Changing Lanes:

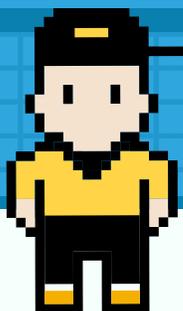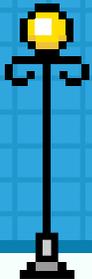## Understanding the Motivations of Ontario Students' College-to-University Pathways

Tianna Thompson | July 2023

LEVEL 2

START   GAMEOVER

UNIVERSITY

COLLEGE

Toronto Metropolitan University

the dais

Acknowledgements

Toronto Metropolitan University

the dais

Funded by

oncat

How to Cite this Report
Thompson, T. (2023, July). Changing Lanes: Understanding the Motivations of Ontario Students' College-to-University Pathways.
https://dais.ca

Author

Tianna Thompson

Policy Analyst

Tianna Thompson (they/them) is a passionate analyst working at the intersection of anti-racism and education. Their own lived experience makes them a committed advocate for other students and families marginalized by systemic oppression. Tianna has conducted and supported research for education stakeholders such as People for Education and the Ontario Secondary School Teachers' Federation (OSSTF). They also have experience facilitating youth programming and engaging a range of education leaders in anti-racism learning. Tianna holds a Bachelor of Arts in Sociology from McMaster University and a Master of Education from the Ontario Institute for Studies in Education at the University of Toronto.
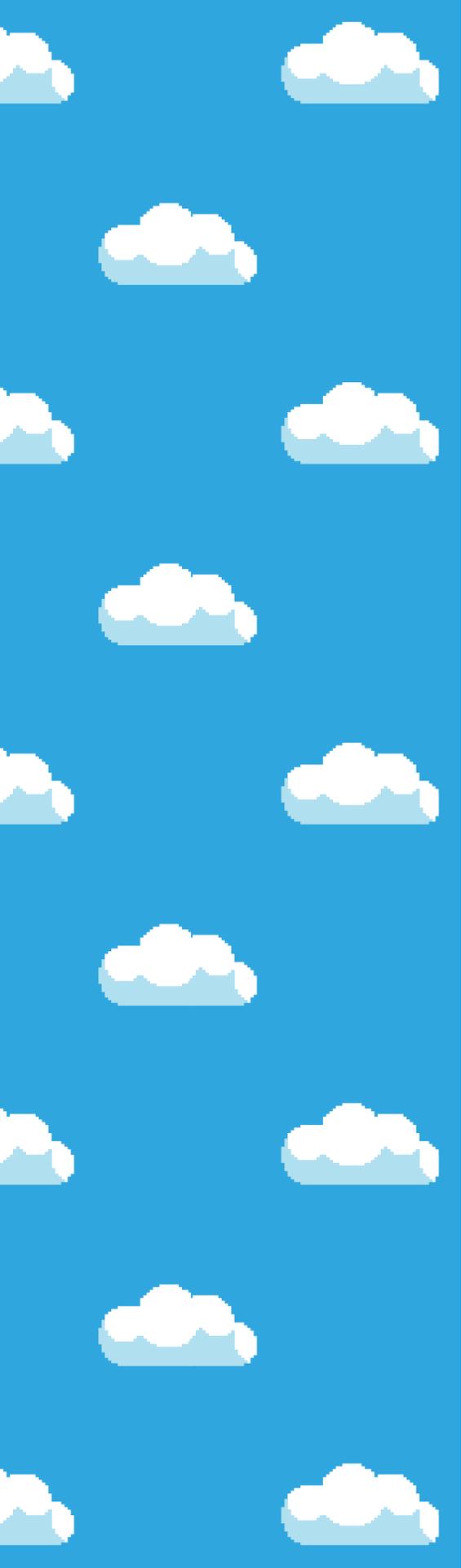
Table of Contents

1

Executive Summary

This project investigated the motivations of Ontario students who chose to undertake a college-to-university (CTU) post-secondary pathway, and attempted to better understand whether there are links between secondary school course selection and why and how students access CTU transfer pathways. Prior research has shown that Ontario university applicants with a previous college credential are more likely than their direct-entry counterparts to be Black, have a disability, come from a single-income or low-income household, and be the first person in their family to attend post-secondary education. Many of these same groups of students are disproportionately streamed into non-academic pathways in Grades 9 and 10 in Ontario. Through a survey of 300 CTU transfer students and semi-structured interviews with select transfer students, this report takes a deeper look at the experiences of these students and whether their post-secondary decisions were adapted in response to their prior experiences in the education system.

Key Findings

- **College-to-university students are more likely to come from groups underrepresented in university:** Ontario CTU students surveyed were significantly more likely to identify as Black or Latin American, and be from lower-income households.

- **Participants' motivations to pursue a CTU pathway were diverse:**
    - **Labour market influences:** The most common motivation cited for choosing the CTU pathway was that it was seen as a way to attain necessary skills to reach career goals, or to help participants upskill into other job sectors.
    - **Personal desire:** The desire to learn new insights, achieve personal goals, and rediscover career passions and fulfillment was a frequent motivation to pursue the CTU pathway.
    - **Pathway accessibility:** The CTU pathway was viewed as useful for students still navigating their personal and career goals and helpful to gain familiarity with navigating the post-secondary education system before entering university.
    - **Limited pathway options:** About one in five survey respondents indicated that college was the only post-secondary option available to them (e.g., were ineligible for or denied university admission).
    - **Other influences on college enrolment** cited were family/peer influences and a personal preference for college-style learning.

- **Importance of credit transfer:** 72 percent of survey respondents indicated that they had been offered transfer credits through an articulation agreement when they transferred from college to university, with rates higher among students under the age of 35 — perhaps suggesting an improvement in credit transfer over time. The presence of an articulation agreement significantly influenced decisions to pursue university studies.

- **Lack of guidance in the transfer process:** While undergoing the CTU transition, feelings of fear, doubt, and stress were commonly mentioned by interview participants due to the perceived lack of guidance for next steps, and lacking knowledge regarding matters like credit transfer and financial aid. Despite concerns regarding finances and additional time, most participants did not express regret in choosing their CTU pathway.

