

# Transferability Expectations and Realities: Predictors of Success and Satisfaction from Student Transfer Experiences

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### Executive Summary

Ontario has been decisive in driving recognition of prior learning, and so it is appropriate to better understand institutional responses to this direction. This report summarizes the current state of credit transfer and Prior Learning Assessment and Recognition, collectively referred to as Recognition of Prior Learning (RPL), at Centennial College. The topic of Ontario RPL is particularly important in light of an increasing number of students accessing credit transfer pathways, as well as continued use of course-to-course transfer credit and Prior Learning Assessment and Recognition (PLAR) applications.

Examining the RPL mechanism through the student experience lens is important. While institutions will mindfully and with purpose create, sometimes, robust information dissemination and support systems, occasionally such systems fail to adequately serve those for which it was intended. Using expectation-reality gaps as a barometer of student experience helps Centennial College on two fronts: 1) front end information dissemination and expectation management, and 2) back end support services.

This study uses a mixed methods design of pre-post surveying, focus groups and interviews to address three questions:

- 1) What expectation-reality gaps exist for incoming Centennial College RPL students (awarded credit and benefits; resources, sources and support; and policies and procedures)?
- 2) Does the first term academic progression affect students' satisfaction and attitudes regarding program and RPL experiences?
- 3) What aspects of RPL affect RPL success, satisfaction with the RPL process and Centennial College satisfaction?

A non-probability convenience sample was collected from the 417 RPL students across the fall, winter and summer cohorts of 2014-15. In total, 140 students (34%) completed the pre-survey and 98 of the 140 students (70%) completed the post-survey. Twenty-seven students participated in focus groups and interviews. Chi-square analysis was used to compare respondent data (from surveying) and population data (from college records), and this determined that the respondent group sample is representative of the population.

The demographic profile of an average Centennial College student is one who is classified as a domestic student in their 20s and enrolled in a diploma program. The average student will have attended 1 prior postsecondary institution, applies for 1-2 transfer credits with varying success rates across schools—School of Community and Health Studies students are most successful.

Centennial College RPL students experience an increased perceived understanding of credit transfer and PLAR from an offer of admission to the end of their first term. A significant difference was found for understanding of transfer credit between these two time periods: 60% of students have an understanding of transfer credit and its policies at offer of admission, and this jumps to 93% at the end of the first term. The same significant trend is observed with PLAR, albeit less pronounced. Comparatively, students have a much better initial understanding of transfer credit than PLAR.

For the most part, the respondents report that they prefer to apply for transfer credit at the beginning of their program and are satisfied with the amount of credit they receive—students state

that they consider it a validation of their prior learning. However, PLAR applicants show some uncertainty or dissatisfaction with the lack of credit they receive—perhaps attributable to only having a mediocre understanding of PLAR and its policies. Those who do receive credit, students claim they were able to reduce their course load, which resulted in them having more free time to focus on their other courses and employment.

While the data show evidence of students' developing realistic expectations in some areas, there are multiple occurrences of statistically significant gaps between expectations and realities. Student expectations noticeably fall short for those who expect more than three transfer credits and those who expect PLAR credit. Sizeable (10%+) expectation-reality gaps also exist across numerous other variables: reduced course load benefit, reduced educational costs benefit, additional time for employment benefit, clear information regarding eligible transfer credits, assistance with understanding RPL decisions, assistance managing the RPL file, program advising and assistance with grade calculation.

Many students stated that they had to research on their own to determine how the transfer credit application process worked, with the majority of students finding information via the Centennial website or through contacting a Centennial College staff member. Some students who spoke with a Centennial College staff member found that they received inconsistent information and were often sent to speak with more than one staff member.

The majority of students expected that a transcript and course outline would be required in order to demonstrate completion of similar course content, however, international students and students who had been away from post-secondary school for a greater length of time, stated difficulties in obtaining a course outline. Many students cite the secondary submission of a transcript to be unnecessary if they submit the same one for admission purposes.

Once students completed their transfer credit application using the online application system, they expressed their gratitude over the streamlined process, ease of use and quickness of the online system. Many students stated that they received a transfer credit decision anywhere from 2 days to 2 weeks, which was much faster than they had expected.

In regards to RPL process satisfaction, respondents find the process fair (59%), quick (61%) and clear (55%). Students do not experience a change in opinion on these three facets of satisfaction across the first term, suggesting that movement through the RPL process bears no effect. RPL students are overwhelmingly satisfied with Centennial College (78%) and their program (82%).

The researchers also sought predicting factors related to RPL success and satisfaction. The only significant predictor found for RPL success was the perceived fairness of the process. Despite findings from Arnold and Woodhead (2015) that credit transfer understanding plays a role in RPL success, those findings were not replicated in the analysis of the three 2014-15 cohorts.

Interestingly, satisfaction with the RPL process revealed two significant predictors. First, success rate has an effect on satisfaction; a likely explanation is that a higher success rate yields a narrower expectation-reality gap and leads to a more satisfying experience. Second, perceived quickness of the RPL process is also a predictor of satisfaction. This may be explained by students' past experiences with slow, bureaucratic processes at other educational institutions.

This study also aggregated data between the 2013-14 cohorts from Arnold and Woodhead (2015) and the 2014-15 cohorts for this study. This leads to a data set that is approximately double in size,

and thus may produce more predictors through regression analysis. The aggregate data set offers two predictors for RPL success: Ontario PSE credential and FQC. For predicting RPL credit satisfaction, post-awareness of transfer credit and FQC are predictors of satisfaction.

The analysis yields predictors of college satisfaction as well: clarity and program satisfaction. It is possible that students look to clarity of information and overall opinions of their program as a means to gauge Centennial College quality—and by extension satisfaction with the institution.

