

# **Trading Places: The Flow of Students into and out of Apprenticeship Programs**



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## **EXECUTIVE SUMMARY**

### **Overview**

Apprenticeship training is an important postsecondary option for Ontario students. One of the main functions of apprenticeships is to facilitate the transition from school to work by creating accessible pathways between education and the labour market. Apprenticeship training is the principal means of entry into the skilled trades in Ontario.

### **Problem**

There has been a steady decline in Canadian apprenticeship program enrolment and completion over the past decade. Expanding knowledge economies and local economic instability are two macro-social factors contributing to a decrease in apprenticeship participation. However, less is known about individual reasons for apprenticeship participation or early leaving. There is no data infrastructure that monitors the career pathways of individuals who chose an apprenticeship. Similarly, virtually nothing is known about students with university or college education who transfer into apprenticeship programs. To date, no study has explored the transfer processes of students moving between apprenticeships and college/university in Ontario.

### **Research Questions and Methods**

To address this knowledge gap, we conducted a one-year project designed to advance our current understandings of apprenticeship students' educational pathways. Our three main project aims and research questions were:

- 1) To explore the challenges affecting former apprenticeship students' decisions to transition to college/university: How is the decision to transfer to college/university

directly impacted by economic, social, and emotional challenges faced by former apprenticeship students?

- 2) To explore the challenges affecting former college and university students choosing to transition to apprenticeship programs: How is the decision to transfer to apprenticeship programs directly impacted by economic, social, and emotional challenges faced by undergraduate students?
- 3) To understand the transfer processes explored by students who moved in either direction: How did institutions help or hinder the transfer process for students?

To answer these questions, we collected interview data from 10 postsecondary administrators who work directly with transfer students. We also collected interview data from one Ontario-based student who transferred to university from an apprenticeship and five former university students who transferred to apprenticeships. Analysis of our interview data allowed us to identify factors that influenced the participants' educational pathway choices and experiences.

## **Findings**

We note several trends in the reasoning, challenges and benefits experienced by students who transfer into and out of apprenticeship programming.

### *Postsecondary Administrators*

According to the postsecondary administrators we interviewed, students transferred into and out of apprenticeships for the following reasons:

- better employment opportunities;

- pursuit of personal interests; and
- difficulty finding apprenticeship partners.

Administrators also noted distinct institutional supports and deficits for students transferring into and out of apprenticeship programs:

- one-to-one academic advising (institutional support);
- online course transfer tools (institutional support);
- pre-existing transfer pathways (institutional support);
- lack of apprenticeship-specific support staff (institutional deficit); and
- lack of transfer policies (institutional deficit).

### *Transfer Students*

Individuals who transferred into or out of apprenticeship programs also outlined their reasons for changing programs. However, unlike our administrator interviews, students only cited interest alignment as their reason for switching programs.

Students also provided examples of challenges and benefits experienced through their transfer process. Those challenges and benefits include:

- lack of apprenticeship-specific support staff (challenge);
- workplace culture (challenge and benefit); and
- concrete rewards (benefit).

### **Recommendations**

Both postsecondary administrators and students made suggestions for how postsecondary institutions could better support their transfer experiences. With these in mind, we created the following recommendations:

- Expand apprenticeship study areas.
- Provide more institutional support for apprenticeship partnerships.
- Raise awareness of databases that provide transfer pathway information to staff and students.
- Enhance secondary education-level supports for students wishing to pursue apprenticeships.

## INTRODUCTION

Apprenticeships provide alternative education pathways for a significant proportion of the Canadian population. In 2019, there were nearly 78,000 Canadians enrolled in apprenticeship programs (Statistics Canada, 2020). A typical apprenticeship involves a contract between an employer and a student, under which the student agrees to receive a relatively low wage in return for training from one or two journeypersons (Gunderson & Krashinsky, 2015), which is often supplemented by required in-classroom learning at a partnering college. Provincial governments and private industries continually favour the expansion of apprenticeship programming in Canada (Lamberink, 2020), pointing to a shortage of young people training in the skilled trades (Decaire, 2021). There remains a steady decline in the number of students enrolling and completing apprenticeships over the past decade (Statistics Canada, 2020). Despite employment and economic growth in recent years, the number of newly certified tradespersons through apprenticeships declined 3.9% in 2019 (Statistics Canada, 2020).

Changes to the Canadian economy have contributed to this drop, including an expanding knowledge economy and local economic instability. The apprenticeship system is a crucial provider of training in Canada, particularly for the skilled trades, for which it remains the principal means of entry. However, little is known about the educational pathways of apprenticeship students out of or into those programs. There is no data infrastructure that monitors the career pathways of individuals who chose an apprenticeship pathway into the skilled trades. Similarly, virtually nothing is known in Canada about students with university or college education who transfer into apprenticeship programs, either before or after completing their degrees/diplomas. There is no national database on these transfer pathways or on the ability

to apply credits across programming (Missaghian, 2022). Although there is a small but growing literature on this phenomenon in Europe (see Pilz, 2009; Fuller & Unwin, 2012; Dismore, 2014), no study to date has explored the transfer process of moving between apprenticeships and college/university – in either direction – in Canada.

## **RESEARCH QUESTIONS**

To address this knowledge gap, we conducted a one-year project that aimed at advancing our current understandings of apprenticeship students' educational pathways. Our three main project aims and research questions were:

- 1) To explore the challenges affecting former apprenticeship students' decisions to transition to college/university: How is the decision to transfer to college/university directly impacted by economic, social, and emotional challenges faced by former apprenticeship students?
- 2) To explore the challenges affecting former college and university students choosing to transition to apprenticeship programs: How is the decision to transfer to apprenticeship programs directly impacted by economic, social, and emotional challenges faced by undergraduate students?
- 3) To understand the transfer processes explored by students who moved in either direction: How did institutions help or hinder the transfer process for students?

To answer these questions, we collected qualitative interview data from postsecondary administrators who work directly with transfer students. We also collected interview data from one Ontario-based student who transferred to university from an apprenticeship and five former



university students who transferred to apprenticeships. Analysis of our interview data allowed us to identify mechanisms that influenced the participants' educational pathway choices.

## **LITERATURE REVIEW**

### *The Decline of Apprenticeships in Canada*

One of the main functions of apprenticeship programming in Canada is to facilitate the transition from school to work by creating accessible pathways between education and the labour market (Sharp & Gibson, 2005; Wright, Lehmann, & Taylor, 2019). In a constantly changing economy, apprenticeship programs provide students with hands-on workplace skills. Students in postsecondary education often lament that they are not learning skills that are directly applicable to the labour market (Shell, 2018; Webber, 2016). Postsecondary students also do not make informed decisions about the types of postsecondary education they pursue. Ball et al. (2002) noted that young people typically choose programming based on perceptions, rather than material economic conditions. They often base major life decisions on incomplete or inaccurate information from peers, which can have negative consequences for their career prospects (Ball et al., 2002). As a result, many students change their degree and certificate programs a number of times during their undergraduate experience (Emerson & McGoldrick, 2019; Griffith, 2010; Ferrare & Lee, 2014). Although there are multiple pathways through education and careers, students often feel as though there are only linear options available to them (Taylor et al., 2014). One potential direction students may take is to leave generalized programs and enrol in apprenticeships.

