

A Case Study of Access to Trades Training Programs and Course Planning Information in a Lower Mainland School District

by

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Abstract

In this case study, I explore equity of access to programs in the Youth Train in Trades program in the Langley School District. Specifically, I examined geographical access to training programs, ease of access to online program registration information, and student race and gender representation in social media postings by the district. I used data that are publicly available and published by the district, including the district's Career Education website and social media pages. From this analysis, I conclude that more work must be done by the district to ensure all students have equitable access to program information. Additionally, transportation and geographical access to school locations is not equitable for all students and that work must be done to increase diversity representation throughout the district's social media postings.

Keywords: Career Education; educational programs of choice; vocational education; access to education; trades training education; alternative education

Dedication

I dedicate this work to my family. Their support and encouragement allowed me to continue my work and studies and grow professionally and academically.

To my husband Brad, thank you for taking on the role of solo parent weekly for two years to enable me to attend classes, and for enduring countless hours of my studying and writing. Your constant support of my goals and education allowed me to complete one of the greatest challenges I have ever undertaken. I would not have been able to finish this work without you. In retrospect, beginning this master's program with an infant and a toddler during a global pandemic was a crazy idea, but we did it! Thank you.

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Finally, I would like to dedicate this work to my late husband, Cody Sawatsky. Cody's support and encouragement of my scholastic ambitions has been a constant force in my educational journey since my first day at college over twenty years ago. His encouragement and constant belief in me allowed me to continue advancing and realize my dream of becoming an educator. I hope to continue contributing to academia and my own educational pursuits in his memory.

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Introduction

My teaching career began when I was hired to teach secondary school in 2016 as teacher on call in the Langley School District. My major in university was English literature; as a teacher I was certified to teach English, Humanities and Environmental Education. Due to a shortage of teachers, I found myself in a contract almost immediately after being hired. My first year teaching included a myriad of different classes in various subjects as is common for many new teachers; I had a mixture of English classes, math classes, and other assorted electives to teach as well as a few blocks of Career Education. When the new curriculum was implemented in 2016, Career Education received a makeover and became a much more robust program with expanded required offerings and courses throughout all grade levels in secondary. The district felt that I would be an excellent Career Education teacher both because they needed more Career teachers to fill this increased demand and also because I began teaching in my thirties after working professionally for a decade in finance and marketing, so they felt I may have some practical business experience to share with students in Career Education.

Although I always dreamed of being an English teacher, I took the opportunity to begin teaching more Career education courses because I enjoyed helping my students consider their goals and interests while planning their potential career paths; I saw teaching Careers as an opportunity to establish myself in an area of teaching that was in need of more teachers. There are no special requirements to teach the classroom Career Education classes that I began teaching, beyond being certified to teach secondary classes. However, it is important to note that the teachers who teach the trades training programs are typically both certified teachers and hold a Red Seal in whichever trade they are instructing. At the time when I began teaching Careers there were relatively few qualifications for becoming a Careers teacher beyond certification to teach Secondary school courses. Teachers from all disciplines were being asked to teach Careers and the district was looking to fill many positions in each school.

Since 2016 I have taught many different Career education classes and held a variety of Career Education positions at three large high schools in the Langley School

District. Essentially, there are two different facets of Career Education in Langley: classroom delivered courses that help students define their plans for graduation and prepare to enter the workforce and hands-on, practical training where students apprentice and train for work in various trades programs. All students must complete the classroom component of Career Education, but only students who choose to apply and enter the trades training programs participate in the apprenticeship training opportunities. Since becoming a Career Education teacher I have had the opportunity to teach the classroom courses to grades eight through twelve and also work directly with the trades training students as their Work Experience (WEX) Teacher. As a WEX teacher, it was my responsibility to help document and facilitate their participation in the Youth Train in Trades training programs and another workplace experience program called Work and Volunteer Experience, or WAVE. The Youth Train in Trades Program offers students the ability to begin working towards a trades certification while completing their high school diploma; most of the costs are covered by the school district and the student will earn their entry level trades credentials before graduating. The WAVE program allows students to volunteer in a non-trades field they are interested in pursuing a career in after graduation.

The Youth Train in Trades program offers many benefits to students. They are able to begin working in a trade they are interested in while in school. Many of the programs offer opportunities for paid work, plus they are also placed in volunteer work to obtain the necessary hours for their trade ticket or journey person tickets. The students begin the path to Red Seal certification while in high school. Furthermore, the district pays for the program for the students which can save them upwards of ten thousand dollars depending on which program they are in. Students are able to train and apprentice in the following programs: Automotive Service Technical; Carpentry Program; Electrical Foundations; Hairstylist Program; Landscape Horticulturalist; Piping and Plumbing Foundations; Professional Cook 1. Upon completion of these programs, students are certified for entry level work in their chosen field and have also earned a high school Dogwood diploma. Each program is hosted at a specific high school site in Langley and the programs are open to all students within the district who meet the requirements to apply. The programs are open to all students in Langley who meet the admission requirements, but students and their families are responsible for the student's transportation to the program location (Table 1, page 38).

Some of the schools I have worked in are intensively focused on delivery of trades training programs whereas in other schools, academics was the major push. I noticed when I worked at the school that had the largest physical area of the school dedicated to apprenticeship programs that there was a lot of awareness and communication around the programs in the school and the community with both parents and potential employers for apprentice students. However, when I worked at the school that only offered chef training there was significantly less awareness and publicity for the trades training programs. Ultimately, however a student may come to find they are interested in a Youth Train in Trades program, the collection of pre-application information and preparation is the responsibility of the student and their family. The required information is all hosted on the schools website, and an appointment can be made with the Career Counsellor if families need help or have questions. This has led me to begin thinking about access to and awareness of trades education across our district and how students and parents come to be aware of programs available within the district in addition to how students are able to access these programs. Entering these programs does require some research and work on the part of the student and their parent or guardian.

For this research project, I aimed to examine how students and their families gain access to the youth train in trades programs. I wondered how do students and guardians conduct their initial research when a student become interested in a specific program and how do students travel to the program they want to attend if it is not at their catchment high school. Many students need to travel to a different school to enroll in the Youth Train in Trades program. The student and their families are responsible for facilitating transportation. I wondered if this layout is accessible for all students or if the transportation to school creates challenges and blocks access. I also wondered if all students and parents have the ability to learn about trades training programs available to them through the use of the district website where program information is kept. Furthermore, upon exploring the information available to parents and students online, I wondered if all students see themselves represented in these programs through the district social media channels and the program brochures. Does the location of trades training programs and information dissemination to parents and students provide equitable access to programs for all students in Langley? Do all students feel that these programs are open to any student regardless of gender or other identity traits?

Literature Review

The decision of whether to pursue a career in the trades or undertake an academic course of study for post-secondary is something a young person must decide with the help of their parents or guardians. Asking young people to make such an important decision so early in their life can be stressful for both the student and their parent or guardian. Schools of Choice have been popular in both North America and Europe since the 1970s (Johnsson, and Lindgren, 2010). Since then, many quantitative studies surveying parents whose children were enrolled of schools of choice have been conducted to determine why they chose a particular path for their children and which factors influences the decisions made by the parents and students (see, for example Luis Bernal, 2005). Common themes that can be found throughout the literature show the following access points can be barriers to families: geographic access (Johnsson and Lindgren, 2010); access to reliable program information (Yettick, 2014); and representation of diversity amongst student participants can influence increased program diversity in trades training programs (Madjd-Sajadi, 2005).

Yettick's research surveying parents who already have students in a program gleans insights as to what deciding factors families considered when researching schools for their children reports that reliable access to information regarding available training and options for students is crucial in this decision-making process for both parents and students. As Yettick (2014) stated, "while parents and students are seeking information trying to make decisions the very information they are seeking...has famously been called the Achilles heel of [school districts'] efforts to increase equity because the more culturally, economically, and racially privileged the population, the more likely that they will have higher rates of access to accurate and rich information" (p. 859).

Being unable to access information or struggling to make sense of the existing information can be a stumbling block for parents and students and thus block access to choice programs for students. Therefore, in order to ensure equal accessibility to all students it is of utmost importance that access to information and programs is clear and easy to navigate for all members of the school community, especially those students who may be marginalized in some way. For example, is the information available in

other languages or for those with visual or auditory challenges? Information gathering can be difficult for students from more affluent or even average families who have the advantage of time and technological resources, and this task becomes much more challenging for lower income students or immigrant students. “Several studies have shown that families need to have access to accurate, reliable and easy-to-use information in addition to other resources at their disposal to make informed decisions about school choice options” (Assefa & Stansbury, 2018).