A few recommendations arise from the results that pertain to Centennial College RPL policy and practice. While these recommendations are specific to Centennial College, other colleges would be welcome to consider similar adoptions to their own institutional practices. All efforts should be undertaken to maintain a process that is fair, quick and clear:

- *Consistent Decision-Making:* A fair process requires consistency on at least two fronts. One, decisions must be consistent with posted standards (e.g. 80% affinity). Two, decisions must be consistent across applicants. Ability to achieve this consistency hinges on clear, published criteria for assessment along with robust transfer credit assessment training for all staff. While Centennial currently does both to some degree, it is suggested that the college revisit this and look to see how consistency can be further improved.
- *Policies and Procedures:* Administrators should change policy to allow students to use two courses from their previous institution to apply for one transfer credit at Centennial. This would allow students to apply for more transfer credits when one course alone does not meet 80% affinity.
- *Increase Initial Support:* Centennial now has dedicated pathway advisors to provide advice and guidance to prospective Centennial students. Between these advisors and the dedicated advisors for incoming students, there is great capacity for initial RPL support to be improved, including the promotion of ONTransfer.ca's course transfer function, so that students can make more accurate choices when applying for transfer credit. In order to accomplish this, RPL staff experts need to transfer knowledge and expertise to these student-facing advisors.
- *Further Automate Processes:* Centennial has an online transfer credit application system that allows students to upload transcripts and outlines; this same system allows faculty to assess applications and render decisions. However, many students cite frustration with having to upload transcripts after already providing them as part of their college applications. The college and students would both benefit from streamlining of transcript submissions, as well as incorporation of PLAR self-assessments into the online system.
- *Access to Other Institution Outlines:* While this is more of a system-wide recommendation, students find it challenging to find course outlines for courses previously taken at other institutions. The Ontario PSE system should consider developing a central repository of outlines/syllabi that is accessible for college staff and students.

A satisfying experience for students seems to hinge most on FQC. An RPL process that is fair, quick and clear promotes satisfaction with the RPL process. Perhaps most importantly for college consideration, a fair, quick and clear RPL process appears to promote satisfaction with the college itself.

## Glossary

This report uses the same glossary as in Arnold and Woodhead (2015):

- *Credit transfer* refers to the overarching system of transferring credit.
- *Transfer credit* refers to the awarding of course credit for previously completed credit obtained at a recognised postsecondary institution (Centennial College, 2014).
- *Prior Learning Assessment and Recognition (PLAR)* refers to the process that gives adult learners the opportunity to gain credit for formal, non-formal and/or informal learning. Learners follow a process that allows them to identify, describe and demonstrate past learning that was obtained through a collection of study, life and work experiences (Centennial College, 2014).
- *Recognition of prior learning (RPL)* is an all-encompassing term that refers to all advanced standing, credit transfer, and prior learning assessment and recognition processes. Central to RPL processes are the assessments of prior learning in an effort to evaluate the learner's sufficient demonstration of learning outcomes (Centennial College, 2014).
- *Expectations* refer to students' self-reported RPL anticipated outcomes.
- *Realities* refer to administrative data and students' self-reported RPL experiences that occurred within the first term.
- *Population* refers to all students across the Fall, Winter and Summer 2014-15 cohorts who met the selection criteria and were therefore eligible to participate in the distributed surveys.
- *Respondents* refer to those students who completed a minimum of 85% of both the pre- and post-surveys.
- *Reduced course hours* refers to the credit hours associated with courses awarded transfer credit and/or PLAR.
- *RPL success rate* refers to the fraction of transfer and PLAR credits awarded relative to the amounts for which students applied.



### Introduction

Postsecondary education (PSE) institutions have positioned themselves as support systems for lifelong learning. Alongside the lifelong learning trend is the emerging pressure to better recognise the prior learning of students. While the academic merits of minimising learning redundancies are occasionally challenged by concerns regarding quality, Ontario has been decisive in its movement towards maximizing credit recognition while attempting to maintain quality—the two ought not be mutually exclusive.

For five years, Ontario has established and grown robust support in an effort to answer this call for greater system efficiency. The PSE system continues to enjoy a period of extensive credit transfer growth (ONCAT, 2015; ONCAT, 2014). This growth takes the form of numerous bilateral and multilateral partnerships among a diverse group of postsecondary education institutions, greater acceptance of course transfer credit and a renewed focus on Prior Learning Assessment and Recognition (PLAR).

This, in turn, has led to enhancement of credit transfer (and less so PLAR) resources across PSE institutions. What is less known is how students experience credit transfer within the institution, and even less is known about how this is experienced from university to college or college to college. As much credit transfer and PLAR occurs at the beginning of the program, conceivably this may adjust student perceptions of their college experience.

Examining these experiences may offer important findings for PSE stakeholders: What does a credit transfer experience look like after many years and ongoing credit-transfer investments, are there relationships between Recognition of Prior Learning (RPL) and Key Performance Indicators (e.g., college satisfaction, program satisfaction), and what has been done correctly and what needs to be improved regarding RPL policies and practices?

This research study investigates student-held RPL expectations and realities while also exploring relationships between two layers: transfer experience and satisfaction. By investigating this topic, the researchers hope to:

- 1) Provide a contribution to the discourse on RPL in Ontario that has practical applicability and is empirically rigorous;
- 2) Nurture discussion at Ontario colleges regarding available RPL supports and how they could be better tailored for student need and demand; and
- 3) Offer important considerations for Centennial College as it continues to enhance its RPL policies and practice.

### Purpose of the Study

The purpose of this research is to investigate the incoming transfer student experience between offer of admission and end of first term at Centennial College. Most specifically, this study seeks to measure and explain the following within the context of credit transfer and PLAR: student expectations, realities, self-adjusted perceptions and satisfaction.

Findings from this research may offer support to both researchers and practitioners for further study. There is scant research on student credit transfer experiences and even less so in an Ontario college context that also includes PLAR. Also, there is little research that employs interpretive

statistical analysis to explore relationships between RPL experience variables and, separately, RPL success, RPL satisfaction and college satisfaction.

While the findings are not intended to be extrapolated to the system level, the researchers believe this study can initiate important policy and process discussions at the system, institutional and program levels in exploring ways to enhance RPL service and student success in a manner that maximises student satisfaction.