However, there is some skepticism about the economic support apprenticeship programs provide individuals. Krueger and Kumar (2004) argue that apprenticeship programming generally favored the economic conditions of the 1960s and 1970s. During that time, available technologies changed slowly, giving trades people time to adapt. In the information age of the 2000s, when new technologies emerge at a more rapid pace, these types of programs provide fewer economic pay-offs for students. Tradespersons have little time to learn new skills and acclimate to technological advances. To make up for the decline in manufacturing-based apprenticeships, there has been a push to expand into new areas, such as sales and business administration. These fields have not traditionally supported apprenticeship education and often do not have the infrastructure to meet needs of students. Fuller and Unwin (2009) describe modern apprenticeships as divesting employers of responsibility for training and diluting the concept of apprenticeship to little more than work experience. Hogarth, Gambin, and Hasluck (2012) argue that apprenticeships now stand at a crossroads. There has been considerable growth in the range of apprenticeships on offer, with little homogeneity in time, training, content, or returns (Hogarth et al., 2012). They argue that these changes leave apprenticeship students in the precarious position of spending valuable resources on programming that may not meet their employment needs (Hogarth et al., 2012).

Another challenge that apprenticeship students face is that their employment is inextricably linked to the health of the local economy. For example, a large decline in apprenticeships occurred in Alberta from 2018 to 2019, mirroring national trends (Statistics Canada, 2020). According to the Survey of Employment, Payrolls and Hours, Alberta had the slowest employment growth (-0.7%) among provinces in 2019 and was down sharply in industries where

apprenticeships are most concentrated (Statistics Canada, 2020). Areas such as construction and mining witnessed a 0.4% decline in growth over the last year (Statistics Canada, 2020).

Conversely, strong growth in housing and construction in Quebec and Ontario saw an increase in apprenticeships among eastern provinces concurrent with Alberta's decline (Statistics Canada, 2020). Fluctuations in apprenticeship availability, across provinces and over time, demonstrate the precariousness of apprenticeship-based trades.

Apprenticeship programming also has a marginalized status in the Canadian postsecondary system, as evidenced by the number of students who complete their training each year. According to the National Apprenticeship Survey, less than 2% of the total labour force was registered in an apprenticeship in 2007 (Menard et al., 2008). Canadian apprenticeships lack the breadth of programming and structure present in older and more established programs globally (NCVER, 2001). Apprenticeship programming in Great Britain provides students with a much wider variety of training options than the Canadian system. The British system has also greatly expanded into non-traditional sectors for training over the past two decades (NCVER, 2001, p. 36). Those non-traditional sectors comprise a large share of registrations, particularly business administration (14.2%), retailing (9.9 %), hospitality (7.9%) and health and social care (5.6%) (NCVER, 2001, p. 36).

Other national programs are also far more structured than the Canadian apprenticeship system. Germany has long-established apprenticeship programming that places the responsibility of employment in the hands of the system itself. The employment search process is integrated into the last two years of secondary schooling for German students streamed into apprenticeship

systems (Sharp & Gibson, 2005). Local chambers of commerce in Germany also publish lists of potential apprenticeships on offer by employers each year (Sharp & Gibson, 2005). Unlike the German system, the Canadian system is much less structured or supported by local communities. Canadian students are responsible for finding an employer willing to provide the apprenticeship training themselves. The Canadian system also lacks the incentives more established international programs have created. In, France firms must devote 1.5 percent of their payroll value to apprenticeship training or be taxed the difference (Sharp & Gibson, 2005). This feature not only ensures that companies are willing to provide training to apprentices, but also mitigates the possibility for employers to free-ride off the training of other companies (Dresser & Rogers, 1999). In addition, the taxes paid by firms that do not provide training are put toward sectorial collector organizations that decide training priorities of the national economy. Oftentimes, these taxes are put toward subsidization or reimbursement of training for apprenticeships in the country (Greenhalgh, 1999).

Since the Canadian system lacks the structure and incentive of more established national programs globally, apprenticeship options tend to be less popular with young Canadians and their parents (Wright, Lehmann, & Taylor, 2019). In addition to these drawbacks, many of the occupations available through the Canadian apprenticeship system do not require certification for professionalization. This means that many Canadian high school graduates can enter into the labour market, earn on-the-job experience, and make wages comparable to someone who has completed an apprenticeship in that field, without spending the same time or money on postsecondary training. These factors combined have influenced the decline in apprenticeship enrolment across the country.

### *Apprenticeship Completion*

In addition to being a less popular option for students and parents, completion rates among apprenticeship programs are also low in Canada. In 2001, the completion rate for apprenticeship programming in Canada was about 47% and was projected to decrease (Sharp & Gibson, 2005).

To better understand why apprenticeship completion is declining, it is important to understand who is enrolling in Canadian apprenticeships. The majority of apprentices are under the age of 25 years of age (53%), self-identify as male (86%), are born in Canada (91%), and had a secondary school diploma as their highest level of education (56%) when starting their apprenticeship (Arrowsmith, 2020). Among students who experience difficulty progressing through their apprenticeship program, some of the most common challenges included financial constraints (25%) and job instability (21%) (Arrowsmith, 2020).

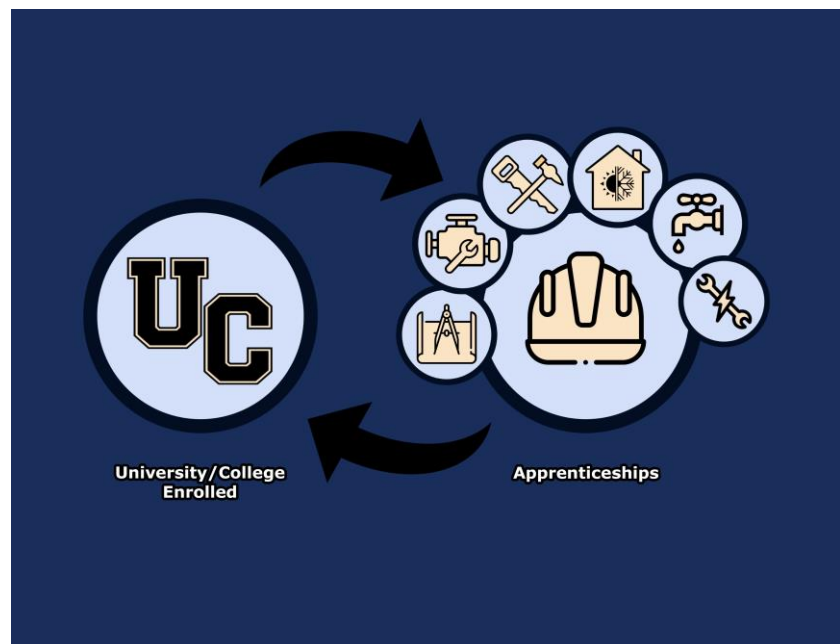
Although apprenticeships are often funded through employers, there are grants, tax credits, and Employment Insurance (EI) to help students fund their programming. However, a 2015 study by Statistics Canada-Employment and Social Development Canada (ESDC) found that no more than 60% of students were aware of applicable grants and programs (Frank & Jovic, 2017). Additionally, students were sometimes denied EI for “insufficient hours” or because they “already had a job” (Frank & Jovic, 2017). Two thirds of apprenticeship students also had no financial support to aid with the purchase of necessary work equipment such as tools, or supports such as transportation or meals (Frank & Jovic, 2017). Those who completed their apprenticeship were more likely to receive additional funding support such as grants, training

allowances, EI-top-ups, or support from apprenticeship employers compared to those who discontinued. Additionally, discontinuers were more likely to have another job for income during their apprenticeship than those who completed (Frank & Jovic, 2017). These challenges combine to lower the rates of completion among apprenticeship students in Canada.