- **High school experiences greatly shape post-secondary decision-making, though high school course selection was not identified as the primary driver of college-to-university pathways:** There were no significant differences in the Grade 9 course selection patterns between college-to-university students surveyed and the overall population: about one in three students took applied or essential math and about one in four took applied or essential English. Most interview participants did not make causal linkages between their CTU pathway, secondary school course selection and academic streaming between applied and academic courses. The embeddedness of institutional streaming policies for students with disabilities and newcomer students, and the expression of low academic confidence illustrate the ways in which some participants may have unknowingly been impacted by these linkages.

2 Introduction

According to applicant survey data, Ontario university applicants with a previous college credential are more likely than their direct-entry counterparts to be Black, Indigenous, have a disability, come from a single-income or low-income household, and be the first person in their family to attend post-secondary education.[1] In alignment with literature on academic streaming (the institutional grouping of students based on percieved academic ability and/or prior achievement) in Ontario secondary schools, these same groups of students are disproportionately tracked toward non-academic pathways in Grades 9 and 10. While three-quarters of students in the Grade 9 academic stream transition directly to college or university, students on the applied pathway face significant barriers accessing post-secondary education, with less than one-third directly transitioning to college and just three percent to university.[2]

Purpose of Study

The purpose of this study was to investigate the motivations of college-to-university (CTU) transfer, and if academic streaming is perceived as an influence for why and how students access CTU transfer. While Henderson and McCloy's 2019 quantitative study[3] captures a fascinating statistical snapshot of demographics and trends of CTU transfer in Ontario, we saw an opportunity to contribute a deeper narrative of student transfer experience to these data.

Using a survey of Ontarians who have done a CTU pathway and following-up with semi-structured interviews, this research aims to explore the experiences of these students and whether those who may be disproportionately marginalized within Ontario's education systems are finding the need to adapt their academic pathways in response. In addition to exploring the connections between academic streaming and students' CTU transfer pathways, we consider the implications of the provincial Grade 9 de-streaming policy fully implemented in 2022 and how these changes may influence CTU transfer.

Research Questions

Using a province-wide survey (n=300) and semi-structured qualitative interviews (n=15) with CTU students in Ontario, the survey sought answers to the following research questions:

1. How, if at all, do CTU students connect their academic pathway to secondary streaming and course selection?

2. What implications might streaming, as well as provincial plans to de-stream, have on CTU transfer?

Students on the applied pathway face significant barriers accessing post-secondary education, with less than one-third directly transitioning to college and just three percent to university.

3

Literature Review

Academic Streaming

Academic "streaming" describes the process of dividing students into differentiated groups based on their perceived academic ability and/or prior achievement.[4] While streaming happens both formally and informally across grade levels in Ontario, entrance into secondary school in Grade 9 marked a more institutional effort to align students to courses of a particular academic "difficulty": academic, applied and essential or locally developed. The practice remains contentious due to its many harmful and disadvantageous consequences for marginalized learners — particularly Black students, Indigenous students, students with disabilities, students identified as English language learners, and students from low-income families.[5] Students belonging to these demographics are more likely to be streamed into non-academic courses where they often experience depressed achievement,[6] delayed graduation, and increased rates of drop-out.[7] Ontario's Ministry of Education describes the difference between applied and academic classes as the balance between "essential concepts and additional material" and "theory and application"; however, stigma associated with applied placement

has been shown to negatively affect students' self-perception and academic performance.[8]

The impacts of streaming become most salient in post-secondary pathway outcomes. Grade 9 students enrolled in non-academic courses rarely shift to academic tracks.[9] An overwhelming majority of students do not think about post-secondary education (PSE) pathways when making their Grade 9 course selections, but instead make more confident decisions about their post-secondary plans in Grades 11 and 12.[10]

In senior grades, applied and academic courses are prerequisites to college and university preparatory courses, respectively. Regardless of their post-secondary aspirations, the difficulty in switching streams by this time effectively closes off opportunities for applied-stream students to take the prerequisite courses necessary for university admission. Over 50 percent of students who take Grade 9 academic English and math transition directly to university and another one in five go to college. In comparison, for those who take applied English and math, less than one-third directly transition to college and just three percent to university.[11]

College-to-University and Direct Entry Pathways

Research has shown marked differences between the high school experiences of students applying for a CTU transfer and those who access direct entry (DE) into university. University applicants with a previous college credential, who make up about four percent of total university applicants, are more likely than their DE counterparts to be Black, Indigenous, have a disability, come from a single-income or low-income household, and be the first person in their family to attend post-secondary education.[12] These demographic characteristics mirror those of students disproportionately tracked toward non-academic pathways in secondary school.

In addition to a higher likelihood of having been streamed into applied courses, CTU students have been shown to earn lower levels of academic achievement than DE students – particularly in Grade 9 mathematics and English.[13] CTU students also experience delayed decision making when it comes to university aspiration and pursuit (Decock, 2006; Drewes et al., 2012).[14] In contrast, DE applicants typically come from the academic pathway and are more than twice as likely to decide to pursue university before graduating high school (Henderson and McCloy, 2019).[15]

Even among CTU students, Henderson and McCloy's (2019) study[16] points to a correlation between academic course enrollment in high school and timing of decision making to pursue university. Sixty-nine percent of CTU applicants who took mostly university preparation courses decided during or before high school that they would attend university. This held true for 51 percent of applicants who took a mix of university and college prep courses. However, this number fell to 28 percent for CTU applicants who came from non-academic pathways. Despite this delayed decision-making relative to their DE counterparts, Henderson and McCloy's (2019) research suggests CTU students tend to do quite well in university; they show higher rates of persistence than DE students and students who transfer from another university.[17]

College-to-university transfer remains a critical pathway for degree attainment in Ontario. Evidence suggests that students consciously map this pathway for a number of reasons, including a desire to pursue different career opportunities than those provided by a college diploma.[18] University graduates not only earn more, but show higher earnings growth five years after graduation relative to college diploma and certificate holders.[19] CTU transfer has been suggested as a way to mitigate inequitable access to university participation.[20] Turcotte (2018) argues "Ontario's colleges have positioned themselves as the springboard to every possible career and education beyond high school," acting as "a recovery ground" for inaccessible pathways.[21]

CTU transfer has been suggested as a way to mitigate inequitable access to university participation.

