Winning Conditions for Apprenticeship

Factors Influencing Apprenticeship Success
Spring 2015

EXECUTIVE SUMMARY
Section 1: Introduction
Section 2: Skilled Trades and Apprenticeship in Ontario
Section 3: Profiling Success: Finding Employment Opportunities
Section 4: Profiling Success: Trade-Related Experience
Section 5: Profiling Success: Trade-Related Education
Section 6: Profiling Success: Training and Mentorship
Section 7: Summary and Conclusions

This Employment Ontario project is funded in part by the Government of Canada.
With 25 years of experience as an active community-focused organization, HIEC has developed a strong record of successful consultative partnerships in spaces related to education, training, economic development and technology.

Our success in connective technology has been built primarily on partnerships that span the province of Ontario, with stakeholders ranging from youth, parents, community agencies, municipalities, boards of education and industry associations to small, medium and large size employers.

HIEC enjoys an excellent reputation throughout Ontario and has successfully spearheaded various youth initiatives to inspire young people to make informed decisions about their futures.

Over the past 15 years HIEC has designed, developed and administered the on-line community ApprenticeSearch.com. ApprenticeSearch.com is a free, interactive online service providing information on apprenticeships and job opportunities in the skilled trades.

For more information, contact:
HIEC - Halton Industry Education Council
5230 South Service Rd
Burlington, ON
L7L 5K2

Tel: 905-634-2575
Email: info@hiec.on.ca
Web: www.hiec.on.ca
This Halton Industry Education Council project is funded by the Government of Canada. The views expressed in the document do not necessarily reflect those of either the Halton Industry Education Council or the Ministry of Training, Colleges and Universities.

**Authors**
Terra Arnone  
Heather Bastedo  
Matt Elliott  
Kelly Hoey  
Jennifer Hove  
Mike Painter-Main  
Michelle Murray  
Dianne Seed  
Jennifer Sorbara  
Dana Stott

**Acknowledgements**
Ontario Ministry of Training, Colleges and Universities  
Alex Magee & Sons Ltd.  
Anton Manufacturing  
Brotex Electrical  
Corporate Auto Works  
DMX Plastics  
Scarborough Nissan  
Skills Canada  
Canadian Apprenticeship Forum  
Halton Apprenticeship Advisory Council
# Contents

Section 1: Introduction .............................................................................................................................. 1  
Executive Summary ................................................................................................................................... 2  
Key Findings ............................................................................................................................................... 3  
Report Objectives ....................................................................................................................................... 4  
Section 2: Skilled Trades and Apprenticeship in Ontario ........................................................................ 5  
Barriers to Apprenticeship .......................................................................................................................... 6  
Section 3: Profiling Success: Finding Employment Opportunities ....................................................... 7  
Employer Access to Opportunities ............................................................................................................. 8  
Facilitation of Employer Needs .................................................................................................................. 9  
Section 4: Profiling Success: Trade-Related Experiences .................................................................... 10  
Characteristics of Successful Applicants ................................................................................................. 10  
Experience and Matching .......................................................................................................................... 11  
Employer Expectations .............................................................................................................................. 13  
Section 5: Profiling Success: Trade-Related Education ..................................................................... 14  
Apprenticeship Training ............................................................................................................................ 15  
Section 6: Profiling Success: Training and Mentorship ..................................................................... 16  
Section 7: Summary and Conclusions ................................................................................................. 17  
Appendix A: Research Methodology ...................................................................................................... 18  
Appendix B: Apprentice Demographic Breakdown ............................................................................... 19  
Appendix D: Predictors of Quality Apprentice Candidates .................................................................... 20
Many students, parents, educators, youth, and career-changers express interest in entering a skilled trade. However, these prospective skilled tradespeople may be unsure how, when, and where to get started to successfully navigate the many challenging and fragmented pathways into the apprenticeship system. The fundamental step in entering a skilled trade is finding an employer willing to train prospective workers via apprenticeship. There are specific conditions that result in job seekers successfully finding apprenticeship opportunities as well as conditions that result in employers making the choice to hire.

To explore apprenticeship processes and outcomes in Ontario and identify the ideal conditions for a successful apprenticeship, *Winning Conditions for Apprenticeship* looks to the experiences and perceptions of job-seekers and employers who used the website ApprenticeSearch.com during a four-year period from 2010 to 2014. ApprenticeSearch.com is a website developed by the Halton Industry Education Council (HIEC) dedicated to matching apprentices and employers across Ontario. The website provides an online platform for job-seekers to profile their background and experience and for employers to post jobs available in their respective companies. Individuals seeking apprenticeships can search the site for available opportunities and learn about the apprenticeship system while employers are able to scan profiles to find appropriate apprentice candidates.

These candidates are seeking employment within the construction, industrial, manufacturing, motive power and service sectors. Opposite them, employers are posting opportunities in these sectors with the hope of attracting qualified individuals to apply. Applicants may well possess a desire to enter the skilled trades but can lack the experiences and background necessary to qualify them as candidates. This lapse has been termed the skills gap by government and community agencies and ultimately centers on an absence of intermediary steps between an individual harbouring interest in the skilled trades and them becoming a candidate qualified to enter the field.