### *Program Transfer*

There is some evidence to demonstrate that those who enter apprenticeship programming have previous academic

experience. While the majority of apprenticeship students in 2015 had a high school diploma, 17% of apprenticeship students held a Collège d'enseignement général et professionnel (CEGEP) or other non-university certificate or



diploma, and 3% had a bachelor's degree (Frank & Jovic, 2017). Students who have previously completed or enrolled in a degree program may also “reverse transfer” or attend a college program that they think will lead to better employment opportunities (Arrowsmith, 2020). Previous research on reverse transfer suggests that students leave university due to academic challenges, mental/physical health/special education needs, and future prospects (Maier & Robson, 2020). More often than not, transfers to and from programs are not premeditated by

students, and the decision is based on a number of factors related to their educational experiences in either college or university (Lang, 2009; Maier & Robson, 2020).

The most common form of postsecondary credit transfer in Ontario occurs between college diploma programs into a degree-based program (ONCAT, 2022). Universities and colleges may also have set transfer articulation agreements that guarantee course-credit transfers.

Postsecondary institutions in Ontario also have different transfer processes, policies, and advisors to guide students through the transfer process. Despite this, students may experience challenges in deciding their pathways. Taylor et al. (2014) suggest that policymakers should raise awareness about transfer programs and increase the flexibility of transfer between postsecondary routes, especially for those students who begin an apprenticeship in high school and may or may not choose to continue.

Despite the work done by colleges and universities to establish transfer pathways for students, little attention has been paid to students transitioning into or out of apprenticeships in Ontario. With apprenticeship enrolment and completion rates declining over the past decade, evidence demonstrating the reasons and experiences of students moving through these programs is needed. This research aims to fill this lacuna by interviewing both transfer students and postsecondary administrators about these processes.

## **METHODS**

### *Data*

The data collected for this study come from interviews with college/university administrators and transfer students. To recruit participants for this study, we first applied for and received permission to conduct interviews from the McMaster University Research Ethics Board and the Multi-College Research Ethics Board. Our recruitment process involved email outreach to postsecondary administrators who supported student transfers and apprenticeship programming. We also posted calls for study participation on social media, including Twitter, Facebook and through academic/labour organizations (e.g., The Canadian Sociological Association monthly newsletters). Advertisements for our study included contact information for our team. Once interested participants reached out to members of our research team via email, we assessed their eligibility to participate. Only students who had transferred between Ontario undergraduate and apprenticeship programs were eligible to participate. College and university administrators who worked directly with transfer students or apprenticeship students were eligible to participate.

Pseudonyms were provided for each participant we interviewed to protect their anonymity throughout the study. In total, we collected 10 interviews from college/university administrators who work directly with apprenticeship or institutional transfer students. Of the postsecondary administrators we interviewed, eight were from colleges and two were from universities (see Table 1).

**Table 1: Administrator Pseudonyms and Institution Types**

Pseudonym	Institution Type and Employment
Mary	University Administrator
Jessica	College Administrator
Travis	College Administrator



Grace	University Administrator
Melanie	College Administrator
Claire	College Administrator
Jacob	College Administrator
John	College Administrator
Sandra	College Administrator
Max	College Administrator

We also interviewed six transfer students, five of whom transferred from university to an apprenticeship program (see Table 2). One student transferred from an apprenticeship program to a university undergraduate program.

**Table 2: Student Pseudonyms and Transfer Type**

Pseudonym	Transfer Type
Steve	University to Apprenticeship
Tom	University to Apprenticeship
Morgan	University to Apprenticeship
Stephanie	University to Apprenticeship
Aaron	University to Apprenticeship
Ivy	Apprenticeship to University

Unfortunately, due to the pandemic and frequent campus shut-downs, collecting interviews with administrators and students was extremely challenging. We reached out to more than 200 administrators across Ontario colleges and universities from spring 2021 to winter 2022. Administrators who responded to our requests commented that they were feeling overworked and stressed from the pandemic, and didn't have time to complete an interview with us. Others noted that they didn't see students transferring to or from apprenticeship programs. Student participants were also difficult to connect with, as many students were studying remotely and feeling equally overworked and stressed.

### *Procedure*

Prior to the interview date, all administrator and student participants were sent a Zoom link, a participant demographic form and a consent form. Participants were required to sign and email the interviewers their demographic and consent forms prior to the starting the interview. Once these documents were received, the interviewer could start the interview. Each interview began with an introduction, an explanation of the study and a review of the consent form.

Administrators were first asked about their daily work tasks and the capacity in which they support transfer students. They were next asked about some of the programs their institution created to support transfer students and about the benefits or drawbacks of these programs. They were also asked to discuss transfer programs at other institutions that they thought were helpful for students. After discussing programming at their schools, administrators were asked to discuss some of the reasons students give for transferring programs, their biggest transfer challenges, and the benefits of their transfer programs.

Similar to interviews with administrators, we asked our student participants to first tell us about the program into which they had transferred. We asked them why they had transferred into that program and what program they were originally enrolled in. Students were also asked about some of the academic and non-academic challenges they faced before the academic transition and after. They were also asked to describe their academic transfer process, focusing on the resources and obstacles they faced throughout that process. They were then asked if anything could be done to make the transfer process easier for them.

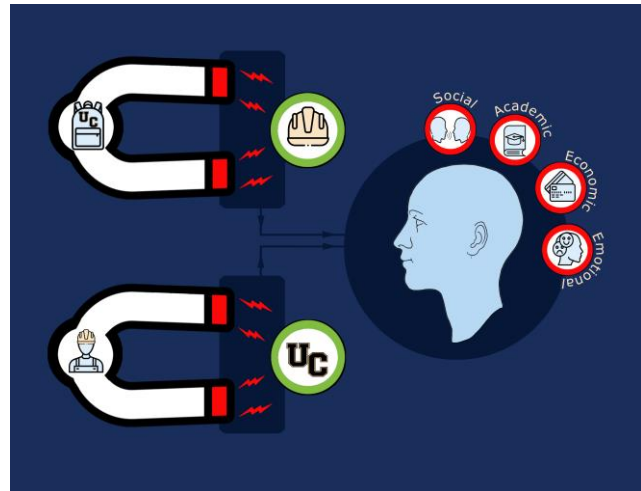
Following the interviews, both administrators and students were thanked for their participation, and they each received a \$15 Amazon gift card. Participants were also able to keep a version of our consent form, containing our contact information, for their personal records. They were encouraged to contact our research team with any questions about our research or the final report.

### *Data Analysis*

All interviews with administrators and students were recorded and transcribed by a third-party transcription service. The interview transcripts were later uploaded to Atlas.ti data analysis software. Before analyzing the interviews, we developed deductive codes that identified key descriptive variables for both administrators (see Appendix A) and student interviews (see Appendix B). Deductive codes were derived from initial research questions, following qualitative data analysis approaches outlined by Crabtree and Miller (1999). Our deductive codes highlight key themes that we were interested in examining across administrator and student transfer experiences prior to the interviews being conducted. These included academic challenges, academic benefits, economic challenges, economic benefits and reasons for transfer. Following the creation of deductive codes, we also developed inductive codes that related to the observed patterns and explanations in the data. Inductive codes are derived from the data itself and highlight the themes, theories, and narratives that emerge from raw data (Crabtree & Miller, 1999; Fereday & Muir-Cochrane, 2006). The inductive codes developed through readings of our interview transcripts include the reasons students gave for switching programs or the suggestions administrators gave for further institutional support.

