CTE Full Review
PALO VERDE COLLEGE

WELDING TECHNOLOGY
REPORTING FALL 2014 TO SPRING 2018

1. PURPOSE OF THE PROGRAM

"Palo Verde College provides opportunities for personal and professional growth to a diverse community of learners in an academic environment committed to student success and equity by supporting student achievement of basic skills, certificate, degree, university transfer, and career goals." PVC Mission Statement 01/2016

a. Describe the purpose of program and its mission.

The purpose of the Welding Technology program is to provide students with the necessary skills to work in an ever-expanding field. To this end, the Welding program provides students with the basic, entry-level skills, professional development opportunities for working technicians, and certification options.

Program courses are available to students enrolled in WEL certificate and degree programs, as well as other College programs and certificates. WEL courses are also available to others seeking to acquire or upgrade welding literacy skills for personal or career reasons. The WEL department also works collaboratively with Palo Verde High School to offer courses in the WEL field to qualified high school students during their traditional school day through concurrent enrollment.

The mission of the program is to promote rigorous curriculum and instruction, focusing on the technological components of welding systems as well as the complete identification and diagnosis of welding techniques, various welds, and welding platforms leading to certificate and degree completion and employment.

Associate of Science (Occupational) Welding Technology
The Associate of Science in Welding Technology is a two-year course of study designed to prepare students intending either to continue study at a technical school, or to enter the workforce. The Associate of Science Degree in Welding Technology include general education courses in English, Math, Speech, History, and Health that are, for the most part, articulated within the CSU system, and some are UC articulated as well, making them transferable within the state of California.

Certificate in Welding Technology

The certificate in Welding Technology is an 18 unit (minimum) course of study designed to prepare students to enter the workforce:

"The program of study in Welding Technology is designed to provide comprehensive occupational training in welding methods currently used in the welding fabrication industry. Students will learn the manipulative skills and the technical knowledge required to operate oxyacetylene, shielded electric arc, MIG, TIG, and semiautomatic flame cutting. They will be prepared for certification as required by employment in the welding industry." (Catalog, Certificate in Welding Technology worksheet).

Certificate of Career Preparation
These welding courses will provide an introduction to the discipline of welding technologies, guiding students through various methods and applications of welding. Upon completion, students will have the necessary knowledge that will assist them in seeking employment in the field of welding.

b. How has the program changed in the last two years? In major ways, minor, or no real changes to speak? Explain.

The Welding program at Palo Verde College has made significant changes since the last two-year update. The Welding Program offers a certificate of preparation through correspondence modality in Welding Technology. Students who are unable to attend "Brick and Mortar" classes at Palo Verde College, as well as incarcerated students are able to pursue an entry-level theory based certificate in the welding field. As of Spring 2018, CTE Welding courses were stopped from being offered at all CDCR Institutions due to potential duplication of other CDCR welding programs.

The Welding Program has also received Prop. 39 Clean Energy funding, which has allowed the Welding Program to update the Electrical connections in the Welding Lab, purchase energy efficient welders, and purchase a computer driven water-emersion CNC plasma table.

The Welding program has also been involved in Strong Workforce program funding and outcomes related to this grant. The Welding program has developed a second welding program and facility in the Needles community. This program is ran at the Needles High School. In addition, the Welding program has begun looking into certification for Industry recognized national certification (AWS) for students interested.

c. How does the program support the College Mission?

The program supports the overall mission of the College by providing high quality programming in a particular vocational area. WEL courses provide an opportunity for lifelong learning in that they offer the opportunity for professional development and

certification to working technicians. In addition, the Welding Technology Program offers training that is career oriented and supports the mission "Palo Verde College provide an exemplary learning environment with high quality educational programs and services. It promotes student success, lifelong learning and community development. Our goal is to create better futures for our students and our community."

2. POPULATION(S) SERVED

a. Describe the populations served by the program, identifying special populations, if any.

The Welding program is open to all interested Palo Verde High School and Palo Verde College District students, and students enrolling in correspondence education including incarcerated students. During the day, the program serves both high school students and adult students, while during the evening; the program serves primarily adult students.

The Welding Technology program serves two important and special populations.
First, the program offers credit courses to high school students who have an interest in vocational education, whether they see Palo Verde College's program as preparatory or terminal. The opportunity to gain welding skills for entry into the workforce or as part of a certificate program is not provided in the community through other agencies. Second, the program provides continuing education to working technicians. That training is not offered in the community through other agencies. In these two cases, the College serves an unmet community need.

All Perkins funded CTE Programs have core indicators which are negotiated with the Chancellor's office which relate to Non-traditional and special population students.

b. Describe other populations that should be served by the program and identify plans for serving them in the future.