Governments, policy makers and industry partners increasingly see apprenticeships, which combine hands-on, work-based learning with classroom instruction, as the intermediary step capable of reducing skills gaps. Both the Canadian and Ontario governments place a high priority on expanding apprenticeship training and incentives, especially for youth. This focus is driven by the many benefits of apprenticeship, including:

- Helping to smooth the school-to-work transition and maintain low youth unemployment
- Imparting strong occupational and employability skills that cannot be learned effectively in a classroom alone
- Securing earning gains for employees who have completed apprenticeship training
- Enabling the development of a productive and adaptable workforce
- Lowering hiring and training costs for employers, reducing turnover and enhancing productivity
- Encouraging higher employment in the skilled trades

By exploring those factors that influence apprenticeship success, *Winning Conditions for Apprenticeship* seeks to assist apprenticeship stakeholders in understanding how they can participate meaningfully in the apprenticeship system—from acquiring a position in the skilled trades to fulfilling the terms of completion.

---

1 Dawson Strategic, “Modernizing Ontario’s Skilled Trades Apprenticeship and Training System” (March, 2015).
2 The Ontario government reports investments of more than $165 million to support apprenticeships in 2014-15.
3 Robert I. Lerman, “Expanding Apprenticeship Training in Canada: Perspectives from international experience,” The Canadian Council of Chief Executives (April, 2014). In line with these benefits, there is increasing evidence that countries with robust apprenticeship systems are more likely to achieve low unemployment and high incomes across the broader economy.
Executive Summary

Factors tied to apprenticeship participation and completion are often framed as barriers. Yet it is equally important to identify and understand those factors that facilitate, expedite and support the process. To fill this information gap and investigate the positive determinants of apprenticeship success, this report seeks to answer "What are the winning conditions for apprenticeship?" Using data from ApprenticeSearch.com and interviews with apprentices and employers, this report explores conditions that influence apprenticeship success including educational background, age, trades related training, willingness to travel, and previous exposure to the trades.

The core purpose of the research detailed and analyzed in Winning Conditions for Apprenticeship is to provide insights on how job-seekers can successfully navigate the many challenging and fragmented pathways into the apprenticeship system and how employers in turn can better attract and retain qualified apprentices. Winning Conditions for Apprenticeship is aimed at addressing the needs and concerns of the many apprenticeship stakeholders in Ontario, including: students, job-seekers, trades persons, industry partners, post-secondary institutions, and government agencies.

If we begin to see the winning conditions of apprenticeship as the flip side to those barriers that challenge access and completion of apprenticeship, several themes emerge. The winning conditions of apprenticeship identified and explored in this report can be grouped under four main themes:

1. Access to employment opportunities
Finding employment opportunities is a key entry point into apprenticeship success. The initial matching of apprentices and employers is a crucial factor—it allows the rest of the apprenticeship process to take place. Apprenticeship is a hands-on, learn-on-the-job system, and requires the successful matching of apprentices and employers to ensure applicants have an opportunity to apply what they learn in a classroom setting to a professional platform. As this report will later explore, successful apprentices are those who have also found and established strong mentorship relationships with their employers.

2. Prior-trade related experience
Prior trade-related experience clearly matters for apprenticeship success. The data collected by ApprenticeSearch.com shows that successful applicants have tended to be experienced ones, but this experience can come from a variety of places including past work, apprenticeships or a combinations of both. As the interviews conducted suggest, acquisition of early trade-related experience is often important for apprenticeship completion and is further enhanced by individual passion and commitment.

3. Trade related education
Some interviewees spoke of limited applicability between school curriculum and job demands, but overall, experiences with in-school training were positive. Accordingly, of those applicants who had found employment matches through ApprenticeSearch.com, those applicants best-prepared for apprenticeship success were more likely to have post secondary education. Yet, higher levels of education does not necessarily appear to assist applicants in finding apprenticeship positions.

4. On-the-job training and mentorship
Apprentices interviewed for this report who were most positive about their apprenticeships were those who felt that they had received a good level of training from their employers. And for their part, the employers interviewed who were most satisfied with their employees felt that these apprentices were committed to their apprenticeships and willing to learn. A handful of employer interviewees expressed more critical perceptions, namely that administrative procedures were more supportive in the past when government representatives visited employers in person; that journeyperson-to-apprentice ratios are too restrictive (particularly in the construction sector); and that base requirements for skilled trades may be out of step with actual job requirements.

The winning conditions of apprenticeship span activities among various stakeholders, primarily apprentices, employers, educational institutions and government agencies. Apprenticeship success therefore depends upon all partners pulling in the same direction to strengthen the apprenticeship system in Ontario. To do this, we must first understand the factors that positively influence participation and completion: the winning conditions of apprenticeship.
Prior trade-related experience

Prior trade-related experience clearly matters for apprenticeship success. The data collected by apprenticesearch.com shows that successful applicants have tended to be experienced ones, but this experience can come from a variety of places including past work, apprenticeships or a combination of both. As the interviews conducted suggest, acquisition of early trade-related experience is often important for apprenticeship completion and is further enhanced by individual passion and commitment.

Trade-related education

Some interviewees spoke of limited applicability between school curriculum and job demands, but overall, experiences with in-school training were positive. Accordingly, of those applicants who had found employment matches through apprenticesearch.com, those applicants best-prepared for apprenticeship success were more likely to have post secondary education. Yet, higher levels of education does not necessarily appear to assist applicants in finding apprenticeship positions.

