

College of Liberal Arts and Sciences
Department of Sociology

Post Office Box 751 (503) 725-3926 tel
Portland, Oregon 97207-0751 (503) 725-3957 fax

<http://www.sociology.pdx.edu>

Evaluation of the June 2021 Carpenters Trade Preparation Pre-Apprenticeship Program at the Pacific Northwest Carpenters Institute in Tangent, Oregon

Maura Kelly and Ned Tilbrook
Department of Sociology
Portland State University
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Overview of findings

- *Demographics*: Nine of the ten students enrolled in the June 2021 pre-apprenticeship cohort completed the program. Eight students completed both wave one and two surveys and are included in this analysis. Half of the students in the cohort were white, 88% were men, all were heterosexual, and 75% were parents. The mean age of the sample was 31.
- *Reasons for enrolling*: At wave one, students reported enrolling in the program in order to have a more financially lucrative career, have a long-term career, and to change careers. Students reported wanting to learn “hard skills” (e.g. carpentry skills, safety procedures) as well as “soft skills” (e.g. union membership, how to navigate the industry).
- *Self-evaluation of skills*: From wave one to two, participants reported improving their skills in a variety of “hard skills” (e.g. construction safety, power tools) and “soft skills” (e.g. knowledge of construction culture, seeking union work). This overall increase in perceived skills indicates a successful pre-apprenticeship class.
- *Perception of benefits of working in the trades*: Participants were optimistic about the benefits of working in the trades at both waves of the survey (e.g. opportunities for good paying jobs, work will contribute to society); more participants agreed at wave two compared to wave one that they would have opportunities for leadership positions.
- *Perception of challenges of working in the trades*: For some survey items, fewer participants thought they would have a challenge at wave two than at wave one (e.g. being out of work too much, being treated disrespectfully on job sites). These indicate areas where students had concerns at the start of class that were alleviated by the information they learned in the class. For other survey items, more participants thought they would have a challenge at wave two than at wave one (e.g. being away from home for long hours, finding consistent childcare). These indicate areas where students were not aware of potential challenges before the class.
- *Perceptions of succeeding in the trades*: All students reported believing they would have a successful career in the trades.

Introduction

This report provides findings from the Portland State University (PSU) evaluation of the June 2021 cohort of the Carpenters Trade Preparation (CTP) Pre-Apprenticeship Program at the Pacific Northwest Carpenters Institute (PNCI) in Tangent, Oregon. This CTP pre-apprenticeship program was a four-week class in June 2021 that prepares students for careers in the trades. The study assessed students' perceptions of their skills related to a trades career, beliefs about the benefits and challenges of working in the trades, and views of their ability to be successful in their trades careers. PNCI staff provided input on the survey instruments to ensure the evaluation measured the objectives of the class. Survey items about challenges in the trades were based on previous research (Kelly and Wilkinson 2020). Survey instruments are shown in Appendix A and Appendix B. Two surveys were administered by PSU researchers at the PNCI facility in Tangent, Oregon. The initial survey was administered at the beginning of the first day of the pre-apprenticeship class and the second survey was administered at the end of the last day of the pre-apprenticeship class. This project was funded the Oregon Department of Transportation (ODOT)'s Highway Construction Workforce Development Program, which is managed by the Oregon Bureau of Labor and Industries (BOLI) .

Demographics

Ten students enrolled in this cohort. Of these, nine completed the program and eight completed both the wave one and wave two surveys. In terms of the demographics of the eight students who completed wave one and two surveys, exactly half were white, 88% were men, all were heterosexual, and 75% were parents. The mean age of the sample was 31.

Reasons for enrolling

Participants were asked why they enrolled in the pre-apprenticeship program. Multiple participants indicated that they had enrolled to secure a more financially lucrative career and, indeed, to have a long-term career. Some participants also indicated that they were looking for a career change, for example one said 'Complete career change from desk job to hands-on job'. Multiple participants also stated that they enrolled in the program because they enjoyed working with their hands; one student noted that 'I am interested in building and woodworking. I like working with my hands.'

As part of the wave one survey, participants were asked to write down the three things that they wanted to learn in the pre-apprenticeship program. All but one participant indicated that learning the skills of their trade, with responses such as 'carpentry skills'. Other common responses included learning about safety procedures, union membership, and what to expect from a career in the construction trades. An example of this comes from one student who indicated that they wanted to learn 'How to navigate the construction industry'.

Self-evaluation of skills required for construction trades

In both the wave one and wave two surveys, participants were asked to rate their strength (very weak, somewhat weak, somewhat strong, very strong) on a variety of items representing skills

needed for careers in the construction trades that were covered in the class. Figure 1 displays the mean rating for each of these skills.