While the Welding program does serve students of varying needs and interest, the program could enroll a greater number of working, adult students. Faculty identify that this population is currently underserved. The Welding Program will continue to attempt to serve incarcerated students through the new courses and certificates designed for these students. The WEL program plans to begin offering courses to incarcerated students at prisons that are not ran by the CDCR.

3. ACCOMPLISHMENTS IN ACHIEVING GOALS

a. Describe progress in achieving each goal outlined in the previous CTE Update, providing evidence documenting such achievements.

- **Continue offering concurrent enrollment courses**: During this program review cycle, the WEL program has increased the number of courses available to concurrently enrolled students. In addition, the WEL program now allows High School Sophomores to enroll in

the courses.

- **<u>Continue offering transportation to concurrently enrolled students</u>**: Transportation is still provided by PVC for concurrently enrolled students.

- **<u>Need for continued funding</u>**: The WEL program continues to be funded by various sources such as Perkins I-C and Strong Workforce.

b. Explain modifications, if any, of goals outlined in the previous CTE Update, providing evidence documenting such modifications.

   N/A

4. DEMAND FOR THE PROGRAM

Is the demand for the program high, adequate, or low? Support your answer with labor market data, advisory input, etc.

SOC Title	2015 Median Pay (Yearly)	2015 Median Pay (Hourly)	# Jobs 2014	Job Outlook 2014-2024	Employment Change 2014-2024
Welders, Cutters, Solderers, and Brazers*	$38,150	$18.34	397,900	4%	14,400
Assemblers and Fabricators**	$30,080	$14.46	1,834,000	-1%	-9,700

*Bureau of Labor Statistics, U.S. Depart. of Labor, Occupational Outlook Handbook, 2016-17 Edition, Welders, Cutters, Solderers, and Brazers, on the Internet at <u>http://www.bls.gov/ooh/production/welders-cutters-solderers-and-brazers.htm</u> (visited January 24, 2019).

**Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, Assemblers and Fabricators, on the Internet at http://www.bls.gov/ooh/production/assemblers-and-fabricators.htm (visited January 24, 2019).

<u>Data Sources</u>
Labor market and educational supply data compiled in this report covers the Inland Empire region. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor's Office Management Information Systems Data Mart, and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS).

The demand for the program continues as evidenced by the labor market demand in our region. In addition, the continued strong enrollment both by PVC students and PVHS students demonstrates how this program is in high demand. There will be a continued need for welders in our community as the agriculture industry and automotive fabrication needs trained and qualified welders each year.

5. EXTERNAL ISSUES, STRENGTHS, WEAKNESSES

a. Cite relevant legislation, Chancellor's Office mandates, VTEA, Tech Prep, CalWORKs, WIA, BIG career ladders, etc. that are contributing positive or negative factors for the program. Explain each mitigating factor and the impact on the program.

The Palo Verde College WEL Department offers most of its WEL courses during the Palo Verde High School traditional school day. Students at PVHS can take college courses concurrently during their school day at no cost. These high school students typically make up 60-80% of the enrollment in these courses. For this reason, PVC will need to continue marketing their programs to PVHS students and parents through events such as Career Day, Financial Aid events at PVHS Campus, and through other community events. Having a good working relationship with the Unified School District Administration and at the local high schools is vital to the success of this task. Transportation is typically paid for by Palo Verde College.

Continued support for transportation will be needed. Dialog regarding PVC's Calendar and the PV Unified School District Calendar will need to continue being addressed. Currently the acting CTE Coordinator/Professional Technologies Division Chair has created an academic calendar which better addresses the needs and vision of each of the concurrent enrollment programs at Palo Verde College. Support from PVC Administration and PVHS Administration has already occurred. The goal is to get CTA support and implement the new academic calendar beginning Fall 2019.

b. List and comment on the major strengths of the program.

The major strengths of the department are as follows:
• Certificates are received after completing the 18 unit program.

• New classrooms and lab area (Needles High School).

• Program directed toward the A.W.S. D1.1 Certification.

• Updated course outlines and syllabus.

• Lecture/Lab hours enforced to meet the college standards.

• Continued sustainable enrollment of all program courses.

• Virtual Welding Lab equipment and software.

• Working with the Advisory Committee for program direction (AWS Certification).

• New Calendar designed to meet the needs of PVHS enrollment.

• Purchased new welding texts and workbooks.

• Strong Workforce funding leading to new program at Needles H.S.

• Full time counselor to aid the students.

• Prop 39 Funding.

c. List and comment on the major weaknesses of the program.

   N/A

6. CURRICULUM HISTORY

a. List all the courses in the program. Of the courses constituting the program, identify those that have not been successfully offered at least once during the preceding eight (8) semesters.