On-the-job training and mentorship

Apprentices interviewed for this report who were most positive about their apprenticeships were those who felt that they had received a good level of training from their employers. And for their part, the employers interviewed who were most satisfied with their employees felt that these apprentices were committed to their apprenticeships and willing to learn.

A handful of employer interviewees expressed more critical perceptions, namely that administrative procedures were more supportive in the past when government representatives visited employers in person; that journeyperson-to-apprentice ratios are too restrictive (particularly in the construction sector); and that base requirements for skilled trades may be out of step with actual job requirements.
**Report Objectives**

This report is aimed at deepening knowledge of factors affecting apprenticeship success and pathways into the skilled trades in Ontario. It explores issues related to three main stages of an apprenticeship:

1. **Job-posting resources for employers and applicant access to employment opportunities**

2. **Matching qualified applicants to openings available to them**

3. **Hiring or being hired as an apprentice and successfully fulfilling the terms of an apprenticeship**

By filtering and extracting data sets collected from the ApprenticeSearch.com database between 2010 and 2014; reflecting on trends and statistics in the Ontario apprenticeship system; and supplementing research with first-hand interviews of apprenticeship participants and stakeholders, characteristics of successful applicant matches are identified. Further refinement of data and analysis will provide job developers, education, and community partners with labour market information unique to the skilled trades that will help them provide guidance to their clients, and develop tactics and strategies to achieve success.
Skills gaps pose a substantial cost to business in Ontario, particularly in the skilled trades. According to the Conference Board of Canada’s Ontario Employer Skills Survey, 41 percent of employers are currently seeking employees with trades training, with the greatest demand in the areas of construction and technology.4 Similarly, a recent survey by the Ontario Chamber of Commerce finds that 30 percent of businesses in Ontario have had difficulty filling a job opening over the last 12 to 18 months, because they could not find someone with the right qualifications. Shortages are most prominent in those sectors that rely most on skilled trades—transportation, infrastructure, manufacturing, engineering, and construction.5

Skills shortages translate into real economic losses. The Conference Board of Canada estimates that skills gaps cost the Ontario economy up to $24.3 billion in foregone GDP—as well as $4.4 billion in federal tax revenues and $3.7 billion in provincial tax revenues—annually.6 Part of the challenge in closing skills gaps relates to attracting and training people in the skilled trades. According to Skills Canada, 40 percent of new jobs created in the next decade will be in the skilled trades. Yet only 26 percent of young people aged 13 to 24 are considering a career in these areas.7 There are also issues of under-representation among particular groups that limit the supply of qualified people in the skilled trades. According to the Canadian Apprenticeship Forum:

A typical apprentice in Canada is a male, under 35 years old. Only one in ten apprentices is female, even though women represent more than half of the population. Immigrants make up 3 to 5 per cent of apprentices, even though immigrants represent 20 per cent of the Canadian population. Visible minorities represent between 5 and 7 per cent of apprentices compared to 16 per cent of the Canadian population.8

Apprenticeships are beneficial to both apprentices and their employers, leading to a recognized and valued occupational credential. Trainees earn money and contribute to production while they learn. And while employers bear most of the training costs, they recoup their investments when the value of work performed by apprentices exceeds their wages.9 A study by the Canadian Apprenticeship Forum finds that for each $1 invested in apprenticeship training, employers saw a median of $3.08 in return. Employers reported benefits including higher bill-out and work rates and reduced errors and downtime for employees who had completed skills training and apprenticeship. Spin-off benefits included decreased employee turnover and increased customer retention.10

---

6 Stuckey and Monroe.
7 Rick Spence, “Skilled trades talent shortage is next crisis for Canadian business,” Financial Post (September, 2012).
9 Lerman.
Barriers to Apprenticeship

Despite these benefits, a number of barriers to accessing, maintaining and completing apprenticeships exist. Although progress has been made by the apprenticeship community to address these barriers, many still persist. Prior research on the perspectives of individuals and employers has identified obstacles including negative attitudes towards apprenticeship, difficult training environments, concerns about the lack of resources to support apprenticeship, the impact of economic factors on work and apprenticeship continuation, and issues regarding regulations governing apprenticeship. Although registration numbers are increasing in Ontario, these barriers contribute to relatively low apprenticeship completion and certification rates.

Two other barriers are detrimental to developing a robust apprenticeship system. First, a lack of information and awareness of apprenticeships, particularly the varied pathways into the skilled trades, inhibits individuals from pursuing apprenticeship training and trades careers. Second, individuals seeking apprenticeships often have difficulty finding an apprenticeship position, which acts as a significant barrier to entry into the skilled trades. A recent report finds that apprentices rated barriers related to employment opportunities – specifically finding an employer to register under – as most detrimental to attracting apprentices to the skilled trades.

Both barriers point to the need for accurate and accessible information on apprenticeship opportunities and trends. Through ApprenticeSearch.com, HIEC has compiled a series of six-month snapshots of job-seeker and employer data, allowing for an analysis of apprenticeship supply and demand, regional and sector breakdowns, and the kind of experience that employers require when hiring an apprentice. Data from June to November 2013, for example, show mismatches in particular sectors between the supply of apprenticeships (as indicated by employer postings) and the demand for apprenticeships (as indicated by job-seeker preferences). During this timeframe, while 50% of job-seekers were looking for apprenticeships in construction, only 30% of employer postings were for apprenticeship opportunities in that sector. Conversely, the motive power sector accounted for 36% of employer postings, but only 14% of job-seekers.