Figure 1. Mean rating of strength in construction trade skills.

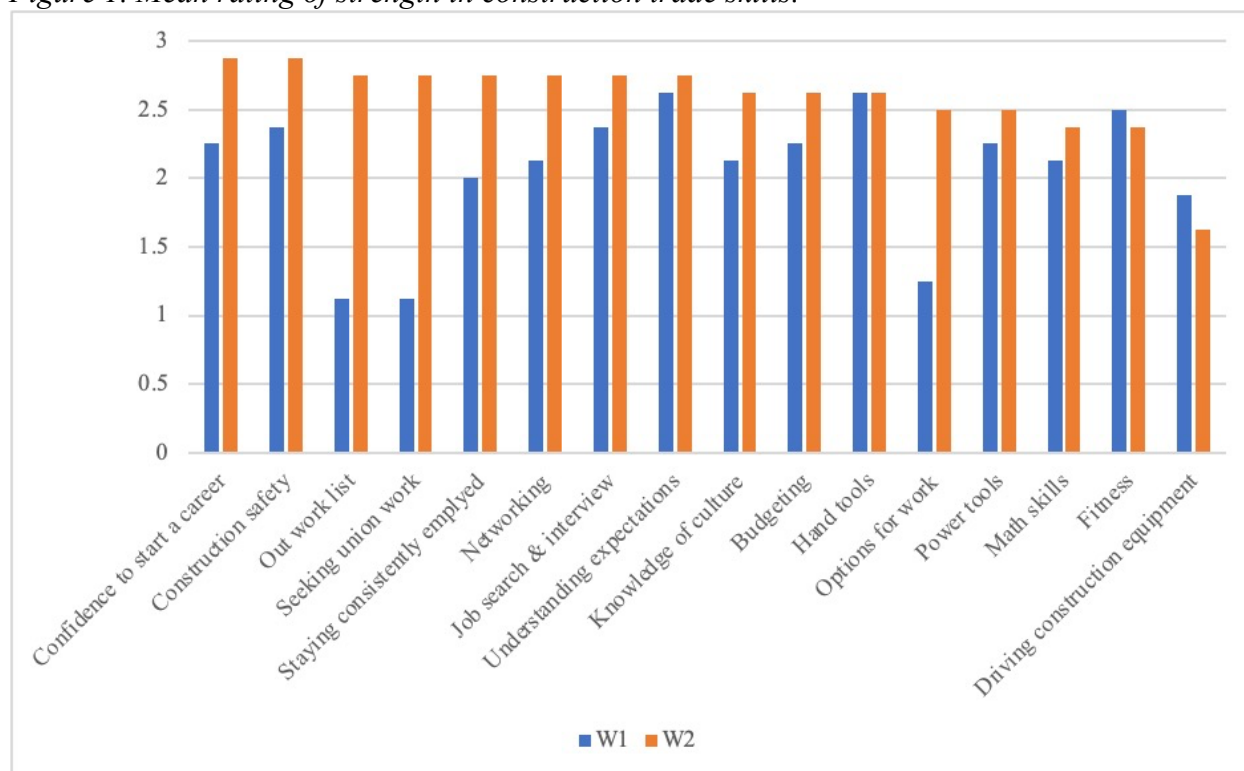


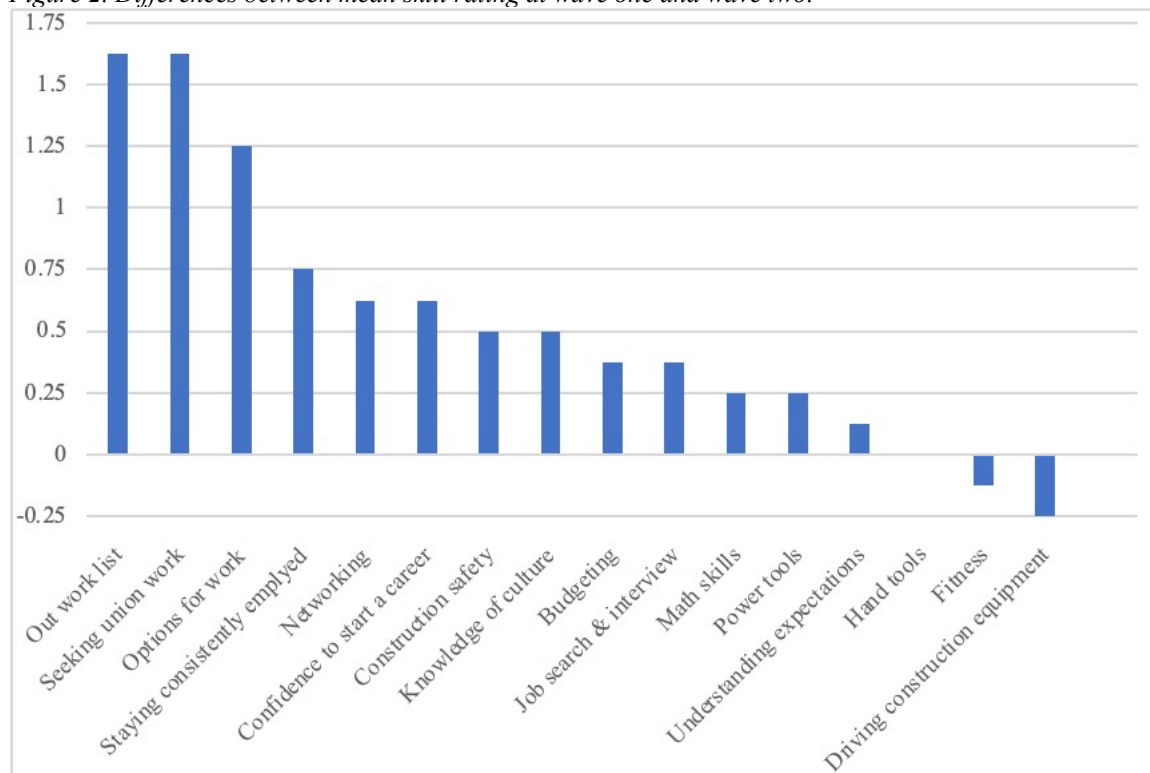
Figure 1 shows that, by wave two, participants rated themselves as strongest, on average, in construction safety and the confidence to start a career. Students also rated highly several items representing skills related to securing work. At wave two, students reported that they were weaker on math skills compared to the other items, although students reported increasing these skills from waves one to two. It may be that a four-week class cannot provide the level of training that would be needed for some students to bring their math skills up to “very strong.” At wave two students also reported lower levels of skill (and a decline from waves one to two) in fitness and driving construction equipment. This may be because students did not fully appreciate the level of training required to drive construction equipment or the physical demands of the job before they began their pre-apprenticeship.

Figure 2 shows the differences between the mean strength scores from the first and second wave. A positive number indicates that the mean self-rated strength of participants in a skill increased between the first and second waves, whereas a negative number indicates it decreased. The majority of the skills saw an increase in the average strength rating, particularly knowledge of how to get on the out of work list, knowledge of how to seek out union work, and knowledge of options for work.

