

2018-19 TEACHER IN THE WORKPLACE GRANT

***NURTURING TOMORROW'S WORKFORCE
TODAY IN CENTRAL PA***



PROJECT NARRATIVE

April 25, 2018



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SECTION 1: PROJECT APPROACH AND MANAGEMENT PLAN

Statement of Purpose

Nurturing Tomorrow's Workforce Today in Central PA will build teacher knowledge in careers that are available within the Central PA Workforce Development Area in order to develop curriculum components that enhance and better prepare students for viable careers.

Overview

The overall goal of this grant proposal is to provide increased opportunities for educators to have real world workplace experiences that inform their teaching and guidance to students. To accomplish this goal, the Central Susquehanna Intermediate Unit (CSIU) in partnership with the Central PA Workforce Development Corporation (CPWDC) proposes to develop two **Academic-Year Cohort Programs** for educators that allows them to engage with multiple local business partners and create curriculum components to enhance career-supporting classroom opportunities for students.

Through the proposed initiative, teachers will benefit from on-site learning in multiple work environments, and then integrate and connect their learnings on desired workplace skills into their curriculum and classroom instruction. The program will include at least 40 hours of total contact time with the educators, including preparation, orientation, on-site experiences, and time to develop lesson plans and update classroom curriculum.

Educators will apply for acceptance into the program, and accepted teachers will be expected to share their experiences and action plans with their colleagues. Additionally, lesson plans and ancillary materials created by educators will be housed online and made accessible to all participants. See *Schedule of Activities* for additional details.

The Need

Companies throughout the Central region are coping with a skills gap. Industry leaders from both the region's Advanced Manufacturing and Healthcare Next Generation Sector Partnerships have identified a lack of available skilled talent as one of the top challenges they face, and one that is increasingly constraining their ability to grow and compete. They have specifically identified several High Priority Occupations (HPOs) where demand for talent greatly exceeds supply, including nursing assistants, LPNs and RNs in healthcare and electro-mechanical and industrial engineering technicians in manufacturing.

To meet current and future workforce needs, more local students need to have an increased awareness of the demand and potential for these occupations, and pursue training that prepares them for these careers. For this to happen, educators at all levels need to have a better understanding of in-demand occupations, the skills necessary to succeed in the current workplace, and how the subjects they teach connect to the world beyond the classroom.

Career Pathway Focus

The proposed initiative seeks to match educators with the most in-demand and fastest growing jobs in Central PA. These include advanced manufacturing and healthcare, two industries in which CPWDC recently established new Next Generation Sector Partnerships.

The advanced manufacturing sector remains one of the top industries in the region. In the 9 county region that CPWDC serves, there are 34,500 manufacturing jobs, accounting for 12% of the workforce.¹ Top career pathways in this sector included on the 2017 Central Workforce Development Area High Priority Occupations (HPO) List include Civil Engineers, Industrial Engineering Technicians, Electro-Mechanical Technicians, and General & Operations Managers.

Healthcare also remains one of the Central PA region's top industries. For example, there are expected to be 587 new openings for Nursing Assistants over the next 5 years, with the total number of jobs growing 7.7%. Likewise, Licensed Practical Nurse positions are expected to expand by 7.5% in the region (349 new openings).² Other top career pathways in this sector included on the 2017 WDA HPO List are Registered Nurses, Emergency Medical Technicians & Paramedics, Licensed Vocational Nurses, and Medical Records & Health Information Technicians.

Along with workforce challenges such as finding enough qualified employees, both industries also face the challenges and opportunities of rapidly advancing technology. These new technologies are changing the workforce needs of employers and the expectations they have for the skills that their future talent will possess. Getting educators more familiar with these evolving expectations will help teachers better prepare their students for these future opportunities.

¹ Source: Economic Modeling Specialists, Incorporated 2014.2 Class of Worker; QCEW Employees, Non-QCEW Employees & Self-Employed

² Source: Economic Modeling Specialists, International 2017.2 Class of Worker; QCEW Employees, Non-QCEW Employees & Self-Employed

Program Goals

The overall goal of this grant proposal is to provide increased opportunities for educators to have real world workplace experiences that inform their teaching and guidance to students. New lesson plans and ancillary materials will be created and made accessible to all participants. In doing so, educators will help students develop awareness of opportunities within their own communities. Assisting educators in recognizing the connection between the content they are learning and those opportunities will also help students make informed course selections as they begin to recognize how their individual interests interface with those opportunities.

Specific indicators that will be reported on quarterly reports include:

| Goal | Indicators | Success |
|---|---------------------------------|---|
| Increase the number of educators that have real world workplace experiences | Number of educators engaged | At least 46 educators engaged |
| Increase the number of new lesson plans and ancillary materials created and made accessible to all participants | Number of new resources created | At least 138 new resources are created and shared |
| Increase the number of businesses participating in Teacher in the Workplace events | Number of companies engaged | At least 24 companies are engaged |

Learning Outcomes

This program aligns to the PDE Career Education and Work (CEW) Standards which seeks to help students explore and understand the world of work. With this understanding, students can identify potential careers, envision career pathways, and understand educational and/or pre-requisite requirements. The *Nurturing Tomorrow's Workforce Today in Central PA* program will expand teacher knowledge of the local work environment and its rich opportunities which can be developed into engaging lessons.

