PUEBLO COMMUNITY COLLEGE

BACKGROUND

The Perkins Field Council was attracted to this Local Plan for multiple reasons:

- Tutoring Program to improve retention and completion;
- Alignment with Plans of Study;
- Professionally developed videos demonstrating how math and science are used in careers;
- Relationship with business and industry via advisory councils that meet four times per year;
- Partnership with Manna Food Kitchen in Durango supporting the Culinary Arts program and providing pathways to self-sufficiency for the homeless population as well as qualified workers to support the active tourism industry in southwest Colorado;
- Overall 47 CTE programs at Pueblo Community College.

Pueblo Community College has developed four goals which directly correlate to the Colorado CTE strategic plan. The goals contain the principle elements of the state plan strategies and ties to the College’s own strategic plan. All projects/programs selected for CTE Perkins funding tie to these goals. The funded projects/programs selected for funding are identified for their impact upon classroom instruction and innovation. New CTE programs such as the Water Quality Management Program have been identified as a result of workforce needs, in collaboration with business and industry, with a plan for implementing the program in the Fall semester of 2016. Regional hospitals reached out to the College to provide programs for the Surgical Tech program when another surgical tech training facility closed.

The College president, Dr Patty Erjavec, has her “ear to the ground” out in the communities being served by Pueblo Community College. Dr. Erjavec is very approachable and believes when there’s a will, there’s a way. She brings back to her staff all that she hears. When there is alignment with the College’s vision and strategic plan, implementation can occur, especially when business, industry and community partnerships exist. And there are many that exist with the College.

The following programs/initiatives have been recently implemented or are in the development stages in response to identified or expressed community needs:

- Water Quality, new program;
- Surgical Tech program (in its second year)
- Medical Assistant program
- Engineering Technology program
- Manna Soup Kitchen project
- STEM Center project
- The Learning Center (tutoring)
Most Interesting to the Perkins Field Council Visiting Volunteers

The Council visiting team was especially impressed by the excellent partnerships and other collaborations, even synergy, between Pueblo Community College (PCC) and the communities, businesses and industries it serves. The College is truly focused on continuous, incremental improvement AND it is possibly the most responsive recipient of Perkins funds when it comes to serving its region. Because of the College’s responsiveness, it has worked collaboratively with St. Mary Corwin Hospital to create simulation scenarios in a REAL hospital setting. There is a definite WOW factor there. In addition, PCC also has a house across the street from the hospital where multiple CTE programs perform simulations. Every piece of equipment for which the College uses Perkins dollars is leveraged (and accounted for) with other dollars to benefit the most CTE programs possible.

The Manna Soup Kitchen project now exists because of an identified homeless community served by the Manna Soup Kitchen in Durango and businesses that need qualified workers. A state of the art kitchen opened at Manna Soup Kitchen. The community wanted to lend a hand up. People being served by the soup kitchen can earn an entry level Culinary Arts certificate through the College that makes them eligible to be employed in the tourism market where there is a need for qualified people.

When students enter The Learning/Tutoring Center, they have to sign in. They also have to sign into the STEM Center. Because they do, PCC is able to account for the number of hours/students in each center and each center, by design, is there to increase student retention and completion. The Council visitors were astonished to learn that the tutoring program was used 55,000 hours this year and that number is increasing!

Challenges

Some of the challenges that the College is working with include:

- Alignment between secondary and postsecondary;
- Remediation of students matriculating;
- The industry is desperate for workers. Employers are hiring students before graduation/certification which meets the goals of the students who want to increase their income, but reduces the retention and completion rates that the College is attempting to accomplish. Students often cycle back. Industry partners are trying to help.
- Sustainability: Grants exist and are available for new programs, but cannot be sustained. There are issues with equipment warranties and training to currency with emerging technologies/new equipment. Perkins dollars are critical for the sustainable pieces.
- Silver tsunami: People are leaving the workforce for retirement and there is no one to replace them.

Students Served

There is much diversity around the region. Using a “cookie cutter” approach is not feasible. PCC is very selective when implementing new programs/projects. The College looks at data
and does feasibility studies with a critical eye focused on ramping up, ramping down, the necessities of retooling, equipment expense, and more Leaders at Pueblo Community College understand the necessity to be nimble within parameters of wise use of resources.

