Status: **Reviewed**

Entry #: 204

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OVERVIEW OF PROGRAM REVIEW AND PLANNING FOR INSTRUCTIONAL PROGRAMS

Program Review is about documenting the plans you have for improving student success in your program and sharing that information with the community. Through the review of and reflection on key program elements, program review and planning identifies program strengths as well as strategies necessary to improve the academic discipline, program, or service to support student success. With our new Guided Pathways plan, this review becomes even more crucial for the success of our students and college.

We are using the Strengths, Opportunities, Aspirations, Results (SOAR) strategic planning technique to help us focus on our current strengths and opportunities, create a vision of future aspirations, and consider the results of this approach.

BASIC PROGRAM INFORMATION

Academic Year
2020-2021

Are you completing a comprehensive or annual PRP?
Comprehensive

Department Name
Trade and Industry

Discipline Name
Welding (WELD)

Department Chair Name
Anthony Fedon

Division Name
Career, Technical and Extended Education

Website address for your discipline
https://www2.palomar.edu/pages/welding/

Discipline Mission statement
The Welding Technology program at Palomar Community College is committed to providing students with the knowledge, skills, and abilities necessary to obtain entry level positions in welding related industries. The welding field offers countless opportunities for program graduates. Our diverse graduates can be employed in the construction, aerospace, manufacturing, utilities, and shipbuilding industries. The Welding program offers an A.S. Welding Technology, Certificate of Achievement, and 3 certificates of proficiency in the major welding processes.

(click here for information on how to create a mission statement)

Does your discipline have at least one degree or certificate associated with it?
Yes

Are any of your programs TOP coded as vocational (CTE/CE)?
Yes

List all degrees and certificates offered within this discipline.
Associate in Science- Welding Technology.
Certificate of Achievement
Certificate of Proficiency- Entry-Level Gas Metal Arc/ Flux Cored Arc Welding
Certificate of Proficiency- Entry-Level Shielded Metal Arc Welding
Certificate of Proficiency- Entry-Level Gas Tungsten Arc Welding.
Welder Qualification Certification- Professional license

Please list the names and positions of everyone who helped to complete this document.
Kevin Powers- Associate Professor
Ashley Wolters- Assistant Professor

Use the link to provided to help answer the staffing questions below. This form requires a login and password to access. Please use your Palomar email and password to log in.

Link: Permanent Employees Staff Count

Full-time Faculty (total number of FT faculty in your discipline)
2

Full-time Faculty (FTEF)
2

Part-time faculty (FTEF)
6

Classified and other permanent staff positions that support this discipline
Shared Academic Department Assistant.(Needed)

One Full-time Instructional Support Specialist (NEEDED)

Additional hourly staff that support this discipline and/or department
Three student and/or short term employees.(Needed)

PROGRAM INFORMATION

In this section you are asked to consider your programs, their learning outcomes, the annual number of completions, goals for completions and enrollment and efficiency trends.

PROGRAM LEARNING OUTCOMES

Begin this section by reviewing the Program Review reports for programs and courses in Nuventive Improve (TracDat). All active course and program learning outcomes should be systematically assessed over a 3-year cycle. First, look at program learning outcomes.

- **Program** = Leads to a degree or certificate
- **Discipline** = A group of courses within a discipline

*Programs will be able to complete program completion and outcome questions.

How well do your program's learning outcomes communicate the scope and depth of the degree/certificate offered?
The Palomar College Welding Technology program Student Learning Outcomes address the 3 learning domains and adequately assess whether a student is achieving success in our courses/ programs. Each of our program level SLO's are based on the Cognitive, Affective, and Psycho-motor domains. Each Program level SLO's demonstrate a higher, overarching learning from the lower course level SLO's.

How do they align with employer and transfer expectations?
Each of our stakeholders have had direct input in determining our program and course level outcomes.
Each of our program level SLO's are based on the Cognitive, Affective, and Psycho-motor domains. These competencies enable the student to develop their knowledge, attitude, and skills that our stakeholders are seeking in entry level employees.
The Palomar College Welding Technology program aligns and communicates the scope and depth of the Associates degree and Certificates of Achievement thoroughly in a variety of manners to its stakeholders. These are accomplished through:
• Thorough course descriptions in all student syllabi.
• Regular semester meeting with faculty where curriculum is reviewed and revised.
• Regular meetings with industry advisers where curriculum and industry trends are reviewed and planned for.
• Employing industry professionals that follow the American Welding Society's standards to include:
Three AWS Certified Welding Inspectors on staff and using these licenses to certify students with professional certifications.
Employing numerous instructors that are; welding business owners, welding business operators and/or welding staff.

Describe your program's plan for assessing program learning outcomes.
Each of our programs have outcomes in Safety (cognitive and affective), Welding (cognitive, affective, and psychomotor), and Equipment setup and use (cognitive, affective, and psychomotor) to determine if the student has achieved the higher level of learning required by our stakeholders. The Welding department assesses these outcome through written reports, tests, hands on activities, as well as welding tests that align with industry standards and codes. The Welding Department is completely mapped to ensure student success, certificate completion, and preparation to enter the workforce.