### **Research Questions**

This research extends from the Arnold and Woodhead (2015) examination of transferability expectation-reality gaps and corresponding relationships with satisfaction and RPL success. This project has been designed to address the following questions:

- 1) What expectation-reality gaps exist for incoming Centennial College RPL students (awarded credit and benefits; resources, sources and support; and policies and procedures)?
- 2) Does the first-term academic progression affect students' satisfaction and attitudes regarding program and RPL experiences?
- 3) What aspects of RPL affect RPL success, satisfaction with the RPL process and Centennial College satisfaction?

Findings from this study are hoped to offer important insights into the Centennial College transfer student experience. The results of this study are intended to inform further policy and process enhancements at Centennial College. This research has not been designed for results to be scalable across the Ontario postsecondary system.

### **Institutional Context**

Centennial College is the oldest publicly funded college in Ontario, having operated since 1966. The college offers a wide range of programming, including certificates, diplomas, advanced diplomas, graduate certificates and baccalaureate degrees, across four campuses and additional learning sites. In 2014-15, the college hosted approximately 19,681 full-time students from over 130 different countries, making Centennial one of the most diverse postsecondary institutions in all of Canada.

Credit transfer and PLAR are loosely coupled at Centennial College into one mechanism: RPL. Significant reforms have been made to policies, procedures and processes at Centennial to better support student self-assessment and advocacy for recognising their prior learning; the reforms include an online application system and student PLAR self-assessment against course learning outcomes.

Effective Spring 2016, Centennial College will be implementing a new service called *Centennial Advising and Pathways Services*. As part of this service enhancement, college advisors will take on more professional advisor responsibilities; in turn, it is expected that professional advising quality and capacity will increase.

Offering high-quality pathways for advising and peer mentoring, including on matters of transfer credit and PLAR, will be among the aims of this endeavour. This aligns with four of the seven recommendations from Arnold and Woodhead (2015); specifically, increase initial support, further automate and streamline processes, improve RPL staff visibility and expertise, and integrate peer mentoring into RPL advising.

### Review of Arnold and Woodhead (2015)

Arnold and Woodhead (2015) explored transferability expectation-reality gaps and searched for links between these gaps, RPL success and RPL satisfaction.

Student expectations, which are developed in advance of attending the institution, are a determinant of RPL satisfaction (British Columbia Council on Admissions and Transfer, 2012; DeCock, McCloy, Liu, & Hu, 2011). Understanding expectation formation is, thus, critical to properly understanding relationships between student expectations, realities and effects on satisfaction. Arnold & Woodhead (2015) draw from the literature three main tenets of a satisfying transfer experience (Andres, 1999; Arnold, 2012; BCCAT, 2012; Handel, 2006; Laanan, 1996; Roksa & Keith, 2008; Townsend & Wilson, 2006; Usher & Jarvey, 2012): 1) clear and accurate information, 2) robust pathway support services, and 3) improved transfer opportunities and processes.

*Expectancy theory*, which belongs to the behavioural psychology discipline, is used by the authors in developing a conceptual framework to explain student expectation formation, how students navigate through realised expectation-reality gaps and resultant impacts on perceptions of the system. This theory is rooted in the work of Victor Vroom (1964), who employs a psychological perspective in explaining that, as conscious agents of action, we establish expectations and choose action based on an iterative and cyclical process of creating, assessing and revising perceptions, attitudes and beliefs in an effort to maximise pleasure (i.e. benefit) and minimise pain (i.e. damage).

Arnold and Woodhead (2015) explain that each individual student will move through this process, navigating in a way that is meaningful to themselves, with the intent of minimising learning redundancy. In their findings, the authors draw the following conclusions:

1. Students' understanding of credit transfer and PLAR improve throughout the first term, more comprehensively with the former than the latter;
2. The main perceived benefits of RPL are reduced course load and limited learning redundancy. Students have unmet expectations regarding tuition reimbursement for reduced full-time course load;
3. Primary sources of information for RPL include the college website, on-campus staff and social networks;
4. Students accurately predict the amount of transfer credit they will receive and strive for a high transfer-credit-application success rate; conversely, students overestimate the amount of PLAR credit they will receive;
5. Students have high levels of satisfaction with program and college choice, RPL process fairness, and RPL process quickness;
6. Students have a descending level of satisfaction across the first term with RPL clarity and straightforwardness;
7. Predictors of satisfaction with RPL credit received include RPL success rate, RPL process fairness and RPL process quickness; and
8. Predictors of RPL success rate include prior understanding of Ontario PSE and credit transfer.

The authors complete their report by offering seven recommendations: increase initial support, further automate and streamline processes, centralise RPL support, improve staff visibility and expertise, incorporate peer mentoring, revise policies and manage expectations.

## Methodology

This study employs Arnold and Woodhead's (2015) research design to capture students' expectations and realities while exploring relationships between resultant gaps and satisfaction. This design employs both quantitative (i.e. pre-test survey questionnaire, post-test survey questionnaire and college administrative data) and qualitative (i.e. focus groups and interviews) methods.

A non-probability convenience sample was taken from among Centennial College students who applied for transfer credit or PLAR during their first term of study, which could be either a fall, winter or summer intake. The pre- and post-test survey questionnaires were designed to measure indicators derived from the literature as being facets of a quality RPL experience and/or having an impact on student expectations, realities or satisfaction related to RPL (e.g. sources of RPL information, understanding of RPL policies/processes and RPL satisfaction).

Centennial College Research Ethics Board (REB) approval was secured prior to conducting this work, and all modifications to the study throughout its entirety were also approved by the REB.

### Recruitment

Students recruited to participate included: 1) first-term students, 2) students who submitted a transfer credit or PLAR application, and 3) students who stayed enrolled through the first term in a certificate, diploma, advanced diploma, graduate certificate or baccalaureate program. These students were identified by student number and were sent an email invitation to participate (Appendix A).

The research study comprised a three-stage design (see Figure 1):

1. Pre-survey: Students were sent an invitation to participate in a pre-test survey questionnaire (Appendix B), consented to participate, and respondents completed the survey through FluidSurveys, were informed of post-test survey questionnaire and had an opportunity to consent for post-survey follow-up.
2. Post-survey: Pre-survey respondents who consented to follow-up were invited to participate (Appendix C) in a post-test survey questionnaire (Appendix D) and had an opportunity to consent to focus group or interview follow-up.
3. Interviews/focus groups: Interested respondents were invited to participate in focus groups or interviews (Appendix E) and were scheduled accordingly; a protocol was established to help facilitate semi-structured focus groups and interviews.

