



Higher Education
Quality Council
of Ontario

An agency of the Government of Ontario

The Apprentice Retention Program: Evaluation and Implications for Ontario

Ron Hansen and
Catharine Dishke Hondzel,
Western University



Published by

The Higher Education Quality Council of Ontario

1 Yonge Street, Suite 2402
Toronto, ON Canada, M5E 1E5

Phone: (416) 212-3893
Fax: (416) 212-3899
Web: www.heqco.ca
E-mail: info@heqco.ca

Cite this publication in the following format:

Hansen, R., & Hondzel, C. D. (2015). *The Apprentice Retention Program: Evaluation and Implications for Ontario*. Toronto: Higher Education Quality Council of Ontario.



The opinions expressed in this research document are those of the authors and do not necessarily represent the views or official policies of the Higher Education Quality Council of Ontario or other agencies or organizations that may have provided support, financial or otherwise, for this project.
© Queens Printer for Ontario, 2015

Acknowledgements

Thank you to our many research assistants on this project. The project was supported through the work of Steven Gedies, Bryanne Harris, Sarah Horsford, Wendy Baker and David Fournier.

Table of Contents

1. Executive Summary.....	4
2. Introduction.....	5
2.1 Apprenticeship Retention Project Background.....	5
2.2 Apprenticeship.....	6
2.3 Partnerships.....	7
3. Literature Review and Theoretical Framework.....	8
3.1 Barriers to Apprenticeship Retention.....	8
3.2 Theoretical Framework.....	9
3.3 Similar Interventions.....	9
3.4 Program Overview.....	10
4. Methods.....	12
4.1 Research Design.....	12
4.2 Participant Recruitment.....	13
4.3 Data Collection and Analysis.....	13
5. Results.....	14
5.1 Program Evaluation.....	14
5.2 Barriers to Apprenticeship Completion.....	16
5.3. Feedback on the Apprenticeship Training System.....	23
6. Discussion.....	24
6.1 The Apprentice Retention Program as an Intervention.....	24
6.2 Systemic Barriers to Completion.....	24
7. Limitations.....	24
8. Conclusion.....	25
9. References.....	26

List of Tables

Table 1: Sources of data.....	12
Table 2: Program Exit Card Summary.....	15

1. Executive Summary

Attraction and retention of apprentices and completion of apprenticeships are issues of concern to all stakeholders involved in training, economic development and workforce planning. The Canadian Apprenticeship Forum (CAF) has forecast that by 2017 there will be a need to train 316,000 workers to replace the retiring workforce in the construction industry alone (CAF, 2011a). In the automotive sector, shortages are expected to reach between 43,700 and 77,150 by 2021. However, shortages are already widespread across the sector, and CAF survey data show that almost half (48.1%) of employers reported that there was a limited number of qualified staff in 2011 (CAF, 2011a). Given this, retention of qualified individuals in apprenticeship training and supporting them through to completion is a serious issue. There is some indication that registration in apprenticeship programs has been increasing steadily over the past few years, but the number of apprentices completing their program has not kept pace (Kallio, 2013; Laporte & Mueller, 2011). Increasing the number of completions would result in a net benefit to both apprentices and employers, minimizing joblessness and skills shortages.

Apprentices face many obstacles that lead to program discontinuation, as well as various reasons for non-completion. The reasons most often cited for non-completion in the literature include a lack of knowledge about the apprenticeship process, differing expectations between employers and apprentices, and poor employability skills (CAF, 2011b; Menard, Menzes, Chan & Walker, 2008; Stewart, 2009). There is also some evidence to suggest that employers and younger apprentices have differing expectations of each other, which may lead to conflict and become a barrier to long-term success in the workplace (Dooley & Payne, 2013; Stewart, 2009). However, there is insufficient information about the actual determinants of attrition from apprenticeship programs and there is evidence to suggest that numerous factors contribute to program discontinuation (CAF, 2004). The purpose of this study was to examine the effectiveness of an intervention program designed to increase apprenticeship retention and reduce some of the personal obstacles apprentices face to continuation.

The intervention program consisted of a series of nine hands-on and two online workshops that were focussed on building life skills and resilience to common stressors among apprentices. Each interactive workshop was facilitated by a member of Fanshawe College's technology faculty who was familiar with the trades, as well as by a community member with specific and relevant expertise. The program was evaluated through the use of exit cards after each workshop. Results of the exit card surveys indicated that most of the workshop sessions contained valuable and useful information for apprentices engaged in apprenticeship training programs.

Program design was informed by collaborative meetings with apprenticeship stakeholders in the London region as well as by focus groups with eight employers and former apprentices who provided insight into current problems in the apprenticeship training process and identified specific barriers to completion.

Interview participants in this study were 26 registered apprentices recruited through a local Employment Ontario office and in-class announcements to Level 1 apprenticeship classes at Fanshawe College. Eleven of those participants took part in the intervention, while 15 only participated in the interview portion. The 26 participants were contacted and participated in phone interviews prior to the beginning of the program, six months after the program ended, and one year after the program ran. In total 39 interviews with apprentices were completed across the three time points. All participants, including those who did not attend the workshops, indicated that they felt the workshops would be valuable and would contribute to apprenticeship training completion.

Results of the focus group and interview analysis indicated that apprentices strongly believed that they would benefit from greater face-to-face support from MTCU employment and training consultants (ETCs), and both employers and apprentices would have liked to have greater knowledge of support services available to apprentices while completing their training. Many apprentices indicated that they would have liked to have a broader awareness of the various job opportunities available post-apprenticeship. Almost all participants in this study indicated that they had experienced some difficulty during the apprenticeship training process and that they were able to complete because they were in some way supported or had a unique opportunity to overcome specific barriers. Other findings revealed throughout the study suggest that apprentices felt that they faced cultural and institutional barriers to completion such as the way in which training is scheduled, delayed access to Employment Insurance, and skills gaps when working to complete their training.

2. Introduction

2.1 Apprenticeship Retention Project Background

The Canadian Apprenticeship Forum (CAF) has released several reports that examine apprenticeship attraction, retention and completion over the past ten years. In 2004 they released a comprehensive report examining the barriers to apprenticeship completion, which identified nine generic barriers that apprentices stated created obstacles for program completion. Many of these barriers underscore a lack of awareness of the options and supports available to apprentices and employers, as well as a lack of essential skills such as literacy and numeracy (CAF, 2004; Ménard, Menezes, Chan & Walker, 2008; Stewart, 2009). The CAF makes clear recommendations for enhanced training and support for both apprentices and employers. Other reports that examine program completion rates argue that attrition is positively correlated to program length (the longer the program, the higher the attrition) and that completion is more likely when apprentices are married, able-bodied and enter the apprenticeship program with a higher level of education (Laporte & Mueller, 2012). Dooley and Payne (2013) also found that changes in employment and residence are key reasons apprentices fail to complete or demonstrate slow progress through the program. Several reports examining the issue of apprenticeship education suggest that apprentices who are provided with supplementary education, appropriate support and access to employment-related resources before and during their apprenticeship have a higher likelihood of success (Sharpe, 2003; Sharpe & Gibson, 2005; Skof, 2006; Stewart, 2009).

In response to these concerns, the Apprentice Retention Program (ARP) was developed at Western University in 2011. Run by the Faculty of Education, ARP was founded following a process of consultation with numerous community partners, as well as by soliciting feedback from focus groups with past apprentices and employers (see section 2.3). The ARP was designed to offer supplementary support and resources to apprentices currently registered in the in-class portion of their training at Fanshawe College. Drawing from a local understanding of apprenticeship completion concerns as well as from the literature, the program consisted of a series of eight one-hour workshops that addressed topics that employers and community partners had identified as major points of concern. These included but were not limited to addressing students' learning expectations, working with others, work/life balance, access to community resources, and employment supports and financial management. The workshop sessions took place in the early evening at Fanshawe College. Enrolment was open to any apprentice in Ontario who wished to attend; however, by virtue of the location, most participants were enrolled at the time in apprenticeship training at Fanshawe College and lived in London or the surrounding area.

The goal of the current research project was to develop, implement and evaluate an apprentice-specific training program that aimed to provide a group of apprentices with the support, knowledge and life skills needed to reduce their likelihood of leaving the apprenticeship program before completion. Data were

collected from program participants before, during and after the activities. In addition, interviews and focus groups were conducted with apprentices, former apprentices and employers in the skilled trades to identify the major issues facing the apprentices in our study and to help identify possible reasons for attrition during the apprenticeship training process.