- WEL 100 (Oxy. Gas Welding)
- WEL 101 (Shielded Metal Arc Welding)
- WEL 102 (Basic Gas Metal Arc Welding)
- WEL 103 (Basic Gas Tung. Arc Welding)
- WEL 120 (Intro Weld. Princ. & Pract.)
- WEL 121 (Resist. Weld. & Special Weld. Applications)
- WEL 122 (Princ. & Pract. Of Metal Tech & Prof. Welding)
- WEL 200 (Adv. Metal Arc Welding)
- WEL 201 (Adv. Gas Tung. Arc Welding)
- WEL 202 (Adv. Oxy. Gas Welding)
- WEL 203 (Consolidated Welding)

Every Course in the program is offered within the two-year program cycle, but most courses are offered each year.

b. Explain in specific terms why these courses were not successfully offered. Provide a strategy for improving their success, or explain why they should not be removed from the program.

   N/A

7. COURSE SCHEDULING AND AVAILABILITY

Describe how the scheduling of classes in the program optimizes class availability and supports student success.

During the time of this program review, the WEL program offered courses in the face-to-face modality and correspondence education modality. Through offering a variety of courses at different times or through various modalities students were able to benefit from what the WEL program at Palo Verde College offers. All of the WEL courses have been designed to be offered within the 2-year program cycle with many courses being offered each term or each year. This allows students to enter the WEL program at any time and still be able to complete their program of study within a 2-year time period.

Time will tell what the outcomes are for losing WEL correspondence education through the California Department of Corrections. Now community students and students looking for a course in WEL throughout the state in the correspondence modality will potentially not be able to complete the course or programs affected by this change due to lack of enrollment. Discussions and remediation plans are already being discussed for how the WEL Department will address these changes. Academic Senate, Curriculum Committee, and the Instruction Office all play a role in the future of these courses.

8. STUDENT LEARNING OUTCOMES (SLO)

SLO QUANTITATIVE DATA
Using the Program Level CLO Worksheets, aggregate data annually. Identify all Courses within that Program that have CLOs which map to PLO #1 in the first column of the table below. For each academic year since your last full program review, enter the % of Successful Students for the CLOs that map to PLO #1. Do the same for each PLO within the program.

Average Percentage Program Learning Outcome #1 Welding Technology A.S. Degree				
Acquired fundamental grounding in communications, science, mathematics, humanities, the social sciences, and self-development in preparation for an occupation, and possible transfer to a four-year institution				
Course IDs within the Program that map to PLO#1	**% Successful Students 2014-2015**	**% Successful Students 2015-2016**	**% Successful Students 2016-2017**	**% Successful Students 2017-2018**
WEL 100	78	N/A	88	N/A
WEL 101	47	N/A	68	N/A
WEL 201	50	N/A	71	N/A
Average % of Successful Students by Year	58.3	N/A	75.7	N/A

Average Percentage Program Learning Outcome #2 Welding Technology A.S. Degree				
Acquired knowledge and skills in WEL201, Demonstrating the proper procedure and techniques for welding mild steel plates and tubing.				
Course IDs within the Program that map to PLO#1	% Successful Students 2014-2015	% Successful Students 2015-2016	% Successful Students 2016-2017	% Successful Students 2017-2018
WEL 100	86	N/A	66	N/A
WEL 102	62	N/A	70	N/A
WEL 201	46	N/A	68	N/A
Average % of Successful Students by Year	64.7	N/A	68	N/A

From the each of the tables above enter the "AVERAGE % of Successful Students by Year" in the appropriate box below.

Average Percentage for all Program Learning Outcomes Welding Technology A.S. Degree				
PROGRAM LEARNING OUTCOME	% Successful Students 2014-2015	% Successful Students 2015-2016	% Successful Students 2016-2017	% Successful Students 2017-2018
PLO #1	58.3	N/A	75.7	N/A
PLO #2	64.7	N/A	68	N/A
Average % of Successful Students by Year	61.5	N/A	71.85	N/A

Average Percentage Program Learning Outcome #1 Welding Technology Certificate of Achievement				
Have the ability to describe the health and safety practices used in Gas MetalArc Welding and Flux Core Arc Welding processes.				
Course IDs within the Program that map to PLO#1	% Successful Students 2014-2015	% Successful Students 2015-2016	% Successful Students 2016-2017	% Successful Students 2017-2018
WEL 100	78	N/A	88	N/A
WEL 101	47	N/A	68	N/A
WEL 102	62	N/A	70	N/A
Average % of Successful Students by Year	62.3	N/A	75.3	N/A

From the each of the tables above enter the "AVERAGE % of Successful Students by Year" in the appropriate box below.