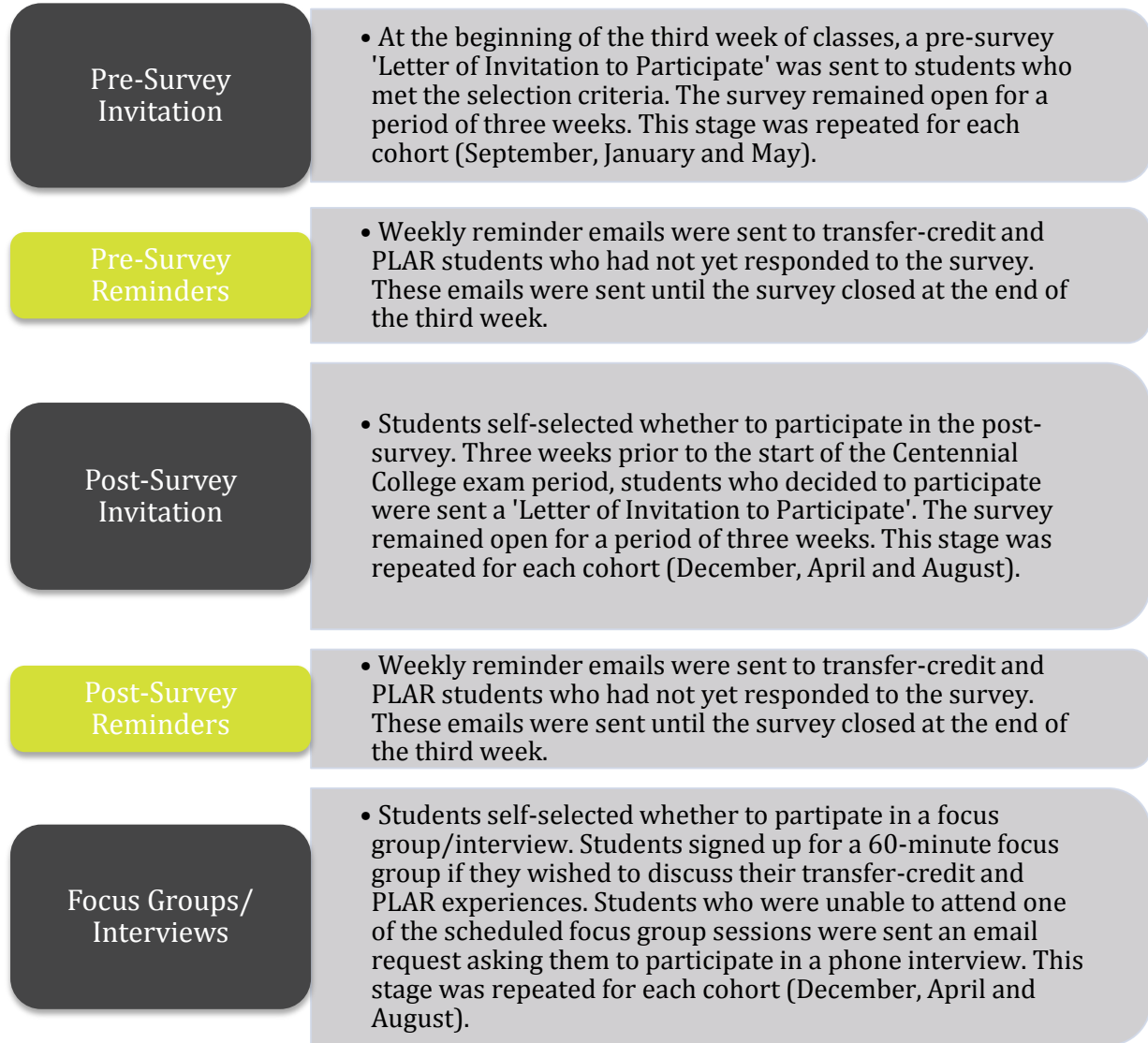
### *Consent and Incentives*

Respondents were fully informed prior to participation and provided explicit consent by ticking a box before survey access. For focus groups and interviews, consent was procured via written confirmation, and all participants were made aware that they were being audio recorded. Confirmation of confidentiality was delivered to all respondents prior to their participation.

Incentives were provided to all respondents, in an effort to recognise that their time and effort was valued. For survey participation, students received raffle tickets for a tablet. There was subsequently one winner at the end of the research study. For participation in the post-test survey questionnaire, respondents also received a \$15.00 Tim Horton's gift card. For participation in the

focus group or interview, which lasted approximately 60 minutes, each respondent received a \$20.00 cash honorarium.

Figure 1 | Three-Stage Design Summary (from Arnold & Woodhead, 2015)



**Data Collection and Analysis**

Quantitative data were derived from three sources: 1) administrative data (i.e. *Banner by Elucian* system of record), 2) the pre-test survey questionnaire and 3) the post-test survey questionnaire.

Administrative data were collected in order to test whether the respondent group was representative of the population. The administrative data consisted of demographic information, program of study and approvals of RPL applications.

Pre-test and post-test survey questionnaire data were collected via FluidSurveys. Data were cleaned in FluidSurveys and Excel, and they were exported to SPSS along with the corresponding codebook. In a few instances, students did not complete all questions. For interval questions, missing data were replaced with mean scores. For Likert-scale questions, median values were assigned to missing data. All data analyses (e.g., cross-tabulation, cross-validation and regression analysis) were completed using SPSS.

Qualitative data were derived from two sources: 1) focus groups and 2) interviews. Interviews were only completed by respondents who were unable to attend scheduled focus groups. Audio recordings of these sessions were transcribed and then codified and assessed for emergent themes and trends using the Arnold and Woodhead (2015) method.