## FINDINGS

Our main aim for this research is to better understand the challenges and experiences of students transferring into/out of apprenticeship programming. Through interviews with postsecondary administrators and transfer students these issues have been demonstrated in our work.



### Administrators

#### *Reasons for Transfer into and out of Apprenticeship Programming*

Some of the transfer administrators we contacted for this study commented that they did not see students transitioning into or out of apprenticeship programming at their institution. However, there were others who had helped students through this process, and those individuals provided interviews with us. Some of the reasons administrators gave for seeing students transfer into apprenticeships were employment and interest alignment. When asked about the primary reason she saw students transferring into apprenticeship programming, Mary, an administrator for a local college, noted that “primarily it’s employment. They can earn while they learn.” While most university undergraduate students do not have the opportunity to work in tandem with their studies, apprenticeships provide this option. Apprenticeship students are able to gain work experience and financial assistance from their apprenticeship supervisor while they complete their academic programming. Another administrator corroborated this point:

They can see it's a short cycle.... They would get into their – you know, earning money quicker, instead of just being in a high tuition fee program with kind of not certain employment afterwards. (Jacob, College Administrator)

Administrators noted that working while at school was an important aspect of apprenticeship for some students. They noted that in addition to immediate earnings, the greater likelihood for post program employment was also appealing to students. John, a college transfer administrator, commented:

What I get from our students who have been at university and are looking to get into a trade, is how hard it is to find work in that field... there's such a huge demand in automotive right now for AST and auto body technicians that it makes it easier for them to decide which way they really want to go.

The availability of pay and job security upon program completion seems to be a considerable draw for students leaving university for apprenticeship programming.

Transfer students also entered apprenticeship programming to help align their work with their interests. A number of administrators said that some of the students they worked with wanted to have an active role in their learning. Jacob (College Administrator) commented that the students “found out they were interested in doing more hands-on work, and maybe like applying some business skills and starting their own companies in the future.” Students moving from university to apprenticeship programming arrived with considerable skillsets and strong academic

backgrounds, but were interested in more applicable programming. When asked about why she saw students transferring out of university and into apprenticeships, Mary (University Administrator) said, “I imagine that there is a lot more of that, as students are seeking more applied skills and things that are going to benefit them on the job market.” Others noted that students were generally more inclined to switching programs to better suit their personal interests. Grace (University Administrator) noted that “students are just more used to change. They’re not going to stick with a program if they’re not happy with it.” Employment opportunities and personal interests seem to push students into apprenticeship programming, but they also influenced students leaving apprenticeship fields.

Administrators also commented that they saw students leaving apprenticeships for university degrees to advance their careers:

Although there should be a lot of opportunity coming out of an apprenticeship, sometimes depending on what’s happening in that industry, that can affect the outlook of job security... students might find that they feel a little more cushioned if they end up coming into the university setting. (Jessica, College Administrator)

With a changing economy, a diverse academic background might help students feel more protected. One administrator we interviewed worked to provide support letters for students transitioning from college programming to university degrees. In those support letters, the administrator was required to outline details for why the student wanted to pursue a degree. She noted that

there's a lot of "I always wanted to get a degree, but it wasn't a good time in my life" or "when I was in high school, I got put in the applied stream and never thought that university was an option for me". But now I'm looking into doing X, Y, Z career-wise and found that I needed a degree for it. (Mary, University Administrator)

Pursuing a university degree following or instead of an apprenticeship helped some students feel more secure in a changing job market.

Some students also transferred out of apprenticeships because they had greater interest in the conceptual aspects of their program. An administrator with experience in culinary programming noted that students sometimes transfer out of their faculty because

it's not what they thought it was going to be. Or they found that it's an area they are passionate about, but maybe from a different angle. So rather than the practical side, they're more interested in the theoretical side. So, they want to pursue education at a higher level. (Jessica, College Administrator)

Although some students were satisfied with the applicable skills provided by their apprenticeship, others preferred to pursue academic advancement through university programming.

Students also transferred out of apprenticeships due to difficulty securing an apprenticeship partner. When a student enters an apprenticeship program, it is their duty to secure a tradesperson to work with. Depending on the trade, students will work on-site in a designated workplace, earning the skills and knowledge necessary for achieving accreditation in that field. However, students sometimes have difficulty finding a workplace to earn their accreditation hours. One administrator noted, “sometimes, yeah, it’s because they cannot find an apprenticeship” (Claire, College Administrator). Similarly, another administrator commented that for the most part, difficulties arose for the student “when employment relationships break down and there isn’t another one readily available” (Sandra, College Administrator). Although apprenticeship programs are aimed at providing students with the skills and working relationships that will help them pursue a career in a given trade, finding and maintaining an apprenticeship outside of the classroom can be difficult.

For administrators, the reasons students gave for transferring into and out of apprenticeship programming centred on financial challenges and career needs. For those leaving university to pursue an apprenticeship, the monetary gain of working while going to school seemed enticing. The promise of learning hands-on skills that would translate directly into post program employment also seemed like a worthwhile long-term investment for some students. However, apprenticeships didn’t suit the career needs of others. Administrators noted that students transferred out of apprenticeship programs because they wished to advance their careers beyond the scope of that programming or had trouble finding suitable apprenticeship placements. Others noted that students seemed more apt to changing programs to better suit their personal needs. While there are a small number of individuals transferring between these two academic spaces,



their motives appear similar. For both groups, career advancement and economic stability are at the forefront of student transfer decisions.

### *Institutional Support and Shortcomings for Transfer Processes*

After discussing the reasons students transferred into or out of apprenticeship programming, we also discussed institutional support for these pathways. There were three main areas that administrators noted as useful for supporting students through program transitions: 1) available academic advising, 2) online course tools, and 3) transfer pathways. Administrators noted that most academic institutions had some type of advising that helped students through transfer processes. Grace, a university transfer administrator, commented that “universities are offering many sessions, whether in person or virtual, to recruit students and to talk to them about the process of transferring.” Another administrator noted that “if they reach out to us about how to fill out the application or what can be expected, we help with things of that nature” (Mary, University Administrator). College staff also noted that some institutions had on-campus units dedicated to helping students transfer programs: “There are departments that support students here at [institution name] in transferring... we do have departments here to help students in that transition” (John, College Administrator). Most of the postsecondary administrators interviewed for this research mentioned some type of advising office or resource available to help students into and out of programming at their school.

Administrators also commented that online course tools were available at some institutions to help students find their way through the transition process. One administrator said that her institution had automated the transfer credit system. As she explained, “We break it down to

eligible courses taken within five years of the transfer.... We show students everything that is a benefit for them to see, and they can check ‘Oh I didn’t meet the grade for this’” (Claire, College Administrator). Claire noted that this process is beneficial for students because they don’t have to wait on staff responses to see if their previous coursework is accepted at their new school. They can check for themselves. Another administrator noted that her school also had an automated portal supporting transfer processes. Sandra, a college transfer administrator, commented, “We do have a transfer credit portal, where students can go in and apply and say ‘Okay, well, I’ve done this particular course or this program at institution X, now I want to transfer those credits into a program.’” Administrators noted that these types of services were extremely helpful for letting students know up-front the types of courses that could be accepted in their new program. Administrators noted, however, that without pre-arranged agreements between institutions, there are few courses that are transferable across different postsecondary landscapes.