Average Percentage for all Program Learning Outcomes Welding Technology Certificate of Achievement				
PROGRAM LEARNING OUTCOME	% Successful Students 2014-2015	% Successful Students 2015-2016	% Successful Students 2016-2017	% Successful Students 2017-2018
PLO #1	62.3	N/A	75.3	N/A
Average % of Successful Students by Year	62.3	N/A	75.3	N/A

Average Percentage Program Learning Outcome #1 Welding Technology Certificate of Career Preparation				
Students will be able to locate and use charts, index, and table of contents to answer open book questions to prepare them for the exam. Students will be able to demonstrate basic knowledge of welding concepts				
Course IDs within the Program that map to PLO#1	% Successful Students 2014-2015	% Successful Students 2015-2016	% Successful Students 2016-2017	% Successful Students 2017-2018
WEL 120	73.6	N/A	72	N/A
WEL 121	68	N/A	80	N/A
WEL 122	75	N/A	81	N/A
Average % of Successful Students by Year	72.2	N/A	77.7	N/A

From the each of the tables above enter the "AVERAGE % of Successful Students by Year" in the appropriate box below.

Average Percentage for all Program Learning Outcomes Welding Technology Certificate of Career Preparation				
PROGRAM LEARNING OUTCOME	*% Successful Students 2014-2015*	*% Successful Students 2015-2016*	*% Successful Students 2016-2017*	*% Successful Students 2017-2018*
PLO #1	72.2	N/A	77.7	N/A
Average % of Successful Students by Year	72.2	N/A	77.7	N/A

SLO ACTION PLANS

In the table below, describe the action plans that your department has made since your last program review. These action plans should be identified in the Program Level CLO Worksheets.

Program Name	Associated PLO #	Course IDs Affected	Identified Gap	Action Plan(s)	Resources Used to Implement Plan	Outcome	Academic Year(s) this was addressed
A.S. In Welding Tech.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cert. of Ach. In Welding Tech.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cert. of Prep. In Welding Tech.	N/A	N/A	N/A	N/A	N/A	N/A	N/A

a. List courses for which CLOs have not been assessed. Provide an explanation why assessment of these CLOs have not been performed.

N/A

b. Were any CLOs or PLOs revised/deleted in the past year based on assessment evaluations or revision of the Course Outline of Record? If so, indicate the courses or the program and a detailed explanation for the changes.

N/A

c. Provide specific examples of course improvements resulting from the assessment of course SLOs.

SLO assessment tools are measuring their intended SLO accurately. The WEL program will continue to use the same tools to measure SLOs.

d. Provide specific examples of program and certificate improvements resulting from the assessment of program SLOs.

We have found that through maintaining high quality programs that promote rigor, critical thinking, and independent inquiry in the WEL field that students have consistently met the goals set through the measureable SLOs identified for each course.

e. Describe any differences in CLO achievement for different modalities (online, ITV, correspondence, face-to-face).

N/A

9. COURSE CURRENCY

a. List the courses in the program and the year in which the course outline of each was most recently reviewed and approved by the Curriculum Committee.

Course	Date
WEL-100	12/09/2014
WEL-101	12/09/2014
WEL-102	12/09/2014
WEL-103	12/09/2014
WEL-120	06/10/2014
WEL-121	06/10/2014
WEL-122	06/10/2014
WEL-200	12/09/2014
WEL-201	12/09/2014
WEL-202	12/09/2014
WEL-203	12/09/2014

b. Describe plans to revise and update course outlines of record that have not been reviewed and approved by the Curriculum Committee within the four (4) years preceding this program review report.

The WEL 120, 121, & 122 courses are being looked at by the department as many of the students who enrolled in these courses were incarcerated students and currently the WEL department is unable to offer courses to incarcerated students in California CDCR. Each of the other courses will be updated and entered into the ELumen system during the next academic year.

10. PROGRAM AND COURSE COVERAGE

a. List the courses in the program and identify which are taught by full-time faculty only, which are taught by adjunct faculty only, and which are taught by both.

Course	Full-Time Only	Adjunct Only	Both Full-Time and Adjunct
WEL-100	X		
WEL-101	X		
WEL-102	X		
WEL-103	X		
WEL-120	X		
WEL-121	X		
WEL-122	X		
WEL-200	X		
WEL-201	X		
WEL-202	X		
WEL-203	X		

b. Explain how effectively the program is served with the current coverage.

The program is effectively served by the current full-time instructor. In the event that course demand increases on the Needles H.S. campus, additional adjunct instructors may become needed.

c. Describe plans to correct deficiencies, if any, in course and program coverage.

N/A

11. PROFESSIONAL DEVELOPMENT

a. Describe specific professional development activities in which faculty members in the program have participated over the past four (4) years, and explain how such activities benefited the program and supported and facilitated student learning outcomes.