Summarize the major findings of your program outcomes assessments.
Each welding section assesses learning outcomes every semester. We have a midterm activity that requires the student to produce a weldment using written procedures and blueprints. The student is required to follow safety guidelines and the written procedure to produce a weld that gets tested in accordance with industry codes and standards. The destructive test allows for students to be evaluated at the end of the class session. We have an incredibly high passing rate for this exam and proves our program is effective. In addition, we have received very good feedback through our industry partners on our students' employment abilities.

Reflecting on the major findings you summarized, what are some questions you still have about students' learning in your program that you have not yet been able to address with your outcomes assessments?

Depending on the degree or transfer goals of our students, they have the choice of three different GE pathways:

- Associate Degree GE Requirements
- CSU GE Requirements
- IGETC Requirements

Palomar College has identified a set of General Education/Institutional Learning Outcomes, which represent the overall set of abilities and qualities a student graduating from Palomar should possess. Click here for a link to Palomar's GE/ILOs.

Next, review your course outcomes as they relate to Palomar's GE/ILOs.

How do the courses in your discipline support General Education/ Institutional Learning Outcomes? In your response, please specify which GE/ILO(s) your discipline supports.
Our Program Level SLO's Support;
ILO 2, Computation: B - Inquiry and analysis
ILO 3, Creative, Critical, and Analytical Thinking: B - Information literacy
GE Foundational Knowledge of Discipline - This is a General Education Outcome.

Summarize the major findings from your course outcomes assessments that are related to the General Education/Institutional Learning Outcomes that your discipline supports.
Being a program that relies heavily on the development of the psycho-motor domain, we believe we have done a thorough job integrating other learning domains through creative assignments to demonstrate student knowledge attainment. Our industry partners inform us that our students are skilled technicians, and possess the requisite soft skills that industry demands.

PROGRAM COMPLETIONS

Student success is at the core of what we do in assisting students in achieving their goals.

The Chancellor's Office Vision for Success stresses the importance of Program Completion as a major goal for our students. In addition, transfer and career readiness are key components of Palomar College's mission statement. This year, our funding formula has also changed reflecting this emphasis, providing additional funding as a function of the number of completions.

In this section we will identify a program standard and a stretch goal (what you would like to move toward) for program completions.

The standards represent the lowest number of program completions deemed acceptable by the College. In other words, if you were to notice a drop below the set standard, you would seek further information to examine why this occurred and strategies to increase completions.

In this section we will identify a program standard and a stretch goal (what you would like to move toward) for programs.

List the number of completions for each degree/certificate for the previous year.
.....2016-2017 2017-2018 2018-2019
Associates in Science 7 11 13
Certificate of Achievement 11 11 22
Certificate of Proficiency 45 43 54
Total Completions 63 65 89

Have your program completions Increased, decreased, or stayed the same over the last 5 years?
Increased

What factors have influenced your completion trends?
Welding is proud to report that our flexible scheduling and program counseling strategies seem to be paying off. We had the highest number of degrees awarded since 2014! Our scheduling changes has allowed for students to complete the entire program during the mornings or evenings. The first day of the semester we map the courses and describe program requirements developing a map for students to take. We describe the program and counsel all students on what courses are required and the order in which they should be taken to help ensure program completions.

Are the courses in your discipline required for the completion of other degrees/certificates?
Yes

Please list them
Auto Chassis and Drive lines- AS/CA
Auto Collision Repair- AS/ CA
Auto Computer Controls and Electronic Tune up- AS/CA
Auto Mechanics General- AS/CA
CAD/CAM Design and Manufacturing- AS/CA
Diesel Technology- AS/CA
Drafting and Design CAD/CAM Technology- AS/CA
Electrical Engineering Drafting and Design Technology- AS/CA
AIR CONDITIONING/HEATING/REFRIGERATION (AS)
Electronic Tune Up and Computer Control Systems- AS/CA
Mechanical Engineering Drafting and Design Technology- AS/CA

Do you have programs with 7 or fewer completions in the last 5 years?
Yes

What steps are you taking to address these completions?
2019-202 we saw a decline in A.S. degrees awarded from 13 down to 2. Certificates fell as well. We believe this trend is strictly due to COVID-19 shutting down our Labs which prevented students from finishing their program.

What is your program standard for program completion?
60

Why did you choose this standard?
We averaged completions over the last 5 years to be 60.4 including COVID-19 data. We had 302 program completions over the last 5 years.

What is your Stretch goal for program completion?
80

How did you decide upon your stretch goal?
For 2018-2019 we had 89 program completions. We attribute this high number of certificates to including our program map into our first day orientations, requiring all instructors to know the program, advising students on which classes they should take, and basically promoting our program. We are currently developing e-portfolios, making curriculum changes, and getting the fabrication shop up and running. We believe all of these factors will allow our program to continue the upward trend we were seeing prior to COVID-19.

ENROLLMENT AND EFFICIENCY TRENDS

Palomar College uses the WSCH/FTEF ratio as one indicator of overall efficiency in addition to the overall fill-rate for courses.

Although the college efficiency goal is 525 WSCH/FTEF and 85% fill-rate (minimal), there are many factors that affect efficiency (i.e. seat count / facilities / accreditation restrictions).

This information can be found by going to the "Program" page in the PRP Data Dashboard.