Notable increases are also seen in knowledge of how to stay consistently employed, understanding the need to build a network, and having the confidence of to start a career in the trades. These skills represent ‘soft’ skills, those that help workers interact and network with others in their line of work

as well as knowledge of the way their trade works. Thus, one of the key outcomes of the pre-apprenticeship program has been a building of soft skills in the pre-apprentice students.

Figure 2. Differences between mean skill rating at wave one and wave two.



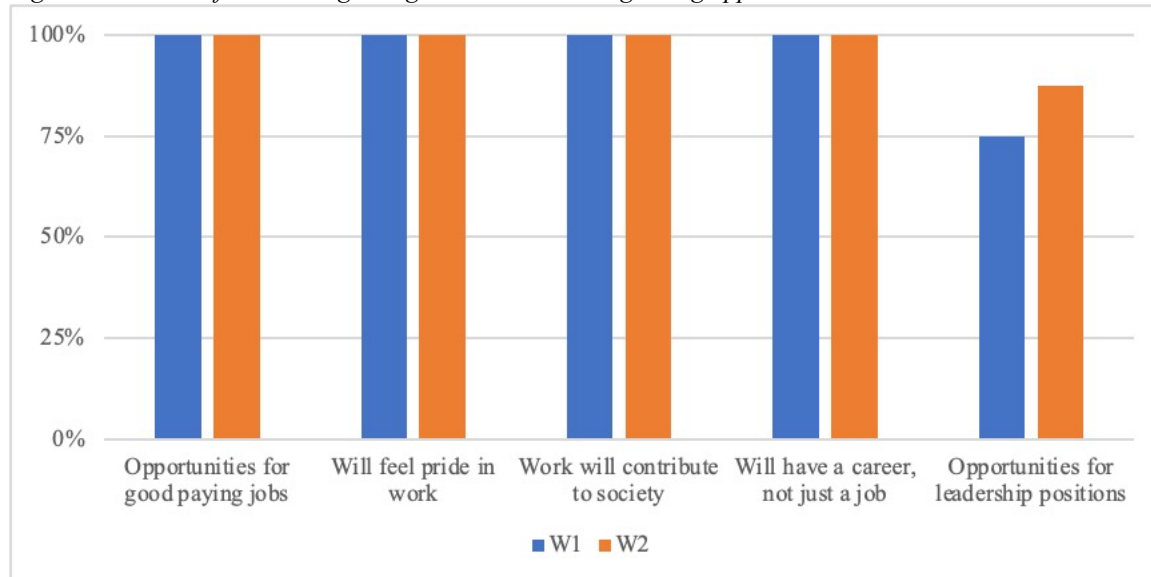
In the wave two survey, participants were asked what the three most important things they learned or learned more about as well. Soft skills related to knowledge of norms and expectations of the trades was the most common answer with more than half of the sample entering this. Examples of responses referring to soft skills include ‘How to network to stay busy’ and ‘Be on time, time is money, being punctual is very important.’ This finding reflects others noted in previous sections that participants reported an increase in their strength in soft skills between the two waves, and that fewer participants agreed that survey items relating to soft skills would be a challenge for them in their career. Learning about the union and about safety were other common responses to this question.