Geographic access has also been shown in existing research to be a key deciding factor for families when considering a choice program (Assefa & Stansbury, 2018). In the Langley School District the Youth Train in Trades programs are open to all students regardless of which school they are designated to attend based on their civic address. However, as noted in the article Information seeking behaviour of the poor: The study of parents’ school choice decisions, “residence address is the most widely adopted strategy for school choice despite the fact that there are quite numerous options available for families” (Assefa & Stansbury, 2018 p. 380). This is important to note, and it indicates that students who do not live within a reasonable distance to the school where their desired program is offered may choose not to attend it as the logistics of getting to school will be too complicated.

If geographic access becomes a challenge for families, it is unlikely their students will be able to take advantage of choice programs . As stated by Assefa and Stansbury,

...parents tend to send their children to the school that is in their neighbourhood, even when better options may be available elsewhere and it is also noted that gathering information on school choice programs can be more challenging for lower-income families...while school choice options are available to all families regardless of their socio-economic status (SES), when one considers information seeking characteristics and decision-making behaviors found in immigrant and disadvantaged communities, the school choice task gets more complicated (Assefa & Stansbury, 2018 p. 390).

As the train-in-trades programs in the district provide a considerable cost savings to families, matters of equitable access are important for all students regardless of their families’ financial status. Almost all of the expenses related to obtaining entry level access to a trade of the students choosing are paid by the district which can save students and their families thousands of dollars or more in tuition costs. As noted in the

above literature, ease of access to website information is crucial in the school choice decision process. However, we must also examine representation when accessing information pertaining to school choice. As noted in the research by Madjd-Sajadi more needs to be done to attract females into trades programs in Canada. Madjd-Sajadi states,

Beginning in the high schools, as Ontario has done with its pre-apprenticeship programs, is a healthy start but apprenticeship needs to also broaden to attract more women. Occupational segregation on the basis of sex, even if by worker choice, has potentially undesirable consequences in the future as gender stereotyping of occupations may lead to a rebalancing of financial incentives (2010, p. 65).

The district website highlights the programs offered and also has a social media feed on Instagram where they showcase students currently in the Youth Train in Trades programs. When students and their families navigate the online brochures and social media feeds from the district students will inadvertently begin looking at the students already in the program and surveying for representation of other students who resemble themselves. More research needs to be done to ascertain if there is a gender bias when referring students into particular trades training programs within the district. However, a cursory glance at the social media feed lends one to believe this may be the case as females are highly overrepresented in the hairdressing trade and at the same time visibly underrepresented in every other trade offered in the district. This type of overrepresentation can have negative consequences in the long run (Madjd-Sajadi, 2005). Therefore, in reviewing access to trades training programs and awareness of these programs it will be useful to examine what efforts are being done to attract diverse students to trades programs within the district. Many of these programs areas that are stereotypically dominated by [white males] (Madjd-Saladi, 2005). To ensure accessibility for all students, examining social media posts for representations of BIPOC, female, and diverse communities, such as LGBTQ+ students, would offer more insight into access for diverse populations across the district.

Methods

In order to answer the research questions, I have conducted a case study examining the trades training information available publicly to both parents and students through the Langley School District's websites and social media channels and have also examined geographic access to the school sites across the district.

I explored the accessibility of information the Langley School District published online that is accessed by parents and students. This research was conducted as a case study that focuses on the communications and marketing decisions made by the district in regard to the program information available to parents and students. I reviewed and analyzed the program brochures for each of the seven Youth Train in Trades programs and attempted to answer a set of questions a parent or student may have before beginning the program (Table 3, page 40) while I collected this data I used Hoppmann's 'think-aloud' method of website analysis. (2007) (Appendix A, page 30) While employing the 'think-aloud method' I simultaneously counted the clicks needed for each program navigation as well as the time it took me to find the relevant information. (Appendix B, page 35) I recorded any new questions that developed and noted if I was unable to answer any questions easily. (Table 4, page 41)

To explore the issue of geographic access I mapped user experience of the transportation options available to students in Langley who wish to attend a program that may not be located at their own school by comparing travel times both with a vehicle and any available public transportation. (Figure 2, page 17)

I then explored if the publications disseminated by the district on their social media channels showed students of all genders and ethnicities participating equally as this could also be a barrier to access. (Table 5, page 23)

The Research Questions

This research study seeks to answer the following questions and sub-questions:

- **How do students and parents access online information about professional certification or trades training programs available to high school students in the Langley School District?**

- **How is this information communicated to parents and students?**
 - o **Is there social bias (gender, ethnicity) in the messaging to students and families?**
 - o **Is this information easily accessible online?**
- **How do students access the programs of their choice?**
 - o **Is program information accessible by all members of the school community?**
 - o **Are training opportunities accessible by all members of the school community regardless of gender or social class?**

The Case

Accessing information in preparation to enter the trades training programs in Langley is the first step for students who wish to participate in these programs. The information on various trades training programs in Langley is disseminated by the Career Education department, by Career Facilitators (a teacher role), and the Career Advisor, a non-teaching staff member who acts as a liaison and counsellor for students and parents. There is an umbrella Career Education department that is district-based and creates online awareness for parents and students of all opportunities available throughout the district through Facebook and Instagram plus a district-based Career Education website. However, parents and students need to be on social media and the internet to receive this information.

The information regarding trades training programs and access is available on each school's website and links back to www.careered.sd35.bc.ca. Information about the Career Education website is also publicized through the use of posters in schools directing students to go online or speak to the Career Advisor. (The location of each school and which trades training program it hosts is located in Table 1, page 38) It is important to note that Langley also has alternative schools that offer some secondary level courses, but they do not offer any trades training programs. It is also important to note that in Langley there are some programs that have similar names, such as the Youth Train in Trades programs that lead to apprenticeships and journey person certifications (which are the focus of this research), but there are also other programs with similar sounding names and objectives offered to students in Langley. (See Table 2, page 39 for a brief explanation of these programs) It is important to differentiate between these programs for the purpose of the research.

Data Sources

The data for this research were collected from the public website careered.sd35.bc.ca as well as the Facebook, Instagram, and Twitter feeds maintained by Langley School District. For each of the seven Youth Train in Trades programs offered I attempted to answer a set of questions a parent or student may have before beginning this program. (Table 4, page 41) The questions I designed for my website access research were based on my own personal experiences of conducting research when considering a new educational course of study and also on information available to parents and students on the website hosted by Skilled Trades BC which is the governing body that works with the school district to facilitate the Youth Train in Trades program. (www.skilletradesbc.ca) I completed a cursory review of the Youth Train in Trades program information and created the questions based on what I think any parent or student would reasonably want to know when first considering an application to the Youth Train in Trades Program.

When I gathered my data on the district website, I timed how many clicks and pages I viewed and how long the data gathering for each program took me in order to determine if some programs are easier to understand than others and also to create an average of how much time a student or parent must spend researching. As I began my search for information I also audio recorded my thoughts while navigating the website to note any confusing experiences I had or conversely any tasks I found easy to navigate. I will also take note of new ideas that developed and any additional questions I wasn't able to answer when conducting my website research. (Data collected is presented in Table 4, page 41)

Data Analysis

Once the data had been collected to answer the program access questions, I sorted each of the seven programs into two groups or categories for analysis: programs where I was able to find all the information I needed and programs where I was not able to find the information I needed based on the questions listed. (Table 3, page 40) After grouping the seven programs based on website navigation and access to data I then looked at physical school access and a social media survey of representation. When grouping the findings from the access of information survey, the two groups were

analyzed as described in *Qualitative Data Analysis*. The timed website research and data gathering clicks were factored along with the questions used when researching each program into the following two categories for each of the seven training programs:

Category One: I was able to find all the information I wanted on the Youth Train in Trades Program

- Subcategories:
 - Further questions that developed
 - Accessibility for ELL, the deaf, or blind
 - How long did this research take, how many clicks did I make?

Category Two: I was not able to find all the information I wanted on the Youth Train in Trades Program

- Subcategories:
 - What information was missing
 - Further questions that developed
 - Accessibility for ELL, the deaf, or blind
 - How long did this research take, how many clicks did I make?

After categorizing the data on the website I then examined the geographical locations of the trades training programs. To study the accessibility of the locations of the schools I noted the relationships between variables and calculated how long it would take a student from any catchment school to attend any of the seven programs.

Finally, the social media photos and the photos used throughout the website in the 2022 to 2023 school year were counted and sorted into categories based on which genders and races are represented in the photos and compared to each of the seven Youth Train in Trades Programs. (Table 5, page 23) This required a counting technique but will also required clustering as well as noting patterns and themes (Miles et al. 2019). The purpose of counting representation gave some insight into accessibility as we will be able to note the genders and possible ethnicities of students who were already in the program. However, the limitations of this counting technique of the social media photos was that I am assuming gender and to an extent, race (Yissick, 2021). Additionally, it is not possible to note if a student in a photo had a disability or came from an ELL family as these traits are not necessarily visible.