What was your enrollment trend over the last 5 years?
Increased

What was your efficiency trend over the last 5 years?
Decreased

Were these trends expected? Please explain.
Yes, We expected enrollment to increase as we have increased our sections offered. We offer courses beginning at 8:00AM and run all the way to 9:30 PM some days. We offer courses 6 days a week. We expected our efficiency value to drop as our contract load decreased from 18 to 15. In addition our laboratory has a maximum occupancy of 22 students due to square footage and equipment availability. Our courses were always overloaded by 2 students for a maximum occupancy of 22 while our course maximum was 20. That is why we always had in excess of 100% fill rate.

Program Information Summary

Consider your program outcome assessments, completions, and enrollment/efficiency trends, as well as other internal and external factors.

How have these factors contributed to the success of your program(s)?
Our program continues to grow, despite being impacted in every section. The only limiting factor our program has is facilities.

How have these factors presented challenges for your program(s)?
We simply do not have enough room to meet the workforce need. We are the only for credit program in the county.

The Chancellor's Office Vision for Success stresses the importance of reducing equity gaps through faster improvements of underrepresented groups.

ACCJC also requires that colleges establish institutional and program level standards in the area of success rates. These standards represent the lowest success rate deemed acceptable by the College. In other words, if you were to notice a drop below the rate, you would seek further information to examine why the drop occurred and strategies to address the rate.

Click on this link to review the course success rates (A, B, C, or Credit) for your discipline.

In this section we will identify a course success rate standards and a stretch goal (what you would like to move toward) for programs.

Course Success Rates by gender, age, ethnicity, special population, location, and modality (You can access the Student Equity Plan on the SSEC website https://www2.palomar.edu/pages/ssec/)

COURSE INFORMATION

COURSE SUCCESS AND RETENTION

What is your program's standard for Discipline COURSE Success Rate?
75.0%

Why did you choose this standard?
The Welding program standard for COURSE success rate is 75%. We are pleased to report that we are currently operating at a 84% COURSE success rate. This standard was chosen to reflect the welding industries standards, which are the same standards that are ensconced in the welding technology program. Some of these standards evolve from and include:
1. Feedback from full time and part time faculty that have been and are actively engaged the the current industry. Their experiences include many aspects of welding business management in the immediate San Diego and San Marcos area. As industry professionals the general consensus it that there must be, at a minimum, a 75% success and retention rate in the the welding industry. Specifics include: New hire selection, trainability, employee retention after 6, 12 and 24 months.
2. Feedback from advisory committee. Throughout the year in various meetings and dealing with our Industry Advisors the express their industry demands in both the hard and soft skills that they are teaching, evaluating and hiring for. These "industry Standards" help us determine the goals for the discipline and course success rate.

Have your overall course success rates increased, decreased, or stayed the same over the last 5 years?
Decreased

Was this expected? Please explain.
Our 5-year average is 82%. Our success rate is down 2% compared to last year, but 2% up from our 5-year average. Given college-wide lower enrollment, COVID-19, and other factors, we expected this number to be lower than it actually is. Given we were required to shut the program down and make up laboratory hours, it was a nice surprise to see we are still above our average.

What is your stretch goal for course success rates?
80.0%

How did you decide upon the goal?
The Stretch goal was determined based upon the Overall Success rate trend. Over the last five years the success rate has been between 77% and 86%.

Have your overall course retention rates increased, decreased, or stayed the same over the last 5 years?
Decreased

Was this expected? Please explain.
Our retention rate for this year is 97%. It is 1% down from last year. Our 5-year average is 96.4%. We expected a slight dip in retention due to the fact that many Welding students can obtain employment without completing a full degree. This trend is also reflected and has direct correlation to the current unemployment rate and the strong economy that has existed pre-Covid.

Are there differences in success or retention rates in the following groups? (choose all that apply)

When or where (time of day, term, location)

Age

Special Pop. (Veteran, foster youth, etc.)

When or Where: Why do you think differences based on when or where the course is offered exists? What do you need to help close the gap?
Our daytime classes are 88%, Evening is 78%, and DE is 77%.
We expected the evening classes to have a lower success rate than our daytime classes as our evening students typically have jobs, families, or other commitments that make it more difficult to attend class. Our evening success rate is down from last year (85.5%) which can be directly correlated to a stronger economy which has placed a greater demand and a greater reward for individuals that are working in the industry.

Age: Why do you think age differences exist? What do you need to help close the gap?
Our Students' age differences are all in alignment with our overall success rate.
19 and under is 83.8%
20-24 is 82.7%
25-49 is 84.6%
50 and over is 94.1%
Our highest population is ages 25-49.

Special Populations: Why do you think special population differences exist? What do you need to help close the gap?
Our Veteran success rate is higher than those that identify as non-veteran. Veterans have an 88.9% success rate while non-veterans have 83.8%. Our non-veteran success rate is in alignment with our overall success rate. We don't have enough students that identify as foster youth to determine any differences between non-foster youth.