These data also reveal a gap between the experience that job-seekers bring to bear, and that required by employers. In the five trades most sought after by job-seekers, over 80 percent of applicants were not yet registered apprentices and therefore had no years of experiences as an apprentice. In contrast, the number of entry-level opportunities offered by employers was relatively low, emphasizing the importance of prior trade-related experience and education. This kind of information is an important corrective to low awareness of apprenticeships in Ontario.

---

12 According to the Government of Ontario, more than 28,000 new apprentices registered in 2013-14, up from 17,100 registrations in 2002-03.
14 Canadian Apprenticeship Forum, “Perceptions of Barriers”.
15 Dawson Strategic. In Ontario, pathways to apprenticeship include college co-op apprenticeship programs, which provide apprenticeship training while earning a college diploma; high school apprenticeship programs like the Ontario Youth Apprenticeship Program; and pre-apprenticeship training programs aimed at helping unemployed individuals upgrade and develop job skills.
17 HIEC, “ApprenticeSearch.com – 6 Months in Review: Employers’ & Job Seekers’ Activity Report” (June 1 – November 30, 2013). Because the site has thousands of registered users, it generates data about the apprentice labour market in Ontario.
SECTION 3 PROFILING SUCCESS: FINDING EMPLOYMENT OPPORTUNITIES

Finding employment opportunities in the skilled trades requires a proactive approach on the part of both applicant and employer. Data from ApprenticeSearch.com shows that a facilitated process, or one that includes an intermediary agency or individual, is a stronger process for apprentices and employers finding successful matches.

Figure 1: Successful Applicants Referred Out to Employment Agency

Applicants may be referred to an employment agency if further assistance is required to strengthen their qualifications and eligibility, or to apprenticeship education programs to enhance their hard knowledge of a given trades sector. As shown in Figure 1, this ‘referring out’ function is not common among applicants who were successfully matched with apprenticeship opportunities via ApprenticeSearch.com. Instead, it is used to assist candidates who are unsuccessful in their initial attempt to find an apprenticeship and who may later return with additional credentials and find success in their search.

To identify the needs of applicants, ApprenticeSearch.com uses a loosely constructed designation system. By understanding a candidate’s qualifications at the time of their initial application and any gaps that might exist in their application, apprenticeship facilitators can better identify what processes or skill-builders might enhance the likelihood of that candidate finding a successful employer match. Table 1 lists the designation of candidates used by ApprenticeSearch.com as one method of understanding what background, skills, and credentials best qualify a candidate for apprenticeship.

Table 1: Description of Applicant Designations

<table>
<thead>
<tr>
<th>Applicant Designation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong qualifications</td>
<td><strong>Good Qualifications</strong>: well-positioned for apprenticeship success; pre-apprenticeship training and/or trade-related experience</td>
</tr>
<tr>
<td>Partially qualified</td>
<td><strong>Partial Qualifications</strong>: some experience and education but non-trades related; may be career-changer or non-regulated trades worker</td>
</tr>
<tr>
<td>Lacking qualifications</td>
<td><strong>Lacking Qualifications</strong>: little or no experience; unsure of trade to pursue; low awareness of educational requirements of trades</td>
</tr>
</tbody>
</table>
It is instructive to note that nearly ten percent of successful applicants were referred out to enhance their candidacy at some point in their application process, suggesting that this function improves the chances of finding appropriate apprenticeship matches for some candidates who might otherwise have been overlooked by employers. By using an involved approach to matching - one that analyzes an applicant’s candidacy and refers them to the steps and processes that can enhance it - ApprenticeSearch.com offers one example of how a middle-man approach to matching can provide winning conditions for apprenticeship.

**Employer Access to Opportunities**

Many of the employers interviewed for this study heard about ApprenticeSearch.com from work associates – like suppliers or contractors – or from college officials. The access that job-matching sites such as ApprenticeSearch.com can provide results in a generally competitive process for available apprenticeship opportunities, as shown in Figure 2. Looking at successful apprenticeship matches facilitated by ApprenticeSearch.com from 2010-2014, one-third had fewer than ten applicants per position. Similarly, most employers interviewed for this study described the process of hiring through ApprenticeSearch.com as efficient and convenient: not only did they receive a greater number of applicants than when advertising job openings through other means (such as newspapers and online classifieds), they also received a higher caliber of applicant.

![Figure 2: Number of Applicants per Apprenticeship Facilitated by ApprenticeSearch.com](image-url)

**In Their Words: Employment Opportunities**

“Getting in as an apprentice with an employer is pretty difficult, especially now. I’m now an employer hiring apprentices [and] hiring someone with no experiences is kind of a big liability for your company.”