2.2 Apprenticeship

An apprenticeship refers to a method of technical training wherein the learner (the apprentice) is taught a trade or occupation under the tutelage of a certified journeyman (Stewart, 2009). Apprentices in Ontario participate in training at both their place of employment as well as at a registered training school or facility, often a community college or trade school. Apprenticeship training in Ontario can be grouped according to four sectors: construction, industrial, motive power and service (OYAP, 2013). Within each of these sectors are specific specialized occupations, both voluntary and compulsory. Of the 156 recognized trades in Ontario, 21 are compulsory, 75 have a Certificate of Qualification (CofQ) available and 49 have Red Seal designation (College Sector Committee for Adult Upgrading, 2014).

An apprenticeship usually begins when a person who wishes to become an apprentice finds an employer who wants to hire an apprentice. Either the trainee or the employer contacts the Ministry of Training, Colleges and Universities (MTCU) apprenticeship office, which then assesses the employer's ability to train the apprentice. Training begins once both the apprentice and the employer sign a contract or agreement of training. Apprentices must be at least 16 years of age to register for the Ontario Youth Apprenticeship Program, which is a part-time apprenticeship training program aimed at high school students, or have completed high school if they wish to begin full-time training (Employment Ontario, 2007).

The Ontario College of Trades is a regulatory body that promotes the skilled trades and issues CofQs and statements of membership to registered apprentices (Ontario College of Trades, 2014). After completing their training, apprentices have different certification options available to them depending on their chosen trade. In order to work legally in Ontario, an apprentice in a compulsory trade must write a standardized, trade-specific exam called a Certificate of Qualification and register with the College of Trades as a journeyman candidate. This certificate states that they have passed a provincial qualification exam and that their knowledge of their trade has been assessed. Some trades, however, are classified as voluntary, which means that apprentices do not need to write an exam or register with the College of Trades in order to work. Apprentices in voluntary trades may still choose to register with and pay a registration fee to the Ontario College of Trades.

The standards and regulations for apprenticeship training differ across Canada; however, the interprovincial Red Seal Trades program sets common standards for apprentice training in specific fields. To certify in a Red Seal trade, an apprentice must successfully complete an interprovincial Red Seal examination. There are currently 55 Red Seal-designated trades in Canada that offer trained apprentices greater mobility across the country (Red Seal, 2014).

2.3 Partnerships

There are many community organizations involved in the apprenticeship training process. Apprentices have contact with the Ministry of Training, Colleges and Universities (MTCU), apprenticeship training consultants, employers, a community college or labour-sponsored training centre, and may also have contacted Employment Ontario, employment and/or literacy service providers before locating a suitable workplace. The apprenticeship services and providers are a collection of offices, personnel and agencies that promote and advocate for apprenticeship, support employers, and manage the operations of apprenticeship and the skilled trades. Therefore, in order to develop an effective apprenticeship retention program, numerous partners needed to be brought together to develop curriculum for the ARP and to design this study. Key players in this project were Western University, Fanshawe College, the local MTCU Employment Ontario office, the Apprenticeship Network, and the Elgin Middlesex Oxford Workplace Planning and Development Board.

This project began at Western University's Faculty of Education. The Faculty of Education is a teacher training facility that offers undergraduate and graduate degrees in education. One of the undergraduate programs offered is the diploma in education. The diploma in education (technological education) program prepares candidates with a technical background to teach broad-based technology courses in secondary schools. To enrol in this program students do not require an undergraduate degree but they must have at least five years of experience in their area of work and demonstrate technical competency in their area of expertise. Many of the students who earn diplomas in education have been registered in the trades as apprentices or journeypersons, so they acted as a resource for the development of this study.

Fanshawe College is a major provider of apprenticeship training in London. It currently offers 31 apprenticeship training programs to students on three campuses. In partnership with the School of Building Technology, instructors from the apprenticeship program provided insight and feedback on program development, allowed for access to classes in order to recruit participants and provided classroom space for the ARP sessions.

Apprenticeship is a highly organized and regulated training process wherein the stages, skills and knowledge that apprentices need to master are documented and prescribed. MTCU's Employment Ontario Apprenticeship offices constitute the first step in the apprenticeship registration process. When signing up for an apprenticeship, employers and apprentices must meet with an MTCU employment and training consultant (ETC) to register for the training and complete the required paperwork. For this project, consultations with MTCU staff and management took place in the London area. ETCs with the MTCU in London also served as our first point of contact with apprentices and offered feedback on the various components of ARP development.

The Apprenticeship Network is made up of a group of like-minded individuals and groups that work collaboratively to promote apprenticeship as a first-choice career option in the Elgin and Middlesex Oxford regions of Ontario (Apprenticeship Network, 2013). As a collective of key stakeholders in the apprenticeship process, their input and support was sought as this project was proposed and developed. Many members of the Network also have connections with the Western Faculty of Education, Fanshawe College and many are connected to MTCU through Employment Ontario Purchase of Service Agreements, Adult Learning/Literacy or Workforce Development.

The Elgin Middlesex Oxford Workplace Planning and Development Board is part of the Workforce Planning Ontario network, a group of 25 organizations around Ontario that track and facilitate labour market planning. It offers support to employers, workers, educators, economic developers and youth, and serves to gather intelligence about labour market supply and demand. Members of the board participated in program development and planning, starting with the early stages of this project.

3. Literature Review and Theoretical Framework

3.1 Barriers to Apprenticeship Retention

Recent research has shown that those born between 1982 and 2000, called ‘Generation Y’ or ‘the Millennials,’ have expectations of work and life that do not match those held by senior participants in the current workforce (Bolton et al., 2013; Howe & Strauss, 2000; Twenge, 2006; Foster, 2013). This generation faces a high unemployment rate, possesses exceptional familiarity and comfort with digital technology, and has generally grown up with certain expectations of the workplace, including on-the-job training, patient mentoring, positive reinforcement and the opportunity to make mistakes without recourse (Bolton et al., 2013; Howe & Strauss, 2000; Twenge, 2006; Foster, 2013). Partially due to these generational differences, the education system, apprenticeship training programs, and ultimately employers, will best be served if they understand the particular strengths and motivations of this generation and can provide effective and appropriate mentoring to bridge the different expectations of these groups.

This gap between the expectations of employers and those of apprentices appears frequently in the literature as a reason for apprenticeship non-completion. Apprenticeship completion appears to be affected by the age of the apprentice, in that younger apprentices have a higher likelihood of non-completion (Dooley & Payne, 2013; Stewart, 2009). Unfortunately, the majority of work to date on apprenticeship attrition has not been conducted in Canada, but rather in Europe and to lesser degrees the United States and Australia (Laporte & Mueller, 2012). The Australian Government has published an in-depth report indicating that up to 40% of apprenticeship cancellations that happened within the first 100 days occurred because of a mismatch in expectations between employers and apprentices (Australian Industry Group, 2007). Researchers found that the differing expectations between apprentices and employers were often identifiable as early as the interview process, but continued into the workplace in such forms as younger apprentices indicating a lack of awareness that overtime hours may be required; a perceived lack of training; and having to complete tasks and jobs that were not related to their apprenticeship. Improvements suggested by the report include enhanced training and mentoring for both apprentices and employers, such as better awareness of workplace expectations, stronger communication skills, and a mutual understanding of what kind of support and guidance is required during the apprenticeship program. Recent Canadian research on retention in apprenticeship also indicates that an effective mentoring program may lead to decreased attrition rates and motivate apprentices to remain in training even through difficult periods and lack of confidence (CAF, 2011a).

The Canadian National Apprenticeship Survey (Ménard, Menezes, Chan & Walker, 2007) also documented a variety of other reasons for which apprentices do not complete their apprenticeship program. A full third (33%) of non-completers indicated non-specific personal reasons for leaving, while nearly 20% indicated that they received a better job offer or did not like the employment conditions at their current workplace. Significantly, this report found that 21% of apprenticeship non-completers indicated that they experienced problems with paperwork, administration, communication and a lack of information during their apprenticeship program. Though this does not necessarily lead to leaving the program, difficulty with the administrative and incoming expectations of the program would certainly compound problems with other job-related duties and expectations. Taylor (2008) expanded on this problem, following five apprentices from high school through apprenticeship and into the workforce. Her analysis and conversations with apprentices clearly indicated that more support is needed for young people entering apprenticeship and that structural factors such as class, gender and minority status significantly change the decision-making process when transitioning through school to work.

3.2 Theoretical Framework

The development of the ARP intervention was grounded in the tenets of community psychology, which is concerned with the functioning of individuals through the support of communities and societies (Dalton, Elias & Wandersman, 2007). The principles of community psychology are committed to fostering resilience, helping individuals define and achieve personal success, and promote individual strengths and personal resources. The ARP was developed with the understanding that when personal strengths are identified, enhanced, valued and made relevant, individuals often thrive (Dalton, Elias & Wandersman, 2007). Moreover, by promoting personal success, communities also gain strength. Research on employment readiness has also suggested that up to 63% of Canadians seeking assistance with work-life transitions may benefit from integrated programs, funding and services (Ward & Riddle, 2014). The tenets of community psychology propose a group format for supportive interventions so that individuals can learn that their difficulties are not unique and that they have a range of options at their disposal for solving problems and creating meaningful personal change (Corey & Corey, 2006). The theoretical premise of this study is based on the understanding that enhancing individual and family wellness, promoting a sense of connection, encouraging citizen participation, and supporting collaboration and community strengths can help reduce attrition by bolstering apprentices' resilience.