During the time addressed in this program review the full-time WEL instructor was

involved in various professional development activities. These activities included involvement in Flex Days, Institute Days, Curriculum Committee, Academic Senate, and CTA. Some specific trainings included Keenan Sexual Harassment Training, CPR/First Aid, E-lumen Training, Universal Technical Institute in-service, and various meetings and presentations at the local unified school district.

    b.   Describe areas of unmet professional development needs among faculty in the program and identify specifically plans to address those needs.

       N/A

12. STUDENT SUCCESSFUL COMPLETION & RETENTION

Note: the Program Review Committee will research the required completion and retention data and provide it to program faculty members for their review and analysis for this report. **Completion** is defined as number of grades of A,B,C,CR divided by A,B,C,D,F,CR,NC,W,MW, IP. **Retention** is defined as number of grades of A,B,C,D,F,CR,NC, MW, IP divided by A,B,C,D,F,CR,NC,W,MW, IP

    a.   Assess semester-by-semester course completion performance in each course in the program over the preceding eight (8) semesters and compare those rates with the Institutional Set standards.

The Current Institutional Set Standard is: _____70.1_____

Year	2014

Completion		
	2014FA	**2015SP**
WEL-100	72%	-
WEL-101	83%	79%
WEL-102	88%	71%
WEL-103	-	70%
WEL-120	77%	72%
WEL-121	-	-
WEL-122	-	-
WEL-200	77%	-
WEL-201	79%	-
WEL-202	-	77%
WEL-203	-	67%

Year	2014

Completion			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	72%	-
WEL-101	-	82%	-
WEL-102	-	78%	-
WEL-103	-	70%	-
WEL-120	74%	-	-
WEL-121	-	-	-
WEL-122	-	-	-
WEL-200	-	77%	-
WEL-201	-	79%	-
WEL-202	-	77%	-
WEL-203	-	67%	-

Year	2015

Completion		
	2015FA	**2016SP**
WEL-100	85%	89%
WEL-101	81%	100%

Year	2015

Completion			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	86%	-
WEL-101	-	82%	-

WEL-102	-	84%
WEL-103	71%	67%
WEL-120	80%	-
WEL-121	74%	68%
WEL-122	-	62%
WEL-200	95%	-
WEL-201	90%	-
WEL-202	-	79%
WEL-203	-	83%

	Correspondence	Face to Face	Online
WEL-102	-	84%	-
WEL-103	-	69%	-
WEL-120	80%	-	-
WEL-121	70%	-	-
WEL-122	62%	-	-
WEL-200	-	95%	-
WEL-201	-	90%	-
WEL-202	-	79%	-
WEL-203	-	83%	-

Year	2016

Completion		
	2016FA	**2017SP**
WEL-100	81%	-
WEL-101	88%	88%
WEL-102	82%	76%
WEL-103	-	76%
WEL-120	92%	-
WEL-121	-	88%
WEL-122	-	81%
WEL-200	95%	-
WEL-201	83%	-
WEL-202	-	80%
WEL-203	-	61%

Year	2016

Completion			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	81%	-
WEL-101	-	88%	-
WEL-102	-	79%	-
WEL-103	-	76%	-
WEL-120	92%	-	-
WEL-121	88%	-	-
WEL-122	81%	-	-
WEL-200	-	95%	-
WEL-201	-	83%	-
WEL-202	-	80%	-
WEL-203	-	61%	-

Year	2017

Completion		
	2017FA	**2018SP**
WEL-100	93%	-
WEL-101	92%	75%
WEL-102	-	95%
WEL-103	88%	100%
WEL-120	92%	-
WEL-121	-	86%
WEL-122	-	92%
WEL-200	92%	-
WEL-201	91%	-
WEL-202	-	92%
WEL-203	-	92%

Year	2017

Completion			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	93%	-
WEL-101	-	85%	-
WEL-102	-	95%	-
WEL-103	-	94%	-
WEL-120	92%	-	-
WEL-121	86%	-	-
WEL-122	92%	-	-
WEL-200	-	92%	-
WEL-201	-	91%	-
WEL-202	-	92%	-
WEL-203	-	92%	-

b. Assess semester-by-semester course retention performance in each course in the program over the preceding eight (8) semesters.