The findings of Henderson and McCloy (2019) shed light on a proportion of students who embark on a pathway reclamation of sorts by using CTU transfer pathways to pursue avenues made inaccessible to them in secondary school.[22] While the CTU pathway certainly can act as a "springboard" through which students can expand their post-secondary education access, this pathway begs the question: what role does academic streaming, as a mechanism of structural oppression and systemic disenfranchisement, play in CTU transfer? Furthermore, how many of Ontario's students are taking "the long-way 'round", using CTU transfer as a means of university pathway recovery?

4 Research Method

Using an online survey and semi-structured interviews, this research captured the secondary and post-secondary academic pathways of current and former CTU transfer students. This examination was used to investigate if, and to what extent, secondary streaming experiences influence why and how students access CTU transfer.

A survey of Ontario residents (n=300) was conducted in English by Abacus Data between August 16 and 26, 2022. A random sample of panellists were invited to complete the survey from a blend of panels on the Lucid exchange platform. To ensure a representative sample, respondents were recruited with quotas by gender and region, plus or minus five percent from their census representation (130-160 participants from the Greater Toronto Area; 65-95 participants from Central/Northern Ontario; 25-55 participants from Eastern Ontario;

and 20-50 participants from Southwestern Ontario; and between 135-165 respondents who identify as men and 135-165 respondents who identify as women). The margin of error for a comparable probability-based random sample of the same size is approximately +/- 5 percentage points, 19 times out of 20. Further information regarding the survey sample is available in the Appendix.

Respondents were asked a series of cascading questions to identify eligibility:

1. Did you attend high school in Ontario after 1995?

2. Are you currently or have you attended a university?

3. Before attending university, did you attend a college?

Respondents who met eligibility requirements of being a recent CTU student that experienced Ontario's academic/applied secondary course structure by answering yes to all three questions were asked an additional short series of questions to capture quantitative data on the role of streaming in their pathway (see questionnaire in the Appendix). These included questions on course enrolment in high school and motivations for their post-secondary pathway.

Respondents were also asked a series of demographic questions, and tests for significance differences (using a p-value of less than 0.05) across demographics were conducted, including gender, racial identity, income, generation, and disability (denoted with ↑↓).

The researcher then conducted 15 individual recorded interviews using an interview guide with consenting individuals who completed the survey that represented a diversity of experiences and perspectives. Interview data was gathered, transcribed, and analyzed using content analysis.

5 Survey Results

A representative survey of Ontario college-to-university students was conducted to better understand their high school and post-secondary pathways and motivations.

Demographics

The survey sample highlights how college-to-university pathways are disproportionately used by equity-deserving communities. For example, while five percent of Ontarians identify as Black, 14 percent of college-to-university students in our sample identified as Black. Likewise, five percent identified as Latin American, compared to less than two percent in the census (Table 1). This reinforces the findings of Henderson and McCloy that college-to-university applicants are more likely to be Black than direct-entry university applicants. Non-immigrants in Ontario who identify as Black have a university attainment rate of 20 percent, while non-immigrant Latin Americans have a university attainment rate of 17 percent, compared to 24 percent of non-immigrant non-visible minorities.[23]

The survey sample highlights how college-to-university pathways are disproportionately used by equity-deserving communities.

Table 1

Racial Identity of College-to-University Survey Respondents

	% of College-to-University Students	Ontario 2021 Census Proportion
White	53% ↓	63%
Black	14% ↑	5%
East Asian	9%	7%
South Asian	9%	11%
Latin American	5% ↑	2%

Table 2

Generation of College-to-University Survey Respondents

	% of College-to-University Students	Ontario 2021 Census Proportion
First generation (born outside of Canada)	28% ↓	34%
Second generation (born in Canada, at least one parent outside of Canada)	31% ↑	23%
Third generation or more (born and parents born in Canada)	40%	44%

The proportion of first-generation immigrants who pursued CTU pathways is less than the overall Ontario population, whereas the proportion who are second-generation immigrants is higher than the overall population (Table 2). Other literature has found that the post-secondary participation rate of first and second generation immigrants is higher than non-immigrants.[24]

The proportion who are in higher-income households is also significantly lower than the overall population: 24 percent of Ontario households have an income above $150,000 compared to just nine percent of the CTU sample, while 44 percent have incomes between $50,000 and $100,000, compared to 31 percent overall. This also reinforces the findings of Henderson and McCloy that college-to-university applicants are more likely to be lower-income than direct-entry university applicants, though this could also be a function of the lower average age of the survey sample.

Henderson and McCloy had found that CTU applicants were more than twice as likely to have a disability than direct-entry university applicants. The survey sample was inconsistent in this regard, with 16 percent of the sample identifying as having a disability compared to 20 percent of the working-age population in the latest count from Statistics Canada, though this could be in part a sample bias of an online survey.

Education Pathways

A majority (61 percent) of CTU students said they took all or mostly academic/university courses in high school (Table 3). About one in four (26 percent) said they took a mix of academic and applied courses, while 10 percent said all or mostly applied/college courses in high school.

Table 3

High School Course Selection of College-to-University Survey Respondents

	% of College-to-University Students
All academic/university	36%
Mostly academic/university	25%
A mix of academic/university and applied/college	26%
Mostly applied/college	7%
All applied/college	3%
Don't know	3%

Grade 9 Course Selection of College-to-University Survey Respondents

	Math		English	
	% of College-to-University Students	**Ontario Overall (Source: EQAO)**	**% of College-to-University Students**	**Ontario Overall (Source: EQAO)**
Academic	**68%**	**68%**	**74%**	**77%**
Applied/Essential	**32%**	**32%**	**26%**	**23%**

There were no significant differences in the Grade 9 course selection patterns between CTU students and the overall population. About one in three students took applied or essential math in Grade 9 from 2001 to 2011 — the same proportion as the survey sample. Likewise, about one in four took applied or essential English in Grade 9, which tracked closely to the survey sample.