### Data Collection Summary

The following is a summary of all data collected for the purposes of this research study (Table 1):

- 98 pre- and post-survey matches were attained from a population of 417 students;
- The pre-test survey response rate was 34%;
- The post-test survey response rate was 70%;
- 27 students participated in focus groups and interviews; and
- No respondents chose to withdraw from the research study.

Table 1 | Data Summary

	<b>Cohort I Fall</b>	<b>Cohort Winter</b>	<b>II Cohort Summer</b>	<b>III Total</b>
<b>Population</b>	258	132	27	417
<b>Pre-Survey Respondents</b>	82	49	9	140
<b>Post-Survey Respondents</b>	56	36	6	98
<b>Focus Groups and Interviews</b>	15	10	2	27

**Results**

Throughout this analysis, *population* refers to all students across the Fall, Winter and Summer 2014-15 cohorts who met the selection criteria and were therefore eligible to participate in the distributed surveys. This was determined by taking administrative data from the system of record of anyone who applied for transfer or PLAR credit. *Respondents* refers to those students who completed a minimum of 85% of both the pre- and post-surveys.

*Demographic Profile*

A series of demographic variables has been used to make comparisons between the respondent and population groups: age, gender, domestic/international status, time passed since secondary school, program credential and school (Table 2).

The table presents the percentage of various respondents' demographics in comparison to the population. The percentage comparison gives only a rough estimation, but it does not test the hypothesis as to whether respondent profiles are different or similar to the population. To achieve this objective, a chi-square contingency table is applied in the analysis.

A chi-square analysis of respondents and population demographics are used to test the hypothesis that respondents represent the population (Table 3). A comparison of the respondent and population frequencies in the demographic profiles (i.e. age, gender, status, time passed since secondary school, program credential and school) is completed with chi-square analysis. As the table shows, none of the demographic parameters of the respondents are significantly different from those of the population.

The RPL population averages 27 years of age, and the average age of the respondents is 26. Figure 2 suggests that respondents have a greater percentage in the 25-29 age group compared to the population. However, the chi-square analysis shows no statistically significant difference [ $\chi^2(df = 4) = 2.64, p = .62$ ]. In terms of mean ages for the respondents ( $M = 26.13, SD = 6.38$ ) and population ( $M = 26.64, SD = 7.38$ ), the t-test indicates that there is no difference ( $t = 0.63, p = 0.53$ ).

Figure 2 | Age Distribution

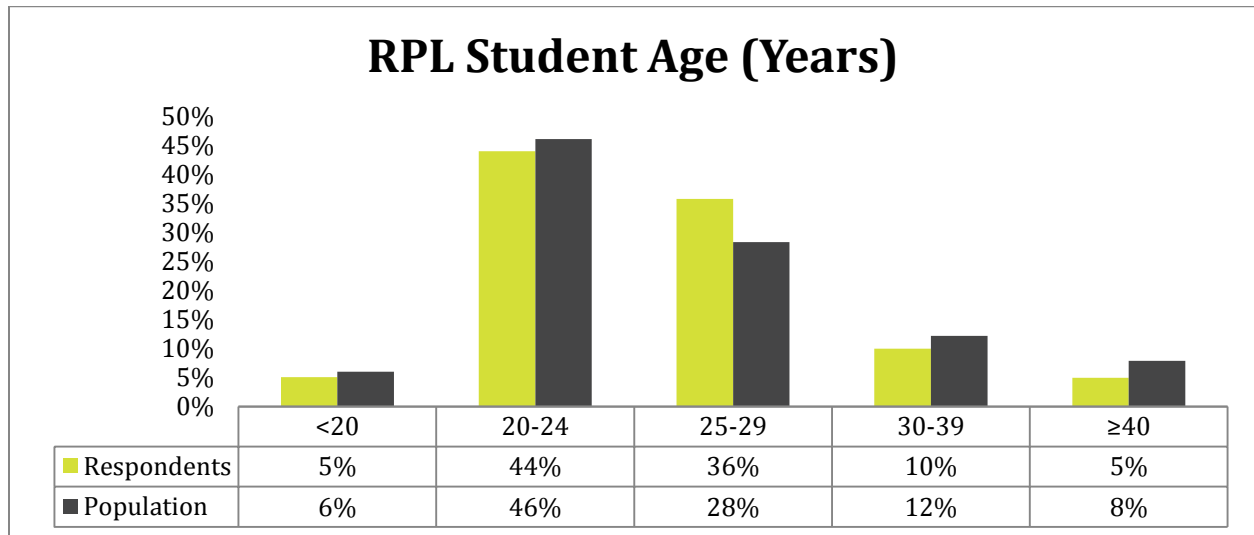


Table 2 | Demographic Comparisons

	Respondent	Population
<b>Gender</b>		
Male	42%	40%
Female	58%	60%
<b>Average Age (Years)</b>		
<20	5%	6%
20-24	44%	46%
25-29	36%	28%
30-39	10%	12%
>40	5%	8%
<b>Status</b>		
Domestic	89%	83%
International	11%	17%
<b>Average Time Passed Since Secondary School (Years)</b>		
<1		
1-2	0%	1%
3-4	14%	20%
5-9	16%	21%
>10	53%	46%
	17%	12%
<b>Program Credential</b>		
Centennial Certificate	1%	2%
Ontario College Certificate	3%	10%
Ontario College Diploma	52%	48%
Ontario College Advanced Diploma	20%	19%
Ontario College Graduate Certificate		
Ontario College Baccalaureate	23%	19%
Bachelor of Nursing (Centennial-Ryerson)	0%	1%
	1%	1%
<b>School</b>		
Advancement	0%	1%
Business	14%	17%
Community and Health Studies	59%	48%
Communications, Media and Design		
	2%	3%
Continuing Education		
	1%	2%
Engineering Technology and Applied Science	23%	25%
Hospitality, Tourism and Culinary Arts		
Transportation	0%	3%
	1%	1%

