

**Excerpt from Final Report
submitted by Southwestern Oregon Community College**

What worked? How do you know that it worked? *(Describe your successes and your evaluation process)*

Three Years of Perkins Nontraditional Grants at Southwestern Oregon Community College

This was the third year we received a Perkins Nontraditional Grant which was focused on women in nontraditional careers, especially welding. Three girls from two previous events entered the Welding and Fabrication program during the fall of 2011. One girl left after one term to continue her welding studies in another location. Two of the girls continued in the welding program and were mentors to the girls at the New Faces of Welding event on February 10, 2012. The high school girls really enjoyed seeing graduates from their schools in the welding program. (See pictures below.)

One woman from a previous event, which included women from the community as well as high school girls, entered the welding program in the fall of 2010 and will graduate this year.

The recruitment results for this year won't be known until next year, or the year after, but we had twice as many participants this year at the New Faces of Welding event and approximately 240 women and girls in our region had the opportunity to see the mobile welding lab and experience virtual welding at their high schools and in the community throughout the last two years due to the leveraged contribution of the US Department of Labor Employment and Training Community Based Job Training grant.

While we did not meet our target rate for 2010-11, the trend for nontraditional participation definitely showed an increase and can be attributed to Southwestern's commitment to nontraditional students in CTE programs.

PERKINS IV PERFORMANCE MEASURES		2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
5P1. Nontraditional Participation The rate at which CTE <i>participants</i> from underrepresented gender groups participated in a program that leads to employment in nontraditional fields.	Target	15.68%	17.54%	19.40%	21.26%		
	Actual	13.91%	11.42%	13.03	15.00%		

**Strategies That Worked
Women in Welding Project 2011-2012**

The Women in Welding Project is leading to the successful recruitment of students (nontraditional by gender) into the Manufacturing Technology/Welding program which is a Program of Study at Southwestern Oregon Community College. Seven high school programs are aligned with Southwestern's program. The following strategies were successfully used in this effort.

- *Expose students to nontraditional role models*
- *Expose students to nontraditional career opportunities*
- *Give students a positive hands-on experience in a nontraditional career*

This project brought nontraditional experiences to young women in middle school and high school and implemented new recruiting and retention strategies within the Programs of Study in attempt to strengthen nontraditional participation and retention in both secondary and post-secondary Manufacturing Technology/Welding Programs of Study.

Results of *New Faces of Welding* Event on February 10, 2012

- Number of students at welding event 30
- Number of high school faculty and CTE- welding advocates 7
(Schools were asked to bring chaperones who were willing to be advocates for welding programs upon their return to the high schools.)
- Number of Mentors 7
Pipe welder, underwater welder, engineering officer, hammer forge artist, retired iron worker, architectural elements welder, sculptor

Two popular mentors returned for the third year – The engineer and the underwater welder. All mentors voluntarily donated their time and travel expenses. None of the mentors requested travel reimbursement.

- College welding student participation in event for service learning 16

Learning Objectives Accomplished

Students will

Be aware of women's opportunities in Manufacturing Technology/Welding

The mentors came from a variety of professions using welding and fabrication: underwater welder, wood and metal sculptor, architectural elements fabricator, pipe fitter, retired industry welder, engineer with the Coast Guard, hammer forge artist

Be aware of the challenges and rewards of working in a nontraditional career

The girls spoke with the mentors who addressed some of the challenges and rewards of their careers in an informal setting so the girls and mentors could take the time for a dialogue.

Be aware of the pathway to the career

Each of the participants received a brief description of the mentor's career history showed their career path. This was also addressed during the small group

conversations. Mentors were provided with a list of questions to address in their initial presentations to the girls.

Be aware of industry certification

This was also addressed in the small group presentations/discussions.

Have a first-hand experience in welding

Each student, teacher and chaperone had the opportunity to weld a product which was a jewelry holder seen in the picture below.



High School Students' Responses (Highlights)

(The students' comments below substantiate the achievement of the learning objectives.)

1. What did you like most about the event?

(19 students liked the hands-on experience the most and 3 liked the mentors the most)

- Being taught how to do a vertical up mig weld
- That I actually learned how wire weld and they accept anyone
- I liked listening to all the different people and their career.
- I liked how well the college students actually helped us and taught –us something

2. What did you like least about the event?

(It was a cold rainy day and the mentors, group gathering and meals were under a large tent so most of the responses regarded the cold as the least liked part of the day.)

- The cold (11)
- Not enough hands on welding
- Everything was great
- The sparks from the grinder
- Loudness
- Love it all
- Going from booth to booth

3. If we do this event again, how could it be improved?

(Not surprisingly, the majority of the comments were about getting heaters or having the event indoors)

- More heat (13)
- By doing different types of welding
- I think it was great
- More welding, more variety
- More projects
- More welding

4. What did you learn today?

- How to weld (13)
- Many more types of welding
- Learned how to get in SWOCC program
- Welding is very dangerous
- A lot especially insight to how the working field truly is.
- To much to write

5. If you are a student, do you plan to take welding class at your high school or when you graduate

from high school? Yes or No What are your reasons for taking a class or not taking a class?

(23 girls answered 'yes' to taking a class and 2 were unsure and 1 said 'no')

- Yes. Good talent to have, useful!
- Yes. I would take it because Im going into the engineering field
- Yes. I love to weld.
- Yes. I enjoy and seem to be decent at it



SWOCC welding student and three high school students

Teacher requests more information:

One school requested 40 copies of the Welding Program Sheets to have available for the students at the high school – This definitely shows an interest in encouraging students to attend the Welding and Fabrication program at Southwestern.

High School Students Create Video of the Event

The original intention in the grant proposal was to have Southwestern staff and students create a video of the women in welding event. Instead, Southwestern partnered with Joe Morin, digital media instructor, at Brookings Harbor High School to have his students video record the event and create a DVD to be presented at public forums, regional schools and agencies. The video was presented at a CTE Network meeting.



Underwater Welder talking with girls and one of the girls trying on the underwater helmet

E-mail from underwater welder mentor after the event:

I'm so glad that I could be a part of this great program again, I hope that it will continue for years to come and I would love to be a part of it then too. I really wish there was a program like this when I was in high school. It feels so great to be able to speak with these girls and young women and to inspire them to reach for the unknown. While I was in Bandon visiting with some of my family and friends I had a lot of young women ask if this is something open to the public. With the lack of jobs in Coos County, women are now reaching out for any work they can find. I feel that if SOCC were to open an event like this to a few more of the local women they could see the welding shop and be inspired to attend the welding program or really any kind of trade. I was thrilled that this years program had more girls from more of the nearby schools. Thanks again for letting me be a part of this great program.