Table 5

Motivations of College-to-University Survey Respondents

	To Attend College	To Later Attend University
My desired career required [college/university] training	41%	47%
I needed additional training or education	-	43%
I always wanted to go to [college / university]	37%	39%
Financial accessibility	32%	-
It was the only post-secondary education option available to me (e.g., I was ineligible for, or denied, university admission)	18%	-
I was not ready or did not want to enter the workforce	16%	15%
Other	3%	0%

Respondents were asked about their motivations for originally pursuing college, and then their motivations for later attending university. About four in ten indicated their pathway choice was driven by the need for training that aligned with their desired career. A further 37 percent of respondents said they always wanted to go to college, and 39 percent said they had always wanted to go to university. One in three respondents said they were motivated to pursue college for financial accessibility. About 18 percent cited that they first pursued college because it was the only post-secondary option available to them. Finally, about one in six said their pathway selections were motivated by feeling not ready or not wanting to enter the workforce.

Students who took all applied/college courses were more likely to say they always wanted to go to college (44 percent), less likely to say they always wanted to go to university (33 percent) and more likely to say the reason that they pursued university was they needed additional training or education (56 percent).

Transfer Experience

Just over 72 percent of respondents indicated that they had been offered transfer credits through an articulation agreement,[25] when they transferred from college to university. The presence of an articulation agreement significantly influenced decisions to pursue university studies: 26 percent said it influenced their decision completely; 39 percent quite a bit; 27 percent slightly; and only seven percent not at all.

Rates of the use of articulation agreements were consistent between regions across the province and demographics, with the exception that younger students were more likely to say they had used an agreement. About 74 percent of those under the age of 35 said they had been offered transfer credits, compared to 67 percent of those aged 36 and above — perhaps indicating an improvement in the ability of credit transfer over time.

The presence of an articulation agreement significantly influenced decisions to pursue university studies.

6 Interview Findings

The aim of the interview phase of this study was to more deeply understand students' experiences of the CTU pathway and how, if at all, they connect this PSE pathway to secondary streaming and course selection.

To respond to this research query, the analysis considers related questions such as:

- How aware are participants of the academic streaming processes present in their secondary school experiences?

- What factors influence the CTU pathway?

- What do CTU students identify as barriers to achieving their post-secondary goals?

- What motivates college students to pursue university studies after earning their college credential?

- What are students' experiences of CTU transfer?

Influences on College Enrolment

Family Influence

Participants most often identified social expectations and/or familial influence as driving factors to their initial college enrolment. Familial influence was sometimes expressed through explicit encouragement to make the decision to pursue college, or being made aware of the option and expressing interest after witnessing a family member attend college.

> **"**
>
> I think my sister influenced me to go to college. She's 10 years older. She was doing a lot of schoolwork and [commuting]. [When she decided to] live on campus I was like, "Woah!" One time I got to see her apartment on campus. It was kind of cool."

> **"**
>
> I told my parents what courses I was taking and they just threw me into [the] academic [stream] without me realizing…until later on, and I [thought] I might as well continue with it."

Other participants shared their experiences with social pressures to pursue post-secondary education, stating their peers' natural decision to attend college after high school and their desire to fit the social norm, as an incentive to pursue college.

> **"**
>
> My mom [said I was] doing ECE because [my] friends are doing ECE and that wasn't the [reason] I was doing it in the first place. She wasn't willing to help me and my dad… doesn't live with us. [But]…this is what you were supposed to do –– go to college after you graduate high school. That's what you're supposed to do…I felt like if I didn't go to college with everybody, I would be a failure."

Preference for College Learning

Participants also noted that their decision to initially attend college was based on their assessment of their learning style and overall accessibility. From feeling more comfortable attending college before university, enjoying smaller class sizes, affordability, to college being conducive to their learning styles, participants had their own assessment of what they desired in their education, and what factors were required to succeed. The following reflections exhibit each participant's underlying reasons used to assess their comfort with their decision to attend college.

> **"**
>
> College, because back then, [it] was more practical. I found [the] student ratio wasn't as high – it's very low. And you were, like, more involved. There's more, I guess, group projects. There's a lot more hands-on things versus other places that I went to."

“

Yeah, that's one of the reasons that I wanted to go to college first – I wanted to save a little money for university.”

“

I felt like I was more into hands-on learning at a slower pace…”

“

I wasn't really good in the classroom when it came to [some] things, but when it came to things that were hands-on [that] I could visually do, see, and I was excited about – it was different for me.”

Others noted their personal learning styles and accommodations needed to succeed, with some highlighting their perceptions of the difficulties associated with entering university versus college, as a barrier.

“

I chose college because I thought it's going to be a little easier and smaller than a university. Because I kind of thought you had to be really, really smart to get into university. And I'm not super, super smart. I have a learning disability so it's kind of hard.”

Beyond sharing the difficulties around entering university straight from high school, some participants also determined college to be a stepping stone for university, feeling they would be better prepared for workloads, and personal and logistical planning, by entering college first.

“

I chose college because I thought it's going to be a little easier and smaller than a university. Because I kind of thought you had to be really, really smart to get into university. And I'm not super, super smart. I have a learning disability so it's kind of hard.”

Limited Pathway Options

A few participants cited other reasons leading to having limited pathway options after high school. Insufficient high school grades to enter university, experiencing schooling without accommodations for learning disabilities, and personal life circumstances were cited as reasons for limited pathways.

> Yeah, there was also a stigma where, if you're not an A-plus student, you don't belong in university. And I wasn't like THE student. But I wasn't highly academic in the sense of certain things. So there was that stigma as well, university probably at that time wasn't the right path."

> It was just something right after high school. Everyone either went to college or university and my grades weren't the greatest. I was kind of a slacker in grade 12. So I only got into college. So I just went to college."

> But no, I went straight to it, it was very hard because I had a daughter young, so I didn't have much freedom."

One participant used college as an avenue to complete their high school education, by doing college part-time.

> For me when I chose to do college, I looked online, it's that I had to go to college part-time when I was in adult education schools, I didn't really finish the traditional high school. Most of my courses were before that. Most of my courses were essential and one or I think one of my classes was applied because of English."

Insufficient high school grades to enter university, experiencing schooling without accommodations for learning disabilities, and personal life circumstances were cited as reasons for limited pathways.