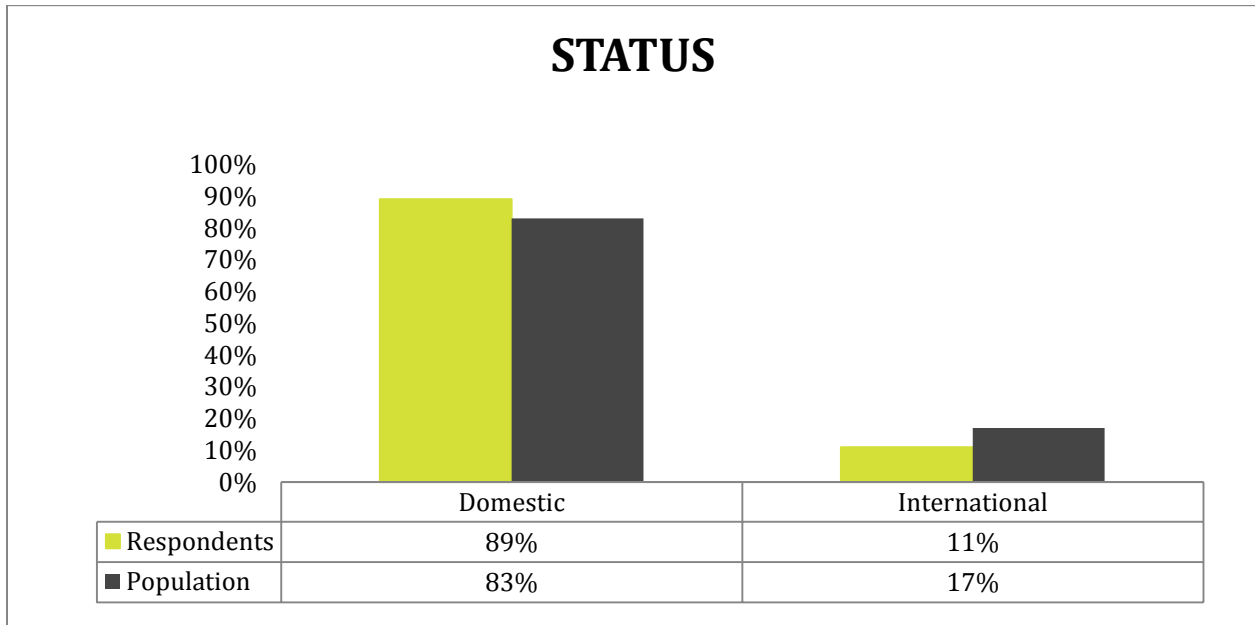


Table 3 | Chi-square Analysis: Demographic Variables

Variable	X <sup>2</sup>	p-value	Degrees of Freedom
Age	2.64	.62	4
Gender	0.72	.40	1
Status	2.00	.16	1
Time Passed Since Secondary School	3.48	.32	3
Program Credential	5.31	.26	4
School <sup>1</sup>	5.12	.16	3

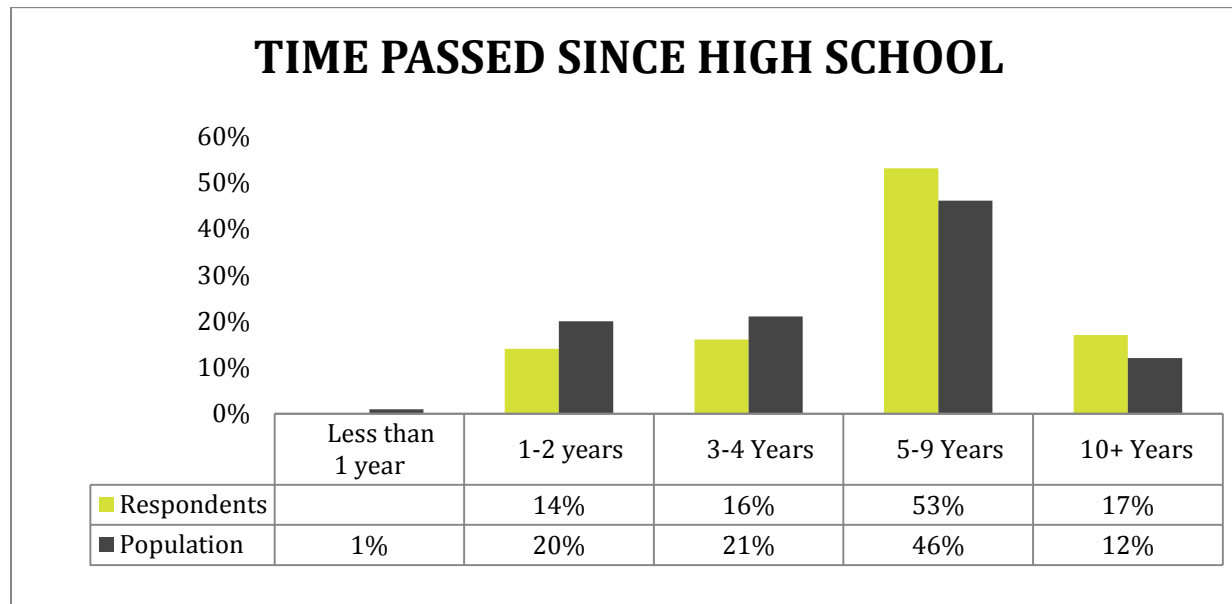
The vast majority of transfer-credit applicants have domestic status, while also showing subtle differences between the respondent and population groups for domestic and international students (Figure 3). There may be a lower number of international students who apply for transfer credit because they need to submit a credential evaluation with their application which is an extra step and there is a cost associated with it. In focus groups, international students did mention the credential evaluation as a being a barrier for them. The chi-square analysis suggests no significant difference between these two subgroups [ $\chi^2(df = 1) = 2.0, p = .16$ ], so we can state that the respondent group is representative of status.

Figure 3 | Status Distribution



<sup>1</sup> Only Business, Community & Health Studies, and Engineering Technology & Applied Science were tested, as these schools account for 94 of 98 respondents and the remaining schools' respondent subgroups are too small to test.