Pre-existing transfer pathways between schools seemed especially helpful for staff and students. While few of these exist between apprenticeship programming and universities, they did exist between some colleges and universities in Ontario. As one university administrator noted,

The biggest benefit is timeline to degree completion. So, the recognition of their former studies at college and that coming through to the university... we have a number of pathways. (Mary, University Administrator)

At this particular institution, the university had pre-established credit pathways to help students who completed two years in a college program complete an additional two years at the university to qualify for an undergraduate degree. Many of the administrators interviewed for this project commented that pre-established pathways between institutions made transfers easier. As a college administrator (Jessica) remarked,

It's not a matter of a student needing to apply and submit their course outlines and then us reviewing them, it's a matter of you're coming from an institution we recognize. So we know right off the bat without even looking at your transcript that these are the credits you're going to get an advanced standing.

Another administrator noted, "It's way easier for us. We don't have to look at every course individually. We don't have to request course syllabi, because that's all been done" (Grace, University Administrator).

For students transferring to institutions without pre-established pathways, the journey can be more challenging. Claire, a college administrator, noted that "students [who] are not pathway students often don't know what credits they are going to receive." Without an established transfer pathway, some students find out which courses are transferable only after they have paid tuition fees and have been accepted into a new program. Unfortunately, this means some students do not receive credit for their previous academic experience and spend more time in school. Some institutions recognize this problem and are working to give students information about their credits before admission. One college administrator commented:

At [college name], the way our admission process works, we will take the best from everything. And then those transcripts that were submitted during the admissions process can be used for credit transfer. We are working on implementing earlier information for at least applicants who have provided transcripts... basically having an assessment done and giving them a preview of what they might get if they come to [college name] on their offer of admission. (Jacob, College Administrator)

Where transfer pathways are not available, providing students with information about credits before they accept an offer can help them determine the financial and time-cost of their new academic program.

A lack of transfer policies between institutions was a considerable problem identified by administrators. Jacob (College Administrator) noted that while more students are transferring into the apprenticeship program, “if we had a better system, like transferring to the university, it would be a larger number of students.” Jacob commented that he had seen large numbers of students leaving previous programming and wishing to pursue apprenticeships at their school. Another administrator lamented that without formal agreements between institutions, students are at risk of not having their previous education recognized. Jessica (College Administrator) said, “One of the drawbacks is ... that there might be credits that they feel are within the conversion, but were not actually granted to them. So we can only do half worth of credits as a transfer.”

Completing transfer agreements across institutions poses some challenges for administrators.

Grace (University Administrator) described the work involved:

At our institution, we have a couple of province-wide agreements with a couple of programs. But those have to be reviewed, and I mean that would be a bigger task.

Because we have to look at every Ontario college and review the entire curriculum for each.

Although transfer pathways support student transitions, they require an exceptional amount of time and monetary investments by the participating institutions. They involve mapping all relevant curricula across institutions and keeping this information updated over time. To make matters more challenging, there is variability in undergraduate course content across programs and professors. Keeping track of which courses are and will continue to be transferable across multiple institutions is not an easy task.

#### *Administrator Program Suggestions and Suggestions for Students*

In addition to outlining institutional supports and shortcomings related to the transfer process, administrators also provided a number of suggestions for new programming. One of the more popular suggestions was providing students with online resources for transfer information processes. Administrators noted that some students didn't understand all of the requirements needed to transfer programs before they started the process. To solve this problem, Claire (College Transfer Administrator) recommended "more education for students about what credit transfer is, or realistic expectations for students about the process would be good."

The transfer process across institutions can be confusing, and if there are no staff available to walk students through the process, learning about all aspects of the practice can be overwhelming. Claire (College Administrator) addressed these challenges: “So personally we are redoing our pathways and student transfer websites... we are working on our FAQs. That should make it easier.” Grace (University Administrator) also highlighted additional areas for online support: “If universities are already offering virtual information sessions, they could talk to students about the whole process of transferring and applying, too.” Institutions that already provide video libraries or online information sessions for incoming students could create additional content focusing on transfer processes at their school. Other administrators noted that a repository of transfer information would be extremely helpful. Mary (University Administrator) commented, “I would love to have an apprenticeship to university booklet or something like that that I could give to students.” Another administrator noted, “Something that would be great ... the possibility of a course syllabi database for college and universities” (Grace, University Administrator).

Administrators noted that having access to a database of syllabi and transfer pathways would be helpful. However, this already exists. The Ontario Centre for Articulation and Transfer (ONCAT) hosts a website with listings of available courses and transfer pathways across institutions. Given college and university transfer administrators’ lack of awareness of this resource, greater discussion and advertisement of the website’s services might be helpful.

In addition to providing suggestions for institutional changes, administrators also provided tips for students interested in transferring between programs. Administrators encouraged students to be organized throughout the application process. Claire (College Administrator) said that she told students, “Make sure you have all your course outlines. Especially if you’re at an institution where you have full online access – download those outlines.” Transfer processes can be different for each postsecondary institution. Course listings can also vary across schools. Two courses that have the same name, but are registered at different institutions, might have variable curricula. If a student would like their previous coursework to transfer to another program, it is important that they have those course outlines ready for review. Another administrator similarly advised students, “Just keep your documentation [laughs] and follow through with the process. Don’t let a delay or a requirement to submit something drag you down” (Sandra, College Administrator). Administrators commented that they needed time to read through student applications and to cross-reference course materials. If a student didn’t have the required documentation readily available, it could cause delays in the transfer process.

Administrators also just wanted students to enroll in programs that best suited their personal interests. According to John (College Administrator),

The best advice I can give is you want to make sure whatever career you choose, doesn’t matter if it’s a doctor, lawyer or a different type of trade, you want to make sure you are happy doing that type of work. You really want to enjoy it.... If you don’t enjoy it, you’re never going to excel, right?

Jessica (College Administrator) echoed these sentiments, stating, “I would ask them what is it that’s driving their motivation, what is it that they’re hoping to gain, what are their expectations?” In addition to highlighting the importance of choosing the right path, Jessica (College Administrator) also wanted to remind students that

the final commitment to make the switch doesn’t happen until the offer is on the table and they’re ready to accept it. So even though they are exploring, they still have the option to change their mind if they want to.

Choosing the appropriate postsecondary program is not an easy task. Administrators we interviewed commented on the academic challenges of various programs and the importance of students finding the one that best suited them.

The transfer process across postsecondary institutions and academic programming can be extremely difficult to navigate. Administrators for this study identified a number of challenges students commonly encounter throughout this process. They noted that having online resources and pre-established relationships between different postsecondary institutions would help them and students bridge these gaps more successfully. In addition to changing institutional relationships, they also suggested that students could better support their transitions by keeping their academic records and course syllabi on-hand. Overall, our administrators were encouraging of students transferring programs and wanted them to find the programs that they were most happy completing.



## **Student Interviews**

### *Transfer Reasons*

Our research also focused on in-depth interviews with students who had transferred into or out of apprenticeship programs in Ontario. The most common reason students gave for making this transition was interest alignment. Some students felt pressured to pursue an undergraduate degree after high school. Steve (University to Apprenticeship Student) commented, “I would have been the first person in my extended family not to have a university degree. So, that’s the only reason I went to university... just because we all did that type of thing.” Morgan (University to Apprenticeship Student) also pursued a university undergraduate degree before transferring into an apprenticeship program. He experienced a push to go to university from family members: “I was good at math in high school and kind of had pressure... well, not pressure from my parents... but, encouragement from my parents to go to university.”