— Justin, former apprentice & now-journeyman in construction sector
Facilitation of Employer Needs

Like in the case of applicants, research shows that employers benefit from an involved or facilitated process when seeking quality apprentices for their positions. As shown in Figure 3, of the successful apprenticeship matches that were created from 2010 to 2014, the bulk were assisted by ApprenticeSearch.com staff in some way (88%, for example, have applied to postings on ApprenticeSearch.com), with another 17 percent resulting directly from more active facilitation (such as a staff member recommending a specific candidate for a position, or creating a short list of an employer to interview). Thus, facilitation services provide a winning condition for both apprentice and employer in the apprenticeship matching process.

Figure 3: Services and Connection Points Provided by ApprenticeSearch.com

The assistance provided by ApprenticeSearch.com contributes to a relatively speedy recruitment process. Most employers interviewed for this study spoke of getting quicker results than through other advertising means, and of appreciating the fact that they could scan applicant profiles and contact those whose qualifications looked appropriate. As shown in Figure 4, over a 4-year period from 2010 to 2014, nearly 60 percent of apprenticeship opportunities posted to ApprenticeSearch.com were filled within 2 months.

Figure 4: Length of Time between Apprenticeship Posting and Successful Match

<table>
<thead>
<tr>
<th>How Match Established</th>
<th>Applied to Posting</th>
<th>Facilitated Employer</th>
<th>Contacted Employee</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referred In</td>
<td>No 91%</td>
<td>Yes 9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitated or Shortlisted</td>
<td>No 83%</td>
<td>Yes 17%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than a Month</td>
<td>19%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 1-2 Months</td>
<td>39%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 2-3 Months</td>
<td>22%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After 3 Months</td>
<td>19%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following discussion delves more deeply into two stages that determine longer-term apprenticeship success and entry into the skilled trades: access to apprenticeship opportunity and job matching. Using data tracked through ApprenticeSearch.com, the following results provide a description of 1) the characteristics of successful apprentice applicants, and 2) the characteristics of employers who have hired through the site.

Characteristics of Successful Applicants

From the data collected by ApprenticeSearch.com, a profile of successful job-seekers emerges, both in terms of personal background and skill-sets. The main demographic characteristics (see Appendix for findings) of successful applicants essentially reflect the broader reality of skilled trades in Ontario.

Beyond demographic characteristics, the results reveal a number of skill-sets successful applicants hold in relation to apprenticeship and work experience. As shown in Figure 5, the vast majority of applicants possess some apprenticeship and/or work experience. In essence, the successful applicant is an experienced one. This, as we will see, does not suggest successful candidates are older in age: instead they have been highly active in the pursuit of a skilled trade, regardless of age.

When analyzing multiple factors (including other apprentice characteristics) simultaneously, experience clearly remains an important determinant of quality of apprentice candidate. In particular, controlling for other factors including age, work and apprenticeship experience are found to be key in determining the most attractive candidates (see Appendix B).

While those with little trade-related experience are less likely to have gained an apprenticeship, they still represent a sizeable cohort of successful candidates. Where do these applicants go? Two main findings emerge in Figure 6. First, data from the ApprenticeSearch.com indicate that less experienced candidates were more likely to find success with voluntary apprenticeships. Secondly, successful applicants with less work or apprenticeship experience are more apt to be in sectors where demand outstrips supply (such as industrial and service sector).

---

18 The analysis excludes unsuccessful applicants that engaged with apprenticesearch.com. While isolating successful candidates allows us to hone in on the characteristics of apprentices and conditions influencing success, it does limit the opportunity to generalize and make broader conclusions about the entire pool of applicants.
19 Successful applicants as tracked by apprenticesearch.com share broad demographic characteristics of apprentices in Ontario, though most live and work in the Greater Toronto-Hamilton Area (GTHA).
20 Figure 16 depicts the results of a logistic regression that analyzes the effects of employer characteristics on the likelihood that the applicant hired was designated with an A rating, compared to a B rating. If the effects of variables appear above the dashed line, they are positive. If the effects appear below the dashed line, they are negative. Those effects shown in pink are statistically significant; those in blue marginally significant.
Experience and Matching

The high degree of matching facilitated by ApprenticeSearch.com was often linked to those more experienced in the trades. As Figure 7 displays, those applicants with several years of apprenticeship experience were most likely to find successful job matches. Similarly, those with the combination of work and apprenticeship experience were the most likely to succeed in finding an apprentice position that matched their skillset.
Indeed, many of the apprentices and employers interviewed for this study emphasized the importance of early, hands-on experience in facilitating apprenticeship participation. One program that helps to foster early apprenticeship experience is the Ontario Youth Apprenticeship Program (OYAP), a school-to-work program that helps high school students in grades 11 and 12 explore and work in apprenticeship occupations. Although all apprentices interviewed were familiar with OYAP, most had registered as apprentices either through college or under a specific employer. Still, consistent with the importance of early experience, one of the apprentices who registered under OYAP mentioned that “it helped me get my foot in the door and get myself started.”

For their part, most employers interviewed for this report had not hired through OYAP, but nevertheless, they emphasized the importance of candidates’ prior experience and overall preparedness in hiring decisions. As reflected in the inset below, employers’ focus tended to be geared towards the acquisition of hands-on skills, directly applicable to the needs of the workplace.

Many of the apprentices interviewed for this report also noted that interest, passion and determination aided in landing an apprenticeship that matched their skills. A number of those interviewed reflected on their desire to work with their hands and avoid an ‘office job’. Some had already acquired a related skill, and were motivated by an interest in starting their own business and securing a good, stable income of the kind often found in the skilled trades.