When asked to report three things they wanted to learn more about during wave two, every participant mentioned some hands-on skill related to their trade. Half of the sample specifically used the term ‘hands-on’ or referred to ‘experience being at an actual job’. Three participants specifically wanted more experience with power tools, and three referred to more specific skills. This feedback about desiring more hands-on experience mirrors student responses in evaluations of other pre-apprenticeship programs (Kelly and Wilkinson 2017). One participant reported they wanted to learn more about ‘How to prevent layoffs’. It is also worth noting that only two participants provided the three answers, two provided two answers, and the remaining four provided only one. This suggests that most of the topics that the students hoped to learn about were covered in the class.

Benefits of working in the construction trades

In both surveys, participants were asked to rate the extent to which they agreed (strongly agree, agree, neutral, disagree, strongly disagree) with a series of statements about the construction trades. The first five of these related to the benefits and opportunities of the trades, the rest related to challenges associated with working in the construction trades (discussed in the next section). Figure 3 shows the percentage of students that agreed (strongly agree or agree) with the statements relating to benefits and opportunities in both waves

Figure 3. Percent of students agreeing with statements regarding opportunities in the construction trades.



Four of these statements (I will have opportunities for good paying jobs, I will feel pride in my work, my work will be an important contribution to society, and that I will have a career, not just a job) were agreed with by all participants in both waves. The final item in Figure 3, that the student will have opportunities for leadership positions in the construction trades, was agreed with by 75% of students in wave one and 88% in wave two.

Participants were also asked an open-ended question about what they saw as the biggest benefits of working in the construction trades. In both waves, the pay and benefits of construction trade jobs were mentioned by the majority of participants. These sentiments are captured in comments such as ‘good pay, benefits’ and ‘The potential for prevailing wages - more income.’ The opportunity to have a career, rather than a job, was mentioned by two participants in the first wave, but by five in the second. This often went hand-in-hand with financial benefits. For example, one pre-apprentice, in their second wave survey wrote: ‘Career- money- Brotherhood’. The intrinsic satisfaction of learning and using the skills of their trade was another oft-mentioned benefit of a career in the construction trades. One participant, in their wave one survey, wrote ‘Doing work that I enjoy, such as working with my hands and building something I'm proud of.’

Challenges of working in the construction trades

Figure 4 shows the percentage of participants that agreed with statements regarding challenges they may face in the construction trades. Omitted from Figure 4 are items that no participants agreed would be a challenge in either wave: maintaining housing, passing the classes required for their apprenticeships, finding transportation, or paying for gas. The first three of these items relate to basic material necessities for many jobs, and perhaps reflects some level of financial security among participants (although 13% of students in both waves did agree that paying for tools, clothes, and equipment will be a challenge).

Two statements that some participants agreed were challenges in wave one, being treated disrespectfully on sites (38%) and spending enough time with family (13%), were no longer perceived as challenges by any participants in wave two. This may reflect certain doubts some participants had before the pre-apprenticeship program being addressed during the program. On the other hand, there were two items that no apprentices thought would be a challenge at wave one but emerged as challenges at wave two: paying for overnight travel and finding consistent childcare. This suggests that apprentices were made aware of these potential challenges during the class. The trend of increasing agreement on some items and decreasing agreement on others mirrors the findings of previous evaluations of pre-apprenticeship programs (Kelly and Wilkinson 2017).