There is a pervasive culture around postsecondary education that suggests university is a more prestigious and advantageous path for students to pursue. As Steve (University to Apprenticeship Student) elaborated, “Generations of people were saying ‘If you want a good job, then this is the path you go.’ It’s what society puts out there.” This type of attitude places pressure on high school students to pursue university routes that do not necessarily align with their academic or personal interests. Stephanie, a student who switched from university to an apprenticeship, expressed similar concerns:

I think I also felt some pressure to go through university. Like, I remember in high school, the teachers would say things like ... trades can pay well too... but, there’s

always this feeling that people who go into the trades aren't smart enough for university or something.

For Stephanie (University to Apprenticeship Student), these expectations compelled her to apply to university after high school.

Despite social pressures, some students discovered that their personal interests aligned more closely with apprenticeship programs. Stephanie (University to Apprenticeship Student) learned about arborist apprenticeships through a tree planting summer job. She commented, "I kind of enjoy difficult tasks – physical tasks. And it was a good mental challenge to me every day. I think it made me think about what I really wanted to do for a living." For her, working outside was far removed from her previous experiences living and studying in Toronto. Having the opportunity to engage in physical labour outdoors was more appealing to her than undergraduate coursework. Morgan (University to Apprenticeship Student) also realized that the hands-on nature of apprenticeship programming was more to his taste: "I knew I wanted to get into the trades. But I didn't want to be a plumber and I didn't want to get into HVAC. I liked math, and so I thought electrical... that was sort of the one I tended towards." Some of the reasons students gave for entering undergraduate degrees shifted into their apprenticeship interests. Morgan realized that his university-based math focus could apply to his apprenticeship program. Similarly, Steve (University to Apprenticeship Student) pursued an undergraduate degree in commerce before switching into a carpentry/construction-focused apprenticeship:

I was a business-oriented, numbers kid. Math was my strong suit... It may have been influenced a bit by my father. Like, when he retired he started his own contracting business, and so maybe a bit of that was an influence here.

Although Steve first pursued a commerce degree, he realized after two years of study that an apprenticeship program would allow him to use his business and math skills, while simultaneously working in a hands-on field.

A student who switched from apprenticeship to university also commented on better interest alignment. Ivy (Apprenticeship to University Student) transferred into an undergraduate program because she preferred a theoretical approach to problem solving. She commented that “there was just something about the way anthropology is really holistic.... I was doing readings and getting really excited about them, so that’s why I chose that program.” Having the opportunity to take social sciences courses as electives at college gave Ivy the opportunity to learn more about other studies that fit with her personal interests.

Although administrators interviewed for this research said they commonly saw students switching programs for greater economic stability, the students in this study explained that they transferred programs based on interest alignments. For many of the students, the university programs in which they were previously enrolled suited their academic aptitudes, but didn’t fulfil their personal interests. Similarly, the student who transitioned into university pursued a degree program because she had more interest in that type of learning. It seems that both sets of students

were taking time to critically assess their aptitude for the programs into which they transferred, rather than just the economic benefits available to them.

### *Transition Challenges and Benefits*

Although the students in our study were largely appreciative of their new academic pursuits, they did encounter some challenges transitioning across programs. One complaint was that the transfer process was confusing and often unsupported. According to Stephanie (University to Apprenticeship Student), “No one really knows about the program or just didn’t really know how to help me. That experience was really frustrating.” Transitioning from an undergraduate program to an apprenticeship, Stephanie had difficulty finding someone who could help her determine which courses credits she could carry over to the new program. Similarly, Steve (University to Apprenticeship Student) had difficulty finding support for his transition. Although he was provided a transfer liaison from his new institution, that person was limited in their capacity to help throughout the process. Steve complained that

if your assigned person was more available or was more supported, able to help you, I think that would be better.... But, they’re extremely busy and [helping] people across many trades. They don’t have time.

Because the liaison had to help students transition to all programs at their school, they sometimes lacked the resources to help Steve troubleshoot course transfer. Steve suggested that if institutions had liaisons for each program, with industry knowledge, this would help facilitate the transfer process more effectively.

Students also experienced frustration getting their host institution to recognize the challenges they were experiencing:

I remember going through to get into my first semester class and it was just so much running around, calling phone numbers. I would get transferred to this department and they'd be like "Oh, you need to talk to this person." And I was like "I just spoke to that person! They directed me to you!" (Stephanie, University to Apprenticeship Student)

The lack of program-specific liaisons seemed to be one of the biggest challenges students faced transitioning into apprenticeship studies.

Once the transfer process was completed, students discussed a number of personal benefits. The most commonly cited benefits were positive workplace cultures and social connections. Morgan (University to Apprenticeship Student) enthused, "I love the people I work with! It's a very open work environment. You can always speak your mind". Similarly, Tom (University to Apprenticeship student) commented, "When we go to school, it's a class of 30 and everybody in the class all works for the same union... It's a pretty tight-knit group." Aaron (University to Apprenticeship Student) also found strong connections within his workplace, but noted that this wasn't always common. He explained:

I think it's pretty workplace dependent... I know a lot of companies will make it tough for apprentices when they're first starting out. You know, for the first year just cleaning up cardboard, but I think it depends where you are. I sort of went in and it was hopping!

For Aaron, a busy apprenticeship kept him engaged and eager to return to work every day. He acknowledged that some apprenticeships can be difficult in the beginning, but that hadn't been his experience.

Having the opportunity to continue working during the pandemic also played a role in some students' responses. Stephanie (University to Apprenticeship Student) was able to continue working through the social restrictions of COVID 19 pandemic. Stephanie commented, "That is one thing that's been nice is that through the pandemic, that I've been able to continue working and it's outside." For students, being part of an academic program that created positive social outlets and allowed them to continue working/studying was extremely important.

Students also felt that apprenticeship programming had more concrete rewards than their previous undergraduate coursework. When asked what the biggest benefit of his transition was, Morgan (University to Apprenticeship Student) said, "I guess getting paid to learn? That is sort of how it is, so it feels more worthwhile? Like, I see tangible achievements." New learning environments also gave students with different learning needs the opportunity to academically excel. As Steve (University to Apprenticeship Student) explained, "I wanted a job that kept me interested. I'm probably one of your ADD type candidates. I like to be constantly challenged and have a job that's almost always evolving." Not only did students feel that they were gaining

money and hands-on experience that would support their careers, they also felt they were learning in environments that suited their personal strengths.

### *In-Program Challenges*

Although students who transitioned largely enjoyed their work, they did mention some difficulties balancing their work–life commitments. When asked about some of the biggest challenges he faced in his new role, Tom (University to Apprenticeship Student) responded, “General scheduling, right? So, depending on where you work, you have a completely different schedule. Right now I’m happy I’m on a maintenance contract. We work five or eight hour days a week, 40 hours a week.” Students mentioned that their work hours can change depending on their placement and that balancing these commitments with coursework can be difficult. Aaron’s (University to Apprenticeship Student) apprenticeship required him to travel, and this sometimes disrupted his time with family:

The distance from family was tough. More than I would have wanted to admit based on I was three hours away, or whatever. But you know, I’d miss them every now and then. And not eating home cooked meals so you just ate pizza.

Others also mentioned the difficulty of balancing commuting with coursework. Ivy (Apprenticeship to University Student) stated that

A big one was commuting. There isn't any other [program] offered in the area... so I had to commute. Sometimes it meant waking up at 4 o'clock to catch the train to be there for 6 o'clock in the morning. The commute was a lot at the time.