Year	2014

Retention		
	2014FA	**2015SP**
WEL-100	96%	-
WEL-101	96%	100%
WEL-102	94%	92%
WEL-103	-	96%
WEL-120	96%	85%
WEL-121	-	-
WEL-122	-	-
WEL-200	96%	-
WEL-201	95%	-
WEL-202	-	91%
WEL-203	-	94%

Year	2014

Retention			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	96%	-
WEL-101	-	97%	-
WEL-102	-	93%	-
WEL-103	-	96%	-
WEL-120	90%	-	-
WEL-121	-	-	-
WEL-122	-	-	-
WEL-200	-	96%	-
WEL-201	-	95%	-
WEL-202	-	91%	-
WEL-203	-	94%	-

Year	2015

Retention		
	2015FA	**2016SP**
WEL-100	100%	100%
WEL-101	94%	100%
WEL-102	-	100%
WEL-103	88%	100%
WEL-120	90%	-
WEL-121	87%	83%
WEL-122	-	89%
WEL-200	100%	-
WEL-201	95%	-
WEL-202	-	100%
WEL-203	-	100%

Year	2015

Retention			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	100%	-
WEL-101	-	94%	-
WEL-102	-	100%	-
WEL-103	-	94%	-
WEL-120	90%	-	-
WEL-121	84%	-	-
WEL-122	89%	-	-
WEL-200	-	100%	-
WEL-201	-	95%	-
WEL-202	-	100%	-
WEL-203	-	100%	-

Year	2016

Retention		
	2016FA	**2017SP**
WEL-100	95%	-
WEL-101	100%	100%
WEL-102	91%	100%
WEL-103	-	100%
WEL-120	96%	-
WEL-121	-	96%
WEL-122	-	92%
WEL-200	100%	-

Year	2016

Retention			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	95%	-
WEL-101	-	100%	-
WEL-102	-	96%	-
WEL-103	-	100%	-
WEL-120	96%	-	-
WEL-121	96%	-	-
WEL-122	92%	-	-
WEL-200	-	100%	-

WEL-201	100%	-
WEL-202	-	90%
WEL-203	-	83%

WEL-201	-	100%	-
WEL-202	-	90%	-
WEL-203	-	83%	-

Year	2017

Year	2017

Retention		
	2017FA	**2018SP**
WEL-100	100%	-
WEL-101	100%	88%
WEL-102	-	100%
WEL-103	94%	100%
WEL-120	100%	-
WEL-121	-	95%
WEL-122	-	100%
WEL-200	92%	-
WEL-201	91%	-
WEL-202	-	92%
WEL-203	-	92%

Retention			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	100%	-
WEL-101	-	95%	-
WEL-102	-	100%	-
WEL-103	-	97%	-
WEL-120	100%	-	-
WEL-121	95%	-	-
WEL-122	100%	-	-
WEL-200	-	92%	-
WEL-201	-	91%	-
WEL-202	-	92%	-
WEL-203	-	92%	-

Course	AVG % Course Completion 2014-18					AVG % Course Retention 2014-18				
	AVG % 2014-15	AVG % 2015-16	AVG % 2016-17	AVG % 2017-18	Combined AVG 2014-18	AVG % 2014-15	AVG % 2015-16	AVG % 2016-17	AVG % 2017-18	Combined AVG 2014-18
WEL 100	72	87	81	93	**83.25**	96	100	95	100	**97.75**
WEL 101	81	90.5	88	83.5	**85.75**	98	97	100	94	**97.25**
WEL 102	80	84	79	95	**84.5**	93	100	95.5	100	**97.13**
WEL 103	70	69	76	94	**77.25**	96	94	100	97	**96.75**
WEL 120	74.5	80	92	92	**84.625**	90.5	90	96	100	**94.13**
WEL 121		71	88	86	**81.7**		85	96	95	**92**
WEL 122		62	81	92	**78.3**		89	92	100	**93.7**
WEL 200	77	95	95	92	**89.75**	96	100	100	92	**97**
WEL 201	79	90	83	91	**85.75**	95	95	100	91	**95.25**
WEL 202	77	79	80	92	**82**	91	100	90	92	**93.25**
WEL 203	67	83	61	92	**75.75**	94	100	83	92	**92.25**
AVG Completion (ALL CLASSES) 2014-18					**82.6%**	AVG Retention (ALL CLASSES) 2014-18				**95.13%**

c. Based on the number of annual awards over the preceding four (4) years, assess trends in the number of program certificates and degrees awarded.

Name of Award	2014-15	2015-16	2016-17	2017-18
Welding Technology Associate of Science	2	2	2	-
Welding Technology Certificate of Achievement	12	13	8	12
Welding Technology Certificate of Career Prep	-	4	13	13

The WEL program is quite popular. Many students enroll in the courses and end up completing many certificates through the latticed and stacked nature of the certificates leading to the AS Degree in WEL. A large number of the people walking across the stage at

the graduation ceremony each year are students who have earned certificates and degrees in WEL. This number is likely to be reduced as now students pursing degrees and certificates from California prisons will no longer be able to take WEL courses.

13. ENROLLMENT TRENDS

Note: the Program Review Committee will research the required enrollment data and provide it to program faculty members for their review and analysis for this report.

Comment on semester-by-semester enrollments, providing explanation of increases, declines or erratic fluctuations in enrollment. Be sure to comment on enrollment trends based on modality as well.