Strengths and Limitations

Although I have made every effort in my research to attempt to be rigorous, a few limitations exist that must be discussed. First, I am not able to fully immerse myself in the place of a parent or student as I have prior knowledge about these programs because I used to work directly with the students who were enrolled in these programs. Second, it is not possible to assume that every person has the same access, speed or literacy with a computer, so it is important to account for variables when trying to access data. When considering access to information it should not necessarily be the speed with which the information was obtained, but the ease. Was it possible to answer all my questions without having to send an email, phone the school, or make an appointment? Third, it is not possible for me to fully understand the position any family in the district is coming from as I have come from a place of privilege where I was able to access post-secondary and create a path for myself towards higher education. Ultimately, if I were to do this study again, I survey both parents and students and conduct interviews to learn more about what existing knowledge they had of the trades training programs before enrolling and also to hear about the barriers and challenges they faced before and upon their entry into the program.

Findings

There are seven programs offered in the district's Youth Train in Trades Programs. I have completed my data gathering for the list of questions I believe parents or students may have when beginning their trades training program application or research. (Table 3, page 40) For each program offered I have completed a table (Table 4, page 41) to answer the questions for each specific program. I have segmented my findings into three parts to best reflect the research questions: program or website information access, geographical access, and social media review.

Program Information Access

I recorded my thoughts and observations while assessing the information on the Youth Train in Trades Program website by using a technique described as the 'think-aloud method' which is a method of surveying a website to search for potential frustrations for users as outlined in the article, Examining the 'Point of Frustration': The think-aloud method applied to online search tasks (Hoppmann, 2007). By using this technique you set out a task for yourself (in my case to answer my questions regarding each program) then record your thoughts as you navigate the website to determine which areas need clarification or where the user might be feeling frustrated or confused. For my first 'think-aloud' exploration I audio recorded myself as I navigated the website so I could go back and see what stood out to me and also to demonstrate how I used this method to survey each program. (Appendix A, page 30) Before my search it seemed reasonable to me to believe that for each program I would find the materials faster as I learn to navigate the pages. However, I found that all my searches took me roughly the same amount of time and clicks even though the pages were all laid out the same. brochure.

Personally, I found this research experience frustrating; each section took me between twenty and twenty-five minutes and I was not able to answer all my preliminary questions. My hypothesis that it would be easier as I became familiar with the layout proved to be false. As shown by the literature, people do not necessarily navigate a website with greater speed solely because they have more technological experience (Pratt et al, 2004). Rather, people's ease with which they navigate a website is determined by the effective layout of the website (Pratt et al, 2004). For example, people

navigate more effectively based on vertical scrolling as opposed to horizontal navigation. If you examine the landing page of www.careered.sd35.bc.ca you can see that it is horizontally designed with tabs for students, parents, and teachers which then populate drop down menus. However, as noted in my exploration in Appendix A (page 30) the information I needed as a student or parent was actually located in a section called Opportunities. Furthermore, there were many similarly named programs like Youth Work in Trades as well as Youth Train in Trades which further exacerbated my confusion when trying to find the appropriate program brochure. It is reasonable to assume that many other people trying to navigate the Career Education website would encounter these same problems I experienced.

For my second program exploration I looked at the Automotive Service Technician program. (Table 4, page 41) My preliminary belief was that my second test of the data access would be faster as I had just completed a similar activity for the hairstylist program. However, even though the graphic design and layout are the same it still took me roughly the same amount of time as my first research attempt for Hairstyling and I did not find the answers to all my questions. Additionally, during my research for the Automotive Service Technician program while I was looking at the link on the Career Education website that is supposed to show information for all the Youth Train in Trades programs I found that the brochure the link directs parents and students to is actually about two other programs the district offers, Youth Work in Trades and Work and Volunteer Experience, and does not mention the Youth Train in Trades Program at all. This must be an error or oversight that the webmaster is not aware of. However, I would find this frustrating as a student or parent trying to navigate this webpage.

The rest of my data gathering took roughly the same amount of time, between twenty and twenty-five minute explorations for each program and between twenty-five and forty clicks per attempt to gather data for the programs. As mentioned, I sorted the programs into two categories: Category 1 where I found all the information and felt ready to enroll as a student or parent, or Category 2 where I felt more research was needed or I had unanswered questions. All the programs have fallen into Category 2 as I was not able to successfully gather all my intended data for any of the seven programs. I was left with many questions about timelines, deadlines, whether a student would be completing paid work or volunteer work, and questions about where they would find their volunteer hours. Another question that I developed that seemed to create less access to the

program is how students are supposed to find experience in fields like electrical and construction work before entering the program? It is suggested that it is helpful for their application, but this assumes the students are established in the community and also know somebody in this line of work who could give them a job or volunteer experience. That puts many students at a disadvantage for access as you need connections or special knowledge. In terms of access to information regarding the programs, since I categorized every program as a Category 2, meaning I could not answer all my questions and developed further areas of confusion, I do not believe the access to information is sufficient.

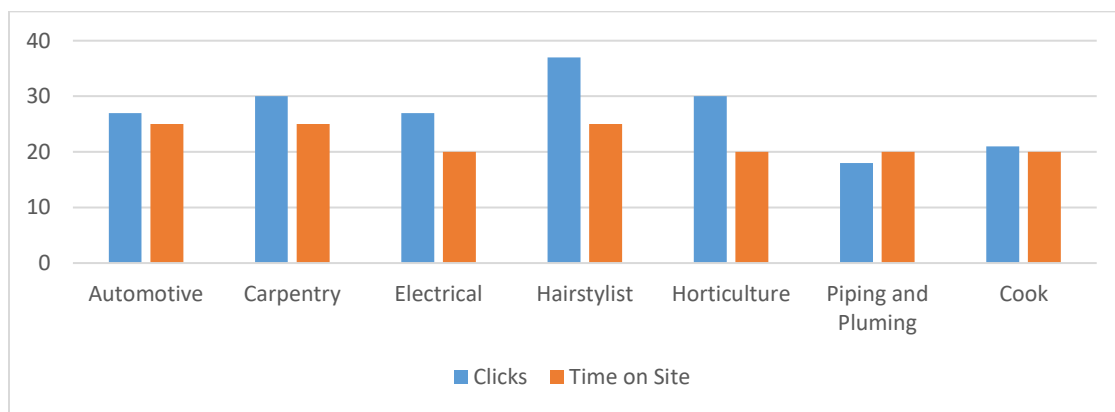


Figure 1. Time and effort investigating each Youth in Trades program

Access for English Language Learners

The access to English language learners is sufficient as the transcription software on the website can translate the pages into any language the reader selects. I tested this by translating the pages into French and Italian (two languages I speak and read) and found the transcription was accurate and made sense. There is no built-in access to the information for people who are blind unless the blind person has special software on their own device, and the videos do not have closed captioning for the deaf, but this could be autogenerated by a computer.

The access to information problem can be solved by making an appointment with the Career Advisor, which is easily done through the Career Education website. The appointment can be made at the student's catchment school, not just the location of the program. However, a site visit and meeting with an advisor will prevent access

challenges depending on the work schedule of the family and the availability of the Career Advisor. The parent or student can email or phone to make an appointment, which in my test cases would be necessary for all the programs as I was left with many questions. One of the main responsibilities of the Career Advisor is to make appointments with students and their parents or guardians to go over the program options and the requirements. People have an expectation that they should reasonably be able to do research online and find a well laid out and informative website. (Pratt, 2004) This connects to the literature from Hoppmann (2007) because as I continued to navigate the page, I found my inner dialogue became increasingly critical of the material I was looking at. It was challenging for me to get a clear idea of what the programs looked like, where they were, and what the challenges and opportunities a student might face in the program would look like. As a parent this would be frustrating and in terms of access to information, the overall access of the website would not be considered adequate if we compared it to the standards laid out in the literature by Hoppmann or Pratt. (Detailed program findings can be found in Table 4, page 41)

Geographic Access

When a student or parent has completed their initial research of the Youth Train in Trades programs they then face the challenge of accessing the physical program location. If the program the student wishes to take isn't offered at their catchment school the student must find an alternative way to access the school. The majority of students in the programs will not be old enough to have a driver's license, and it is also unlikely that every family has an extra vehicle to provide if the student were to drive themselves. Furthermore, most of these programs occur outside the time-table of traditional school. For example, the Professional Cook program runs from 2:30 pm to 7:30 pm and the Piping and Plumbing and Electrical programs start at 8:00 am and can run as late as 4:00 pm. It is the responsibility of the parents and student for the students to get to school, so now the student and their family must find a way for the student to get to the school location. This presents an access problem as most of the students do not drive, they may or may not know any friends going into the program to carpool with, and it is likely their parents must work or care for other family members and cannot necessarily drive the student great distances in the mornings or evenings.