Are there differences in success/retention between on-campus and online courses?
Yes

Please share any best practice methods you use for online courses.
We converted our online courses to use the OEI rubric and outline. Both full-time instructors worked with the course specialist to fully rebuild and develop our online courses. Some of the current practices that are being employed include:
1. Regular contact with students via canvas announcements, zoom videos and prerecorded videos.
2. Student intervention "being intrusive" practices.
3. Clearly stated course and student learning objectives.
4. Clarity in course content
5. Course reorganized into easy to use and find "modules"

COURSE LEARNING OUTCOMES

How is course assessment coordinated across sections and over time?
All courses assess our SLO's every semester. We have specific projects developed for assessing student learning. In WELD 100 we assess the SLO's through our midterm practical exam. In our advanced courses we assess our SLO's with our practical final exams. At the end of a student tenure they participate in "weld 140and weld 145 " which are "capstone" courses These courses tests the development and acquisition of their affective , cognitive and psychomotor skills. Course assessment are regularly evaluated based upon the success rate and the number and types of industry certifications that a student earns.

How have you improved course-level assessment methods since the last PRP?
Since the last PRP, we updated and added SLO's so that all of our courses have 3 total learning outcomes. These outcomes align with program outcomes and ensure all 3 learning domains are assessed. We have fostered an environment of collaboration with all welding faculty to come together and standardize course content across each section. We have completed standardized curriculum for every Weld 100 and 120 section. This has created a department wide homogeneous standard which supports industry wide standards set form by the American Welding Society. In addition to having all faculty and adjunct collaborate on course content and curriculum, we have standardized the welding procedures so that each section of Weld 100 is the same despite which instructor teaches it. This has led to much more student success in later courses.

Summarize the major findings of your course outcomes assessments.
Overall we are pleased with the course assessments and outcomes. We are averaging 60 AWS certifications per calendar year. These certifications are recognized on a global scale and are indicators that appropriate curriculum and assessments are being taught and administrated throughout the Palomar Welding program.

Reflecting on the major findings you summarized, what are some questions you still have about student learning in your courses that you have not yet been able to address with your outcomes assessments?
Our courses have proven to be effective in evaluating SLO's and also with industry standards. We regularly receive feedback from our graduates employers (advisory committee members) and reassess and modify student learning on a regular basis .

What are some improvements in your courses that have been, or can be, pursued based on the key findings from your course learning outcomes assessments?
We are currently updating multiple courses in META. Our instructors have developed new practical final projects that are exciting for the students. These projects also integrate technology into our remedial courses. Integrating this technology has intrigued students to branch out into other programs as well as complete their welding courses. The CNC equipment is being used all the way down to WELD 100 now. This has also gathered interest in our new advanced fabrication certificate we are working on.

PROGRAM CURRICULUM ALIGNMENT, MAPPING, SCHEDULING, & PLANNING

The Chancellor's Office Vision for Success stresses the importance of decreasing the average number of units accumulated by CCC students earning degrees.

Palomar College's Guided Pathways plan includes clarifying paths for students by sequencing course offerings so that they support scaffolding and timely completion. Our goal is to ensure learning through:

- The mapping and assessment of clear program outcomes that are also aligned to employer and/or transfer institution expectations.
- Engaging and applied learning experiences.
- Effective instructional practices to support students in achieving success.

How do your course outcomes help your students achieve their program outcomes?
Our outcomes are aligned with GE/ILO outcomes and are derived specifically from advisory committee and industry input/standards. All of our course outcomes build in knowledge and skills as a student progresses towards the program outcome. As a result of program planning, our certificates, and welding certifications have increased over the last 5 years.

How do your degree maps and scheduling strategy ensure scaffolding (how all parts build on each other in a progressive, intentional way)? How do you share the maps with students?
We implemented a department wide mandatory introduction to our courses and programs. As a result, we are having less students ask which courses they need to take next, and have seen an increase in certificate awards. The first day of the semester we map the courses and describe program requirements developing a map for students to take. We describe the program and counsel all students on what courses are required and the order in which they should be taken to help ensure program completions.

What is your departmental strategy on how you schedule your courses including the time of day you offer courses? Do you use 4-week, 8-week, or block scheduling (putting required classes near each other) to organize required classes to meet the needs of disproportionately impacted students? Please explain.
We have organized our program so that day and night students can complete the program. We alternate 2 classes with day and night offerings every other semester. We offer 5 sections of WELD 100 as our "feeder" class, and because multiple other programs require or have it listed as an elective. We are completely scheduled out consistently with the exception of Sundays. We operate from 8:00 AM- 9:00 PM daily and 10:00PM on Fridays. The biggest impact on our program is class availability. We have waitlists for every section.

How do you work with other departments that require your course(s) for program completion?
Other departments require or list our WELD 100 as and elective for their programs. We work with these programs to discuss if there are any specific information is required for their students or their given industry. Because of this dialog we have incorporated new student projects in our courses.

Does your discipline offer cross-listed courses?
Yes

How do you work with the other department(s) to ensure consistent curriculum per the COR and minimum qualifications? How do you coordinate course scheduling?
We have multiple cross listed courses with Industrial Technology. The courses are industry standard and do not require welding specific information. Welding used to teach the industrial Mathematics course, however we lost that course so that the new IT instructor could have a full load.

Are there curriculum concerns that need to be resolved in your department? What are they?
We are currently updating COR's and writing new courses and programs. Our other instructor has now been trained in using Tracdat and META.

Are there courses that should be added or removed from your program - please explain?
We need to add an advanced pipe welding class, Solidworks for manufacturing course, Advanced manufacturing/fabrication course and program.