In their words: Early Passion & Willingness to Learn

I’ve always had a keen interest in repairing cars, and that’s what got me into wanting to pursue my apprenticeship as a technician.
— Anthony, apprentice in motive power sector

I’ve always worked with my hands, and I realized I couldn’t sit at a desk for the rest of my life.
— Derrick, apprentice in construction sector

In their words: Early, Hands-on Experience

If I say I’m looking for a third year guy, then I expect a third year kind of talent level. I don’t want a guy who hasn’t even seen the inside of a shop: he’s just done school – bang, bang, bang – now working in a bank.
— Mike, employer in industrial/manufacturing sector

[Educational institutions] should have these kids come out having more hands-on [experience]. Coming out into the field and actually learning the trade.
— Sam, employer in construction sector

I couldn’t imagine sitting in an office all day.
— Justin, former apprentice & now-journeyman in construction sector

As long as I have a guy who can learn, I’m pretty happy.
— Mike, employer in industrial/manufacturing sector

21 One employer from the motive power sector expressed reservations with OYAP, and what she perceived as low skills acquisition by the students who participate in the program. She was concerned, therefore, that the program did not prepare students well for the demands of the workplace, at least in the motive power sector.
Employer Expectations

A second set of information relating to employer profile revolves around employer expectations and requirements of applicants. This information takes three forms: employers' willingness to hire less experienced applicants than initially sought, the experience level of applicants actually hired, and salary parameters. As shown in Figure 8, employers were generally split on their willingness to hire less experienced applicants. Conversely, some 70 percent of employers hired an applicant whose experience was equal to or exceeded expected levels. Thus, when given the option, employers tended to hire experienced candidates. Salary information is categorized by type of salary structure. The two most common forms of salary offered were negotiable and weekly wages, followed by hourly wages.

Figure 8: Employer Expectations and Salary Profile

- Willing to Hire Less Experienced: 51%
- Hired Less Experienced: 36%
- Equal Experienced: 35%
- More Experienced: 29%
- Based on Experience: 8%
- Negotiable: 36%
- Flat Rate: 32%
- Weekly Wage: 32%
- Hourly Wage: 19%
- Other: 2%

WINNING CONDITIONS FOR APPRENTICESHIP
Looking specifically at the educational background of successful applicants, there are two competing narratives. As shown in Figure 9, the vast majority of successful applicants have attended college. And, as might be expected, educational experience clearly matters when ranking candidates in their preparedness (see Figure 10).

However, post-secondary education experience does not appear to play a role in matching the skills of the applicant with employers. As Figure 11 displays, those attaining post-secondary education are as likely as those without any post-secondary experience to find an apprenticeship that matches their skillset. Taken as a whole, this suggests that higher education plays a role in getting a foot in the door, but does not provide greater assurance of finding a placement in a relevant field.
Traditional college and university programs do not offer trades-specific educational opportunities, nor are they designed to develop skills relevant to the skilled trades industry. To a skilled trades employer, an undergraduate degree holds the same weight as a recently acquired high school diploma.

In many cases, an applicant’s only opportunity for trade-related education is limited to the choice between lengthy wait lists for union-run apprenticeship positions or expensive private college preparation courses. However, as interest in quality apprenticeship opportunities grows in the public sector, specialized programming such as pre-apprenticeships, OYAP (Ontario Youth Apprenticeship Program), bridging and upgrading programs are expanding to offer applicants more accessible and affordable options for trades-related education.

While awareness of these programs grows among applicants, employers are beginning to recognize trades-related education as a tangible step that can offer applicants specialized trades-related skills and experience. Thus, with time, it appears that trades-related education will grow from being a winning condition in the initial stages of understanding apprenticeship to a more concrete credential that can benefit applicants in developing positive relationships with potential employers.

**Apprenticeship Training**

Once registered as an apprentice, applicants are able to further their education with a choice of full-time ‘block’ release or part-time ‘day’ release training and reported no substantial challenges in completing this portion of their apprenticeships. Issues mentioned included a perceived lack of applicability of curriculum to workplace tasks, and the difficulty of transitioning back to school after being in the workforce. But overall, the apprentices interviewed for this study found the in-school training process to be supportive and free of major obstacles.
SECTION 6 PROFILING SUCCESS: TRAINING AND MENTORSHIP

One of the key factors raised by apprentices interviewed for this report relates to the willingness and ability of their employers to provide oversight and apprenticeship training. These apprentices were split on whether they were satisfied with the on-the-job training provided by their employers. Importantly, those who were highly satisfied spoke of having received good hands-on training. Those who were less satisfied tended to identify low oversight and a lack of training as reasons for their discontent, as articulated by the quotations in the inset below.

The employers interviewed for this study often spoke – either directly or indirectly – of the importance of commitment and a willingness to learn on the part of apprentices as key factors influencing apprenticeship participation. These factors are illuminated by the quotations in the inset below.

Most of the employers interviewed for this study appeared to feel well-equipped to mentor apprentices, and had done so regularly over the recent past. As one employer in the industrial/manufacturing sector put it, “we don’t need a lot of hand-holding. We know what an apprenticeship is and how the process should work. We just get on with it.” To develop long-term mentorship opportunities for both apprentice and employer, it is important to find work that is stable and continuous—conditions challenged by employment stability in the Ontario skilled trades.