Figure 4. Percent of students agreeing with statements regarding challenges in the construction trades.

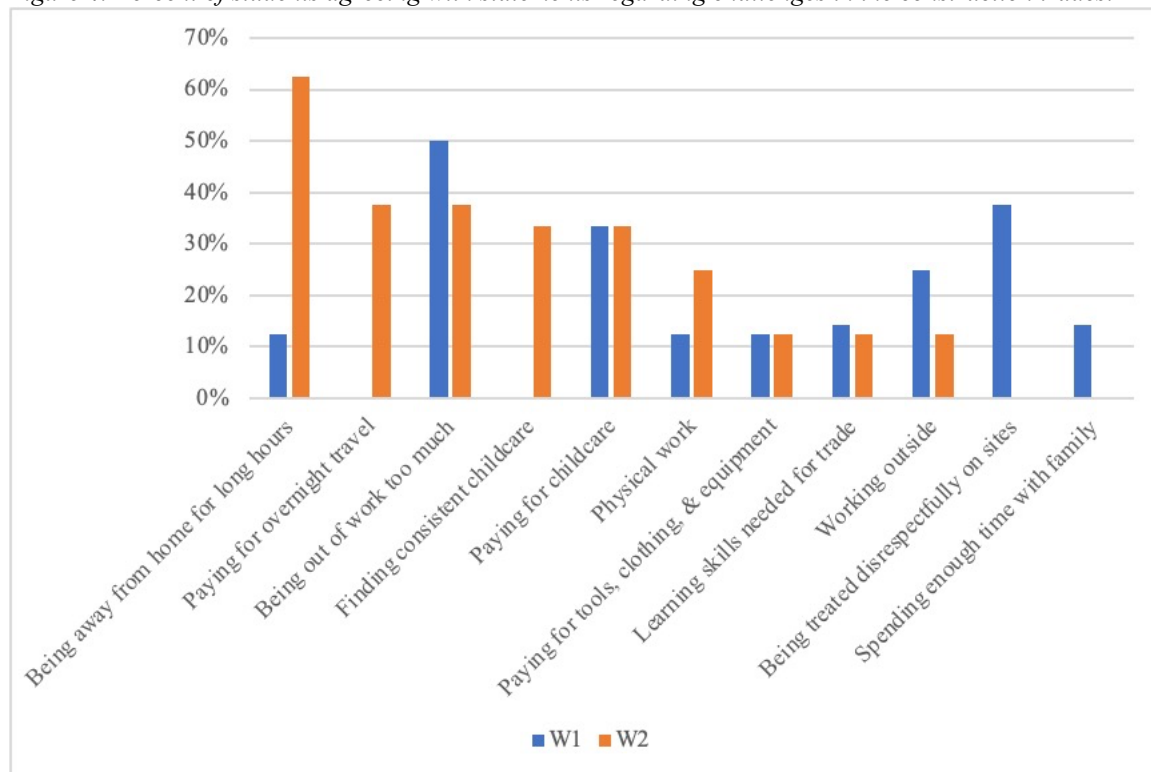
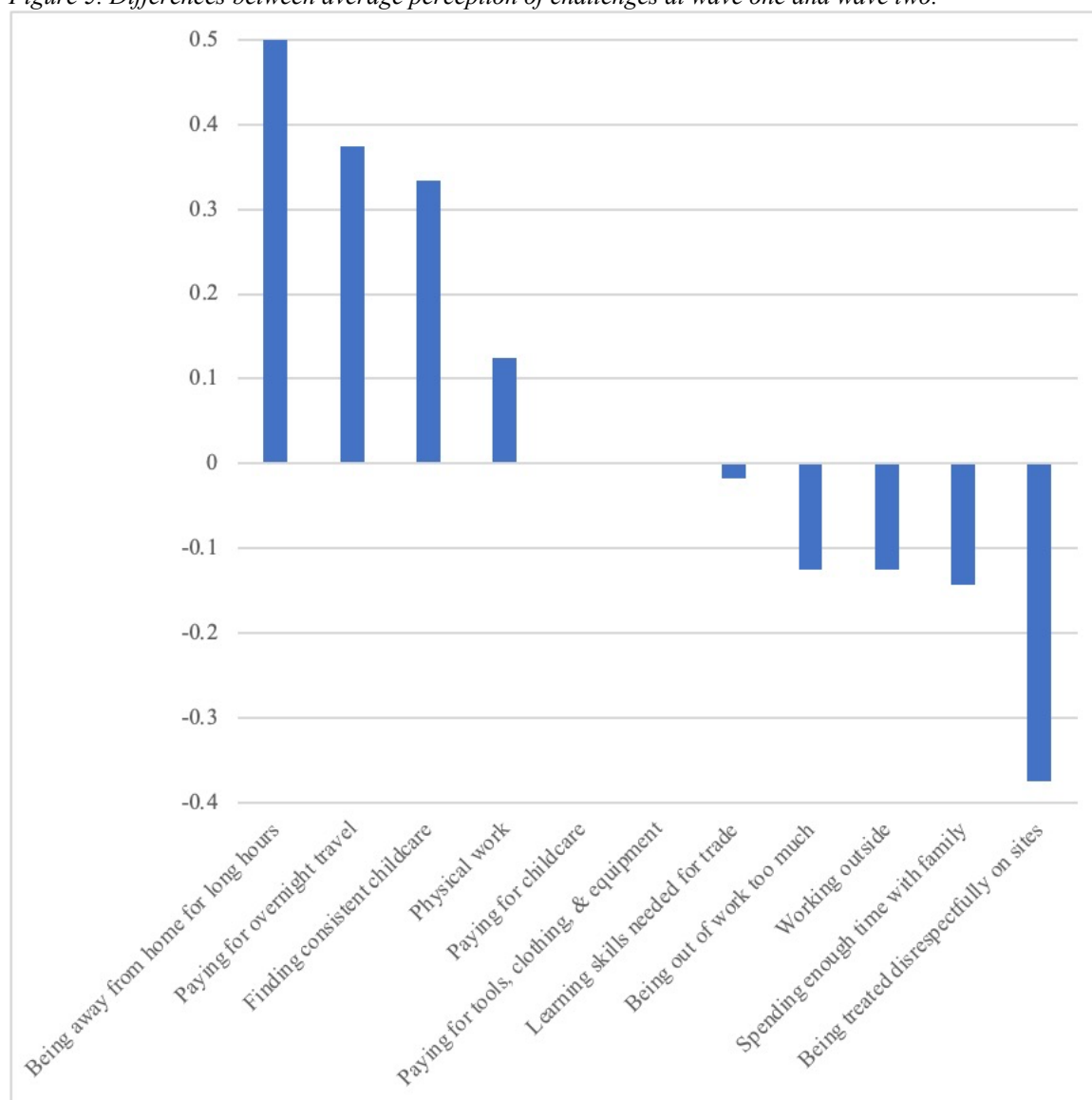