A group model was chosen as an effective means of intervention for the ARP. Groups provide a sense of community through which the establishment of connections provides an opportunity for sharing resources and learned experiences (Corey & Corey, 2006). Piper and Ogrodniczuk (as cited in Corey & Corey, 2006) identified the specific benefits of group therapy as efficacy, applicability and cost efficiency. Our intention was to provide a space for access to resources, education, support and connection to aid the unique profile of an apprentice. To our knowledge, this approach has not been attempted elsewhere to address apprenticeship attrition, though it has proven successful in other situations, such as when individuals face job loss, educational challenges or personal crises.

3.3 Similar Interventions

Conceptually, the ARP resembles other interventions designed to increase resilience, such as From Surviving to Thriving and the JOBS Project. To the best of our knowledge no intervention to improve retention in apprenticeship programs has published its results, so the program was developed with reference to interventions with similar goals.

In the From Surviving to Thriving project, Fuller (1998) developed an intervention workshop series designed to promote mental health in youth populations. Through his group workshops, Fuller aimed to move clients away from a rote day-to-day process of meeting immediate needs and wants to a more goal-oriented perspective that takes into consideration long-term needs, social stability and mental health. Drawing from this design, it was recognized that the facilitators must meet participants collaboratively in an accessible and familiar location, and make material engaging, relevant and specific while promoting a long-term vision of success and strength. Although apprentices range in age, Fuller's approach to treating mental health provides examples of possible considerations when designing a support.

The JOBS Project for the Unemployed provides another comprehensive example of an intervention used to build personal resilience through a series of targeted workshops aimed at a population facing identifiable risks (Vinokur, Price & Schul, 1995). In this case the JOBS Project was developed to help unemployed workers in Detroit develop job-seeking skills, build personal resilience, overcome personal barriers and increased self-efficacy in order to find work. Workers who completed the hands-on program increased their real-life problem-solving skills, became better able to find and keep employment, and were able to learn how to access social resources and support when needed (Vinokur & Schul, 1997). Vinokur, Price and Schul's JOBS intervention (1995) demonstrated that skills, support and inoculation for resilience acted as a social resource and that a

carefully designed intervention can help in the acquisition of meaningful and useful new behaviours and provide social support to those who were impacted by job loss and other adverse circumstances. This long-running program offered ideas and a scaffold from which to develop the ARP. The JOBS intervention shares similarities with the ARP in that both are designed to be responsive to the needs of participants and target a range of supports beyond the identified concern. Though the primary concern with the JOBS project was to increase employment, it used a holistic approach to build resilience and self-efficacy. In a similar way, the ARP is targeted at reducing apprenticeship attrition, but does so in a way that is meant to build resilience and personal success, combat incorrect expectations and provide needed support.

The participants in the JOBS and From Surviving to Thriving interventions also share similarities with apprentices. Youth dealing with mental health challenges and the unemployed both face social stigma, devaluation of skills and regular challenges to their self-efficacy. Apprentices, though enrolled in educative programs, face similar social barriers. Pervasive negative social and educational attitudes toward apprenticeship programs are evident (CAF, 2004; Ménard, Menezes, Chan & Walker, 2007; Taylor, 2008; Stewart, 2009; Desjardins, 2010). In addition, apprentices face several barriers or challenges (locating an employer, travel, costs), whereas those facing un- and underemployment experience significant risks when contemplating leaving social assistance or finding a higher-wage job (Vinokur, Price & Schul, 1995). Using techniques to increase participant resilience, these various intervention models provided a conceptual framework to develop a program to provide apprenticeship support that could be used to enhance apprentices' skills and confidence.

3.4 Program Overview

The ARP was structured around 11 session topics that were based on the barriers identified in the apprenticeship literature. Specific group session protocols were designed to meet the needs of the target audience, drawing on the theoretical literature for each topic, and supplemented with community resources available within the local area, as well as the institutional resources available to participants registered at Fanshawe College. Curriculum documents for each workshop were reviewed by teachers in apprentice training as well as by educational psychologists prior to the beginning of the program. Each session was limited to one hour and designed to be interactive and make use of a small-group discussion format, keeping in mind that hands-on and experiential learning activities are more engaging and draw upon higher-order thinking skills than do lectures. Program and session resource development were also guided by the desire to integrate components of workplace literacy and essential skills.¹

Session topic areas included the following:

Introductions and expectations. This session was designed to establish rapport, encourage connections and foster ownership of the group between members. Activities included icebreakers, networking (creating an elevator pitch) and building group cohesion.

Skills gaps and solutions (online). Using a tool developed by the College Sector Council for Adult Upgrading (Glass, Kallio & Goforth, 2007), participants were asked to complete an assessment program in order to identify possible gaps in essential skills. They were then presented with useful ways to address these skills gaps to better prepare them for their apprenticeships. Facilitators were permitted access to view the results of apprentices' assessments.

¹ The nine essential skills identified by Employment and Social Development Canada include reading, document use, numeracy, writing, oral communication, working with others, thinking, digital skills and continuous learning.

Learning at school and learning on the job. This session was designed to support apprentices in their transition from school to work. Journeypersons stimulated active discussion, recalled their personal experiences and presented applied solutions. The limitations of institutional learning were also discussed frankly.

Personality, communication and working with others. Drawing on research from the field of social psychology, this session included exercises designed to improve effective communication and social skills, and to promote understanding of differences in group dynamics.

Employer expectations. An employer of apprentices presented his particular workplace expectations in relation to what he perceived to be apprentices' perceptions. Targeted questions provided the context for a discussion of how employers view the role of the apprentice, in addition to providing information about how to demonstrate leadership, work ethic, and how to communicate personal needs effectively.

Health and safety (online). Using the Health and Safety 101 series of online modules developed by the Workplace Safety and Insurance Board (HS101.ca), participants were asked to complete the preparatory course for the Passport to Safety program. These modules are designed to provide relevant information about workers' rights and safety using an interactive multimedia format. If participants chose to complete the Passport to Safety program, they would earn a nationally recognized certificate in health and safety.

Finances and budgeting, and entrepreneurship. Working with a local youth entrepreneurship program and business incubator, participants were given information about how to start a business or approach a business owner and ask for mentorship. Topics included how to get tool and materials loans, develop a business plan, understand personal finances and register a new business.

Work/life balance and health. A guest speaker from the local health unit presented information on how to deal with workplace stress and maintain well-being in the trades. The presenter discussed and explored different avenues for dealing with mental health, wellness and sexual health, and provided information about how to access local support services.

Getting involved in your industry/learning about unions. A speaker from a local trade union that registers a large number of apprentices discussed the ways in which apprentices could get involved in regulatory bodies and associations within common *apprenticeable* trade industries. Discussions ranged from the pragmatics of union membership to the various forms of non-union trade organizations that represent apprentices and journeypersons and that arrange local events and meetings for education and networking in the industry.

Accessing community resources. As part of the program summary and wrap-up session, the concepts of resourcefulness, resilience and seeking support were re-iterated, as were the various ways to seek out community and school resources. The aim of this session was to reinforce the importance of information-seeking and building an effective network and useful relationships with supports in the community.

Wrap up and feedback. The final session was designed to collect meaningful feedback from participants, address lingering questions and provide contact information for program leaders.

Together these 11 sessions provided apprentices with comprehensive information and with substantial resources to move forward with their careers. Drawing from the main concerns identified by stakeholders and within the apprenticeship literature, each session was evidence-based and designed with specific apprentice needs in mind.

4. Methods

4.1 Research Design

The research project was designed to collect information from employers, former apprentices and apprentices currently enrolled in an apprenticeship training program. The purpose of the data collection from employers and former apprentices through focus groups was to assess critical issues in the local apprenticeship training program in order to build a relevant and effective program. Interviews were conducted with apprentices-in-training in order to identify challenges that they had experienced in their apprenticeship training programs. Two groups of apprentices-in-training that were interviewed. One group participated in the ARP, the other indicated an interest in participating but did not attend any sessions.