How is the potential need for program/course deactivation addressed by the department?
Our entire program is relevant with industry, needed by industry, and impacted with students. We don't have any courses that need to be deactivated.

Is your department pursuing non credit or not-for credit options at this time?
No

Are there areas you would like to expand?
We need to expand in the advanced manufacturing and welding automation sectors.

Click here for information about Noncredit and Community Education

Is your department offering online classes?
Yes

How do you consider student needs when determining which classes and how many classes should be offered online versus face-to-face?
We only have two courses that can be offered online. The rest of our program requires laboratory exercises. The online courses were traditionally offered in person, but moved to online when the welding facilities was decreased. We were forced to move these courses online due to facility restrictions. With the addition of the new fabrication lab, we would like to explore offering these courses in person in the future.

Describe other data and/or information that you have considered as part of the evaluation of your program
We communicate with our industry advisory panel, employers, and other stakeholders to consistently assess our program. Our program has worked with local employers, company owners, and unions to give feedback on what industry is seeking in qualified employees.

CAREER AND LABOR MARKET DATA

The Chancellor's Office Vision for Success stresses the importance of increasing the percent of exiting students who report being employed in their field of study. It is important for us to consider how ***all*** of our programs connect to future careers.

Go to this website https://www.onetonline.org/ and enter your discipline in the bubble on the top right for ideas about potential occupations. Click on an example to see more detail.

The following websites are for CTE related data:

- Centers of Excellence (many other data resources besides supply and demand) Password: GetLMI
- LaunchBoard
- LaunchBoard Resource Library
- Chancellor's Office Data Mart
- Career Coach-San Diego Workforce Partnership
- EDD Labor Market Info
- Career One Stop

What kinds of careers are available for people who complete your programs (and/or transfer)? (Refer to link above) Are there any new or emerging careers and if so how would the new or emerging careers impact your future planning?

Onet shows that there are 89 careers available some of these include:
Welding Soldering and Brazing machine setters operators and tenders
Welder, cutter and fitter petroleum and pipe industries
Structural Metal fabricators and Fitters
Steam Fitters
Sheet Meta cutters, welders and fitters
Structural Iron and Steel workers
Millwrights
Engine and autobody assemblers
Model makers metal
Industrial machinery repair
Construction machinery repair and maintenance
Commercial Diving
Robotics technicians
Aerospace welding, and maintenance
Industrial engineering technicians
Weld inspection technologies
Boilermakers
Construction
Heavy equipment repair, agriculture, mining
Rail car Repair
Shipbuilding and Ship repair

What are the associated knowledge, skills, abilities (KSA's) needed for the occupations listed above? (click examples in the link above to get ideas)

The ability to demonstrate knowledge of and skills in the GMAW, FCAW G&S, GTAW, SMAW welding process in accordance with applicable codes in a variety of settings.
Blueprint reading and Layout
Mathematics
Active listening and communication skills
Measuring, marking and preparation of materials using a broad range of tolls and machinery.
Critical thinking and reasoning skills.
Inspection, examining and repairing of welded assemblies.

How does your program help students build these KSA's?

The Palomar College welding program develops the knowledge, skills and abilities of students in a variety of means. Some of these include:
Welding classes, (W100, W115, W110, W120, W140) that teach students how to weld with all of the common welding technologies that are in demand in the industries. Within these classes students must receive interpret and utilize verbal and non verbal instructions on a daily basis, while completing assignments which develop welding skills that lead to American Welding Society Industry certifications.
Welding Classes, (W160, W135 & W150) which teach students essential math, critical thinking and reasoning blueprint, and inspection skills.

Work Based Learning

Applied and work-based learning (WBL) allows students to apply classroom content in professional settings while gaining real-word experience. WBL exists on a continuum that reflects the progress of experiences from awareness-building to training. Students often cycle back through the continuum many times throughout college and throughout their career. Faculty play a critical role in ensuring these experiences are embedded into curriculum and support learning.

Have you incorporated work based learning (work experience, internships, and/or service learning) into your program?

Yes

What have you done to integrate work-based learning?

Currently the Welding Technology is incorporating WBL in a a variety of means throughout the program these include:
1. Clinical experiences in the W!$% classes that includes specific training that allows students to enter the pipe welding environment as a entry level apprentice.
2. Capstone projects. The W140 class trains and administers American Welding Society weld certification tests These

tests that are recognized globally and which are in high demand throughout the welding industry.
3. Industry Tours. In Weld 120 and w145 students are involved in touring local welding businesses.
4. American Welding Society Open house. Palomar regularly hosts a AWS meeting where students are introduced to local industry professionals wherein they have a chance to learn about the various jobs in the local economy and meet companies that are hiring.

How does your work-based learning help your students learn how to do some of the tasks associated with the potential occupations?
WBL allows students to conceptualize a few areas these include.
1. Skill development according to industry standards.
2. Job seeking strategies. Including social media and resume writing, and interview strategies
3. Job awareness. Students have the opportunity to see various industries and can become self aware of the particular industry that they would like to pursue for their future employment.