Langley City and Township do have public transit options, but the bus schedule in the Langleys does not run as frequently as in more urban cities or even in more urban areas of Langley, such as in Langley City. Relying on the bus for young students who may be travelling alone early in the morning and also late at night can present safety concern for any parent. Many areas of Langley are also rural, so the bus may not be a great option for families. Additionally, some of the programs like Piping and Plumbing and Electrical have components that occur at BCIT in Burnaby. According to the transit calculator Moovit.ca a student who needs to take a bus from Walnut Grove (the most western part of Langley) to BCIT in Burnaby (where part of the electrical and piping programs are held) would have to take a trip that takes one hour and twenty minutes each way. This time does not include getting to the Walnut Grove Park and Ride from wherever they may live in Langley.

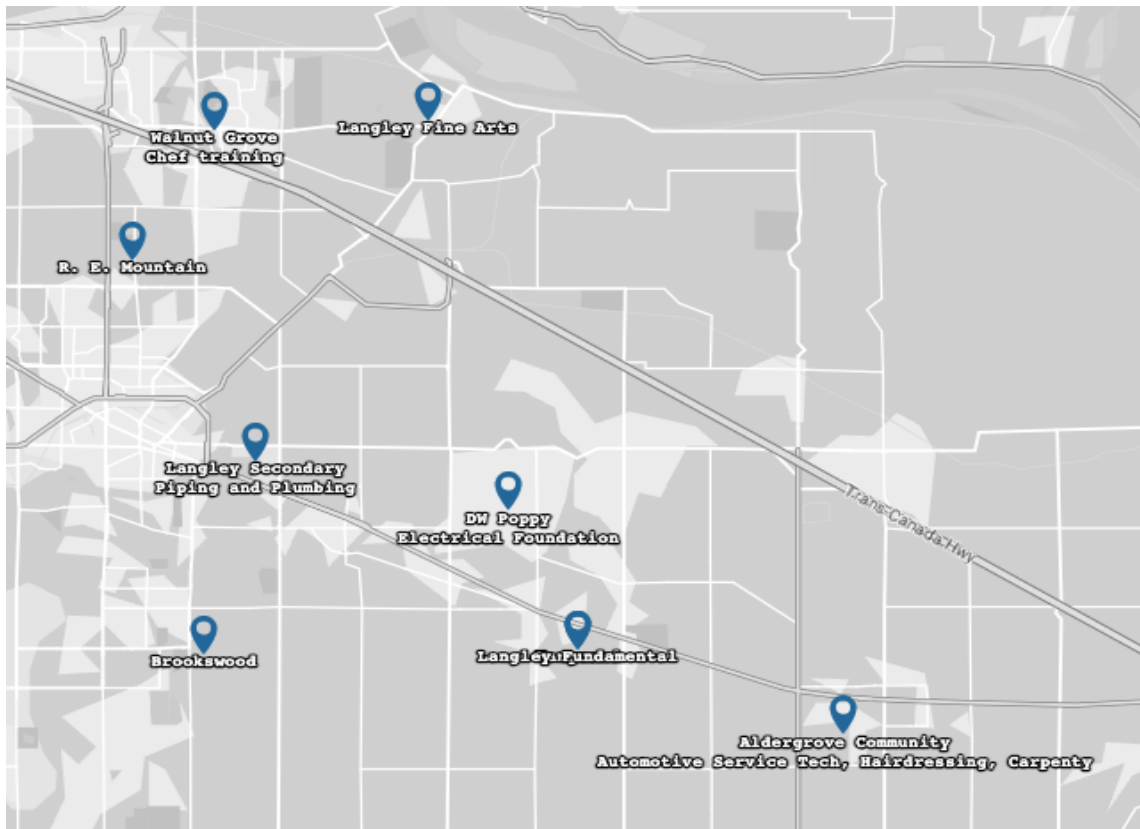


Figure 2. Location of Trades Training Program

Langley is a large township of 316 km² with a mix of rural and urban areas. Major transit hubs exist in Walnut Grove by Walnut Grove Secondary and in Langley City close

to Langley Secondary School. Travelling between schools outside of a student's catchment is challenging for a family to navigate as the student most likely cannot drive and will need to be at school the same time a parent may need to be at work or caring for other children in the home. According to Google Maps the drive in a car between Walnut Grove Secondary and Aldergrove Secondary is twenty-two minutes at 7:30 am on a typical morning, but if a student must take transit the same journey is one hour and fifteen minutes one way. Although a student may be motivated to take a program at a school outside of their catchment travelling over an hour on the bus each way would be a lot of stress for a student and possibly a safety concern for their parents. Safety concerns and the added stress of time constraints create an accessibility problem for students when we look at geographical access to programs.

Social Media Access

When scanning the social media channels maintained by the Career Education department, I employed the counting and sorting techniques to determine if the images and videos posted depict a wide range of genders and races. I then colour-coded the trades and categories to allocate a percentage of posts per gender, race, or program. (Appendix B page 35) I scanned every post from the beginning of the most recent school year starting in September of 2022 and ending with June of 2023. For each image I noted which trade was being depicted then noted if it was a male or female or a white or BIPOC person. With images and videos containing more than one person I counted all the people separately. In total, the social media feed contained sixty-three posts that were about the Youth Train in Trades programs. There were a few other posts pertaining to other matters and I did not count these in my data. I separated and categorized the students into white or BIPOC and also into presenting as male or presenting as female

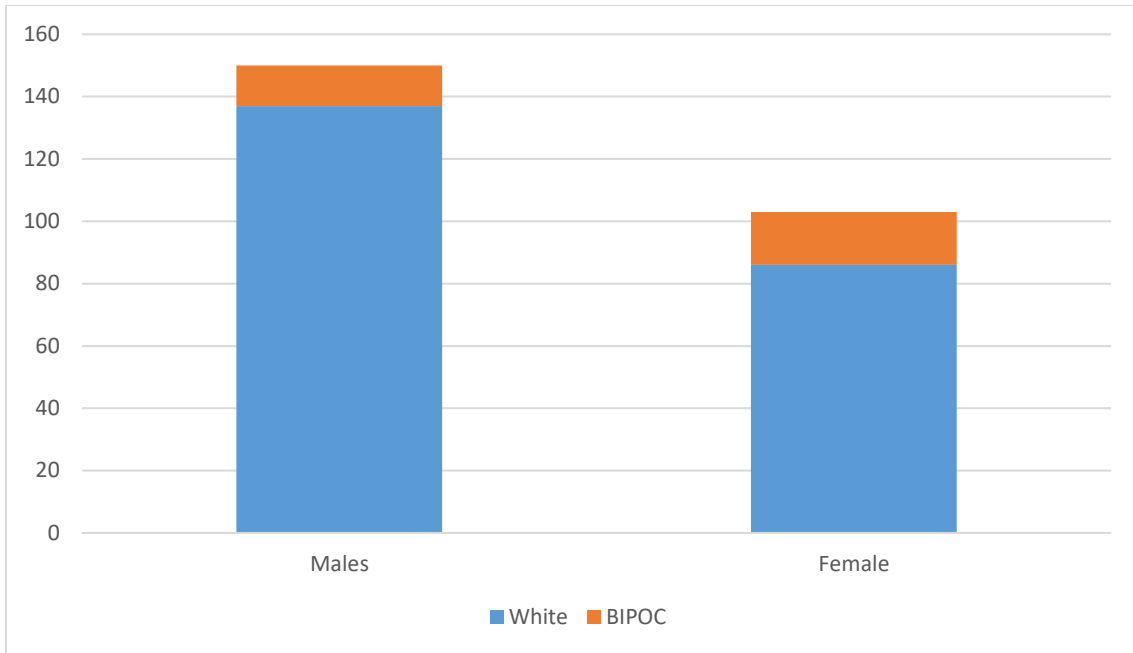


Figure 3. Social Media Posts by Race and Gender

Overall, males were represented 150 times in the posts and females were represented 103 times. Considering there were 63 posts males appear roughly thirty percent more frequently than females do. Of the 150 males represented only thirteen of the males were BIPOC Of the 103 females represented only seventeen were BIPOC. It is important to note that with the BIPOC representation it was the same six students appearing in the photos whereas with the white students the majority of the did not appear repeatedly in the photos. By segmenting the photos by trades I can then determine which trades have the highest representation of males or females or BIPOC students.