### Able to Implement/Acquire with Perkins Funding

The College was able to support and advance new programs and initiatives by temporarily funding some personnel costs:

- Water Quality Program Coordinator
- Director of Simulation for the Health Simulation Center
- Department Chair for Surgical Technology
- Adjunct instructors for Culinary Arts and the Manna Soup Kitchen project
- STEM Center Director
- Learning/Tutoring Center Director

All special tools and equipment is purchased to enhance the big picture, contributing to student learning and competencies. Efficient and effective use of tools and equipment is a major College goal. Nothing is purchased that does not meet these criterial and almost all equipment/tools can be used across multiple programs/projects to enhance efficiencies and simulation. There is in-depth communication between programs/proposals for all future planning. Everyone involved in planning pulls together as a team to ensure that final budgeting and plans are in alignment with the College’s strategic plan and vision.

Twice each year, department chairs meet for an idea session and to dream! One example of a dream realized is the implementation of a cadaver lab that includes an Anatomage™ anatomy visualization system that helps students better understand the human anatomy. It is used with all students who are engaged in health-related programs, including dentistry.
Pop Quiz – Determine which elements of the human anatomy are being portrayed by the anatomy visualization system in the following photos:
Pueblo Community College Cadaver Lab

For professional development opportunities, the Welding and Automotive programs bring in industry speakers to demonstrate state-of-the-art technology and techniques. This information is also used to guide equipment purchasing choices and strengthens the relationship between the college and the community.

The STEM Center has instituted a speaker series that brings in professionals to share cutting edge developments in various career fields.

Pueblo Community College STEM Center activities – robots.
College CTE personnel participate in the Colorado CTE Conferences such as CACTA and CACTE. They also funded faculty for a Culinary Arts Conference, especially for re-accreditation self-study and to keep current with changes in the field.

All departments/CTE programs focus both on concepts as well as applications. Real-life simulations are actively implemented. Not purchasing enough staff training in the use of newly acquired technologies may be wasteful. Time is wasted when staff has to train themselves before the technologies’ uses can be maximized for the benefit of students. Also, funding has to be available for the purchase of warranties on equipment. Additionally, training about equipment maintenance is key to equipment efficiency goals.

The Welding Program is teaching a new type of welding (pulse). It has required change in how the welding machines are set-up, per industry. Tutors are being used in the actual welding process in order to expedite student instruction in implementing new set-up protocols.

**KEY INNOVATION(s)**

Over the next five years, 50% of the CTE programs will develop professionally filmed video clips with faculty, students or business/industry partners on how math and/or science is essential in careers. The video clips will then be played on the College’s internal TV network, on its public television channel and shown to high school students during college entrance, career advising, and/or career planning events.

The College currently provides a great and unique video about all the career pathways in Health Sciences and Public Safety available at Pueblo Community College. It is a pleasure to
watch and provides so much information about careers in a user-friendly format. (https://www.youtube.com/watch?v=fhW-USKnktA&feature=youtu.be)

Perkins funds are used to support tutoring for CTE students in the Learning Center which is open to all students. Students sign-in to be tutored so that the use of Perkins funds and other grant money that support student learning, completion and retention are carefully monitored. Tutoring is well used at the College with more than 55,000 hours tracked this year. That number has been steadily increasing on an annual basis since the Learning Center opened. So far, students have a 93% pass rate for the completed courses in which CTE students utilized tutorial services.

The Learning Center, tutorial service, at Pueblo Community College

A four-month market survey was conducted prior to the implementation of the Manna Soup Kitchen Culinary Arts Program in Durango in which a new commercial kitchen opened. Classes are open to Manna clients, many of whom are homeless, to provide them with job skills to become self-sufficient. Southwest Colorado is a major tourism area. There is a regional need for students with certificates in Beginning Production and Baking. Attainment which will give certificate completers marketable skills in an area with a large number of restaurants, bars and lounges, resorts, cafes, delis, coffee shops, and other institutional food services. There are both jobs for completers and community support for completers.

The College focuses on project-based learning, conceptual and applied, and provides clinical simulation in their health-related and automotive related programs. Purchased equipment for one career cluster area becomes available to other disciplines within that cluster as feasible.
The leadership at Pueblo Community College is very clear about being open to exploring new ideas and building partnerships. The Learning Center and STEM Center are extraordinary. The partnership with St. Mary Corwin Hospital is magnificent. An entire wing in the hospital is dedicated to health-related education programs. The College has a house near the hospital where additional simulations take place for a number of health-related careers. A full-time Director of Simulation within the Health and Safety division has responsibility for the overall flow of the operation of the Simulation Center and the house.

The College’s current SIM Lab is housed in 4,656 square feet of space but has been expanded to an additional 11,923 square feet within the hospital. Enhanced simulated learning opportunities are being provided to: Nursing, Nurse Aide, Radiology, Respiratory Care; Medical Assistant; Physical Therapist Assistant; Occupational Therapy Assistant; Surgical Technology; Law Academy, Fire Science, and Emergency Medical Services.