Employment Stability

Economic conditions are well-documented as potential barriers to apprenticeship completion. The specific condition mentioned by some interview participants in this study relates to the need for stable employment that allows apprentices to gain on-the-job experience and complete their apprenticeship. Conversely, some apprentices – especially in the construction sector – spoke of getting hired and then let go when work dried up, a process that hinders apprenticeship completion.

**In Their Words:**

**Employment Stability**

The hardest [thing] is getting your first and second years done – and working with employers. Because in construction, you get busy for a few months, then they do lay-offs, then you get busy, then they do lay-offs. Once you have the knowledge behind you in second year, you can find an employer that will keep you.

— Derrick, apprentice in construction sector

[Sometimes employers] have a lot of work and need someone to jump in there. Then they run out of work and let you go.

— Kevin, apprentice in construction sector

[Employees] just don’t take time to teach [apprentices] anything. [...] As an employer [in construction] you are there to make things. You get paid the faster you get things done, so it’s hard to take the time and there’s really not much of an incentive to having an apprentice. What ends up happening is you spend all this time training people and then they just leave, or find a new job. You just wasted all that time.

— Justin, former apprentice & now-journeyman in construction sector

In their words:

**On-the-job Mentorship & Training**

I was constantly left by myself in order to finish things that I had no idea how to do. [With training] if someone were to actually say, ‘no you’re doing that wrong,’ it would be nice to have more support in that area.

— Becca, apprentice in motive power sector
Using data tracked by ApprenticeSearch.com and interviews with apprentices and employers, this report has explored the ‘winning conditions’ of apprenticeship. Specific factors that positively influence the apprenticeship process emerged in the study’s findings. These factors can be grouped into four broad categories of ‘winning conditions’, which together work to define apprenticeship success.

**Employment Opportunities**

The findings from this study correspond with existing research emphasizing employment opportunities as crucial to the apprenticeship process. Interview participants spoke of the difficulty surrounding apprentice-specific opportunities in two ways: apprentices interviewed for this report highlighted the challenge of finding job openings that matched their skill level, especially in the early years of apprenticeship, and employers emphasized the difficulty of finding qualified job candidates to fill apprenticeship positions.

As a winning condition, finding employment opportunities can be considered as one of the entry points into apprenticeship success. The initial matching of apprentices and employers is a key factor that allows the rest of the apprenticeship process to take place. As a hands-on, learn-on-the-job system, apprenticeship requires the successful matching of apprentices and employers.

**Prior trade-related experience**

Prior trade-related experience clearly matters for apprenticeship success. The data collected by ApprenticeSearch.com show that successful applicants have tended to be experienced ones, but this experience is not linked to having spent many years in the trade. Rather, it depends on having gained trade-specific experience in combination with college or apprenticeship program education. And as the interviews conducted suggest, the acquisition of early trade-related experience is often supported by individual passion and commitment.

For employers, the key is finding job-seekers with appropriate skills and work-ready experience. When interviewed, employers emphasized the importance of job candidates having hands-on, applied knowledge of the trade, and having acquired basic skills necessary for the job. This acts as a foundation upon which to build further learning and on-the-job training.

**Training & Mentorship**

With regard to on-the-job training, there are two factors that determine apprenticeship success. First, the ability of apprentices to find positions that offer exposure to the tasks and techniques necessary to complete their apprenticeship (as discussed above). And second, the ability and willingness of employers to provide the hands-on training and oversight necessary for apprentices to learn required skills. As expected, the apprentices interviewed for this study who were most positive about their apprenticeships were those who felt that they had received a good level of training from their employers. And for their part, the employers interviewed who were most satisfied with their employees felt that these apprentices were committed to their apprenticeships and willing to learn.

**Trade-related Education**

Training and trade-related education play complementary roles in Ontario’s apprenticeship system, and this study has revealed importance in the congruence between in-school and on-the-job training. Some interviewees spoke of limited applicability between school curriculum and job demands, but overall, experiences with in-school training were positive. Accordingly, of those applicants who had found employment matches through ApprenticeSearch.com, best-prepared applicants for apprenticeship success were more likely to have college education and be further along in their apprenticeships. Trade-related education can also occur earlier on in an applicant’s pursuit of skilled trades work through the Ontario Youth Apprenticeship Program (OYAP). Though most applicants interviewed in this study did not apply to their apprenticeship through OYAP, one noted the importance of the program in helping to introduce him to opportunities in the skilled trades.

---

25 The study encountered three main limitations. First, it does not speak to issues related to under-represented groups, such as recent immigrants and women: the sample of “successful” apprentices largely consists of young, Canadian-born men. Second, it is geographically-specific to Southern Ontario: most observations from apprenticeSearch.com were derived from the Niagara to Greater Toronto Area (GTA) corridor. And third, the study lacks a comparison group of apprentices who were not able to find employment matches. As a result, the report is not able to compare the experiences and perceptions of “successful” apprentices versus those who have had difficulty completing their apprenticeships. This represents an avenue for future research.
APPENDIX A: RESEARCH METHODOLOGY

The findings for this report come from information collected by ApprenticeSearch.com staff. Two forms of quantitative data were analyzed. First, profile information was gathered on both successful applicants and the employers that hired them between 2010 and 2014. Applicant information included such items as type of work, applicant and job location, as well as apprenticeship level, education and select demographics. From the employer side, data were captured on their previous use of ApprenticeSearch.com, the industry they were situated in, and their expectations for applicants.