Figure 5 shows the differences between average perception of challenges between the first and second wave. A positive number indicates that the percent of students agreeing increased, whereas a negative number indicates it decreased.

Figure 5. Differences between average perception of challenges at wave one and wave two.



At wave two there was more concern about the challenges of being away from home for long hours, paying for overnight travel, finding consistent childcare, and the physical nature of the work. As noted above, this may reflect an increased knowledge of these particular requirements of the job that students were less aware of before their pre-apprenticeship program. Students were equally concerned at waves one and two about paying for childcare, tools, clothing, and PPE. At wave two there was less concern about learning the skills needed for the trade, being out of work too much, working outside, spending enough time with family, and being treated disrespectfully on the job site.

The reason for the increased concern about being away from home for long hours (reported by about 60% of students) at wave two is not entirely clear. It is not directly due to concerns about spending enough time with family (no students reported this would be a challenge at wave two). However, it may be that as students learned more about the cyclical nature of construction, they

had more concerns about being away from home during busy seasons but remained less concerned about spending time with their family overall, given that they are likely to have more time off during less busy seasons. The concern about being away from home for long hours is also not due to concerns about the cost of fuel (no students reported believing this would be a challenge) but it may be partially due to concerns about the cost of overnight travel (40% of students reported this may be a challenge).

The finding that students are less concerned about being out of work is congruent with the findings about perceived skill gains detailed above: participants rated themselves as stronger in areas such as finding work and networking in wave two than in wave one.

Turning to the potential challenges that participants perceived in the open-ended question, adapting to the workplace environment was the most common response in the first wave. One student wrote that they saw the biggest challenge of working in the trades as ‘getting familiar with work and requirements, work culture and being on time’. However, no participants indicated that they saw this as the biggest challenge during the second wave. This reflects another previously detailed finding that participants rated their strength in soft skills as much higher in wave two than in wave one. Other challenges that participants perceived were fairly consistent between waves, though all were only seen as the biggest challenge by a minority. Finding consistent work, the physical aspect of the job, and working in bad weather – ‘surviving snow season’ as one participant put it – were these challenges.