Three approaches to data collection were used:

1. **Focus groups.** Focus groups were used as the first stage of program development. Two focus groups were conducted, one with apprentice employers and one with past apprentices.
2. **Interviews.** Interviews were conducted with apprentices-in-training in order to collect in-depth information regarding the trajectory of their apprenticeship, their interest in the field and to discuss any challenges they had encountered in the process. Interviews were conducted with apprentices who participated in the ARP and those who did not participate in the ARP. Apprentices who had participated in the ARP were also asked in the interview to give feedback on the program and on what types of programs they thought were useful for apprentices.
3. **Program evaluation exit cards.** At the end of each program session participants were asked to evaluate confidentially the value of the information presented in the session and to provide feedback for future session development. This exit card evaluation was used as a gauge of the effectiveness of program sessions. A summary of exit card data can be found in Table 2.

Table 1: Sources of Data

	Number of Participants	Characteristics
1. Focus groups	8	Apprentice employers and former apprentices
2. Interviews	26	Apprentices-in-training who did and did not participate in the ARP. Thirty-nine interviews were completed over 12 months
3. ARP (Exit Cards)	11	Apprentices-in-training who completed the ARP

Research ethics board approval for this study was granted by both Western University and Fanshawe College for the duration of this project. All participants in this study provided their signed informed consent and were aware of the nature of the research and how results would be disseminated. All participants were assured anonymity in the final report and that no personally identifying information would be reported.

4.2 Participant Recruitment

Focus group participants were recruited via emails sent to technology instructors at the Western Faculty of Education and through partners at the Apprenticeship Network and the Elgin Middlesex Oxford Workplace Planning and Development Board. Participants were asked to participate in a one-hour focus group examining barriers to apprenticeship retention. Participants had to be former apprentices or employers of apprentices. A total of 10 people responded to the advertisement. Eight individuals, including a mix of both men and women ranging in age from 29 to 55, participated in the focus groups.

Interview and ARP participants were recruited through Employment Training Consultants at the local MTCU apprenticeship office and at Fanshawe College through classroom announcements made by members of the research team. ETCs were provided with envelopes containing a letter of information and a demographic information collection sheet. After registering a new apprentice, they were asked to briefly explain the study that was taking place and ask whether the newly registered apprentice would be interested in participating. Once the new apprentice was asked to participate and given the envelope containing the two forms, the ETC left the room with the employer. Whether or not they had decided to participate after reading the informed consent form, apprentices were asked to seal the envelope and return it to the ETC. Over a period of six months 21 individuals completed the informed consent and demographics form. Over 50 additional sealed envelopes were returned to the research team, but without any participant information completed. This indicated that envelopes were being given to apprentices, but that they were choosing not to participate in the study.

A second stage of interview recruitment took place in Level 1 apprenticeship classes at Fanshawe College. Members of the research team visited at least two classes of students from three of the four sectors: construction, industrial and motive power. Class sizes ranged from 20 to 30 students. After a brief presentation about the program, members of the research team left envelopes containing informed consent and demographic information forms for the students. Envelopes were returned by the instructor to one of the main technology offices at Fanshawe College. A total of six completed envelopes were returned.

All participants were informed verbally and in advance of their participation about the purpose of the study and the general nature of the information that was being sought. Focus group participants were reminded at the beginning of the group meeting that their responses were being recorded and that they were welcome to leave at any point in the process. They were told that their information would be used to help in the design of a program and that personally identifying information would not be released. ARP participants were also told at the beginning of the sessions that they were part of a pilot program and their responses and comments would help inform future program design.

4.3 Data Collection and Analysis

Data from focus groups and interviews were collected using a digital audio recorder and transcribed verbatim using the Express Scribe program. Transcripts were reviewed by another member of the research team for accuracy. Interview transcripts were analyzed and coded by categorizing interview text into underlying semantic (latent) themes and patterns identified by the researchers. MaxQDA software was used as a tool to assist in the process of manually sorting, grouping and coding relevant elements of the participants' transcripts and focus group data. This method of coding and data organization is often referred to as thematic analysis, which is described by Braun and Clarke (2006) as "a method for identifying, analysing, and reporting patterns (themes) within data" (p. 79). It allows the opportunity to interact with the data and sort through ideas and concepts that are shared between participants (Braun & Clarke, 2006; Hays & Singh, 2012). Themes identified are reported in order of frequency, providing the reader with a sense of which issues are most relevant to participants.

Demographic data and exit card data were compiled using the responses collected on intake sheets. Exit card responses were added and averaged to provide an assessment of program strength and to formulate recommendations. A summary of the data collected is presented in Table 2.

5. Results

Though the program evaluation was originally intended to be the primary focus of this report, the information gleaned through interviews and focus groups provides additional insights into apprenticeship training in Ontario, as well as structural and systemic barriers. The results section is divided into three sections: program evaluation, barriers to apprenticeship completion, and feedback on the system of apprenticeship training.

5.1 Program Evaluation

The ARP ran for four weeks in the fall of 2012. Over the course of these four weeks apprentices registered in the program attended eight hour-long in-class sessions (two each week). Two additional workshops were available online for students to access through the campus computer lab or a home computer. Participation in the online workshops was tracked by the research team. Though all individuals who agreed to an interview were invited to participate in the workshops, only five participants completed every module in the ARP, with four additional participants joining in occasionally. Each week participants were asked to complete an exit card to evaluate the workshop in which they had participated. The two online sessions were not rated, though verbal feedback was collected when students returned to the workshop. Ratings of online workshops are not presented. It is important to note that though equal participation from men and women was sought, ARP participants were all male between the ages of 18 and 29.

Participants were asked to rate items for each session on a four-point Likert scale from 1 (no, not at all) to 4 (yes, definitely). Item questions and average ratings for each week are compiled in Table 2. Though there was a limited number of participants in each session, the feedback given on the exit cards provided an indication of which sessions required re-tooling and gave the project team an understanding of the issues that apprentices found most relevant to their needs. Though a second ARP session was planned for the spring of 2013, training schedules and the cyclical nature of apprenticeship intake prevented this second session from commencing.

Based on the exit card data, it is clear that sessions 4, 5 and 8 were well received by participants. Sessions 4 and 5, which focussed on employer expectations and finances and budgeting, were both facilitated by community partners. One was an employer, the other the director of a business incubator that provided start-up funding and resources for young entrepreneurs. These speakers offered practical advice, straightforward answers to questions, and were both enthusiastic and optimistic about the ARP participants' future opportunities. Session 6 on work/life balance was poorly received. A community member who typically presents to workplaces and health and safety committees facilitated this session on health and work-life balance. The session offered limited interaction and mainly consisted of information being presented to participants.

Table 2: Program Exit Card Summary

Week	1	2	3	4	5	6	7	8
The topic was interesting	3.86	3.60	4.00	4.00	3.86	2.86	3.40	3.80
I will be able to use the information provided	3.43	3.40	3.67	4.00	3.86	3.00	3.60	4.00
The facilitators were helpful	3.57	3.60	3.83	4.00	4.00	2.86	3.80	4.00
I would suggest this program to a friend.	3.57	3.20	3.67	4.00	4.00	2.71	3.60	3.80
Average	3.61	3.45	3.79	4.00	3.93	2.86	3.60	3.90

Scores represent average ratings given to each session on a four-point Likert scale (ranging from 1: No, not at all, to 4: Yes, definitely)

Sessions are numbered as follows: 1. Introductions and Expectations, 2. Learning at School vs. Learning on the Job, 3. Personality, Communication and Working with Others, 4. Employer Expectations, 5. Finances and Budgeting & Entrepreneurship, 6. Work/Life Balance and Health, 7. Getting Involved in Your Industry/ Learning about Unions, 8. Accessing Community Resources/Wrap Up and Feedback.

Of the 11 apprentices who participated in the ARP, all were contacted again for at least one follow-up interview at six months post-program. Participants were asked to comment and provide feedback on the ARP, and the apprentices' comments were categorized into three broad categories: the utility of the topics, the perception of extra work and the group format.

Program utility. The utility of the program was of primary concern to the research team and most ARP participants interviewed indicated that the program provided valuable information that they could use in their work and personal lives. Several participants who attended the ARP indicated that the workshops provided a useful opportunity to build their network. One program participant stated, *"It's an excellent way for them to meet new people and expand their network – that's a real big thing for me."* Echoing that comment, another participant commented that *"you get lots of contacts and stuff or whatever from it, people coming in and explaining stuff."* These general comments speak to the value apprentices place on building a professional network of connections and the importance of conveying information that has immediate applicability.

A few ARP participants commented on the particular value of the first workshop, which asked them to develop an elevator pitch – a short description of who they are and what they do that could be used to introduce themselves to a potential employer or client. This session garnered strong positive feedback and, in a six-month follow-up interview, an ARP participant stated, *"That was a real good thing for me, him talking about those elevator speeches, and opening your eyes up a little more. I do get introduced quite a bit to customers, and people from other companies, and so it's good to like, I don't know, I just found that helpful."* Another ARP participant mentioned that his schedule required him to spend a lot of time at school between classes and that the program was a good use of this free time. Based on feedback from participants and discussions with faculty members, the program served an important purpose and conveyed information that was not covered in the classroom portion of apprenticeship training. As the workshop was designed based on evidence from the literature as well as feedback from stakeholders in the apprenticeship training process, it was tailored to be relevant and meaningful for the target population.