Table 1. Social media graphic representation of students by visible gender and ethnicity

Program	Number of Posts	Males		Females	
		White	BIPOC	White	BIPOC
Electrical	14	22	2	12	0
Hairstyling	11	0	0	58	11

Piping Plumbing	10	35	2	1	0
Carpentry	8	44	5	1	2
Professional Cook	8	5	2	5	3
Automotive	7	36	1	3	1
Horticulture	4	3	0	3	0

Discussion

After gathering all the data, I revisited my research questions to see what I have learned about access to the Youth Train in Trades programs in the Langley School District. I know that students and parents learn about the professional certification programs through the Career Education website hosted by the district at careered.sd35.bc.ca. However, when I began gathering data to learn more about the programs it proved to be a frustrating activity that resulted in my not being able to find clear answers even after twenty minutes or more of searching. As shown in the literature by Pratt (2004) and Hoppmann (2007) a poorly designed website cannot be overcome even if the user has a high level of familiarity with technology. The information was laid out poorly or in some instances was incomplete. This would create frustration for any parent or student. In regard to access for ELL families, the translation software was adequate. There were no adaptations for the deaf or blind added as a function on the website, but it is possible people with these needs may have their own specialized software. According to the accessibility scan website, accessScan, the Career Ed website is semi-compliant and does not have clickables, menus, or correct orientation for accessibility. (For a full report please see the accessScan website <https://accessibe.com/accessscan?website=https://careered.sd35.bc.ca>)

One caveat that cannot be overcome is that if a family does not have access to the internet for whatever reason, they would not be able to access this information at all. The information was not easily accessible, and I found the research process frustrating for each program I looked at. I was not able to clearly answer my questions for any of the programs and felt that I would need to meet with a Career Advisor to resolve my areas of confusion. This would be more difficult for a family or student as I personally worked in the Careers Department at for three years at various schools in the district and I did not find the information accessible or easy to navigate.

When looking at geographical access to programs in Langley it must be noted that the transit system is not easily navigated due to the fact that many parts of Langley are rural. Because of this I do not believe that the program is easily accessible by all students. The district does not offer a bus service or any means for students to get from one area of Langley to another to attend these programs. Students must rely on rides

from parents or friends, or use transit which is difficult and potentially unsafe given that the trades programs start early in the morning and end late in the evening. Three of the programs are located at Aldergrove Secondary which is the farther point geographically in Langley from all other communities and would be a minimum one-hour bus ride plus a walk to the bus for any students outside of the Aldergrove catchment. In terms of physical access to schools, families who have two vehicles or who have a parent who is able to drive the student to school are at a distinct advantage for access to the Youth Train in Trades programs.

Students who are considering any of these programs will look at the promotional material and social media feeds of the Career Education department to learn more about these programs. Students who identify as BIPOC or female are largely underrepresented in any of the imagery for the Youth Train in Trades program. White males appeared more than twice as often as females or BIPOC students in any of the social media or promotional materials for the programs. Although there may be lower enrollment of Female and BIPOC students in the programs, finding a way to highlight their achievements in the Youth Train in Trades programs could encourage more BIPOC and female students to enroll.

Conclusion

Through my studies of the Youth Train in Trades programs in the Langley School District I have learned that these programs can provide youth an amazing opportunity to start their career in a number of trades. Participating in a Youth Train in Trades program give students who want to work in the trades a major career advantage as their tuition is paid by the district and they complete their first year of apprentice or trades training before graduating high school. The programs are also established and well organized. Being a student in any of these programs would be a great learning experience for any youth who wants to work in a trade. However, accessing the programs is a major stumbling block. Navigating the programs and collecting information is frustrating and challenging. Students who do not have a vehicle or transportation from their families will have a difficult time attending these programs due to lack of bus service or public transit. Finally, students who are marginalized are not well represented in the marketing material or social media promotions. Even though the Youth Train in Trades programs are a wonderful opportunity they are not accessible to all students due to poorly organized communication from the district regarding programs, a geographic challenge that does not allow all students to physically attend the program, and a lack of representation of diversity in the programs.

It is my belief that access to Youth Train in Trades programs could be equitable with a three-step approach:

1. Revise the Career Education website
 - a. Simply the information presented for each program
 - b. Ensure there are no errors in the information presented
 - c. Revise the program brochure to provide clear timelines and course outlines for students and their families
2. Create a transit plan to allow students to bus to different campuses
 - a. Utilize the school bus system to bring students from various areas of Langley to the location of their chosen training program from their catchment schools
3. Highlight diversity in each program
 - a. Show female and male students in all programs
 - b. Show BIPOC youth and Indigenous youth participating in all programs

c. Show LGBTQ+ students participating in the Youth Train in Trades Programs

By showcasing diversity and increasing access to program information and enabling all students to easily attend these programs all students in Langley will have equal access to these valuable learning experiences.

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Appendix A. Audio Recording Transcript of 'Think-Aloud Method' of Website Analysis

Source: Laila Testini narrating using Otter AI recording software

Transcript from my web search on www.careered.sd35.bc.ca for the Hairstylist brochure.

35 clicks and 25 minutes of search time. I transcribed this speaking aloud while recording my process using Otter AI recording software. The timer restarts as I had to pause the recording for a moment while navigating.

SUMMARY KEYWORDS

student, work, trades, career, brochure, hairstylist, skilled trades, link, youth, tab, district, called, forms, website, documents, listed, parent, translate, bc, exit survey

00:02 Okay, so I have just opened up the Career Education website and I would like to start researching the hairdressing program. The six tabs that I see are students. When I click on Students, it is an exit survey for graduates. A link to career advisors, a unnamed survey, a drop down on take our kids to work day. Something called the wave board. Another link called wave documents and forms and something called Youth Work in trades documents and forms which I believe are the documents and forms that I would like.

00:55 The next tab is parents, which is a link to career advisors, a link for family accident reimbursement plan, which is student Accident Insurance. A link called links and resources, something for parent info sessions and another link for take our kids to work day which is for grade nine students. Under our opportunities, there is success stories, career spotlight sessions, tours and info sessions academic bull credit career Discovery's a link for work and volunteer experience, a link for youth train in trades and another link for youth working trades and something called micro credentials. Under the educators tab, there are resources for people who are working in the district for in service professional development, resources and staff resources. There's another link for employers where there are forms for work and volunteer experience and the youth work in trades. And there is an events and newsletters tab with a calendar and event listings. There is so a translate button to translate the website into basically any

language that I might like period. This is fairly accurate as I translated it into Italian which is the language that I speak and I found everything to be basically the same

02:43 because I'm approaching this as a student or a parent, I am going to assume that I would like to look at the student or parents tabs. I am pretty sure I do not want the grad exit survey. When I click on the career advisors link. It takes me to the list of career advisors at every secondary school in the district. So I could potentially email them

03:14 I know that take our kids to work day does not apply to me because at this point I would not be approaching this as a grade nine student. I don't know what the wave board is. This when you click on it shows you available placements in the district that students can apply for work and volunteer experience to get their high school credits for paid or unpaid work.

03:42 And then the youth work in trades documents and forms would be something that I'm interested in. There is a drop down for student brochures, application forms a student guide, workplace safety training and a document submission form. When I click on the Student brochure, it takes me to something called the prospective student brochure.

04:12 So this is a brochure for the entire program which lists the most popular trades for youth in BC. As the first thing you see so professional code Carpenter, electrician, Automotive Service Technician, plumber, hairstylist heavy duty equipment tech are listed as the first seven. It says if you have a question to see your school's career advisor or you can email the district the student benefits listed are get paid while completing up to four elective courses acquire skills employers want get a head start on your career. Use 480 paid work hours have a seamless transition from school to work and you may be eligible for a \$1,000 youth train in trades. Award. The image of the brochure is of a White teenage boy digging a hole potentially. And then on the top left there is a young White female who appears to be doing gardening which I believe is the horticulture program

05:28 so I'm going to answer some of my questions. This says what is it a program of up to four high school courses for students who are working in a trade regulated by skilled trades BC and there is a blurb about how you can win \$1,000 with youth work. You'd need no hard work hours reported to skilled trades BC you have to maintain a c plus average you have to complete before youth work in trades courses. You must graduate with a dogwood diploma or adult diploma and you have to be registered as an

apprentice. The requirements for students are you need your parent or guardian permission you must be 15 to 19 and you must be working or previously worked in one of the 100 Skilled Trades regulated trades. So this hasn't really told me anything about what I'm looking for yet which would be information on becoming a hairstylist

06:36 so I'm going to go back to the original website there are some application forms

00:00 So while I am exploring the youth work in trades, documents and forms, there is the prospective student brochure, which I've already found does not contain a lot of information on it. There is a youth work and trades application form for current students. And there's one for graduates as well. And then there's something called an Express application. None of these explain who they're for. There is an Express application which goes to the Career Education Department so it's just a email service. That's not very helpful. The youth work and trades form for current students is a PDF on OneDrive, which I feel like might be confusing for some people. The application form contains all the information that you would need to know about what sort of ID to submit

01:09 and it has a nine-step plan on how the program works.