Figure 4 | Time Passed Distribution



There are no participants in the category of less than 1 year, and only 1% of the population falls into this category. To overcome the limitation of the  $\chi^2$  test, this category is combined with the “1-2 years” group. Approximately half of students who applied for RPL have been out of high school for 5-9 years and almost 80% have been out of high school for at least 3 years (Figure 4). This is to be expected as students need to either possess post-secondary credit or have relevant experience to apply for RPL. There is no statistically significant difference [ $\chi^2$  (df = 3) = 3.48, p = .32] between the respondents and the population.

College Diploma Program students represent the highest ratio of RPL applicants, followed by the College Graduate Certificate, College Advanced Diploma and Ontario College Certificate (Figure 5). Categories with a small number of participants are consolidated to test the hypothesis; thus, the Bachelor of Science Nursing, College Baccalaureate and Centennial College Certificate programs are combined into one category to facilitate the  $\chi^2$  testing. Again, no statistically significant difference is observed between the respondents and the population [ $\chi^2$  (df = 4) = 5.31, p = .26].

The last component of the demographic profile is the school of study, which reveals the School of Community and Health Studies to host the largest number of RPL students, both in the respondent group and the population. Fifty-nine percent of respondents and 48% of the population are attending this program (Figure 6).

Since there are no respondents from the School of Advancement and School of Hospitality, Tourism and Culinary Arts, these categories are combined with the School of Transportation and School of Continuing Education for hypothesis testing. The school of study analysis was thus reduced to four categories, among which there is no statistically significant difference [ $\chi^2$ (df = 3) = 5.12, p = .16].

Figure 5 | Program Credential Distribution

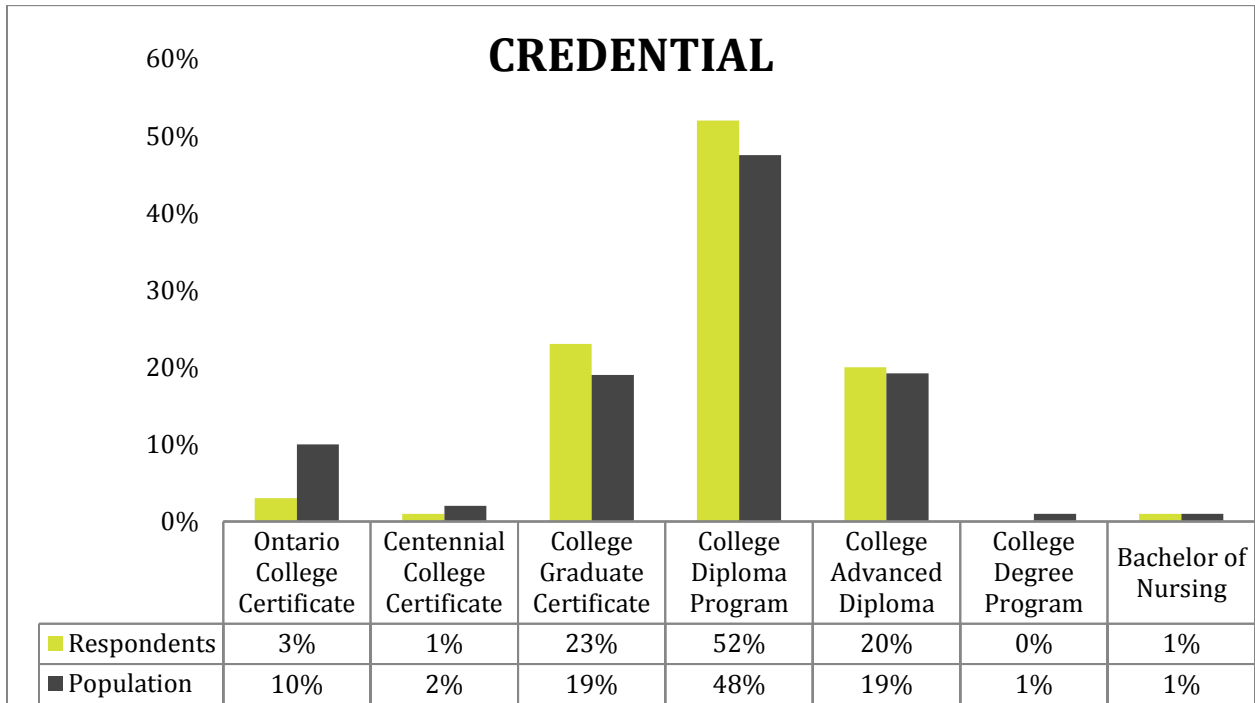
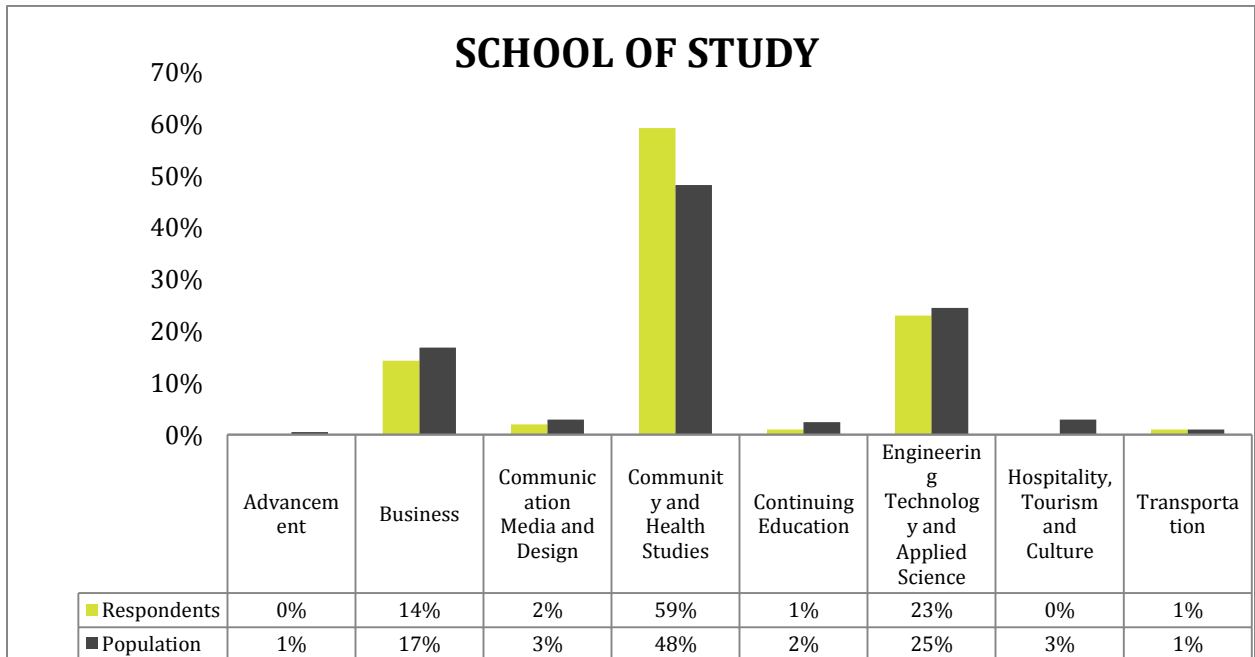