Extra work. Not all comments from program participants about the ARP were positive. Though those who participated in the ARP were very reluctant to provide constructive criticism or suggestions to improve the program, one participant indicated that *“other people might be scared; it sounds like extra work.”* Several others echoed that remark in different ways, mentioning that the amount of time they spent in class was long and that it would take time away from relaxing after school. In discussing this perception with instructors in the apprenticeship program, many mentioned that once classes ended students typically met up at the campus pub, and putting a program in place around a students’ scheduled down time would not attract high levels of participation.

Focus group data and discussions with stakeholders indicate that in general it is difficult to program extracurricular work for apprentices because of a lack of perceived value. Many stakeholders gave examples of trade shows, career fairs and workshops being poorly attended by apprentices even though they were the target audience. Whether this is due to the perception of having to do extra work or a reflection of these extra activities being perceived as holding limited potential value is unclear.

Group format. Participants who mentioned the group format indicated that they liked meeting apprentices from other trades and finding out more about them. One participant interviewed mentioned that *“it’s good to get to know the guys in other trades because when we’re on the site we’re going to all have to work together, even though we don’t know each other.”* Another participant commented that the group format was good because the apprentices could learn from each other. No participants indicated that working with apprentices from other trades detracted from the usefulness of the program, and stakeholders indicated that it was important to have apprentices from various trades interact with each other.

Overall the apprentices who participated in the ARP were happy with the program and the learning outcomes. The specific challenges that facilitators encountered were centred on the quality of guest speakers, participant retention, and connecting to the group as a whole with relevant and engaging topics. One speaker in particular used a lecture-style format and PowerPoint presentation, which students found to be less useful than other sessions where a group discussion format was used.

5.2 Barriers to Apprenticeship Completion

All focus group and interview participants were asked to comment on what they felt were the most significant barriers they faced to completing an apprenticeship. They were asked to comment on their own journey through the apprenticeship program and discuss any obstacles they faced along the way. By way of a prompt, apprentices were also asked to indicate why their peers in the training program had left the program. During the focus groups, employers and former apprentices were asked to discuss what they felt led apprentices to discontinue their training. Findings from the interviews and focus groups fell into four distinct categories:

1. Financial support and Employment Insurance
2. Support from MTCU and access to ETCs
3. School curriculum and skills gaps
4. Personal life/family situation

These categories are not mutually exclusive, and the individuals in the study who referenced these challenges frequently mentioned more than one. The order in which they are listed reflects the approximate frequency with which each issue was raised. Financial issues were the most frequent barrier mentioned by apprentices, while family issues and individual personal struggles were mentioned less often in comparison. As this is not a representative sample of apprentices, the issues identified do not reflect the extent of all apprentices’ experiences. Given the nature of the responses, it is expected that these are relatively common concerns that vary in frequency and may change based on individual circumstances and characteristics.

Financial support and Employment Insurance (EI). Participants in this study who provided a reason for non-completion of an apprenticeship overwhelmingly indicated that they discontinued their training for financial reasons. Participants indicated that the waiting period for EI was too long, that they did not meet the requirements to qualify for EI or that they were paid at a rate they felt was incompatible with their level of education or experience.

Overall, EI was a common subject of complaint for apprentices. One stated that:

I thought it was really petty like, I've been working for the last like ten, fifteen years of my life, everyday and like I'm fifty hours shy and you can't give me the EI? And I know people often, there's like a long waiting period or people don't get their cheques on time. Honestly that's probably the biggest issue I've ever heard of like when guys go to school they don't get their money or guys don't qualify for the EI hours. Like, it is-, you know what I mean? I'm sure I'm not the only one that's been denied. It really kind of-, like I have a daughter and stuff and I had bills I had to pay, right? So I was really hoping to get that EI. No, you're fifty hours shy, and I just couldn't believe it.

Another apprentice also discussed how difficult it was for his colleagues to get denied EI benefits:

Even a couple guys that didn't come this year for intermediate, like they would of been here at the same time as me. They, a couple of the other guys had said that they weren't here because of the money issue. Just not being able to go on unemployment and be able to, you know, take the time off work. I don't, it is difficult, even for myself. You know, it's obviously, being on unemployment is not the easiest thing, but hopefully if you get your notice a couple months in advance as to when you're going to school you can kind of save up for it.

Both of those participants faced financial hardship because they did not get the EI benefits that they had expected during their training. Consequences for these participants included stress, having difficulty paying bills and earning enough to support themselves or their family. One participant summed up the problems he saw by saying, “I know most of the time it's stuff to do with money, through either not making enough money to support, to pay for the books, or for right to stay going through the apprenticeship while working, right?” Lastly, one of the apprentices in the sheet metal trade indicated that:

It's a little hard yeah, because, basically I'm going to put my case as an example. I have my family, I have my wife and my kid right? I'm making x amount of money and then just because they send me to school I start receiving just half of it. It's definitely better than nothing and I'm grateful for that but it's a little hard.

Each of these participants indicated that they considered difficulties with EI and the amount that they were making as an apprentice to be a barrier to eventually completing the program. Several indicated that they had to obtain loans to cover their expenses over the period of time for which they were in school and that they had to take on additional work outside their apprenticeship to make ends meet. Participants suggested eliminating the initial wait time for EI benefits when starting an apprenticeship, or having a subsidy or top-up arrangement where apprentices can still make their regular wage while returning to school. Several of the participants indicated that the lower starting wage for apprentices was a barrier, especially if they had worked in the field before at a higher wage or in a job with more responsibility. A few mentioned that they knew people who left apprenticeship training because they were offered a job that met their short-term financial needs.

Support from MTCU and access to ETCs. The second most frequently identified barrier was access to the Ministry of Training, Colleges and Universities and to ETCs. When asked about the support they had in finding grants, accessing schooling and in generally seeking help, many participants mentioned that they

wanted greater access to their ETC, knowledge of program supports and the ability to ask questions about progression, testing and requirements.

One participant who left his apprenticeship indicated that he did not feel he got the support that he needed to continue:

I mean, just at the time the province was saying, we need apprentices, we need apprentices and specifically with carpentry and they were really pushing that, but I didn't feel the support was really there for me to get it. So I made the decision well I'm not gonna finish that because I'm doing lots of work and learning lots of stuff. It may be unofficial that I'm getting this apprentice stuff in, but at the time I was becoming a carpenter and I was doing work and I was learning. So, I guess I didn't really need the apprentice thing to do that.

Another indicated that he had issues contacting and communicating with his ETC:

Other communication things were difficult. I understand my apprentice worker was one person for a giant area. I'm guessing like Windsor to London, or something like that, like it was a huge area in my department. Like having a phone conversation or emailing or a personal visit was extremely difficult. In my almost 3,000 hours I saw this person once and I probably emailed her forty times.

One of the few women who participated in our study described a perceived lack of support and indicated that she had difficulty obtaining answers to her questions: “I kind of wish going in that it wasn't, what you know, depicted on a pamphlet. For example, support for myself and support for the person that had taken me on as an apprentice would have helped me do better and not feel so lost.” When asked what she would recommend to address this problem, she replied that perhaps she should not have expected to get support in dealing with the administrative components of the apprenticeship program:

If I could tell the apprentices what to expect, I know that you're going to be doing a lot of legwork yourself and be prepared for that. Knowing going in, I would of been okay with that had I known that I'm responsible to fill out my own forms and all that kind of stuff, and do my own reports. That's fine but the apprentice should know that going in... and also to know that the support is not necessarily there for you.

Study participants frequently voiced difficulties getting support to deal with and complete the various tasks required to find, register in and progress through an apprenticeship. Though not a component of the study that was explicitly tracked, research associates conducting interviews remarked that apprentices sometimes asked them for resources or whether they knew a better way to get in touch with their ETC. The quote below demonstrates how the researcher was identified as someone who was interested in the apprentice's progression and was checking in on how his training was going:

When, like some of the mechanics who are teaching me now said when they went through the apprenticeship, they'd see the apprenticeship person come in, say every six months, and ask how you're doing, how the employer is, pretty much the same thing you're doing now, but see them face to face, be able to talk with them, and they'd give you some information if you have questions, so that I know has changed because I haven't seen anyone since I've signed up.