Perceptions of succeeding in the trades

Students were very optimistic about their careers in the trades. At both waves one and two, all students reported agreeing with items indicating that they would enroll in an apprenticeship within the next year, would be working in the trades in five years, would be working in the trades in ten years, and would hold leadership positions in the trades.

Conclusion

Students in this program wanted to enter a career in the trades primarily due to the increased financial security it would bring them and for the satisfaction of doing something that they are interested in. Responses from students in this cohort indicate that they were able to significantly build their soft skills – such as networking and knowledge of site culture – during the pre-apprenticeship program. These skills saw the largest mean increase in strength rating between the two surveys, and were frequently mentioned as important things participants had learned in the wave two surveys. This suggests that this program has been successful in de-mystifying what working in the construction trades involves and building confidence in pre-apprentice students.

Pre-apprenticeship remains an important tool for providing a pathway into the trades for individuals who would not otherwise enter this industry, particularly those from race and gender groups that are underrepresented in the trades. Previous research shows that between 2008 and 2019, 20% of women of color, 16% of white women, and 8% of Black men completed a pre-apprenticeship program prior to entering the trades (Kelly and Wilkinson 2020). Pre-apprenticeship also provides a pathway for members of race and gender groups underrepresented

in the trades into *union* apprenticeship programs, which apprentices are more likely to complete compared to non-union programs (Kelly and Wilkinson 2020).

References

Kelly, Maura and Lindsey Wilkinson. 2020. *2020 Evaluation of the Highway Construction Workforce Development Program*. Final report submitted to Oregon Labor and Industries and Oregon Department of Transportation. Available at <http://maura-kelly.com/>.

Kelly, Maura and Lindsey Wilkinson. 2017. *Evaluation of Pre-Apprenticeship and Retention Services in the Trades*. Final report submitted to Oregon Tradeswomen, Inc and Constructing Hope. Available at <http://maura-kelly.com/>.

Appendix A: Pre-class survey



Evaluation of Pre-Apprenticeship Program

BACKGROUND: Portland State University researchers are conducting an evaluation of your pre-apprenticeship program. The objective of the study is to learn more about people's experiences in pre-apprenticeship programs. The study is sponsored by Oregon the Bureau of Labor and Industries and the Oregon Department of Transportation.

INSTRUCTIONS: You will be asked to complete this short survey, which will take about 10 minutes. Your participation is voluntary and you are not required to provide PSU with the information requested in the survey. By taking the survey, you give your consent to participate in the study. You don't have to answer any questions you don't want to answer and you can stop at any time. **If you choose to participate, you will be entered into a raffle to win a gift card for \$25.**

BENEFITS AND RISKS: Benefits of the study include contributing to research that will potentially improve the experiences of future workers in the construction trades. Risks to participating in the study are minimal (e.g. thinking about potential negative future experiences working in the construction trades).

CONFIDENTIALITY: **PSU will keep your answers to this survey confidential to the fullest extent possible.** Only the PSU researchers conducting the project will be able to connect your name to your responses on the surveys. Any information that could identify you will not be shared with the public agencies funding the study and will not be included in reports from this study.

ADDITIONAL INFORMATION: If you have concerns or problems about your participation in this study or your rights as a research subject, please contact the PSU Office of Research Integrity at 503-725-2227. If you have questions about the study itself, contact Dr. Maura Kelly at 503-725-8302.

Yes, I give my consent to participate in the study:

Name (print)

Signature

Please continue to the next page!

	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely
You will complete this pre-apprenticeship program?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will be enrolled in an apprenticeship program within the next year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will complete an apprenticeship program?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will be working in a construction trade 5 years from now?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will be working in a construction trade 10 years from now?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will hold a leadership position in the trades (e.g. foreman, supervisor, superintendent, business owner, instructor, union staff) in the future?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

--

- 1.
- 2.
- 3.

4. Please evaluate your current strength in the following areas:

	Very strong	Somewhat strong	Somewhat weak	Very weak
Math skills needed for the construction trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of construction safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of hand tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of power tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to drive construction equipment (e.g. forklift)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial and budgeting skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job search and interview skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical fitness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understanding of the expectations for working on job sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of the culture of construction job sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understanding of the need to build a network in the trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of how to stay consistently employed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of how to get on the out work list	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of how to seek out union work in my trade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of the options for working in the trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confidence to start a career in the trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. What do you see as the biggest benefits of working in the trades?