01:19 So the application is seven pages and it is for somebody who wants to work in a trade. So it says the primary goal is to help students personalize their learning and prepare them for the transition from secondary to post graduation life. It talks about the credits you can get in the courses that you take. There's a workplace safety course as well which is good.

01:56 There is not a lot of information on how I get started though besides filling out this so you fill this out and bring it to your counselor or work experience teacher.

02:17 So there is nine steps detailed here. So you meet with your career advisor, or your teacher you complete the application form with your employer and your parent guardian. You give the application form to the Career Advisor. The school district Career Education Department staff will visit your employer

02:37 the student is registered as an apprentice with skilled trades. And the student is monitored by the school district staff.

02:49 So youth work in trades is the one that is paid. So what is confusing for me is that I'm looking for the train and Trades Program and now I have opened this so if I was a parent right now I would be extremely confused. So this is for somebody who already may have a job in a trade that they're interested in working in. So this is actually not what I want. So that's disappointing, so I'm going to close this

03:16 so so far I actually haven't found anything about youth training trades, which is the program that I want to be in and there's a youth work and trades application form for people who have already graduated from high school as well. So I still have not found the page that I'm looking for. So I'm gonna go back. So here's the the landing page for the career Ed website is the ITA youth train and Trades Program. But I haven't figured out how to get to that information yet. I just got stuck in the youth work in trades, which is different. So if I go under students, there's actually nowhere to get into the training trades that I can see clearly. So maybe I'm going to go into parents so under parents, there's the list of career advisors, there is something called links and resources. So let's try that. So this is indigenous career opportunities. Some promotional videos some things to talk to your kids about money and some quizzes and labor market outlook, as well as a podcast about weird jobs which I feel like

04:39 is a waste of time but that's fine. Okay, so I'm still looking for the youth train in trades.

04:51 So I'm going to go under opportunities now. So it's not under students or parents. Because if I was coming here as a student or a parent, the first place I would click on is students and parents. So I'm going to go under opportunities and now there's another drop down, which at the bottom has youth training traits and that's what I'm looking for. Okay, so now there is a video here about youth train and traits. So the what is foundation or apprenticeship training in a trade? The why is they learn skills and gain experience, earn credits, and it's tuition free for eligible students. So who the student must be in grade 11 to 12. They have to intend to graduate they have to be interested in the trades. They have to be committed to learning the skills and knowledge and attitude. The web says most programs begin in February of the school year and the cook programs begin in September. Programs are full time for one or two semesters. So where are the location depends on the program. Click on the program icons below for more information. So how contact your career advisor for more info and to apply and

apply now and begin the program next school year. So it will be next September. So I'm looking for information on being a hairdresser. And I'm scrolling around and here is the hairstylist one so finally I'm going to click on this so so far it's taken me 20 minutes to get to this and now there is a promotional video about being a hairstylist

06:36 So this program is full time and provides students the opportunity to participate in skilled trades BC foundation technical training, including level one. So students earn high school course credits as well as post secondary credits. So level one is a level one hairstylist, a barber a sales representative for beauty products or a consultant. So after you complete this, you could move on after graduation to level two which is where you might become a red seal or work in other kinds of hairstyling.

07:14 So the requirements are you must be registered to attend school and the school district you need to be under 18 before June of the coming school year. You have to have intention to graduate the prerequisites are grade 10 and English 11. And it's recommended to have experience working in personal services. So it still hasn't told me where it is. It does have some information about the keys to success which is helpful so regular attendance. maturity and job readiness. You have to be sensitive and respectful and a strong desire to work with people on a personal level. You need to have good hand eye coordination and you have to be able to stand for long periods. You have to have high tolerance for haircare products and odors. So here we can learn more by clicking on the program guide. There is a career track video as well on being your hairstylist so let's click on the program guide first. So this is the parent booklet for hairstylists for 2023. It has a photo of a White lady with a blonde icy Bob and lots of makeup on the cover. So there's also a picture of a White male who's training to be a hairstylist at the school. So about the program Atlanta school district offered skilled trades BC us training trades hairstylist program at Alder Grove Community secondary so it's at Alder Grove School, it is full time. Students earn high school course credits and post secondary credits.

09:13 And then there's a roadmap saying that in January to March you would learn about the program and apply in May of that school year you would have interviews and shortlisted students. Then in June you would have a conditional acceptance. In summer you're supposed to gain experience in the trade. It's unclear if that's facilitated by the school or if you're on your own. Then in January of the following school year, you take

the program prerequisites or your grad requirements November of the following year as final acceptance. So 11 months later, you're finally accepted. Then in February the program starts at Aldergrove. So between January and November you're at whichever school you attend regularly and then in February you would need to go to elder Grove secondary and then April to June you would do your program at Alder Grove and then the following September. You would continue the program at Alder Grove secondary until January. And then in February two years later, you complete the requirements and you would begin working in an apprenticeship if you've graduated, and this program runs Monday to Friday from 815 to 230.

10:31 It's says that that tuition of \$7,500 is paid by the district but the student must pay \$1,700 for supplies including their tools and the textbook. There are some partial bursaries available for students that have a financial need

10:54 and then there's just some general information about all of the training trades programs. So this would be a two year program and then it shows a career progression for hairstylists. So all in all, it took me 26 Different clicks on the website to find the information I was looking for and I have not filled out an application or sent any inquiry messages yet.

Appendix B. Representation of Genders and Ethnicities on the Career Education Social Media Feed

TRADE DEPICTED	MALES		FEMALES	
	WHITE	BIPOC	WHITE	BIPOC
hairstylist			6	3
carpentry	1			
cook		1		
auto		1		
cook	2		4	1
piping	4			
hairstylist			2	
cook	1			
electrical			2	
electrical			2	
electrical	1		3	
auto	1			
carpentry	1			
piping	4			
hairstylist			2	
electrical	1		1	
electrical			2	
piping	1			
hairstylist			12	2
hairstylist			13	1
horticulture			1	
electrical			1	
piping	1			
cook	1			
auto	1			

carpentry	1			
hairstylist			1	
horticulture			2	
horticulture	1			
pipng	3	1		
electrical	3			
cook	1	1	1	
hairstylist			5	
carpentry	9			
auto	4			
pipng	9			
carpentry	13	1		
auto	10	1	2	
hairstylist			8	2
electrical	11	1		
pipng	12	1		
hairstylist			8	1
hairstylist			1	
horticulture	2			
pipng	1			
electrical	1			
electrical			1	
electrical	1			
electrical	1			
cook	1			
cook				1
carpentry	8	2	1	1
hairstylist				1
electrical	1	1		
electrical	1			
pipng			1	

auto	11		2	
carpentry	10	2	1	1
hairstylist				1
cook				1
carpentry	1			1
auto			1	
pipng	1			
Totals	137	13	86	17

Total Posts for Each Program	
Hairstylist	11
Electrical	14
Piping	10
Auto	7
Cook	8
Carpentry	9
Horticulture	4

63

Electrical			
MALES		FEMALES	
WHITE	BIPOC	WHITE	BIPOC
21	2	12	0

Hairstyling			
MALES		FEMALES	
WHITE	BIPOC	WHITE	BIPOC
0	0	58	11

Piping	
MALES	FEMALES

WHITE	BIPOC	WHITE	BIPOC
35	2	1	0

Professional Cook			
MALES		FEMALES	
WHITE	BIPOC	WHITE	BIPOC
5	2	5	3

Automotive			
MALES		FEMALES	
WHITE	BIPOC	WHITE	BIPOC
36	1	3	1

Carpentry			
MALES		FEMALES	
WHITE	BIPOC	WHITE	BIPOC
44	5	0	0

Appendix C. Data Analysis Tables

Table 2. List of Trades Training Program Locations

<i>School name</i>	<i>Location</i>	<i>Programs Offered</i>
Aldergrove Community	26850 - 29 Avenue Langley, BC, V4W 3C1	Automotive Service Tech Hairdressing Carpentry
Brookwood	<u>20902 - 37A Avenue</u> <u>Langley, BC, V3A 5N2</u>	none
DW Poppy	<u>23752 - 52 Avenue</u> <u>Langley, BC, V2Z 2P3</u>	Electrical Foundation
Langley Education Centre	<u>21405A - 56 Avenue</u> <u>Langley, BC, V2Y 2N1</u>	none
Langley Fine Arts	<u>9096 - Trattle Street</u> <u>Fort Langley, BC, V1M 2S6</u>	none
Langley Fundamental	<u>3825 - 244 Street</u> <u>Langley, BC, V2Z 2L1</u>	none
Langley Secondary	<u>21405 - 56 Avenue</u> <u>Langley, BC, V2Y 2N1</u>	Piping and Plumbing
R. E. Mountain	<u>7633 202A Street</u> <u>Langley, BC, V2Y 1W4</u>	none
Simonds U-Connect	<u>20190 - 48 Avenue</u> <u>Langley, BC, V3A 3L4</u>	none
Vanguard	<u>3825 - 244 Street</u> <u>Langley, BC, V2Z 2L1</u>	none