Many other apprentices also reported being confused, feeling isolated, being told conflicting information by employers, instructors and fellow apprentices, and wondering who to contact. It is clear that the participant above recognizes that support has been scaled back and that he would derive benefit from face-to-face

contact with an ETC or representative of the training program. Some also indicated that they thought their employers could use the support of an ETC or other community resource. The quote below is indicative of how an apprentice who eventually dropped out of the apprenticeship program thought that he would have had a better experience had his employer had more support:

I really just wish I kind of knew what the structure was, as flimsy as it may be. Support for myself and support for the person that had taken me on as an apprentice. I was working with him before I decided to become an official apprentice for probably like five or six months. And then wow, I really like this because it was exploratory--I wanted to see where I would go with it and like I really like this. So, let's make it official, right? So then now because I'm an official apprentice, his insurance changed, the way he had to report his income changed, like all these, like more difficult things for him to do. Which he did, which was lovely, but it affected his business because I'm now an official apprentice. When I was a worker, he didn't have any of those things. I mean I was insured under his Worker's Compensation and all that kind of stuff, but now it was it was like, he had a lot of forms. Like it was very official, and took away from him working or him generating new business.

Though most of the participants in this study were apprentices, employers who participated in the focus groups also indicated that access to ETCs was important and served a valuable purpose to support both the employer and the apprentice through the training period. During a focus group one of the employers had the following suggestion:

You gotta give support. There has to be a support structure between the employer, or potential employer, who is going to pick up those people. There has to be life support there. Either help them with one of the problems – of say like, compensation, insurance wise – stuff like that. It'd be a better program so that the potential employer is not worried about effects coming up, affecting his business and his income because he's taking on an apprentice.

Another focus group participant echoed his comment and spoke about how employers can be better prepared to train apprentices when they hire them on:

If the employer has support, he will teach better and he will be taking more apprentices. Like if I don't have to pay them and pay the insurance and taxes and all those things, I don't mind having guys there. I will always have two apprentices. There is no problem. And I will always give them results. Like, it's not just send the apprentice and the guy uses him and sends him away. That's what happens with the co-ops and things. I got students, which were fired in two weeks, ok. One of them went and got fired from his father's place where his father was working. And they told me, they said this guy's no good. But I said, 'Okay, you guys are sending this guy free of charge to me'. [...] Three months, never had problem with him, and everybody was surprised. 'This is not the same guy we brought here.' They were telling me, 'how?' Because, I said there is no pressure on me. [...] because it is free, I feel obligated to teach him something.

From the perspectives of both employers and apprentices, ETCs play a crucial role in connecting stakeholders to the training system and providing support and resources. There is a need for integrated services and clear communication pathways between apprenticeship stakeholders and coordinated services and program delivery for apprentices and employers. Employers and apprentices expect more support and to be able to access services that offer assurances, information and knowledgeable individuals who can explain expectations and system-level processes. Employers and apprentices both felt that the information provided in brochures and pamphlets was insufficient. At no point in the study did participants or employers mention seeking out information online or accessing the MTCU website.

School curriculum and skills gaps. Apprentices and employers recognized that both the college curriculum and essential skills and knowledge gaps posed some significant challenges. When asked to discuss their college training experience, apprentices often indicated that it was a dramatic shift from the work environment and that not all apprentices were ready for what they encountered. The main issues were related to specific difficulties with curriculum (mostly math) and the differing expectations from the workplace to the college. However, an equal number of the apprentices interviewed also spoke very positively of their college experience and indicated that they enjoyed the challenge and were receiving good grades. The following sections are broken down to represent the differing thoughts and experiences of apprentices and employers.

Apprentices. Participants in the study who indicated that the college curriculum was a challenge often mentioned that they had specific challenges with math. A common concern for students was the level at which they were expected to perform. One student indicated, *“The math. There is a lot to memorize... It’s hard to explain this course, it’s pretty, it’s pretty wild. You almost have to be an engineer and yet this only sheet metal.”* Many stated that the calculations they were expected to perform were more challenging than they had expected and questioned whether or not they would need this on the job, as they had not seen the need as of yet. In speaking about his friend’s challenges, one of the participants stated, *“Like there’s a lot of stuff covered at school that a lot of guys wouldn’t normally do outside of working. So it kind of seems overwhelming to some people.”* When asked if this was a reason that apprentices may be leaving the apprenticeship program, participants were likely to state that other factors played a role as well. One of the construction and maintenance electrician apprentices stated, *“Some guys at school ... they just think it’s a big party and that’s why they’re not doing well.”* Though apprentices seemed reluctant to discuss their own challenges, it was apparent that they saw a range of skill levels in their classes and that there were variations in how subjects were taught across disciplines and in the expectations college faculty placed on apprentices.

When asked to comment on the academic support available to students, most participants said that help was available but often difficult to access. One participant who had difficulty with math stated that he knew supports were available: *“Well I know like the math, some of the math stuff in second term is rather hard, but I mean they provided any extra help we ever needed and stuff like that. Like I thought the work, the work was hard but they were always there to help.”* However, other apprentices found that even though support might be available, it often was not accessible.

Several apprentices indicated that the limited access to college instructors also posed a challenge. One apprentice stated, *“The one-on-one time with the teacher, sometimes there’s not enough because there’s too many unanswered questions. It gets a little crowded I guess.”* Another indicated that the only challenge he really encountered at college was access to information. He stated:

It’s not only me, like some of my, my other, like the other apprentices that are with me in the program here at Fanshawe agree, that there is not enough, not enough - how to say like, not tools, well like learning tools, to really be able to get access to all the information that we really need.[...] I feel that that should be the government’s responsibility, or like the colleges, the college’s responsibility in this case, to provide that kind of stuff, to be able to train people properly.

Though some apprentices commented on ways to improve the academic program, most indicated that they felt challenged by the in-class portion of their training but that it was not too much to handle. Several indicated that they were enjoying the work involved in going back to school and were happy to be receiving good grades and learning more than they had in the workplace. The most common comment from students who were happy with their school experience was succinct: *“I thought it was great. The teachers and the atmosphere, it’s all, it’s all really good.”* Considering that very few apprentices in our group left their apprenticeship, this is not surprising and may reflect the nature of this particular sample.

Employers. When asked about their apprentices' knowledge coming to work, employers were forthright about the need for good apprenticeship training and the right kinds of academic support for apprentices. Though focus group participants varied in what they expected the college to teach apprentices, they were certain that apprentices lacked the basic skills they were expected to have when they entered the workplace. One employer indicated that as much as she felt the workplace was a place to learn, teaching was the college's primary responsibility. In reference to the skills that apprentices need to have, the employer stated:

When you go to Fanshawe to take your courses, I think they should take on some of the responsibility of educating you when you're there...as to the process – what you're going to be faced with. [...] And I think in the apprenticeship field you are not getting your high academics. You are getting some kids who are just dumped there because people don't know what else to do with them, and you are getting some kids who are on the IEPs and they can't cut it in normal academic fields so they need more support with this. And they need education as to how to take it further and how to hopefully not drop out. I think that's mostly it. Also, I think you do have to support the employer more if you want them to teach the apprentice.

Focus group participants were clear in identifying the problems they saw with employers playing the role of teachers. One employer in the automotive trade described his strategy to train the apprentices he took on:

So I actually have a whiteboard in my shop and I teach them about it. I write it down and draw them, and go through them, because I said, 'okay this guy worked for me for one hour, he did some stuff and I'm not paying him so I have to give him something.' And it works really well. I have done it so many times, but I have to have that. When I have to pay half of his salary or something, it puts me under pressure. Then I have to say, 'okay at least he has to make that half'. That half makes me to not give enough chance to learn. And it's just for the first few months, you know. Once he learns the trade, such a way, he can do for example, ten tires a day, and he makes his salary plus a few bucks for me, and I don't mind paying his salary, taxes and everything. But that few months which is training, I have to be comfortable and be obligated to teach him everything. You can go to the mechanic shop and year, year and a half be there and learn nothing. Just sweep the floor and do this and do that. And you can go to the mechanic shop and three months you can teach them. So this is the thing – the government has to do this and organize it and do it right way. Then, they don't get misused, the funds don't get misused, and the same time produce people which can go out and do some jobs.

In an interesting group response to that statement, every other employer in the focus group chimed in stating, “nobody does that” or argued that “just because a person is employed in a trade does not necessarily mean they're going to be a good teacher of that trade.” Together, the employers' perspective draws a picture that shows a need for skilled apprentices but a reluctance or lack of ability to do the training for a variety of reasons. Moreover, there is a pervasive expectation that the college system will prepare apprentices for the workplace, however this is not necessarily true in practice.

