/10402

This product contains documentation to assist grantees in developing action plans to guide implementation of sector strategies. It includes presentations, an action plan template, a site visit outline and a webinar PowerPoint.

INSIGHT: Presentation – Employer Involvement in Sector Partnerships

https://www.skillscommons.org//handle/taaccct/10403

This presentation addresses specific strategies for achieving successful employer involvement in sector partnerships. It contains a detailed employer engagement model to increase placement outcomes and quality by maintaining, growing and developing employer relationships.

INSIGHT: Webinar – Building Work Readiness

https://www.skillscommons.org//handle/taaccct/10404

This webinar, and accompanying PowerPoint presentation, focus on strategies to develop the work readiness of program participants. The discussion and presentation address three key components of work readiness: definition, assessment and building.