6. What do you see as the biggest challenges you will experience working in the trades?

7. Below are some statements about working in the trades. Please identify whether you strongly agree, agree, neither agree nor disagree (neutral), disagree, or strongly disagree with the following statements.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I will have opportunities for good paying jobs in the construction trades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will have opportunities for leadership positions in the construction trades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will feel pride in my work in the construction trades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work will be an important contribution to society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the construction trades, I will have a career, not just a job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paying for tools, work clothing, or protective equipment will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintaining housing will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being away from home for long hours will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finding transportation to and from work and class will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paying for gas to get to and from work and class will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paying for overnight travel (transportation, hotel, and food expenses) will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being out of work too much will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Passing the required classes for my apprenticeship program will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning the skills needed for my trade will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being treated disrespectfully on construction work sites will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doing physical work will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working outside will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having a job in the trades will make spending enough time with my family a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[If a parent] Finding consistent childcare will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[If a parent] Paying for childcare will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Finally, we would like to collect some demographic information:

8. What is your race/ethnicity? (Please check all that apply)

- ☐ White
- ☐ Black or African American
- ☐ Asian or Asian American
- ☐ American Indian or Alaska Native
- ☐ Native Hawaiian or other Pacific Islander
- ☐ Latino/a, Hispanic, Spanish
- ☐ Another race/ethnicity, please specify: _____

9. What is your age? ____

10. What is your gender?

- ☐ Man
- ☐ Woman
- ☐ Non-binary

11. What is your sexual identity?

- ☐ Heterosexual or straight
- ☐ Sexual minority (e.g., gay, lesbian, bisexual, queer)

12. Are you currently parenting one or more children under 18?

- ☐ Yes
- ☐ No

The PSU researcher will collect this survey. Thank you!

Appendix B: Post-class survey



Evaluation of Pre-Apprenticeship Program

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BENEFITS AND RISKS: Benefits of the study include contributing to research that will potentially improve the experiences of future workers in the construction trades. Risks to participating in the study are minimal (e.g. thinking about potential negative future experiences working in the construction trades).

CONFIDENTIALITY: **PSU will keep your answers to this survey confidential to the fullest extent possible.** Only the PSU researchers conducting the project will be able to connect your name to your responses on the surveys. Any information that could identify you will not be shared with the public agencies funding the study and will not be included in reports from this study.

ADDITIONAL INFORMATION: If you have concerns or problems about your participation in this study or your rights as a research subject, please contact the PSU Office of Research Integrity at 503-725-2227. If you have questions about the study itself, contact Dr. Maura Kelly at 503-725-8302.

Yes, I give my consent to participate in the study:

Name (print)

Signature

Please continue to the next page!

1. Please think about your plans for the future in the trades. How likely is it that...

	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely
You will be enrolled in an apprenticeship program within the next year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will complete an apprenticeship program?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will be working in a construction trade 5 years from now?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will be working in a construction trade 10 years from now?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You will hold a leadership position in the trades (e.g. foreman, supervisor, superintendent, business owner, instructor, union staff) in the future?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. What do you see as the three *most important things you learned (or learned more about)* from your pre-apprenticeship program?

1.

2.

3.

3. What are three things you *wanted to learn (or learn more about) but didn't* in your pre-apprenticeship program?

1.

2.

3.

4. Please evaluate your current strength in the following areas:

	Very strong	Somewhat strong	Somewhat weak	Very weak
Math skills needed for the construction trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of construction safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of hand tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of power tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to drive construction equipment (e.g. forklift)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial and budgeting skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job search and interview skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical fitness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understanding of the expectations for working on job sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of the culture of construction job sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understanding of the need to build a network in the trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of how to stay consistently employed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of how to get on the out work list	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of how to seek out union work in my trade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of the options for working in the trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confidence to start a career in the trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. What do you see as the biggest benefits of working in the trades?

6. What do you see as the biggest challenges you will experience working in the trades?

7. Below are some statements about working in the trades. Please identify whether you strongly agree, agree, neither agree nor disagree (neutral), disagree, or strongly disagree with the following statements.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I will have opportunities for good paying jobs in the construction trades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will have opportunities for leadership positions in the construction trades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will feel pride in my work in the construction trades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work will be an important contribution to society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the construction trades, I will have a career, not just a job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paying for tools, work clothing, or protective equipment will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintaining housing will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being away from home for long hours will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finding transportation to and from work and class will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paying for gas to get to and from work and class will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paying for overnight travel (transportation, hotel, and food expenses) will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being out of work too much will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Passing the required classes for my apprenticeship program will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning the skills needed for my trade will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being treated disrespectfully on construction work sites will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doing physical work will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working outside will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having a job in the trades will make spending enough time with my family a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[If a parent] Finding consistent childcare will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[If a parent] Paying for childcare will be a challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The PSU researcher will collect this survey. Thank you!