Motivations for Pursuing CTU Pathways

Motivations toward CTU pathways were due to a variety of factors, including the influence of the labour market and professional development, personal desires to pursue further education, and the relative accessibility of the college-to-university pathway.

Labour Market Influences and Professional Development

Many participants noted the labour market's influence and a desire for professional development as their major driving force to pursue CTU pathways. For some, the pathway to pursue their desired careers required specific skills and training that could only be achieved through supplemental university education.

> For theatre, I wanted to get out in the world of acting, and I graduated high school 2004 ish. At least a lot of the time there, everyone was like, if you want to go to university, it's [very] theoretical. So you'd go to university to become a professor or a teacher type of thing in the arts or English. If you want to go and do actual acting and get into the field, you go to college because it's more practical. That was usually the deciding factor and then I had people ahead of me that I knew that went to college for theatre arts and they recommended doing the same thing. So that's kind of the way I went."

Other participants looked to upskill or attain emerging skills to enter different job sectors. The following reflection shows support by an employer to upskill in order to switch into other roles as a reason to pursue CTU pathways.

> I did have a summer job or contract then and it was like an admin assistant but they were also looking for someone to grow their IT department. So it kind of helped. Then they were also encouraging me in that job to go into [...] HR."

Personal Desire

A shared sentiment among multiple participants was the personal desire to pursue further education, in order to learn new insights, achieve personal goals, and rediscover career passions. While some were driven by their personal interests to learn and expand their knowledge in different fields, others chose to explore other academic fields as a way to find fulfillment in their work. The following reflections reflect the deep personal desires that drove participants to pursue the CTU pathway.

> So after my university, I worked for a telecommunications company for quite a while, [...] worked for PR firms as well and it's just exhausting, so it's very tiring. So [...] my

body was just not having it. So [I was] like, okay, I'm gonna take a year off. And then I was kind of feeling down too. So I was having a little depression. I didn't feel fulfillment in my work. One day, my mom's like, 'Oh, why don't you just go back to volunteering.' So I started volunteering teaching English to seniors. And then that's when I think I found my calling for community work. So then I went back to university, and did my social service work and now I'm working around the community. That's my true calling, I think."

"

I just like studying new insights. So I just wanted to increase my business knowledge."

"

I just keep on learning and help those people I can on my road of recovery."

One participant boldly shared their personal desire to pursue further education without social pressures, and without the intention to attain a higher salary.

"

For my own personal gain, I mean, I didn't do it for higher salaries or anything. I mean, same with university, wasn't about the money, was mostly [to] do it for me like I don't do it for my parents or anything. It's all what I want to do, if I want to do it that day, I go for it. And nobody can change my mind or tell me to go take this course. I do what's best for me. And what's the cause? Like I get a calling and I just go for it."

College-to-University Pathway Accessibility

The relative accessibility of the CTU pathway was also a motivating factor to many participants. The university degree pathway was mentioned to seem more attainable after going to college, treating college as a stepping stone to understand both a participant's personal desires and goals better, and to get familiar with the CTU pathway and system before entering university.

Participants also identified the benefits of credit transferability, with some stating the support they were given by going to college first, in terms of understanding the credit transfer process, and by being made eligible for the university degree pathway by first taking some college courses. The examples below share a common theme of participants who saw the benefits of credit transferability to achieve their career goals, treating this as their motivation to consider the CTU pathway.

"

I wanted to get a career in [archaeology] and people who work in museums [...]. So, I wanted to get those extra credits so that I can actually go to an actual [university]."

"

Yeah, so the college credits really helped me to get to university. [...] because someone said they're really similar, so [the college courses] will help me."

A report by ONCAT (2013) shows that CTU students have higher cumulative GPAs than DE students and higher rates of persistence when articulation agreements grant a significant number of transfer credits (ONCAT, 2013)[1].

The CTU pathway's accessibility was also shared as a motivation by some participants, as they were able to gain familiarity with post-secondary education options, as well as increase some certainty about their areas of interest. Many participants voiced uncertainty about what fields to pursue after high school, and saw college as a natural next step, before committing to the university degree pathway.

---

1 ONCAT, Summary of ONCAT-funded pathways and transfer research.

Reflections on Practices and Impacts of Academic Streaming

Most participants did not make causal linkages between their CTU pathway, secondary school course selection, and academic streaming. Many CTU students expressed uncertainty about whether or not streaming had impacted their pathway. It is interesting to consider how this may relate to participants' memory recall, familiarity with academic course selection processes, and/or internalized beliefs that learners have about themselves.

The following reflections from participants illuminate the ways in which academic streaming processes are embedded within, and normalized by, institutional streaming policies impacting students with disabilities and newcomer students.

" I was always in a special needs program up until Grade 9 when I had to [move to] a regular [classroom] setting. That's when I really chose my courses…it's the locally developed courses that I usually took."

" I had just come from Jamaica… [the school decided] I wasn't able to speak English properly [and] moved me to ESL. …so right from there, I was already separated … I came here and I was supposed to be in grade seven, they put me in Grade 6 right away."

One of the more covert ways streaming impacts students is the role it plays in shaping learners' core beliefs about their intellectual potential. While many participants proudly identified with a hands-on learning style, they simultaneously held the belief that it precluded them from being a suitable candidate for university. One participant shared that her Grade 9 course selection was heavily influenced by her prior achievement in kindergarten through Grade 8. As a result, her academic confidence plummeted and she was on a pathway that she described as "college-bound".

" [By] Grade 10 and Grade 11 that's where I started slowly understanding…if I want to go to university when I graduate, I need to take academic/university courses. [Taking academic level courses] was one of my goals, but I wasn't really shooting the highest because I…didn't feel like I was good enough for a university at first … Going into college I felt like it was more hands-on. Like there was a slower pace for me to understand things."

Another participant discussed his fear about not being successful in a university setting. Again, expressing low academic confidence in learning environments believed to be less "hands-on" and more theory heavy.