In March, after educators have concluded their visits to businesses, educators will meet as a group to discuss what they learned during their interaction with the businesses and develop lesson plans that use real-world work situations to teach academic content. Particular emphasis will be on soft skills in the workplace and effective communication as these are often identified as areas of concern by employers. In addition, participants will have an opportunity to discuss how the data they collected and the lessons they learned might impact other school routines such as student course selection, research on post-secondary education or training, and/or

senior exit interviews. Additional considerations will be made for schools who operate Pathway Models and/or provide their own NOCTI programs in addition to those offered by their local CTC.

Schedule of Activities

The proposed program will be open to all public K-12 educators in the CPWDC region and will include at least 40 hours of contact time (i.e, orientation, visits, and lesson plan writing). Educators may participate as an individual or as part of a team, and all will participate in group discussions. The planned schedule includes:

JULY - SEPTEMBER 2018

Recruit educators; Recruit businesses; Create Google Folder

OCTOBER 2018

Pre-Program Orientation: Orientation will include a 2-hour introductory session where educators receive reading materials, the program schedule, and select the business(es) they would like to visit. This activity will occur via a Zoom video conference.

Day 1 - Morning: Educators take a pre-assessment on the Pennsylvania CEW Standards and career opportunities in the CPWDC region. Educators then review the CEW Standards, engaging in activities that deepen understanding of these standards and their application.

Day 1 - Afternoon: Educators will receive professional development using *Engineering by Design™* (EbD™). Using constructivist models, educators will learn concepts and principles in an authentic, problem/project-based environment. Through an integrative STEM environment, EbD™ uses Science, Technology, Engineering, and Mathematics as well as English-Language Arts to help students understand the complexities of tomorrow.

OCTOBER 2018 - FEBRUARY 2019

Workplace Visits (3 days per educator): Each educator will be required to select three (3) full day or six (6) half-day or a combination that equals three full days of visitations from among multiple opportunities scheduled from late October through February at various sites throughout the CPWDC region. This will provide educators with flexibility and enable businesses to better meet the needs of educators. Through the Business Services Team, CPWDC will secure workplace opportunities for educators and, with the project facilitator, create an agenda and sign-up for the educators. During each visitation, educators will tour the local facility, learn about several careers, interview employees, and attend presentations. A focus will be on what educational background and workplace attributes are required to be successful at the company today and in the future. Throughout the visit, educators will seek to identify

how their newfound knowledge connects to the CEW Standards and how that can best be conveyed to students. Educators will document their experiences and thoughts in a journal.

MARCH 2019

Curriculum/Unit/Lesson Plan Writing: Educators will convene to create lessons that can be embedded into the curriculum and articulate their impact on student understanding of the CPWDC work environment. EbD™ tools will be utilized to create a robust set of lessons that will support students in identifying potential careers, envisioning career pathways, and understanding educational and/or pre-requisite requirements.

Survey of Business Participants: Businesses will be surveyed to determine the value of the experience and if they would participate in future Teacher in the Workplace events.

Wrap-up: During the final professional development day educators will take a post-assessment on the CEW Standards and career opportunities in the CPWDC region. They will also create a SMART goal with of an action plan to determine next steps.

MARCH - JUNE 2019

In-district professional development by participants.

JUNE 2019

End-of-Year Survey of Participants; Report to Stakeholders (e.g., CPWDC, IUs, Districts, Business, Next Century Sector Partnerships).

SECTION 2: APPLICANT / TEAM CAPABILITIES

Lead Agency

Key partners for this proposal include the Central Susquehanna Intermediate Unit (CSIU) and the Central PA Workforce Development Corporation (CPWDC).

The CSIU, established in 1971, is one of 29 educational service agencies created by the State Legislature to provide pre-K-12 curriculum and instructional expertise and resources including special education services. CSIU serves 17 school districts and numerous non-public schools in Columbia, Montour, Northumberland, Snyder, and Union counties. CSIU also has expertise in curriculum and professional development, workforce development, adult education, out-of-school youth, adult education, pregnant and parenting teens, and migrant education, among others. It is an active partner in CPWDC's Healthcare Next Generation Sector Partnership.

CPWDC is the local Workforce Development Board covering the 9 county region of Central PA. It has substantial experience managing grants that engage businesses to help enhance the region's workforce. In the past three years these have included the 2016 and 2017 Business Education Partnership Grants, the 2015 and 2016 Strategic Innovation Grants, the 2015 Sector Partnership National Emergency Grant, the 2016 Community Based Partnership for Workforce Services Grant, and two 2017 Next Generation Sector Partnership Grants. CPWDC will work with the region's PA CareerLink® Business Service Teams to identify companies interested in hosting educators and connect them to the proposed program.