Personal life/family situation. The last, though certainly not the least, of the primary barriers to apprenticeship completion that was mentioned by participants in this study related to the general life difficulties that apprentices face as they go through their apprenticeship program. Several apprentices indicated that they or someone they knew was at risk of not completing their apprenticeship because they had gotten married or had children, changed employers, experienced financial difficulty or were frequently absent from class. These personal challenges are not unique to the apprenticeship sector. Employers were less likely

to address specific life challenges but were more likely to see immaturity as a barrier to completion. Employers indicated that apprentices needed to have a mature work ethic to succeed, and they were happy to provide examples of apprentices who they thought were too young or too immature to complete their training.

It should be noted that some of the specific situations that participants described have already been illustrated in earlier sections of this report and that many could also be classified as financial challenges. However, there does not seem to be one identifiable reason why apprentices leave their training program. It is likely that there are often multiple factors that work together and lead to disengagement or amplify other personal challenges. The following section will briefly highlight the ways in which apprentices prioritize completion with reference to their own personal life and how both apprentices and employers view the age of apprentices as either an asset or a liability.

Though most of the participants in the sample were unmarried, a few indicated that they were responsible for families and households. Access to childcare and keeping regular work hours were important to maintaining a sense of normalcy and work-life balance. One participant indicated that he left the apprenticeship because his wife “*had a baby and he couldn't go to school because it's too much going on at the time.*” A woman who participated in the program indicated that she had left her apprenticeship program because she got re-married and decided that she wanted to start a family, which would not fit with her apprenticeship goals. Though she had enjoyed the training program she indicated that sometimes “*life circumstances like take you in different directions, and it just happened to be that way.*” Others mentioned moving to a different city, the length and expense of a commute, or vaguely alluded to personal issues that prevented them from going forward.

Age seemed to be another factor that apprentices and employers tied to maturity and likelihood of continuation. One apprentice stated that he knew two men who were no longer in his apprenticeship program:

One of them was like 18 even I think, I don't even think he was 19 yet. Point being is that they were pretty young but they definitely had some issues with continuing, they didn't pass I think the first level so that's why they didn't come back and some of the guys right now are struggling with the same thing that I'm telling you. Like, I'm not the only one.

Employers in the focus groups also mentioned that they found older apprentices who had tried a different career to be more stable and more willing to learn. They found that younger apprentices were less likely to show up on time or be willing to work a full day. One focus group participant made the connection between maturity and stability in the workforce. In discussing the ability to continue in an apprenticeship, she made the following statement:

These kids have to understand that you have to have a passion for what you do – it's a long journey. You're going to have to persevere for quite a long time and if you, if you don't like it, it's going to be longer and you're going to hate it. And I think that's really hard to instill in kids. I'm not sure how to do it, because I watch-. I see kids and I wonder why they're here. I see kids and I think, wow, after school you're going to be in your mom's basement still playing those video games. So I think that's a really hard thing to do.

Echoing her comments, another employer indicated that maturity and work ethic were key to success in the trades. With reference to reforming the system and helping apprentices understand what is required before they sign up for training, he stated, “*They should have the kids come in at eight o'clock in the morning until five o'clock afternoon and work as a carpenter, electrician, baker, mechanic, to see what eight hours of hard work means.*”

Though the personal challenges and difficulties that the apprentice participants identified or encountered was not the explicit purpose of this study, they came up in conversation sufficiently often to warrant attention and analysis. Participants in this study came from different trades and had a variety of different backgrounds and personal characteristics. Despite these differences, age, personal situation and family situation emerged as reasons for which apprentices leave their programs before completing. The issue is complicated and multi-faceted, reflecting the diverse nature of the population in training.

5.3. Feedback on the Apprenticeship Training System

The interviews and focus groups also captured some suggestions for improvement to the apprenticeship training program. Upon learning that this report was to be disseminated publicly, many participants wanted to suggest improvements all the more. This section of the paper categorizes the two main types of feedback provided, one related to the block release structure and the other to the need for greater employment supports.

School/work structure. Many participants indicated that the format of the release system was challenging and indicated that it acted a barrier to completion. Some indicated that they were not given enough notice before beginning the in-class portion of the program. One participant indicated that:

The class stuff was pretty difficult because, on a couple of occasions, they would call me with virtually no notice to start the class. For example, once on a Friday they said 'we have a cancellation, can you start Monday in class?' And I'm like 'no, I have jobs lined up'. And another time was, they gave me like six days notice, and I just can't desert my employer like that. I can't just commit to being off work for three months just like that, right?

Others also stated that they were given little notice before a class began or that class start times conflicted with a busy period, requiring them to defer until the next cycle of classes. Some participants who were in block release programs also suggested increasing the length of the semester, mentioning that the curriculum could be extended to cover more material or that they felt like they were cramming information in the last week of the program that they had not covered in detail but were expected to learn. Illustrating this complaint, one apprentice commented, “*If we had more time it wouldn't be that much of a, you know, a challenge to try to cram it in. It'd be more of a challenge to try to master it.*” His suggestion was to extend the release to ten weeks in order to learn the material fully.

Employment supports. Apprentices also indicated that they wanted more help finding employment. Several indicated that they were looking for new employers because they were experiencing difficulties in their current location. Others had a hard time finding an apprenticeship. One individual was in an apprenticeship program, left, and was now having a hard time finding a new employer. He stated, “*I've been since trying to apply and get into an apprenticeship and I've been going at it for about a month now – just applying to anything in Ontario trying to find a job.*” He later mentioned that he had heard from other journeymen around Ontario that the ratio of journeymen to apprentices was very high compared to out west where it was busier, meaning there were few people offering training and mentorship. It was expected that he would spend longer looking for an employer. Another apprentice who had an employer stated:

I got signed up at another employer, and that was probably over a year and a half ago at least. When I switched to this new employer it just seemed that I wasn't able to get into school as quick as I thought I should be, so I don't know. It's just that when you call the apprenticeship office, like, whoever signed me up for my apprenticeship hasn't really followed up with me at all.

Also interesting was the number of participants who asked the research associates on this project for help or tips with locating a job. One asked, “*Is there any way I can further my search for a job? Would you know any, anyway I can expand my search?*” Others asked if there was a place to find employers for specific trades or if certain employers were looking for Level 1 or Level 2 apprentices. This issue refers back to the earlier section on support and the role ETCs play in helping apprentices navigate a difficult employment terrain, as well as the need for integrated community apprenticeship services that are well-marketed and understood by apprentices and employers. If service providers are working independently the result is that apprentices are responsible for making the way through the system on their own. For those facing other challenges, this presents a barrier to successful completion of training.

6. Discussion

6.1 The Apprentice Retention Program as an Intervention

The ARP intervention was informed by discussions with stakeholders in the apprenticeship community. It also solicited input from apprentices about their experience with the intervention. In-depth discussions with former apprentices, employers and a range of involved community partners indicated that the program met the expectations of stakeholders and was designed to target the most pressing issues faced by apprentices currently registered in Level 1.

With this preparation and background research completed, access to participants was the most difficult hurdle to clear. Even using multiple approaches to recruitment, including classroom visits and direct contact by ETCs, enrolment in the intervention and workshop attendance posed greater challenges than anticipated. Though we remain optimistic that the design of the ARP was meaningful and important, other methods need to be considered to recruit and attract apprentices to training programs. As much as the ARP could be a success, it cannot be successful if it is not reaching the intended participants.

6.2 Systemic Barriers to Completion

When asked during the interviews what they need, apprentices identified a lack of support and guidance in the training process. The balance of power, including access to resources, information and opportunities between employers and apprentices is in many cases quite large. Apprentices suggested that they could be reluctant to ask for support knowing that economic pressures make employment precarious and contingent on a number of unstated factors. The employers interviewed also discussed facing numerous barriers to sponsoring apprentices and based their decisions about whether or not to take on an apprentice on a range of factors. Economic conditions figure prominently in employers' choices. Concerned with profitability, the employers mentioned being reluctant to take on an apprentice who they perceived to be underqualified or incapable of performing a full range of duties.

7. Limitations

This program was hosted in London, Ontario with a small sample of apprentice and employer participants. While the study provides interesting insights into the challenges faced by a specific group of employers and apprentices, the small sample size limits the generalizability of our findings. Though efforts were made to reach a wide group of apprentices, fewer than expected returned the completed consent forms. The researchers had planned to run a much larger study using an experimental design, randomly assigning

participants to participate in the program or be monitored by interview over a period of 18 months. Due to low interest in participation this model was reviewed and adapted to use a qualitative methodology to solicit information from those who did and did not participate in the program. For this reason attrition rates and comparison data between participants and non-participants are not tabulated. A lack of reliable contact information for many individuals who consented to participate led to lower than expected follow-up rates as well.

The qualitative nature of this study means that the researchers cannot make any general claims about the efficacy of the ARP in reducing apprentice attrition rates. The next step of this study is to engage in further consultation with community partners to investigate what aspects of the ARP may be suitable for integration into existing curriculum or supports for apprentices and how information gleaned from interview data can be used to find ways to address some of the challenges apprentices described.