Second, along with this observational data, ApprenticeSearch.com developed internal measures capturing the strength of apprentice applications, the degree to which ApprenticeSearch.com facilitated a potential match, and the date when a match was established. The purpose of measuring strength in each application, and applying a given designation to that applicant, was to allow site staff to administer appropriate supports and assistance to the job-seeker. Candidate designation was fluid, and could be improved over time and with effort from ApprenticeSearch.com staff who dedicated resources to equipping candidates with the information on qualification-boosting services and programs that could, in theory, improve their designation from “lacking qualification” to “partially qualified” and eventually to “strong qualifications”.

Four cautions should be noted. First, the purpose for capturing the data was not, initially, to analyze patterns or relationships. As such, a variable such as the A/B/C designation, while providing some insights, cannot be said to have been applied consistently across candidates. Indeed, it was used as a flexible system and captures a particular point in time (since applicant designations could change throughout the process). Second, given the size and resources limitations at ApprenticeSearch.com, it was not possible to exhaustively capture data on every candidate who was successfully matched through ApprenticeSearch.com, nor was it possible to seek out every employer who utilized the service to successfully hire an apprentice. The applicant-employer sample used in this report is depicted in the figure below.

Figure 12: Sample of Successful Apprenticeships Facilitated by ApprenticeSearch.com by Year

<table>
<thead>
<tr>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>91</td>
<td>81</td>
<td>103</td>
<td>40</td>
</tr>
</tbody>
</table>

Thus, the findings that emerge are intended to posit further questions and not to generalize to the broader skilled trades population. Although ApprenticeSearch.com is a provincial resource, this report uses data gathered mostly from the Greater Hamilton–Toronto Area, where the sample pool of applicants and employers can most effectively represent the broader skilled trades landscape in Ontario. Third, this report only analyzes data from successful applicants; those unsuccessful in their apprentice search were not included. Given this focus, the study is unable to make broad claims about the nature or characteristics of both successful applicants and relevant employers, even when limiting the analysis to ApprenticeSearch.com. Finally, the measures developed by ApprenticeSearch.com (e.g. A/B/C designation) often include key indicators one might include when attempting to understand success. For example, the A/B/C variable accounts for previous experience. Thus, when conducting more complex analysis, there is a risk of tautology. Nonetheless, the exercise does provide an important ability to compare successful apprentice candidates, evaluate the coding undertaken by ApprenticeSearch.com, and provide verification that such attributes matter.

A second source of evidence was derived from interviews conducted in April and May 2015 by ApprenticeSearch.com staff with apprentices and employers who had been successfully matched through the site (see Appendix B for a list of interview participants). The purpose of the interviews was two-fold. First, the intention was to use the feedback about ApprenticeSearch.com to augment the findings emerging from the quantitative data collected. Second, as a means of fully understanding the challenges and opportunities in pathways to apprentice’s success, the interviews aimed at capturing how individuals viewed their participation in the apprenticeship process.
As with the quantitative data collected, the interviews do not allow for a comparison of those who were not successful and/or did not use ApprenticeSearch.com. Thus, it is not possible to determine if the attitudes and opinions expressed are unique to successful applicants or employers using ApprenticeSearch.com. In addition, while interviewers attempted to find a representative cross-section of employers and successful applicants, there is no assurance that this group is representative of the larger pool of successful candidates and employers using ApprenticeSearch.com. Nonetheless, the purpose of the report is to develop a sense of the opportunities and constraints for apprenticeship success. The data and interviews go a long way to providing insights into the apprenticeship process and areas of research going forward.

APPENDIX B: APPRENTICE DEMOGRAPHIC BREAKDOWN

As shown in Figure 13, apprentices are largely male and Canadian-born, with women and newcomers to Canada in far shorter supply. Further, the apprenticeship experience is a particularly youthful exercise, as indicated by the age distribution of successful applicants. This parallels the broader skilled trade sector. Since fewer years of postsecondary education are generally required, many in the skilled trades begin their careers at a relatively early age. Indeed, in 2007 the average age (40) of those employed in the trades Canada-wide was almost two years younger than for other occupations.

![Figure 13: Demographic Breakdown of Successful Applicants](image-url)

26 This picture corresponds with concerns that challenges remain in engaging groups who have traditionally faced both motivational and systematic barriers in entering the skilled trades, particularly women and immigrants. Recent immigrants, for example, have been found to hold university degrees at a greater rate than their Canadian-born counterparts (Galarneau and Morissette 2004). Indeed, 51 percent of those arriving to Canada between 2001 and 2006 possessed a university degree, much higher than the 20 percent attainment rate for the Canadian-born population (Statistics Canada 2008a). Given that the educational requirements of jobs in trades are often linked to college degrees, one might expect fewer immigrants to be working in the trades. Additionally, immigrants face systematic barriers, including the recognition of foreign-based credentials, as well as work visas being delayed or denied (SOURCE).

Figure 14: Effects of Applicant Characteristics on Designation (A/B)