Year	2014

Enrollment		
	2014FA	**2015SP**
WEL-100	25	-
WEL-101	24	14
WEL-102	16	24
WEL-103	-	23
WEL-120	47	47
WEL-121	-	-
WEL-122	-	-
WEL-200	26	-
WEL-201	19	-
WEL-202	-	22
WEL-203	-	18

Year	2014

Enrollment			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	25	-
WEL-101	-	38	-
WEL-102	-	40	-
WEL-103	-	23	-
WEL-120	94	-	-
WEL-121	-	-	-
WEL-122	-	-	-
WEL-200	-	26	-
WEL-201	-	19	-
WEL-202	-	22	-
WEL-203	-	18	-

Year	2015

Enrollment		
	2015FA	**2016SP**
WEL-100	20	9
WEL-101	16	1
WEL-102	-	19
WEL-103	17	18
WEL-120	41	-
WEL-121	23	47
WEL-122	-	45
WEL-200	20	-
WEL-201	20	-
WEL-202	-	14
WEL-203	-	18

Year	2015

Enrollment			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	29	-
WEL-101	-	17	-
WEL-102	-	19	-
WEL-103	-	35	-
WEL-120	41	-	-
WEL-121	70	-	-
WEL-122	45	-	-
WEL-200	-	20	-
WEL-201	-	20	-
WEL-202	-	14	-
WEL-203	-	18	-

Year	2016

Enrollment		
	2016FA	**2017SP**
WEL-100	21	-
WEL-101	24	16
WEL-102	11	17
WEL-103	-	21
WEL-120	26	-
WEL-121	-	25
WEL-122	-	26
WEL-200	19	-
WEL-201	18	-
WEL-202	-	20
WEL-203	-	18

Year	2016

Enrollment			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	21	-
WEL-101	-	40	-
WEL-102	-	28	-
WEL-103	-	21	-
WEL-120	26	-	-
WEL-121	25	-	-
WEL-122	26	-	-
WEL-200	-	19	-
WEL-201	-	18	-
WEL-202	-	20	-
WEL-203	-	18	-

Year	2017

Enrollment		
	2017FA	**2018SP**
WEL-100	27	-
WEL-101	25	16
WEL-102	-	19
WEL-103	16	15
WEL-120	24	-
WEL-121	-	22
WEL-122	-	25
WEL-200	13	-
WEL-201	11	-
WEL-202	-	12
WEL-203	-	13

Year	2017

Enrollment			
	Correspondence	**Face to Face**	**Online**
WEL-100	-	27	-
WEL-101	-	41	-
WEL-102	-	19	-
WEL-103	-	31	-
WEL-120	24	-	-
WEL-121	22	-	-
WEL-122	25	-	-
WEL-200	-	13	-
WEL-201	-	11	-
WEL-202	-	12	-
WEL-203	-	13	-

Enrollment for all WEL courses has remained consistent throughout this program review cycle. It is important to note that enrollment in WEL120. 121, & 122 will be decreased for future academic terms as CDCR is currently not allowing incarcerated students to enroll in these courses.

14. QUALITY OF THIS PROGRAM

List core indicators, student outcomes, partnerships, certificates, degrees, articulation, faculty qualifications, diversity, grants, equipment, and refer back your responses in sections 5 – 13 to give a complete analysis of the quality of this program.

- Exams and assessments have been designed to accurately measure SLOs for each course.

- Regular SLO assessments have been designed and implemented for each course and program.

- Regular CTE and Professional Technologies Department meetings have been held to discuss SLO data and assessment results.

- The Palo Verde College WEL Department has met or exceeded all 34 Core Indicator areas addressed in Perkins I-C funding during the 2014-18 program review update cycle.

15. FINANCIAL TRENDS

Comment on annual budgeted-vs.-actual program expenditures for each of the preceding five (5) years as to personnel salaries, benefits, supplies, contract services, capital outlay and other expenditures. Explain deviations from budget exceeding 10% of any line item. Describe plans for future budget changes.

- Each year, the WEL department completes budget requests to support its programs. The WEL program utilizes all of its budget each year.

- The WEL program uses all of its budget without having to transfer or deviate from the original budget designed for the program.

- The WEL program will continue to seek funding from Perkins I-C and Strong Workforce. These funds help the WEL program enhance the program. Without these funds the WEL program would not be able to keep up with industry recognized tools and equipment used in the Welding industry today.

- The WEL program generates more money than is used to run the program and pay for the instructor's salaries and benefits (see Table – Section 16)

16. REVENUE AND EXPENSES

a. State the revenue of the program (using FTE data, grants, and anything else) for the preceding two academic years.