Supplies for project-based learning, donated from partnerships.
KEY FACTORS TO IMPLEMENTATION

Special Training
Pueblo Community College recruits and retains the most highly qualified CTE faculty and staff available and provides 100% of new CTE instructors with a faculty mentorship program to facilitate transition to teaching from business and industry. The College requires all faculty to attend a minimum of two professional development in-service days throughout the academic year. Workshop topics include special sessions for CTE instructors about teaching methodologies and pedagogy in technical education.

Obstacles
The report notes list these challenges:
- Funding
- Qualified instructors and tutors
- Facility limitations
- Keeping current with constantly emerging technologies; training to use them; and equipment warranties

Support Systems
These elements help address challenges:
- Strategic planning
- Research
- Feasibility studies

This helps assure that whatever is implemented is the right thing to do and therefore will be sustainable when the grant money is gone. Another key to the College’s success is having a dedicated Perkins compliance person to coach the system.

Connections to Business, Industry, Labor Market Demand
Close connections to the Work Force Center and the Economic Development Board are key. Because of Pueblo Community College’s responsiveness to regional needs, many new businesses have moved to the area. Significant in-kind contributions are a result of these close connections, especially the space within St. Mary Corwin Hospital and contributions from Parkview Hospital. CTE Program Advisory Committees comprised of business, industry, and education members meet twice each year. Sometimes they meet as often as four times in a year and these committees bring many good recommendations to the table to expand CTE programming; recommend new equipment; and adopt new methods.

Other Financial Resources
Pueblo Community College applies for many large grants and has been very successful. The College applies for any and all grants that will strategically meet its mission including, but not limited to, the following funding:
- TAAC (Dept. of Labor grants)
RESULTS

Student Outcomes
The College strives for incremental, continuing improvements that trend positively. The data is always behind the expected outcomes. It has largely show success, attaining within 1.09% of its goal on two of the College’s goals: Connections to Secondary CTE and CTE Resources (Perkins postsecondary metric of Technical Skill Attainment) and Academic and CTE Skills (Perkins postsecondary metric of Certificates and Degrees). PCC came within 2.02% of another goal: Expand and Enhance CTE (Perkins postsecondary performance metric of Placement). Another College goal was exceeded by 2%: CTE Program Improvement (Perkins postsecondary performance metric of Non-Traditional Participation). The CTE programs fell short of the Perkins performance metric of Student Retention goal by 11.65% which is also part of the College goal of CTE Program Improvement. The College has already designed new strategies for improving student retention at the course/instructor level in CTE courses through the “First 4 Weeks Campaign” and work to further embed advising will have impact.

Combined outcome data for summer and fall 2014 shows that 95% of the completed courses for which CTE students received tutoring support earned a passing grade. CTE students received tutorial support for 487 courses they completed. Of those, students passed 463 of them. This pass rate is the highest since before Academic Year 2010. CTE students who received tutorial support passed their completed courses at a higher rate than non-CTE students (95% versus 90%). There is a high, 90% pass rate for students who pursue CTE Health Programs.

Student retention is particularly difficult. For example, in the welding programs many students are hired by industry prior to the students’ completions of certificates or degrees. Industry demands for workers with any skill level is high and the students’ need for income is high. Many students return to PCC for additional training, but the data are negatively skewed because of a high attrition rate. The good news is the welding program is successful and highly regarded. The bad news is it is such a good program that it brings students up to speed quickly thus students’ initially gained skills are attractive to industry.

Strengthened Programs
Perkins provides programs with the current equipment of the industry. It also supports professional development of faculty which is sometimes a reduced item in other budgets. It supports the personnel needed for tutoring and enhanced learning (The Learning Center and The STEM Center.)

- Amendment 50 (dollars from gambling)
- Space grants from NASA (through the College’s partnership with the University of Colorado)
- National Science Foundation
- Pueblo Community College Foundation
**Can Innovations Be Replicated**

Yes! Innovation is realistic when faculty, administration and staff:

- Are willing to learn new things;
- build relationships and partnerships in the community; and
- are open to new ideas.

**Words of Advice**

Recommendations shared with the Perkins Field Council visiting team include:

- Build a reputation for being responsive to community needs.
- Adopt a vision and strategic plan and be dogged in adherence to it.
- Build cooperative, collaborative, unselfish and passionate College personnel.
- Listen to the businesses, industries and communities in your service area.

**Additional Final Comments from the Visiting Team**

“This was one of the better visits I have had over the years.” “I totally agree. The comprehensiveness of PCC’s vision and adherence to its strategic plan is what makes everything so impressive.”