"

What I did was more...hands-on, so I guess college is more of that thing and to my knowledge, I guess university [is] more theoretical at times." … "[I'm trying to get] rid of the [fear of pursuing university]. There's a lot of doubt in me right now. I don't really feel like I can achieve [my] goal."
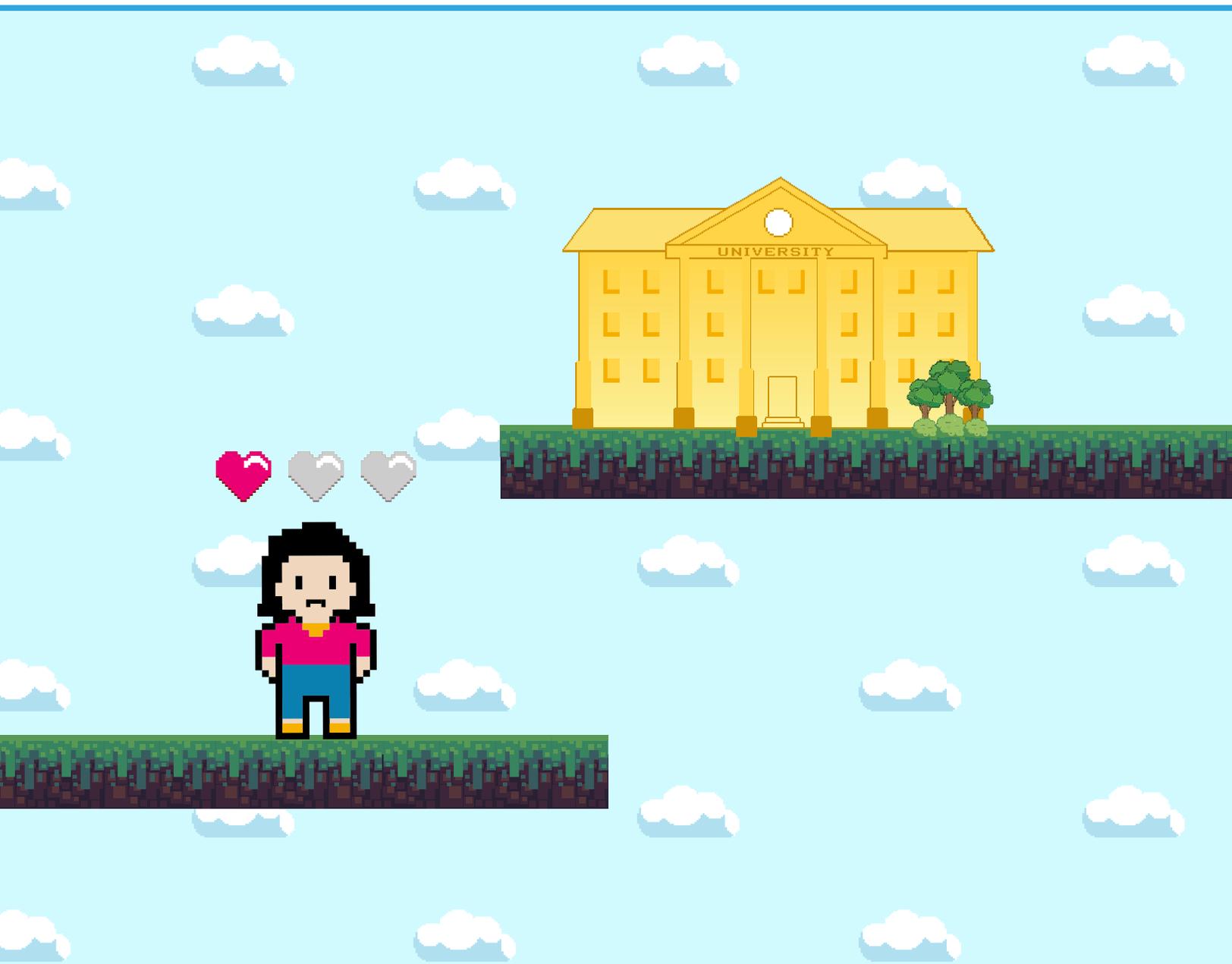
CTU Transition Experiences

Challenges

Amidst transitioning from college to university, challenges such as uncertainty regarding the next step to take, the lack of guidance, and lacking knowledge regarding matters like credit transfer and financial aid were all common themes among participants. Many also expressed feelings of stress, fear, and doubt while preparing for the transition.

"

[I'm trying to]…[get] rid of the scare. There's a lot of doubt in me right now [and] I don't really feel like I can achieve the goal."

One participant noted that the style and depth of guidance that they desired was not provided by college guidance/advising staff.

"

They didn't really give us guidance on what university to go to though. And just more of like 'okay, here's a heads up if you do want to apply for some of these courses will apply for your transfer credits.'"

Others, despite being advised by staff, felt that the credit transfer process did not benefit them greatly due to the few number of credits they could transfer to university.

"

Before the first year of university. I went to the guidance counsellor. And because the programs weren't really related, they didn't really give me much credit. I think they gave me like, I forget how the credit system worked. But it basically wasn't even a year, it was just a few credits, so it didn't make any difference really."

Without the support of guidance counsellors/advisors and other adequate support, one participant noted feeling lost in the processes and being

unprepared on how to fill out applications, the credit transfer process, and applying for financial aid.

> I feel like if you don't know what you're doing, if you're not readily prepared, and when I mean, I didn't even know how to apply for college. I had to have someone tell me okay, this is what you need to do. Like I had no idea, there was no preparation for it. And now that I know how to do it, it's a lot easier. Even the transferring of credits over to university that was like, I felt that was difficult too and even trying to get financial aid. I was like, lost in all the application."

A number of participants also mentioned personal life circumstances that arose during the transition from college to university, leading to delays or the inability to continue with the decision to pursue further education.

Dreams of Direct Entry

When participants were asked whether they would have preferred to pursue university as a direct-entry student, most of the participants expressed appreciation and valued their CTU pathway choice. Although there were concerns regarding finances and additional time taken to complete their education, participants did not regret their decision to pursue college before university. Several participants foresaw that they might have been dissatisfied with their decision, had they decided to apply for university first.

> [University] kinda sounded boring at first… if I had gone to university [and made] these big decisions, I think I would have felt more stressed out and unhappy as well."

Others noted the preparation college provided, lessening the stress that might have been incurred.

> Nah, it would have been a little tough. Yeah, because [college] gave me a little insight about the program."

Overall, participants were able to see the benefits behind their choice for the CTU pathway, for both their careers, as well as their personal life circumstances.