Term	Subject	FTES	Rate	Revenue
2014FA	WEL	40.70	$4564.83	$185,788.58
2015SP	WEL	37.03	$4564.83	$169,035.65
2015FA	WEL	35.97	$4564.83	$164,196.94
2016SP	WEL	35.37	$4564.83	$161,458.04
2016FA	WEL	33.60	$4564.83	$153,378.29
2017SP	WEL	34.77	$4564.83	$158,719.14
2017FA	WEL	31.40	$4564.83	$143,335.66
2018SP	WEL	28.70	$4564.83	$131,010.62

b. State the expenses of the program (salaries, equipment purchases, contracts, and supplies) for the preceding two academic years.

Row Labels	Budgeted	Expended
2013-2014		
Benefits	$27,311.00	$26,714.50
Conferences	$943.00	$0.00
Equipment	$3,507.00	$3,059.69
Overload Benefits	$0.00	$2,137.17
Overload Salaries	$0.00	$18,900.00
Salaries	$80,904.00	$80,904.00
Supplies	$13,119.52	$12,256.32
Transportation	$5,000.00	$5,000.00
Tutoring	$0.00	$4,978.75
2014-2015		
Benefits	$24,454.00	$27,462.10
Conferences	$134.35	$152.35
Equipment	$3,507.00	$14,573.06
Overload Benefits	$0.00	$4,212.15
Overload Salaries	$0.00	$34,740.00
Salaries	$80,904.00	$80,904.00
Supplies	$14,275.00	$12,779.51
Transportation	$5,000.00	$851.47
Tutoring	$0.00	$4,036.50
2015-2016		
Benefits	$28,318.00	$39,139.74
Conferences	$943.00	$0.00
Copying/Printing	$0.00	$70.88
Equipment	$3,194.45	$7,250.83
Overload Benefits	$3,785.00	$5,758.94
Overload Salaries	$27,000.00	$40,950.00
Repairs	$0.00	$1,495.00
Salaries	$80,904.00	$80,934.00
Supplies	$16,664.00	$13,582.43
Transportation	$5,000.00	$5,988.00

Tutoring	$0.00	$6,411.88
2016-2017		
Benefits	$33,955.67	$33,955.67
Contracts	$132.38	$132.38
Copying/Printing	$98.30	$98.30
Equipment	$25,999.76	$25,999.76
Overload Benefits	$5,155.79	$5,155.79
Overload Salaries	$32,620.50	$32,620.50
Salaries	$90,233.17	$90,233.17
Supplies	$20,268.71	$20,268.71
Transportation	$5,025.60	$5,025.60
Tutoring	$3,183.77	$3,183.77
2017-2018		
Benefits	$35,687.00	$36,099.18
Conferences	$1,000.00	$0.00
Copying/Printing	$450.89	$390.89
Equipment	$3,000.00	$1,114.53
Overload Benefits	$0.00	$5,255.43
Overload Salaries	$0.00	$29,920.50
Salaries	$88,185.00	$89,880.73
Student Workers	$0.00	$3,327.50
Supplies	$20,350.00	$15,768.93
Transportation	$5,000.00	$4,886.40
Tutoring	$0.00	$3,200.66

c. State the dollar value of in-kind contributions of time and/or resources during the preceding two academic years.

N/A

17. FACILITIES AND EQUIPMENT

a. Are current facilities, such as classrooms, offices and equipment adequate to support the program? Explain.

Current equipment and facilities are adequate at both the Blythe campus as well as at the Needles High School Campus.

b. Describe plans for future changes in facilities or equipment that would better support the program.

As trends lead toward National Industry recognized certification in welding, a designated lab will be needed for practice and testing as approved by AWS.

18. TWO YEAR PLAN

a. List recommendations, project future trends, personnel and equipment needs, as well as continuing and new goals. Describe activities to achieve these goals, timelines to complete these goals, and measures for evaluating success in achieving them.

- Continued involvement in Strong Workforce Funding and activities (Ongoing).
- Continued participation in Perkins I-C and CTE Transitions activities and funding (Ongoing).
- Implementation and testing for AWS Certification and Certified Lab (Spring 2020)
- Purchase Virtual Welders to offset cost of Welding supplies needed for WEL programs (Fall 2020)
- Growth of Needles WEL program and sustainability (Ongoing)
- Return of Correspondence courses in WEL for incarcerated students (Summer 2019)

b. Describe the alignment between continuing and new program goals and institutional goals and objectives stated in the current Integrated Strategic Plan, which can be found on the college website.

The Institutional goals for PVC were used as a model to develop the goals for the WEL program. The goals for the WEL program are aligned with PVC's Institutional goals. In addition, the PVC WEL program's mission is also tied to the goals of CTE programs throughout the state. The WEL program has created curriculum, courses, and programs that are current with industry needs, provides educational opportunities that lead to high skill, high demand, high wage employment in the WEL field.