How do you engage with the community to keep them apprised of opportunities in your program?
The community is appraised and engaged in a variety of means these include:
Advisory meetings that consist of local stakeholders in the welding industry.
Community outreach events, Cal State San Marcos, High Tech High etc.
Industry partnerships with local businesses
Community tours, Various high school tours organized via Palomar College outreach center
Social media
Regularly hosting American Welding Society chapter meetings

What is the regional three-year projected occupational growth for your program(s)?
The Ca EDD department projects between a 3% and 6.5 % growth in the many industries where welders are utilized. A few of the state occupations and their associated projections: Welders, Cutters, Solders and Brazing industry will need 1100 additional workers. Structural Metal Fabricators and Fitters: 100 additional workers. Assemblers and fabricators, 1100 additional workers. Maintenance and repair workers general 4300 additional workers. Farm equipment Mechanics and service technicians 100 additional workers. Helpers Pip layers, plumbers, pipefitters, and steam fitters 200 additional workers.

What is being done at the program level to assist students with job placement and workforce preparedness?
A lot of assistance is available for students for job placement and workforce preparedness. These measures include:

1. Many of the instructors at Palomar college are employed full time in the welding industry. In addition to teaching the hard skills that are necessary, instructors teach the soft skills that are in demand and utilized on a daily basis in their respective industries.
2. Integration of Bruce Reaves, Job Placement Professional, into Palomar's welding Program. Bruce's skills and industry contacts are being utilized in a variety of means these include: Bruce teaches and helps students design a Welding Resume every semester in the Weld 145 class. Bruce regularly seeks out, and creates industry partnerships with local businesses which directly translate to job placement for Palomar welding Students. Bruce additionally spends additional one on one time refining resumes and coaching individuals with interview questions and general interview preparation.
3. Job Board: On a regular basis local welding businesses, advisory board committee members and contacts via Bruce Reaves place job postings on the Job Board

When was your program's last advisory meeting held? What significant information was learned from that meeting?
Spring Semester 2020 a advisory meeting questionnaire was published and sent out to advisory committee members. Additional communication has happened with advisory members via, emails and phone communication. Currently the industry trend is to continue preparing students in the fundamental welding skillsets while ensuring that measuring, blueprint reading and soft skill sets are obtained while in the college environment.

What are the San Diego County/Imperial County Job Openings?
The San Diego, Imperial County job openings are vast and include openings in the following sectors: Construction, Repair and Maintenance, Aerospace, Ship Building, Ship Repair, Fencing, Pipefitters, Sheetmetal, Ironworkers and numerous small businesses. The occupational growth prediction for Welders Cutters Solders and Brazers is about 1% per year in the San Diego area. These numbers translate to 445 additional welders needed on an annual basis with an additional 52 workers needed annually. Currently between Palomar College and San Diego Continuing Education there is a average supply of 94 credit awards for 445 annual job openings.

Program Goals

In the previous sections, you identified opportunities for improvement. Using these opportunities, develop 3-year SMART goals for your department. Goals should be Specific, Measurable, Attainable, Relevant, Time-Specific. Ensure your goals align with the mission of your department and/or the College's strategic plan.

Please list all discipline goals for this three-year planning cycle. Click here for previous PRPs and goal information.

Goals

Goal 1

Brief Description
Create additional Certificates of Achievements in Advanced Manufacturing.

Is this a new or existing goal?
New

How will you complete this goal?
We need to write an Advanced manufacturing course, and a solidworks for manufacturing/CNC programming course. These 2 course in conjunction with existing courses will develop an new certificate of achievement for our program.

Outcome(s) expected (qualitative/quantitative)
The expected outcomes include:
a. increase of Certificates of Achievement
b. Increase in student employment sectors.
c. Increase in entry level wage.

How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?
This goal will support Palomar Colleges strategic plan by increasing the completed Certificates of Achievements (C/A) that welding students will earn. The new C/A's also support guided pathways by creating a program wide model which support faculty while they track, plan, and assist welding students in the welding guided pathway

Expected Goal Completion Date
6/30/2021

Goal 2

Brief Description
Finish the new S3 lab/classroom

Is this a new or existing goal?
Existing

Goal Status
Ongoing

How will you complete this goal?
The S3 lab/ classroom has been a multi year project that is coming to a close. Along the way there have been numerous stumbling blocks that have been overcame. Current tasks and goals include:
a. electricity for welding machine.
b. A/V equipment for classroom
c. shears delivered assembled and training performed on.
d. moving of equipment into new lab.
These tasks and activities are currently being worked on by Kevin Powers and Ashley Wolters during the fall 2020 semester.

Outcome(s) expected (qualitative/quantitative)
1. The ability to offer additional classes during the day and evening in the new classroom.
2. Increased access for all students to advanced fabrication technologies.

How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?
This goal will increase access to the welding program for all demographics. The goal will ensure more students will be able to complete their educational goals in a timely manner. We will be providing our stakeholders with more people qualified to obtain a family supporting wage.