Walnut Grove	<u>8919 Walnut Grove Drive</u> <u>Langley, BC, V1M 2N7</u>	Chef training
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Please note the Horticulture program is not offered at a Langley school and is held at Kwantlen Polytechnic University in Langley. Additionally, some of the semesters of Automotive and Carpentry are also held at Kwantlen and some are at Aldergrove Secondary. Source: Langley School District Careers Website: careered.sd35.bc.ca

Table 3. Career Training Programs Offered in The Langley School District

<i>Program Name</i>	<i>Location</i>	<i>Purpose</i>
Youth TRAIN in Trades	6 programs offered at 5 schools and one at Kwantlen	Students receive pre-apprenticeship training that will lead to Red Seal or Journeyperson's certification if they pursue it further beyond the district-based program. The work the student completes in this program is not paid.
WAVE (Work and Volunteer Experience)	Students can be registered at any high school	An elective course outside the school timetable where students can volunteer or work in any area that is of interest to them after graduation. Work must be completed when school is not in session. Students will

		also earn credit for these work hours.
Career Discoveries	Conducted in the community. Students can attend any school.	For students with ministry designations, allows students to work in the community with the aim of developing employment skills for after graduation.
Youth WORK in Trades	Can be in conjunction with the Youth Work in Trades program. School location can vary.	This is for students who have completed unpaid training and are now being paid either by the original work placement or a new employer.
Academic Dual Credit	Students can be registered at any high school.	Students earn high school credits while completing courses at University of the Fraser Valley either for Early Childhood Education or in Health Sciences.

Source: Langley School District Career Education Website: careered.sd35.bc.ca

Table 4. Website Access Questions and Purposes

Question	Purpose
1. Where is this program located geographically?	Examine issue identified in the literature review (Johnsson, Lindgren 2010)

2. What are the entrance requirements for this program?	Examine issue identified in the literature review (Pilz et al, 2009)
3. What will it cost for a student to complete this program?	Examine issue identified in the literature review (Greaves et al. 2023)
4. What credentials are awarded upon completion of this program?	Examine issue identified in the literature review (Pilz et al, 2009) Examine issues generated through conversations with colleagues, parents, or students, as appropriate.
5. What sort of work is available after completing this program?	Examine issues generated through conversations with colleagues, parents, or students, as appropriate.
6. What will the student learn in this program?	Examine issues generated through personal experience, as appropriate.
7. What are the requirements to complete the program?	Examine issues generated through personal experience, as appropriate.
8. Is there paid work available or just volunteering?	Examine issues generated through conversations with colleagues, parents, or students, as appropriate.
9. Are there risks or hazards I need to know about?	Examine issues generated through conversations with colleagues, parents, or students, as appropriate.
10. Is there any information on future job prospects available?	Examine issues generated through conversations with colleagues, parents, or students, as appropriate.

Table 5. Data findings from website

Questions	<p><i>Answers found during the research</i></p> <p><i>Hairstylist</i></p>
1. Where is this program located geographically?	<i>Aldergrove Secondary</i>
2. What are the entrance requirements for this program?	<i>English 11 and the intent to graduate</i>
3. What will it cost for a student to complete this program?	<p><i>\$7500 paid by district</i></p> <p><i>Approximately \$1700 for tools paid by student</i></p>
4. What credentials are awarded upon completions of this program?	<i>Hairstylist level one (junior level) this is not a journey ticket or part of a Red Seal</i>
5. What sort of work is available after completing this program?	<i>You could be a junior stylist or work selling beauty and hair care products.</i>
6. What will the student learn in this program?	<i>The foundations of haircutting and colouring, chemical hair services</i>
7. What are the requirements to complete the program?	<i>The student must complete work experience hours that are unpaid in a salon and also nine months of classroom experience at Aldergrove Secondary in their hair salon.</i>
8. Is paid work experience available or is it all volunteer?	<i>It is all volunteer and it is unclear if there is assistance from the school to find your volunteer placements</i>
9. Are there risks or hazards I need to know about?	<i>May be risks with product exposure, but this was not covered in the materials.</i>

10. Is any information on future job prospects available?	<i>Yes there is a forecast for work from Skilled Trades BC link on the website.</i>
<i>Clicks to access all relevant information ad time spent.</i> <ul style="list-style-type: none"> <i>Clicks were tracked with Click Tracker App</i> 	<i>I used 37 clicks and spent 25 minutes trying to access the information brochure.</i>
<i>Additional questions or information that developed</i>	<i>I was unsure if there is any assistance finding the volunteer hours the students need and if they are paid or unpaid or where they are located.</i>

Questions	<i>Answers found during the research</i>
	<i>Automotive Service Technician</i>
1. Where is this program located geographically?	<i>Aldergrove Secondary and Kwantlen Polytechnic University Cloverdale</i>
2. What are the entrance requirements for this program?	<i>Grade 10, English 11, Any Math 11, Auto 11</i>
3. What will it cost for a student to complete this program?	<i>\$950 paid by district</i> <i>\$900 for tools paid by student</i>
4. What credentials are awarded upon completions of this program?	<i>Students are considered a Level 1 Automotive Service Technician (Level 2 would be path to Red Seal)</i>

5. What sort of work is available after completing this program?	<i>Parts counter technician, Level 1 Auto Service Tech, Front End Alignment Tech, Muffler and Exhaust Tech</i>
6. What will the student learn in this program?	<i>Credit for 5 high school courses and the Level One Automotive Program as set out by Skilled Trades BC</i>
7. What are the requirements to complete the program?	<i>Complete the program at Aldergrove Secondary then continue training at KPU in Cloverdale, requirements are unclear</i>
8. Is paid work experience available or is it all volunteer?	<i>It appears there may be some paid work at the end of the program but this is not clearly indicated.</i>
9. Are there risks or hazards I need to know about?	<i>Possibly as there is a link to apply for insurance for your child.</i>
10. Is any information on future job prospects available? <i>Time spent researching this particular program</i>	<i>There is a labour market forecast link from the BC Government but the information seems generalized</i>

<p><i>Clicks to access all relevant information</i></p> <ul style="list-style-type: none"> <i>Clicks were tracked with Click Tracker App</i> 	<p><i>27 clicks and 25 minutes spent researching but I still do not fully understand the programs.</i></p>
<p><i>Additional questions or information that developed</i></p>	<p><i>It is not clearly indicated when the student must transition from their regular school to Aldergrove then to Kwantlen or what exactly they will be doing at Kwantlen. I also do not understand the difference between the various work placements as it seems some may be paid, but it isn't explicitly stated.</i></p>

<p>Questions</p>	<p><i>Answers found during the research</i></p> <p><i>Carpentry</i></p>
<p>1. Where is this program located geographically?</p>	<p><i>Some initial training at Kwantlen Polytechnic University in Cloverdale, then the student completes the Program at Aldergrove Secondary.</i></p>
<p>2. What are the entrance requirements for this program?</p>	<p><i>Grade 10, English 11, Any Math 11, Woodwork courses suggested, experience in construction suggested</i></p>
<p>3. What will it cost for a student to complete this program?</p>	<p><i>\$3200 paid by the school district</i></p> <p><i>Approximately \$900 paid by the student for tools</i></p>
<p>4. What credentials are awarded upon completions of this program?</p>	<p><i>Students can complete the program as a residential carpenter apprentice, a commercial carpenter apprentice, a renovation worker, or a construction framer</i></p>

<p>5. What sort of work is available after completing this program?</p>	<p><i>General work in construction or demolition or the student can pursue more apprenticeship and work towards a Red Seal</i></p>
<p>6. What will the student learn in this program?</p>	<p><i>How to read blueprints, how to use power tools, how to work in demolition and construction, how to build and renovate using current construction practices</i></p>
<p>7. What are the requirements to complete the program?</p>	<p><i>Have an intention to graduate, regular attendance, complete all volunteer and classroom hours</i></p>
<p>8. Is paid work experience available or is it all volunteer?</p>	<p><i>This is unclear. If a student has also worked in construction before as the program suggests, would it be possible to have paid work? It is not specified.</i></p>
<p>9. Are there risks or hazards I need to know about?</p>	<p><i>It can be assumed that the same hazards of a construction site might be present when a student is learning this trade. There is a suggestions to purchase insurance for students who are volunteering.</i></p>
<p>10. Is any information on future job prospects available?</p>	<p><i>There is a labour market report from Skilled Trades BC but it is generalized and not specific.</i></p>
<p><i>Clicks to access all relevant information</i></p> <ul style="list-style-type: none"> • <i>Clicks were tracked with Click Tracker App</i> 	<p><i>30 clicks to access all the information. I spent 25 minutes gathering this data.</i></p>