Schools, home, and workplaces were sometimes located in different cities for students, requiring them to drive longer distances after the transition.

Female students we interviewed also encountered discrimination in their apprenticeship environments. Ivy (Apprenticeship to University Student) said, "I loved the program. My instructors were great! I had some really good peers. But, there were issues that I encountered in the industry, like with sexism, and with my peers. And that was sometimes an issue at school." Ivy did not elaborate on the types of experiences she encountered, but the same sentiments were echoed by Stephanie (University to Apprenticeship Student): "Non-academic wise, there are some challenges. Especially for me as a woman and a minority in other ways – it's a very white male dominated industry." Stephanie noted that most of the instructors for her program were white males, who also owned companies in which apprentices worked. Stephanie said, "Sometimes, you know, some comments are made and just the general attitude about certain things doesn't always feel the most supportive of someone like me." Being a female in a largely white male workplace subjected certain members of our study group to unnecessarily uncomfortable situations.

### *Advice for Students*



Overall, the students interviewed for this study were extremely pleased with their decisions to switch programs. They found that the coursework and hands-on nature of apprenticeship suited their aims. For those who transitioned from apprenticeships to university, the theoretical approach to problem-solving fulfilled their interests too. When we concluded our interviews, we asked students if there was any advice they would like to pass along to others considering the transition to or from apprenticeships.

Overall, they suggested that students take more time to think about their postsecondary decisions. Tom (University to Apprenticeship Student) commented, “If you can, I’d say take a year off after high school... take some time and don’t rush in.” They also recommended students find support early. Steve (University to Apprenticeship Student) suggested that students “talk to someone who’s already done what you wanted to do and get it all, get everything. Ask any question you think would be relevant or irrelevant.” He also noted that it is important to find help from individuals who have gone through apprenticeships in the past decade because there have been many policy changes within different trades programs, and new students should be aware of these. Mirroring Steve’s suggestions, Ivy (Apprenticeship to University Student) had this advice: “Get as much support as possible. If you have connections from other programs, use them.” For Ivy, knowing people in different programs helped her see the abundance of academic and career opportunities available.

Interviewees also cautioned other students to be wary of the social pressure to pursue a university degree. Stephanie (University to Apprenticeship Student) echoed the sentiments of other respondents:

Feeling like I needed to go to university – or that going into the trades meant that I wasn't smart enough for university or something like that – I would say don't buy into that. It's not a thing...If that's the experience you want to have and how you want to use your brain and your body and that's of interest to you, then yeah definitely go for it!

Instead of pursuing educational pathways based on social pressure, students we interviewed recommended choosing academic programming based on personal, academic, and professional goals.

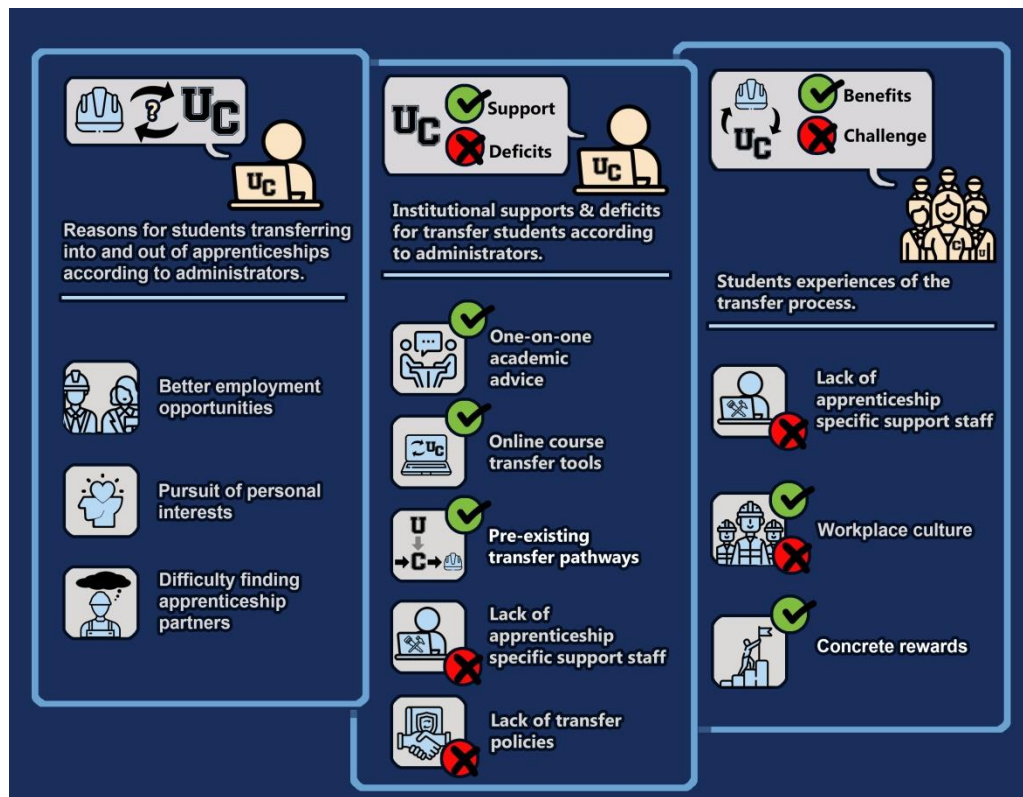
## **SUMMARY OF FINDINGS**

Apprenticeships provide Ontario students with an important alternative education pathway. However, there remains little information about the academic routes students pursue into and out of these programs. To date, no study has explored the transfer processes moving between apprenticeships and college/university for Ontario students. Through interviews with postsecondary transfer administrators and transfer students, we aimed to answer the following research questions: 1) How is the decision to transfer to college/university directly impacted by economic, social, and emotional challenges faced by former apprenticeship students? 2) How is the decision to transfer to apprenticeship programs directly impacted by economic, social, and emotional challenges faced by undergraduate students? and 3) How did institutions help or hinder the transfer process for students? Analysis of our interview data demonstrates that there are a number of factors that influence students' decisions to transfer into or out of an

apprenticeship program. Our data also reveal ways that postsecondary institutions can work to better support students through those transitions.

Interviewed administrators commented that students seemed likely to switch programs in search of better employment opportunities and in response to difficulties building apprentice relationships. They noted that students were sometimes reluctant to finish undergraduate degrees because they didn't see tangible skillsets available to them through those routes. By transferring to apprenticeship, students could gain the applicable knowledge to be successful in a changing economy. Some postsecondary administrators also commented that they also saw students moving out of apprenticeships because they had difficulty finding partnerships for their job-placement learning requirements. They saw students leaving apprenticeship due to unsuccessful placement relationships, difficulty finding a business willing to support their apprenticeship, or because those relationships sometimes fell apart over time.

### **Figure 1: Summary of Findings**



Administrators also discussed the support and shortcomings of transfer processes for students.

They noted that some institutions provide online course tools and transfer liaisons to help students get the credits they need when changing programs. Administrators also took note of pre-existing transfer pathways between some universities and colleges. They said that although these did not yet exist between postsecondary institutions and apprenticeship programming, they would be helpful for future students interested in transferring between these two types of learning.