Expected Goal Completion Date
1/1/2021

Goal 3

Brief Description
Rebuilding of Palomars welding technology enrolled students to ensure full classes

Is this a new or existing goal?
New

How will you complete this goal?
This year we saw a sharp decrease in the number of certificates and completions. When the program shut down (Spring 2020 covid) many students were not able to finish their progression towards C/A and welding certificates. Upon surveying the staff we saw about a 50% reduction in the amount of students that completed their coursework during the covid outbreak Another area of concern stems from the fact that there have been no new students enrolled into the introduction to welding, W100, classes for two semesters. This equates to approximately 110 students that would directly feed into and affect the enrollment numbers in the entire program. With these factors in mind a proactive marketing and recruitment campaign will need to be enacted to inform current students, students that have not completed and new prospective students about the opportunities that the Palomar welding program has to offer.. These include coordinated efforts with the palomar recruitment program and marketing program.

Outcome(s) expected (qualitative/quantitative)
a. Increase number of enrolments in all welding classes.
b. increased number of C/A during the next two years.

How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?
This goal aligns with the with all stakeholders by recruiting students that will attend Palomar College.

Expected Goal Completion Date
2/1/2022

Goal 4

Brief Description
Increased number of Certificates and A.S degrees in Welding Technology

Is this a new or existing goal?
New

How will you complete this goal?
In order to increase certificates and degrees the following will be undertaken.
1. All part time instructors will be trained and instructed on how to use and deliver lecture "What welding classes to take and how to file for certificates and degree" lecture. This will ensure that students have a a clear path to completion and know how to apply, where to apply and when to apply for C/A and welding degree.
2.Kevin this is an idea to make sure that students file the correct paperwork. Integration of ePortfolios into W100, W140 & w145 (introduction capstone courses taught by full time faculty= accountability). By integrating C/A and Degree information into a program ePortfolios format Instructors and students will be able to track their progress while ensuring that they file the necessary paperwork thereby increasing the C/A and Welding Technology degrees

Outcome(s) expected (qualitative/quantitative)
The expected outcomes include:
a. increase of Certificates of Achievement
b. Increase of Instructor and Student awareness regarding Certificates of achievement
c. Increase of A.S Welding Technology degrees
d. Increase in program uniformity
e. Increase of participation of all faculty in helping students attain C/A and degree.

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How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?
This goal will support Palomar Colleges strategic plan by increasing the completed Certificates of Achievements (C/A) and associates degrees that welding students will earn. The lecture and ePortfolio supports create a program wide model which support faculty while they track, plan, and assist welding students in the welding guided pathway.

Expected Goal Completion Date
9/1/2021

RESOURCES

Congratulations! You are nearing completion. In this section, you will consider the resources you need to implement your three-year program review plan and/or address any findings from your assessment of your discipline.

The section is organized into the following four parts:

PART 1: Staffing Needs (Faculty and Additional Staff)

PART 2: Budget Review

PART 3: Technology and Facilities Needs

PART 4: One Time Request for Other Needs (NonTechnology Equipment, Supplies, Operating Expenses, Travel)

PART 1: STAFFING NEEDS

Requests for faculty will follow the prioritization process currently in place in IPC, and the IPC SubCommittee. Requests for new staff positions will be prioritized at the division level and reviewed at Exec.

Are you requesting additional full-time faculty?
No

NOTE: If you are requesting full-time faculty, you must go back to the Labor Market section of the form to complete that section. It is required when requesting additional faculty positions.

Are you requesting new Classified, CAST or AA positions?
Yes

REQUEST FOR ADDITIONAL CLASSIFIED, CAST, AA

Staff, CAST, AA request 1

Title of position
ISA Class III

Is this request for a full-time or part-time position?
Full Time

How does the position fill a critical need for current, future, or critical operations? e.g. accreditation, health and safety, regulatory, legal mandates, institutional priorities, program trend analyses of growth/stability Untitled

Approximately 5 years ago, before the increase in classes offered, there was a .45% ISA in the Welding Technology department. Since that time there have been many modifications to the program including; nine additional sections added, class sizes increased from 20-22. During this time of growth the part time ISA position has been vacant and on a yearly basis, via the PRP review process, a full time ISA position has been requested. At this time a full time ISA is again being requested to meet the following needs:

1. Student support. Through weekly adjunct class observations and student survey feedback reports, it is evident that students are waiting for assistance while they should be learning. A ISA Class III will be able to directly instruct the students in the lab while allowing the instructor to help students that have more pressing questions and needs.
2. Instructor support. Currently part time T/A's (Palomar Students) are being regularly trained and rotated through the welding program. There is a regular turnover in this position that is approximately three semesters. While this has been beneficial for the student TA's it has been detrimental to the program in the form of regularly retraining assistants. A full time ISA will help by creating a stable work and learning environment for students and staff.
3. A higher level of expertise is needed in the form of a assistant VS the traditional T/A. With the expansion of the welding program and the technologically advanced equipment (CNC plasma, CNC Waterjet, advanced welding processes, CNC brake and shear) a individual is needed that can operate these machines on oversee the use of these machines.
4. Health and Safety. With the addition of the new welding lab, additional advanced fabrication classes will be offered. Many of these machines can be life threatening if used improperly or without direct supervision. A quality ISA

Does the position assist in establishing more efficient District Operations through either of the following: reorganization/restructuring OR use of technology?

Yes the The ISA position will establish more efficient district operations through the use of technology in the Welding Technology department. The Palomar college welding department currently owns many pieces of CNC equipment that are utilized in the manufacturing sector. With the expansion of the welding lab students will have access to this equipment.

Is there funding that can help support the position outside of general funds?