<i>Time spent researching this particular program</i>	
<i>Additional questions or information that developed</i>	<i>How would a student so young find experience working in construction unless somebody they knew was already doing this work? Is there any assistance finding this work before or during the program?</i>

<i>Questions</i>	<i>Answers found during the research</i> <i>Electrical Foundation</i>
1. Where is this program located geographically?	<i>D.W. Poppy Secondary in partnership with BCIT</i>
2. What are the entrance requirements for this program?	<i>Grade 11, English 12, Physics 11, Math 11 and Math 12 (pre-calculus strongly recommended) Experience in electrical is strongly recommended</i>
3. What will it cost for a student to complete this program?	<i>\$3200 tuition paid by the district</i> <i>Approximately \$1200 for tools paid by the student</i>
4. What credentials are awarded upon completions of this program?	<i>Skilled Trades BC Electrical Foundation 1</i> <i>Credit for 6 high school courses</i>
5. What sort of work is available after completing this program?	<i>Apprentice electrician, pole line technician apprentice, security system installer, telecommunications apprentice</i>

<p>6. What will the student learn in this program?</p>	<p><i>Foundations of electrical work</i></p>
<p>7. What are the requirements to complete the program?</p>	<p><i>Student must complete the two years of study both in class and in work placements</i></p>
<p>8. Is paid work experience available or is it all volunteer?</p>	<p><i>This does not seem clear. It may be paid or unpaid, it is also vague if the students must find the work or if the school helps</i></p>
<p>9. Are there risks or hazards I need to know about?</p>	<p><i>Electrical work has many risks and hazards, the district suggests purchasing insurance for student workers</i></p>
<p>10. Is any information on future job prospects available?</p> <p><i>Time spent researching this particular program</i></p>	<p><i>The WorkBC labour market forecast is linked but it is vague</i></p>
<p><i>Clicks to access all relevant information</i></p> <ul style="list-style-type: none"> • <i>Clicks were tracked with Click Tracker App</i> 	<p><i>This took me 27 clicks and 20 minutes of research</i></p>
<p><i>Additional questions or information that developed</i></p>	<p><i>This is the most easily understood brochure of all the programs. I wonder though how a student can gain electrical experience before starting the program unless they know somebody in this field.</i></p>

Questions	<i>Answers found during the research</i>
1. Where is this program located geographically?	<i>Kwantlen Polytechnic University</i>
2. What are the entrance requirements for this program?	<i>Grade 10, English 11, Any Math 11. Strongly recommended: Life Sciences 11, Earth Sciences 11 and experience working in landscaping, lawn, or plant care</i>
3. What will it cost for a student to complete this program?	<i>Tuition of \$800 is paid by the district Approximately \$650 for tools is paid by the student</i>
4. What credentials are awarded upon completions of this program?	<i>Skilled Trades BC Landscape Horticulturalist Level 1 Credit for four high school courses</i>
5. What sort of work is available after completing this program?	<i>Nursery worker, landscape maintenance, groundskeeper, seasonal parks worker</i>
6. What will the student learn in this program?	<i>Basic lawn, plant, landscape care. Students can work towards a Red Seal after graduation.</i>
7. What are the requirements to complete the program?	<i>Regular attendance and a commitment to the program is mandatory</i>

<p>8. Is paid work experience available or is it all volunteer?</p>	<p><i>The program ends with a student work placement or apprenticeship, but it is not specified if there are paid work opportunities</i></p>
<p>9. Are there risks or hazards I need to know about?</p>	<p><i>There are no particular risks specified, but the district encourages all students to purchase insurance in case they are injured while working</i></p>
<p>10. Is any information on future job prospects available?</p>	<p><i>A work BC Labour market summer is linked, but it is vague</i></p>
<p><i>Time spent researching this particular program</i></p> <p><i>Clicks to access all relevant information</i></p> <ul style="list-style-type: none"> • <i>Clicks were tracked with Click Tracker App</i> 	<p><i>I made 30 clicks and spent 20 minutes researching this. In comparison to other programs this one seems very interesting, but there is not much information on the website about it</i></p>
<p><i>Additional questions or information that developed</i></p>	<p><i>This program grants far fewer credits towards graduation than other but is roughly the same time, so how will students make up the difference? This program is 8:00 am to 4:00 pm at Kwantlen which may be hard to commute to.</i></p>

<p>Questions</p>	<p><i>Answers found during the research</i></p> <p><i>Piping and Plumbing</i></p>
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1. Where is this program located geographically?	<i>Mostly at Langley Secondary with some training at BCIT Burnaby for two months</i>
2. What are the entrance requirements for this program?	<i>Grade 10, English 11, Any Math 11, Strongly recommended Science 11 and experience in piping or plumbing</i>
3. What will it cost for a student to complete this program?	<i>\$4300 tuition paid by the district Approximately \$1025 for tools and textbooks paid by the student</i>
4. What credentials are awarded upon completions of this program?	<i>Skilled Trades BC Piping Foundation Level 1, includes sprinklerfitting, steamfitting, and plumbing Credit for 9 high school courses</i>
5. What sort of work is available after completing this program?	<i>Plumber apprentice, commercial/industrial plumber, sprinkler system installer, gas or steam fitter apprentice</i>
6. What will the student learn in this program?	<i>Foundations for plumbing, steamfitting, sprinkler systems. Can work towards Red Seal after.</i>
7. What are the requirements to complete the program?	<i>This program takes three years which is much longer than the others. The student must complete three years of study plus workplace apprenticeships</i>

8. Is paid work experience available or is it all volunteer?	<i>This program does include paid work experience plus there is also volunteer components.</i>
9. Are there risks or hazards I need to know about?	<i>This work can be dangerous and the district suggests purchasing insurance for student workers.</i>
10. Is any information on future job prospects available? <i>Time spent researching this particular program</i>	<i>The BC Labour market report is linked and suggests this is a great field to get into at this time.</i>
<i>Clicks to access all relevant information</i> <ul style="list-style-type: none"> <i>Clicks were tracked with Click Tracker App</i> 	<i>I only made 18 clicks and spent 20 minutes researching this. However, there are many complex areas of this program that would require further study by a parent or student as this program is much longer than the others.</i>
<i>Additional questions or information that developed</i>	<i>I feel like this brochure accurately outlined the program but I have so many unanswered questions like what the timeline will be, how will they get to Burnaby for work, are they graduating later than other students since it is longer? There are a lot of unanswered sections in the timeline and this program also seems very challenging based on the brochure.</i>

Questions	<i>Answers found during the research</i>
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	<i>Professional Cook</i>
1. Where is this program located geographically?	<i>Walnut Grove Secondary School</i>
2. What are the entrance requirements for this program?	<i>Grade 11, English 11, Cafeteria or Foodstudies 11/12 or experience in a professional kitchen, Foodsafe Level 1. Recommended experience in food service.</i>
3. What will it cost for a student to complete this program?	<i>\$2900 tuition paid by the school district \$950 for tools and textbooks paid by the student</i>
4. What credentials are awarded upon completions of this program?	<i>BC Skilled Trades Professional Cook 1 (Institutional Entry) Technical Training Credit for 8 high school courses</i>
5. What sort of work is available after completing this program?	<i>Students can find work in the food service industry and work towards their Red Seal. The brochure says they can find work as a restaurant manager upon graduation, but I find this to be inaccurate as they will only be 18 years old.</i>
6. What will the student learn in this program?	<i>Industrial cooking techniques, skills for working in restaurant food service or as a personal chef.</i>
7. What are the requirements to complete the program?	<i>Students must complete any graduate requirements for their coursework during the day then attend this program from 2:30 to 7:30 after classes are over.</i>
8. Is paid work experience available or is it all	<i>On Fridays students have paid work placements and they also have paid work over Spring break.</i>

volunteer?	
9. Are there risks or hazards I need to know about?	<i>General hazards to working in a kitchen. The district recommends insurance for student workers.</i>
10. Is any information on future job prospects available? <i>Time spent researching this particular program</i>	<i>There is a general BC Labour Market report linked but it does not have a lot of relevant information for this program.</i>
<i>Clicks to access all relevant information</i> <ul style="list-style-type: none"> <i>Clicks were tracked with Click Tracker App</i> 	<i>I used 21 clicks to access this and it took me 20 minutes.</i>
<i>Additional questions or information that developed</i>	<i>I am wondering how the students will find work placement and if the school helps them. Additionally, will it be safe for students to work all over the community at night in restaurants?</i>