7

Conclusion

The objective of this project was to provide a deeper understanding of the profiles, motivations, and experiences of college-to-university transfer students. This work is critical to understanding the influence of systemic inequities that restrict student opportunity and agency in choosing and navigating their academic pathway, and to inform whether changes to secondary course structures may influence rates of post-secondary transfer or mobility.

CTU students are more likely to come from groups underrepresented in university, such as those who identify as Black, Latin American and from lower-income households. The findings show that while the motivations and influences of participants to pursue the CTU pathway are diverse and tied closely to career aspirations, the impact of an individual's experiences in the education system prior to post-secondary education have a major impact on their future education and career decisions. There also remain challenges embedded in the education system that are widely experienced throughout the transition process such as a lack of guidance when making post-secondary decisions, which need to be further addressed to better support students at all education stages.

Complex connections between secondary school course structures and post-secondary pathways have significant implications for education policy and practice, as well as labour market outcomes. About one in five of those who went to college and later to university indicated that college was the only post-secondary option available to them at the time they applied to college. Ontario has since mandated a single-stream format for Grade 9 courses beginning in September 2022, while streaming will remain in place in upper years moving forward. It remains to be seen whether this change may alter rates of secondary enrolment in university or college preparatory courses, or reduce the number of students who feel their post-secondary options are limited and instead take different pathways.

This project addresses a gap in existing research about the impacts of academic stratification through streamed course selection in post-secondary pathway formation. Provincial policy and programming must continue to understand and acknowledge the needs of all students, in order to provide equal opportunities to students in the education system, recognizing its significant long-term impacts on their futures.

Appendix 1: Survey Questionnaire

Q1. Are you currently or have you in the past attended a university in Ontario? [Yes/No]

Q2: [If Yes to Q1] Before attending university, did you attend a college in Ontario? [Yes/No]

Q3: [If Yes to Q2] Did you attend high school in Ontario after 1995? [Yes/No]

Q4: [If Yes to Q3] What level of Grade 9 English did you take? [Academic/Applied/Essential/Not sure]

Q5: What level of Grade 9 Math did you take? [Academic/Applied/Essential/Not sure]

Q6: In general, what course levels did you take in high school?

- All Academic/University
- Mostly Academic/University
- A mix of Academic/University and Applied/College
- Mostly Applied/College
- All Applied/College
- Not sure

Q7: What motivated you to pursue college? (Select all that apply)

- I always wanted to go to college
- My desired career required college training
- Financial accessibility
- It was the only post-secondary education option available to me (e.g., I was ineligible for, or denied, university admission)
- I was not ready or did not want to enter the workforce
- Other reasons: please specify

Q8: What motivated you to later attend university? (Select all that apply)

- I always wanted to go to university
- My desired career required university training
- I needed additional training or education
- I was not ready or did not want to enter the workforce
- Other reasons: please specify

Q9: Did your college program offer university transfer credits through an articulation agreement? (e.g., If you applied to university after successfully completing your college program, you would be granted advanced standing in an undergraduate program) [Yes/No/Don't know]

9b) [If yes to Q9] To what degree did the presence of an articulation agreement influence your decision to pursue university study?

- Not at all
- Slightly
- Quite a bit
- Completely
- Not sure

Q10: How old are you? [drop down]

Q11: Do you self-identify as: (select all that apply and/ or specify, if applicable)

- Arab, Middle Eastern or West Asian (e.g., Afghan, Iranian)
- Black
- East Asian (e.g., Chinese, Koran, Japanese, etc.)
- Indigenous, that is First Nations (Status/Non-Status), Metis or Inuit
- Latin American
- South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
- Southeast Asian (e.g., Filipino, Thai, Vietnamese, etc.)
- White
- Not listed – please specify [text box]
- Prefer not to say

Q12: Were you or your parents born outside of Canada? (select all that apply)

- I was born outside of Canada
- One or both of my parents were born outside of Canada
- No
- Prefer not to say

Q13: Do you identify as having a disability? [Yes/No/ Prefer not to say]

Q14: What is your gender? [Man/woman/non-binary or third gender]

Appendix 2: Survey Sample

	#	%
Total	**300**	**100%**
Man	153	51%
Woman	143	48%
Non-binary/third gender	4	<1%
Age 25 and under	90	30%
Age 26 to 30	54	18%
Age 31 to 35	58	19%
Age 36 to 40	40	13%
Age 41 and above	58	19%
Born outside of Canada	83	28%
Born in Canada, at least one parent outside of Canada	93	31%
Born and parents born in Canada	119	40%
Less than $35,000 household income	31	10%
$35,000 to $50,000	42	14%
$50,001 to $75,000	67	22%
$75,001 to $100,000	65	22%
$100,001 to $150,000	63	21%
Over $150,000	27	9%
Arab, Middle Eastern or West Asian	13	4%
Black	41	14%
East Asian	28	9%
Indigenous	11	4%
Latin American	15	5%
South Asian	27	9%
Southeast Asian	11	4%
White	159	53%
Identify with a disability	48	16%
Northern Ontario	8	3%
Southwestern Ontario	44	15%
Greater Toronto and Hamilton Area	100	33%
Toronto	110	37%
Eastern Ontario	38	13%

Appendix 3: Interview Questionnaire

1. Could you first share with me about your post-secondary journey? Where and what did you study?

2. Can you tell me more about what motivated you to pursue college?

3. Tell me more about your experience transitioning from college to university?

4. Were there barriers in the way of you achieving your desired post-secondary goals?

5. What do you know about academic streaming?

6. Do you think academic streaming impacted your post-secondary pathway?

7. Would you have preferred to pursue university as a direct entry student?

8. How, if at all, did your parents, peers, or teachers influence your post-secondary pathway decisions?

9. Is there anything else you would like to share with me about your education experiences?

References

1 Henderson, Claire and Ursula McCloy. From Application and Beyond: Tracking Aspirations, Motivations, Experiences, and Outcomes of Ontario's Transfer Students. Ontario Council on Articulation and Transfer (ONCAT), 2019. https://oncat.ca/sites/default/files/media-files/2016-10_oncat_-_from_application_and_beyond_-_final_report_-_2019_revised.pdf.