Program Facilitator

Alice S. Justice M. Ed. will be the primary facilitator for *Nurturing Tomorrow's Workforce Today in Central PA*. Ms. Justice is a consultant with 34 plus years of experience in education, most recently from 1993 to June 2018 as a school counselor. Ms. Justice has been a consultant for the Pennsylvania Department of Education since 1995 working on the Career Leaders Network, a consortium of educators working to further implementation of the Career Education and Work Standards. Ms. Justice has worked with the CSIU, Junior Achievement (JA) and Pennsylvania College of Technology. She has co-authored a curriculum for JA, facilitated a STEM Camp for girls for the last six years, and planned and delivered a variety of professional development programs, primarily focused on the Career Education and Work Standards and, most recently, the PA Future Ready Index.

Dr. Bethann Dudley-McCain, CSIU Curriculum Director, will supervise Ms. Justice. Dr. McCain is the lead facilitator for the CSIU's College and Career Readiness initiative which works with 17 districts and others to fully implement the CEW Standards and Act 339 requirements.

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|---------------------------------------|---|
| Dr. Bethann Dudley-McCain | Phone: 570/523-1155, Ext. 2219 |
| Curriculum Director | Cell: 814/577-6992 |
| Central Susquehanna Intermediate Unit | Email: bmccain@csiu.org |
| 90 Lawton Lane | |
| Milton, PA 17847 | |

Fiscal Agent

CPWDC will serve as the fiscal agent, and will ensure that all financial status reports are accurate and submitted timely. CPWDC's Executive Director, Erica Mulberger, and Finance Manager, Brooke Gessner, will oversee all financial aspects of the grant including monitoring of contracts and payments to ensure there are no disallowed costs.

Local Support

CPWDC's nine county region overlaps several Intermediate Units. Columbia, Montour, Northumberland, Union, and Snyder are served by the CSIU. Lycoming County is served by BLaST IU17; Mifflin County by Tuscarora IU11, and Centre and Clinton Counties by Central IU10. All have agreed to work together on *Nurturing Tomorrow's Workforce Today in Central PA* to accommodate educators and provide career diversity. The CSIU's five counties and Lycoming County will form one cohort with Centre, Clinton, and Mifflin counties in the far west forming a second cohort. In FY 2017-18, Dr. McCain was the Curriculum Director at both the CSIU and CIU10 and is very familiar with both regions. Beginning July 1, she will be the full-time Curriculum Director at the CSIU.

Local industry is also supportive of increased engagements between companies and educators. Building the talent pipeline was identified as a top priority for the both Advanced Manufacturing and Healthcare Next Generation Sector Partnerships recently launched in the Central region. Business leaders in both sectors have specifically proposed developing partnerships and coordinating with local colleges and high schools to generate increased interest in locally available career pathways.

Business/Industry Partners

In partnership with the Business Service Teams of local PA CareerLink® offices, CPWDC regularly identifies businesses for *Student in the Workplace* tours, and has organized *Educator in the Workplace* tours in the past. Building on these experiences and utilizing the Advanced Manufacturing and Healthcare Next Generation Sector Partnership networks, CPWDC has already identified 23 business/industry partners in support of the proposed program with many of them already committing to host teachers. The following companies have already committed to hosting teachers:

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|--------------------------------|------------------------------------|
| Albright LIFE Lycoming | Lewis Lumber Co. |
| AristaCare @ Loyalsock | Patriot Metal Products |
| Autoneum North America | Primus Technologies |
| Bingaman Lumber | Riverwoods Senior Living Community |
| Brush Industries | SEKISUI-SPI |
| Elmcroft | The Williamsport Home |
| Evangelical Community Hospital | Thermal Product Solutions |
| GAF | UPMC Susquehanna |
| Girton Manufacturing | Videon Central, Inc. |
| JDK Management, Co. | |

SECTION 3: POTENTIAL IMPACT AND SUSTAINABILITY

Participating Educators

This opportunity will serve forty-six (46) public K-12 educators in the CPWDC region, who will share their learning within their districts' footprints. The program will be marketed within the participating Intermediate Units and via school districts through curriculum, principal, educator and superintendent meetings, as well as through flyers and on social media.

Professional Development Credit

Forty (40) Act 48 hours will be provided to participating educators through the CSIU.

Sustainability

As part of the application process, teachers will explain how they will provide professional development to other K-12 educators within their district. Teachers will also discuss how they might leverage their experiences for their students. For example, scheduling a class field trip to the site the educator visited or recommending job-shadow or internship opportunities for students. These opportunities will go beyond Teacher in the Workplace and guarantee that these experiences directly impact the students. Teachers will share their curriculum modifications through a Google folder which all participants will be able to access and use in their classroom. All participating teachers will be required to create an action plan that supports sustainability.

Program Evaluation Process

The evaluation will include:

- a short survey from each educator about each site visited (i.e., site visited, industry sector, occupations/careers new to them, attributes or education needed for the occupation/career, recommend this site visit to others).
- end-of-year survey on how site visits, colleague collaborations, and the Google folder informed and formed their instructional practices and how those instructional practices enriched and engaged student learning.
- survey of participating businesses on the value of having educators visit their site(s) and their desire to continue to do so.

The data gleaned from these surveys will help to evaluate the effectiveness and impact of *Nurturing Tomorrow's Workforce Today in Central PA*. It will also be used to frame and sustain future Teacher in the Workplace activities.