No

Describe how this position helps implement or support your three-year PRP plan.

This position supoport the three year PRP plan by allowing us to continue expanding class offerings in the new welding lab and offering student and staff safety and support advanced welding technology classes and in regular welding classes.

Strategic Plan 2022 Objective

1:3 2:4 4:1 4:2

If the position is not approved, what is your plan?

Our plan is to do the best with the resources that we have available.

PART 2: BUDGET REVIEW

Review your Budget/Expenditure reports for 2018, 2019, 2020. Consider your three-year PRP plan.

Click on the link below to access directions to the *Available Budget Report* to complete this section.

How to Request the Available Budget Report

Reflecting on your three-year PRP plan, are there any budget considerations you would like your dean/supervisor to be aware of for the upcoming year?

Yes

What budget considerations would you like your dean/supervisor to be aware of or to consider? Please be as specific as possible. For example, if you need an increase in the 40000 account and a decrease in the 23000 account, describe what increase your department needs, how much, and a description of why the department needs the adjustment.
For the past six years a full time Instruction aid has been requested for the welding department. The following budget request reflects the addition of a full time ISA.

ISA Class III 53459
24000 Short Term T/A's 24000
40000 General 37989
40000 Student Material Fee 44550
50000 General 11988

sub total 171986
less revenue material fee -44550
less T/A funds if ISA is hired -18000

TOTAL 109436

NOTE: PARTS 3 and 4 – TECHNOLOGY, FACILITIES AND OTHER NEEDS

This year the College is implementing two new processes related to resource needs coming from the PRP process.

1. One-Time Fund Requests. The college is implementing a process for prioritizing and allocating funds for one-time needs/requests tied to Program Review and Planning. Prioritization will take place through participatory governance in planning councils and the Budget Committee. Then, a recommendation will be made to Exec for funding of request utilizing various funding sources.

   For more information about funding sources available, see IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES.

   Consider submitting one-time requests only if you have verified that you cannot fund the request using your general discretionary funds or other funds.

2. Technology and Facilities Review. From now on, ALL requests for technology will go through an institutional review process. If you request technology here, you will see a description of the process below.

PART 3: TECHNOLOGY AND FACILITIES NEEDS

Will you be requesting any technology (hardware/software) this upcoming year?
No

Do you have resource needs that require physical space or modification to physical space?
No

PART 4: OTHER ONE-TIME NEEDS

For more information about funding sources available, see IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES. Please check with your department chair on the availability for this cycle.

Do you have one-time requests for other items (e.g., Non-Technology Equipment, Supplies, Operating Expenses, Travel) that your budget or other funding sources will NOT cover?
No

I confirm that the Program Review is complete and ready to be submitted.
Yes

Enter your email address to receive a copy of the PRP to keep for your records.
awolters@PALOMAR.EDU

Review

Chair Review

Chair Comments
Ashley,
Please update WBL under labor market, tighten up the coursework comments, and curriculum outcomes.
Nice updates Ashley!
BUDGET NUMBERS INCLUDED

Chair Name
Anthony Fedon

Chair Sign Date
10/29/2020

Dean Review

Strengths and successes of the discipline as evidenced by the data and analysis:
Excellent review. Excellent and appropriate goals.
I agree that the program needs and ISA or continued hourly help for health and safety reasons in the labs.

Areas of Concern, if any:

Recommendations for improvement:

Dean Name
Margie Fritch

Dean Sign Date
11/6/2020

IPC Review

Strengths and successes of the discipline as evidenced by the data and analysis:
The program assessments and results are to be commended.
Program completions are increasing due to the flexible scheduling including morning, evening, and Saturday classes along with counseling.
Excellent program review; easy to understand the program by reading it.
Good use of feedback from industry faculty and advisory committee.
The use of the OEI rubric and outline has led to significant changes to online course practices, including student interventions and course reorganization.
The program is consistently evaluating and improving ways for students to have the information they need to have a clear path (how, when, where to apply for a welding degree) and involves faculty in the process.

Areas of Concern, if any:
It was noted that the program has been hit hard this year by the Covid-19 pandemic, which closed the labs.

Recommendations for improvement:
Use actual numbers for WSCH/FTEF.

IPC Reviewer(s)
Cindy Anfinson, Nancy Browne,Jennifer Backman, Justin Smiley, Rocco Versaci

IPC Review Date
11/30/2020

Vice President Review

Strengths and successes of the discipline as evidenced by the data and analysis:
well developed SLOs informed by employers; regular assessment of SLOs; alignment of PLOs and SLOs; modification of student learning based on outcome assessments; improved completion rates; work being done on curriculum and e-portfolios; very good work around conversion of lecture to OL with CVC/OEI.

Areas of Concern, if any:
1. space & additional curriculum

Recommendations for improvement:
1. adjust your standard to reflect your discipline course success rate -- sounds like at least 80% would be the baseline for your target now.
2. need to think through adding curriculum where there are already concerns about lack of space. conversation should be part of long-term planning and identified funding
3. provide specific measurable outcomes for goals -- e.g. increase number of enrollments in all welding classes by 2% -- (i just threw that number in there) -- it should be based on what's realistic

Vice President Name
Shayla Sivert

Vice President Sign Date
1/2/2021