8. Conclusion

Apprenticeship is a unique form of technical training that requires the participation of many different parties. The apprentice is never alone in his or her apprenticeship, working together with employers, ETCs, instructors and often co-workers. Apprentices balance many different roles within the training program and face both general and specific barriers related to their chosen vocation.

Using a framework grounded in community psychology, the Apprenticeship Retention Program was designed as a progressive way to support apprentices in navigating the system and to build apprentices' personal strength. The program, run over a series of 11 workshops, targeted areas identified in the literature and by stakeholders as most important to apprentice well-being, general knowledge, and to developing supportive and engaging networks. Though the actual program was poorly attended, it was well received by those who participated.

Interviews and focus groups with apprentices, former apprentices and employers helped identify the major issues that this group of apprentices and employers faced. Data collected through focus groups and interviews clustered into four themes, including financial support, access to support from MTCU, the difficulty with school curriculum and challenges that apprentices faced in their personal life. None of these factors was mutually exclusive and participants typically addressed more than one barrier in conversation. This suggests that any intervention designed to improve apprentice retention needs to be multi-faceted and work on many levels, taking into account the dynamic nature of the apprenticeship training process as well as the lives of the apprentices enrolled.

Overall, data collected as part of this project suggest that a specifically designed program to assist apprentices in overcoming barriers to completion could be of service to them, but may not be well received by the apprenticeship community if marketed as such. There are still pockets of resistance within the field of apprenticeship training to offering or accepting support and acknowledging the need for programs to improve success. Those who are not able to succeed on their own are often seen as incapable or unworthy of the positions they are in. This mindset is cultural and may be resistant to change. It is recommended that programs such as this one, if implemented, be made part of a core curriculum of training or pre-apprenticeship training and offered by established members of the training community. Through integration and perceived normalcy, there is a chance that more apprentices will have the opportunity to succeed and complete their training as anticipated.

9. References

- Apprenticeship Network (2013). Retrieved from <http://www.theapprenticeshipnetwork.com/>
- Australian Industry Group (2007). *A guide to managing the first 100 days of an apprenticeship*. Australian Government Department of Education, Science and Training National Skills Shortages Strategy. Australia: Australian Industry Group Training Services.
- Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Komarova Loureiro, Y., & Solnet, D. (2013). Understanding generation Y and their use of social media: A review and research agenda. *Journal of Service Management, 24*(3), 245-267.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.
- Canadian Apprenticeship Forum (2004). *Accessing and completing apprenticeship training in Canada: Perceptions of barriers*. Ottawa: Canadian Labour and Business Centre.
- Canadian Apprenticeship Forum (2006). *Apprenticeship- Building a Skilled Workforce for a Strong Bottom Line*. Ottawa: Canadian Labour and Business Centre.
- Canadian Apprenticeship Forum (2011a). *Creating Diversity and Career Opportunities in the Skilled Trades*. Ottawa: Canadian Labour and Business Centre.
- Canadian Apprenticeship Forum (2011b). *Recruiting and Retaining Apprentices: A Summary of Employers' and Apprentices' Perspectives*. Ottawa: Canadian Labour and Business Centre.
- Canadian Apprenticeship Forum (2013). *Recruiting Apprentices in Canada*. Ottawa: Canadian Labour and Business Centre.
- Colleges Ontario (2009). *2009 Environmental scan: An analysis of trends and issues facing Ontario*. Toronto: Colleges Ontario.
- College Sector Committee for Adult Upgrading (2014). *Essential Skills for Ontario's Tradespeople: List of Trades*. Retrieved from <http://en.esot.essentialskillsgroup.com/?p=occup>
- Corey, M. S., & Corey, G. (2006). *Groups: Process and practice*. Seventh ed. Belmont, CA: Thomson.
- Dalton, J. H., Elias, M. J., & Wandersman, A. (2007). *Community Psychology: Linking individuals and communities*. Second ed. Belmont, CA: Thomson Wadsworth.
- Department of Advanced Education and Skills (2014). Journey person mentorship program. Provinces of Newfoundland and Labrador. Retrieved from: <http://www.aes.gov.nl.ca/foremployers/journey person mentorship.html>
- Desjardins, L. J. (2010). Completion and discontinuation rates of registered apprentices: Does program duration matter? *Education Matters: Insights on Education, Learning and Training in Canada, 7*(2). Retrieved from <http://www5.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=81-004-X201000211253&lang=eng>

- Dooley, M., & Payne, A. (2013). *Understanding the Determinants of Academic Success in Apprenticeship Programs at Mohawk College*. Toronto: Higher Education Quality Council of Ontario.
- Employment Ontario (2007). *Apprenticeship and Trade Certification*. [Brochure]. Toronto: Queen's Printer for Ontario.
- Foster, K. R. (2013). *Generation, Discourse, and Social Change*. New York: Routledge.
- Fuller, A. (1998). *From surviving to thriving: Promoting mental health in young people*. Melbourne, Australia: ACER Press.
- Glass, B., Kallio, S., & Goforth, D. (2007). *Essential Skills for Success... in College Postsecondary and Apprenticeship Programming*. College Sector Committee for Adult Upgrading. Retrieved from <http://www.collegeupgradingon.ca/projrprt/ess/ess.pdf>
- Hays, D. G., & Singh, A. A. (2012). *Qualitative inquiry in clinical and educational settings*. New York: The Guilford Press.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage Books.
- Kallio, S. (2013). *Supporting apprenticeship completions: A model of service provision*. Sudbury: Mid-North Network for the Coordination and Development of Adult Learning.
- Laporte, C., & Mueller, R. E. (2012). *The Completion Behaviour of Registered Apprentices: Who Continues, Who Quits, and Who Completes Programs?* Ottawa: Statistics Canada. Analytical Studies Branch Research Paper Series. Retrieved from <http://www.statcan.gc.ca/pub/11f0019m/11f0019m2011333-eng.htm>
- Ménard, M., Menezes, F., Chan, C. K. Y., & Walker, M. (2008). *National Apprenticeship Survey: Canada Overview Report 2007*. Statistics Canada Catalogue no. 81-598-X. Ottawa: Minister of Industry.
- Ontario College of Trades (2014). About Us. Retrieved from <http://www.collegeoftrades.ca>
- Ontario Youth Apprenticeship Program (2013). Retrieved from <http://www.oyap.com/>
- Red Seal (2014). Retrieved from <http://www.red-seal.ca>
- Sharpe, A. (2003). Apprenticeship in Canada: A Training System Under Siege? In H. Shuetze & R. Sweet (eds.), *Integrating School and Workplace Learning in Canada: Practices and Principles of Alternation Education and Training* (pp. 243-259). Montreal: McGill-Queen's University Press.
- Sharpe, A., & Gibson, J. (2005). *The apprenticeship system in Canada: Trends and issues*. The Centre for the Study of Living Standards for the Micro-economic Policy Analysis Branch. Ottawa: Industry Canada.
- Skof, K. (2006). *Trends in Registered Apprenticeship Training in Canada*. Ottawa: Statistics Canada. Retrieved from <http://www.statcan.ca/english/freepub/81-004-XIE/2006002/reappr.htm>
- Stewart, G. (2009). *Apprenticeship training in Ontario: Literature review and options for further research*. Toronto: Higher Education Quality Council of Ontario.

- Taylor, A. (2008). 'You have to have that in your nature': Understanding the trajectories of youth apprentices. *Journal of Youth Studies*, 11(4), 393-411.
- Twenge, J. M. (2006). *Generation me: Why today's young Americans are more confident, assertive, entitled – and more miserable than ever before*. New York: Simon and Schuster.
- Vinokur, A. D., Price, R. H., & Schul, Y. (1995). Impact of the JOBS intervention on unemployed workers varying in risk for depression. *American Journal of Community Psychology*, 23(1), 39-74.
- Vinokur, A. D., & Schul, Y. (1997). Mastery and inoculation against setbacks as active ingredients in the JOBS intervention for the unemployed. *Journal of Consulting and Clinical Psychology*, 65(5), 867-867.
- Ward, V., & Riddle, D. (2014). *Weaving soft skills development into everyday employment services in Canada*. Career Development Association: Online Resources. Retrieved from http://cannexus.ca/wp-content/uploads/2014/04/Weaving-Soft-Skills_canada_20141.pdf
- Withenshaw, M. (2009). *Mentor Training Program*. EMO Workforce Planning and Development Board. Retrieved from <http://workforcedevelopment.ca/sites/default/files/Mentor%20Training%20Program%20-%20August%202010.pdf>



Higher Education
Quality Council
of Ontario

An agency of the Government of Ontario