2 Brown, R.S. and G. Tam. Grade 9 Cohort Post-secondary Pathways, 2011-16. Fact Sheet 3. Toronto: Toronto District School Board, November 2017.

3 Henderson and McCloy, From Application and Beyond.

4 Segedin, Lauren. "Listening to the Student Voice: Understanding the School-related Factors that Limit Student Success." McGill Journal of Education 47, no. 1 (2012): 93-107. https://mje.mcgill.ca/article/download/8777/6800/0.

5 Follwell, Tianna and Sam Andrey. "How To End Streaming in Ontario Schools." Ontario 360. https://on360.ca/policy-papers/how-to-end-streaming-in-ontario-schools/

6 People for Education. Roadmaps and Roadblocks: Career and Life Planning, Guidance, and Streaming in Ontario's Schools. People for Education, 2019. https://peopleforeducation.ca/wp-content/uploads/2019/02/Roadmaps_roadblocks_WEB.pdf.

7 Parekh, Gillian. Structured Pathways: An Exploration of Programs of Study, School-Wide and In-School Programs, as well as Promotion and Transference across Secondary Schools in the Toronto District School Board. Toronto: Toronto District School Board, 2013. https://www.tdsb.on.ca/Portals/research/docs/reports/StructuredPathways.pdf.

8 Boaler, Jo, Dylan Wiliam and Margaret Brown. "Students' Experiences of Ability Grouping: Disaffection, Polarisation and the Construction of Failure." British Educational Research Journal 26, no. 5 (2000): 631-648. https://www.jstor.org/stable/1501995.

9 Oakes, Jeannie. Keeping Track: How Schools Structure Inequality. New Haven: Yale University Press, 2005.; People for Education. Annual Report: Ontario's Schools: The Gap Between Policy and Reality. People for Education, 2015. https://peopleforeducation.ca/wp-content/uploads/2017/10/P4E-Annual-Report-2015.pdf. ; Social Planning Toronto. Still Streamed: How High Impact Decisions are Shaping Students' Futures. Social Planning Toronto, 2017. https://assets.nationbuilder.com/socialplanningtoronto/pages/1728/attachments/original/1541612433/Streaming_Report-September-v1.1-web.pdf?1541612433.

10 Council of Ministers of Education. An Examination of Barriers to Pursuing PSE and Potential Solutions. Canada: Council of Ministers of Education, 2009. https://www.cmec.ca/Publications/Lists/Publications/Attachments/196/EKOS-FINAL-16-03-09-An-exam-of-barriers-EN.pdf.

11 Ontario School Information System for Grade 9 students in 2010-11; graduation determined at five years as of 2014-15; direct post-secondary enrolment as of 2015-16 as reported by Ontario College Application Service and Ontario University Application Centre; Brown and Tam (2017). Grade 9 Cohort Post-secondary Pathways, 2011-16. Fact Sheet 3.

12 *Henderson and McCloy, From Application and Beyond.*

13 Walters, David, Rob Brown, Gillian Parekh, Dylan Reynolds, and Trisha Einmann. Postsecondary Borrowing Patterns and Graduation among Transfer Students in Ontario: The Role of High School Academic Performance. Toronto: ONCAT, June 11, 2021. https://oncat.ca/sites/default/files/media-files/1_-_postsecondary_borrowing_patterns_and_graduation_among_transfer_students_in_ontario-compressed.pdf.

14 Decock, Henry G. A Case Study Analysis of Ontario CAAT Graduates who Transfer to a University. PhD Diss., University of Toronto, 2006. https://tspace.library.utoronto.ca/bitstream/1807/67416/1/Decock_Henry_G_2006_PhD_thesis.pdf. Drewes, Torben, Karen Maki, Kris Lew, Michelle Willson, and Kent Stringham. An Analysis of CAAT Transfer Students' Academic Performance at Trent University. Peterborough: Trent University, 2012. https://oncat.ca/sites/default/files/research/2012-18-FINAL-REPORT-Analysis-CAAT-transfer-students-academic-performance-Trent.pdf.

15 Henderson and McCloy, From Application and Beyond.

16 Ibid.

17 ONCAT. Summary of ONCAT-funded pathways and transfer research. ONCAT, 2013. https://oncat.ca/sites/default/files/inline-images/oncat-research-summary-2013-english.pdf.

18 Gorman, Glen, Connie Phelps, and Robert Carley. Exploring the Success and Challenges of Diploma to Degree Transfer Students. Kitchener: Conestoga College, 2012. https://oncat.ca/en/projects/exploring-successes-and-challenges-diploma-degree-transfers.

19 Finnie, Ross, Michael Dubois, Masashi Miyairi, Steven Tobin, Tony Bonen and Behnoush Amery. How Much Do They Make? New Evidence on the Early Career Earnings of Canadian Post-secondary Education Graduates by Credential and Field of Study. Ottawa: Education Policy Research Initiative and Labour Market Information Council, 2019.

20 Kerr, Angelika, Ursula McCloy, and Shuping Liu.. Forging Pathways: Students who Transfer between Ontario Colleges and Universities. Higher Education Quality Council of Ontario, 2010. https://heqco.ca/pub/issue-paper-no-4-forging-pathways-students-who-transfer-between-ontario-colleges-and-universities/.

21 Turcotte, Devon. Factors Affecting Post-Secondary Pathway Choices. Master's thesis, Royal Roads University, 2018. https://viurrspace.ca/bitstream/handle/10613/6507/Turcotte_royalroads_1313O_10543.pdf?sequence=1.

22 Henderson and McCloy, From Application and Beyond.

23 2021 Census

24 Statistics Canada. (2019). Socioeconomic Outcomes of Immigrants Attached to Canada as Children, 2019. https://www150.statcan.gc.ca/n1/daily-quotidien/220203/dq220203b-eng.htm?CMP=mstatcan.

25 "An articulation agreement is a contract between two or more institutions of higher learning that allow students who have completed a specific program at one institution to be assigned specific advanced standing credits in a specific program at another institution". University of Guelph. "Articulation Agreements | Undergraduate Academic Information Centre (UAIC)." Accessed July 7, 2023. https://www.uoguelph.ca/uaic/articulation-agreements.