In addition to interviewing administrators about the assistance they provide students, we also interviewed students about their transfer process experiences. The reasons students provided for

transitioning into or out of apprenticeship programs were slightly different than the ones administrators provided. Students commented that they decided to transfer programs because they were following their own personal interests. Several students noted that they initially pursued university degrees because they felt pressure from family and educators toward that academic route. However, through social contacts and summer jobs, they learned that their interests were more keenly connected to the hands-on training provided through apprenticeships. They also noted that the employment available through apprenticeships better suited their personal interests and aptitudes. The single student we interviewed who transferred from an apprenticeship to a university program similarly commented that her transfer was based on the pursuit of personal interests. Instead of applicable solutions to problems, she felt more engaged with theoretical explanations that were provided through undergraduate programming.

Although all the students we interviewed seemed happy with their transition decisions, they did encounter some challenges along the way. Students complained that the transition process was confusing and difficult to navigate. They said that it was sometimes unclear which courses could transfer over to their new programming, and that administrators sometimes had little information to support this process. Students acknowledged that while colleges provided transition support teams to students, these teams were sometimes understaffed. One student remarked that their program liaison was required to support many students across multiple programs and didn't have enough time to help everyone. Female students interviewed for this study also commented that they experienced discrimination in apprenticeship fields. The combination of these experiences meant that some students felt under supported through the transfer process and within their apprenticeship training.

## RECOMMENDATIONS

Given the information that was provided to us through interviews with postsecondary administrators and transfer students, we can make a number of recommendations to help support the transition process for students. First, it would be extremely helpful if there were greater awareness of a provincial database that provides information about the available transfer pathways between schools and the application of credits for those programs. Administrators sometimes complained that they were unable to provide students with information they needed about course transfer until after they had been accepted to the program. Students also complained that some administrators were unsure of which course credits could be transferred into their new academic programming. ONCAT already supports a website ([https://www.ontransfer.ca/index\\_en.php?page=exploring\\_options&sec\\_id=3](https://www.ontransfer.ca/index_en.php?page=exploring_options&sec_id=3) ) with some of this information available to postsecondary staff and students. Since the students and administrators we interviewed were unaware of this resource, more attention toward publicity and maintenance of this site might be helpful.

In addition to providing students with information about transfer pathways before they enroll in a new program, Canadian postsecondary institutions could take note of European apprenticeship programs with histories of institutional support. Because Canada has witnessed a decline in apprenticeship participation over the last decade (Statistics Canada, 2020), the expansion of apprenticeships into new technical sectors might be helpful. For example, Britain has developed apprenticeship programming that follows the growing knowledge economy (Sharp & Gibson, 2005). By offering apprenticeships in sectors like information technology and business

management, apprenticeship programming could better meet the needs of students here. Additionally, postsecondary institutions could better support students by taking on the responsibility of finding apprenticeships for students. In Germany, education institutions are responsible for building and maintaining relationships with companies that provide apprenticeship opportunities for students (Sharp & Gibson, 2005). Since difficulty finding and maintaining workplace relationships with apprentices was one of the biggest challenges administrators noted for apprenticeship students in Ontario, maintaining these relationships institutionally might be a more effective solution.

More guidance to pursue trades at the secondary education level should also be provided to students. Students who were transferring from university to apprenticeship programming commented that they experienced pressure to matriculate into an undergraduate degree rather than a trades program. Some students felt that choosing an apprenticeship program over an undergraduate degree was only for those who were less academically inclined. They noted that they had pursued a degree because they felt pressure to apply to university rather than college. Ontario guidance counselors and high school teachers could work to better demonstrate the benefits of apprenticeship programming for students. This might help dismantle the perceived stigma associated with trades programming among students. More work needs to be done to show students that the pursuit of trades programming is not an academic failure, but a valid postsecondary education choice.

This research demonstrates the challenges and benefits students experience in their postsecondary transfer processes into and out of apprenticeships. Despite difficulties, the

students we interviewed were overwhelmingly happy with their decisions to transfer schools. We believe that the enthusiasm they showed for their newfound programming and employment should inspire greater support for postsecondary transition pathways into and out of apprenticeships. Every student deserves to be enrolled in the academic program best suits their personal goals.



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## Appendix A: Administrative Interview Deductive Codes

Name	Code Type	Definition	Example
Common Challenges	Deductive Code	Common challenges Admin sees of students transitioning into/out of apprenticeship program	“So, if students are going from postsecondary institution to postsecondary institution that can cause issues with funding in terms of grants and OSAP.”
Common Benefits	Deductive Code	Common benefits transitioning Admin sees of students transitioning into/out of apprenticeship program	“I think the last piece in terms of the experience is that they have the applied skills and now they have an opportunity to gain both applied and theoretical skills.”
Institutional Support	Deductive Code	Types of transition or pre-program support provide by Admin’s institution	“I would say, ministry consultant, or counselors, they work directly with applicants. So when the student is registered as apprentice they get sponsored by the company, and they get in touch with ministry consultant.”
Institutional Shortcomings	Deductive Code	Types of transition or pre-program support that the Admin wishes their institution provided	“A guidance counselor or a transfer liaison person, that doesn’t exist right now. Our transfer students are just thrown into first-year stuff.”
Other Institution Support	Deductive Code	Programming that other institutions have that are supportive of transfer students	“They do a lot of what we call block transfers, and so they have a lot of agreements, basically, between themselves and other institutions.”
Transfer Reasons from Students	Deductive Code	Reasons students give admin for transfer	“I would say employment. They would get into their – you know, earning money quicker, instead of just being stuck with a high tuition fee and a kind of a not certain employment afterwards.”

Program Suggestions	Deductive Code	Suggestions from administrators for additional programs at their institutions	"I would love to have an apprenticeship to university booklet or something like that that I could give to students."
Student Suggestions	Deductive Code	Administrator suggestions for students interested in transferring programs	"I would definitely say like meet your program counselors, meet your professors, like be open and ask for help."

## Appendix B: Student Interview Deductive Codes

Name	Code Type	Definition	Example
Transition Challenges	Deductive Code	General challenges experienced by student transitioning into/out of apprenticeship program	“Exactly yeah, I don't have any relatives or friends who are in the field. So... I didn't otherwise know about it at all.”
Transition Benefits	Deductive Code	General benefits experienced by student transitioning into/out of apprenticeship program	“I’ve been able to continue working and it’s outside... it’s one of the draws for me with changing careers paths and going into this field was being able to work outside.”
Home-Life Challenges	Deductive Code	Home-life challenges experienced by student transitioning into/out of apprenticeship program	“I would say just definitely like work-life balance and just work-school balance, like just trying to manage my time.”
Academic Challenges	Deductive Code	Academic challenges experienced by student transitioning into/out of apprenticeship program	“Most of the preliminary work and everything is done through the ministry and they’re the gatekeepers for everything. So even if you thought you were going to school on a certain date, if the ministry hasn’t notified the school yet, they can’t even talk to you, they can’t even tell you what kind of books you’d need, nothing.”
Reasons for Transitioning	Deductive Code	Reasons student gives for transitioning into/out of apprenticeship program	“I’d say the group of people. I won’t get too much into that, but I wasn’t a big fan of a lot of the people there.”
Economic Challenges	Deductive Code	Economic challenges experienced by student transitioning into/out of apprenticeship program	“And that’s actually what kind of drew me away from the industry because I was working so hard, I had so much experience and it wasn’t really paying off like monetarily or the kind of like lifestyle I wanted to have.”
Economic Benefits	Deductive Code	Economic benefits experienced by student transitioning into/out of apprenticeship program	“Yeah I’m glad I did it. The hours are better, I mean the pay will be better when I’m done.”

Academic Benefits	Deductive Code	Academic benefits experienced by student transitioning into/out of apprenticeship program	“And like having that sort of trade training where it’s like a very hands-on experience.”
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