Figure 6 | School Distribution



*Prior Postsecondary Education and RPL Credit*

Comparisons are also conducted between the respondent group and the population regarding prior postsecondary education and number of RPL credits (Table 4). Almost all respondents had some postsecondary education prior to joining Centennial College; 32% had attended an Ontario university and 26% an Ontario college (Figure 7). About 10% to 13% of respondents indicated that they attended university or college outside Ontario, 9% attended an international college and 3% were former international university students.

Table 4 | Previous Postsecondary and RPL Credit Comparisons

Previous Postsecondary Education	Respondents	Population
<b>No answer</b>	7%	12%
<b>College - Ontario</b>	26%	32%
<b>College - Out of Province</b>	10%	12%
<b>College- International</b>	9%	3%
<b>University - Ontario</b>	32%	19%
<b>University - Out of Province</b>	13%	15%
<b>University - International</b>	3%	7%
<b>Number of PSE Institutions</b>		
<b>No PSE Institution</b>	7%	12%
<b>One PSE Institution</b>	63%	63%
<b>Two PSE Institutions</b>	29%	24%
<b>Three PSE Institutions</b>	1%	1%
<b>Transfer Credit(s) Application (average)</b>		
<b>0</b>	3%	3%
<b>1</b>	40%	42%
<b>2</b>	18%	19%
<b>3</b>	14%	12%
<b>4</b>	9%	9%
<b>5</b>	4%	3%
<b>≥6</b>	12%	12%
<b>Transfer Credit(s) Awarded (average)</b>		
<b>0</b>	21%	32%
<b>1</b>	40%	35%
<b>2</b>	13%	13%
<b>3</b>	12%	8%
<b>4</b>	5%	4%
<b>5</b>	2%	3%
<b>≥6</b>	7%	5%
<b>PLAR Credit(s) Application</b>		
<b>0</b>	95%	96%
<b>1</b>	4%	3%
<b>2</b>	1%	1%
<b>3</b>	0%	0%
<b>PLAR Credit(s) Awarded</b>		
<b>0</b>	97%	99%
<b>1</b>	2%	1%
<b>2</b>	1%	0%
<b>3</b>	0%	0%
<b>Reduced Course Hours</b>		
<b>0 Hours</b>	23%	34%
<b>1-50 Hours</b>	36%	30%
<b>51-100 Hours</b>	13%	16%
<b>101-150 Hours</b>	15%	9%
<b>151-200 Hours</b>	4%	4%
<b>&gt;200 Hours</b>	9%	7%

It is noted here that about 30% of respondents indicated that they had previously enrolled in more than one postsecondary institute. Chi-square analysis of the respondent records and the admin database shows no statistically significant difference [ $\chi^2$  (df = 6) = 9.49,  $p = 0.15$ ], suggesting that the categories of population in the administrative database are fairly well represented by the respondents (Table 5). Perhaps surprisingly, most students only applied for one transfer credit and did not apply for PLAR. In testing whether the respondent group is representative of the population, a chi-square analysis is used for testing the null hypothesis.

Table 5 | Chi-Square Analysis of Postsecondary Education and Credit Awarded

Variable	X <sup>2</sup>	p-value	Degrees of freedom
<b>Postsecondary education</b>	9.49	.15	6
<b>Postsecondary institute number</b>	2.29	.32	2
<b>RPL Credit(s) Application</b>	1.34	.93	5
<b>RPL Credit (s) Awarded</b>	5.22	.39	5
<b>Reduced Course Hours</b>	9.80	.08	5
<b>Success Rate by Program (only 3 schools)</b>	4.66	.10	2
<b>Average Hours Saved by the Program</b>	1.46	.69	3
<b>Expected and Transfer Received</b>	8.28	.02	2
<b>Expected and PLAR Received</b>	7.56	.02	2
<b>Expected and Actual Benefits of Credit Transfer</b>	10.49	.03	4
<b>Information Sources for Transfer Credit</b>	4.18	.84	8
<b>Support for Credit Transfer/PLAR</b>	12.63	.02	5
<b>Documentation Used in Submitting Transfer/PLAR Applications</b>	1.90	.75	5

A majority of respondents (63%) reported that they had attended one PSE institution, but a considerable number (29%) indicated that they had attended two institutes (Figure 8). One percent reported that they had attended three institutes. Only 7% reported that they had no previous exposure to a PSE institute which could be because they applied for PLAR where previous postsecondary education is not needed. The population data also show a similar pattern to those of the respondents. There is no statistically significant difference between the respondents and the population [ $\chi^2$  (df = 2) = 2.29,  $p = .32$ ].

In terms of prior education and experience relevant to Centennial College, 57% of participants reported that they had completed university, college or vocational schools; 29% were employed in a job related to their enrolment, 24% had relevant hobbies, 20% volunteered in the field of study and 12% had completed a workshop.

This diversity of prior learning sources is important (Figure 9). While transfer credit only allows for formal prior learning sources (i.e. university and college), this breadth of sources has applicability to PLAR.

Figure 7 | Previous PSE Distribution

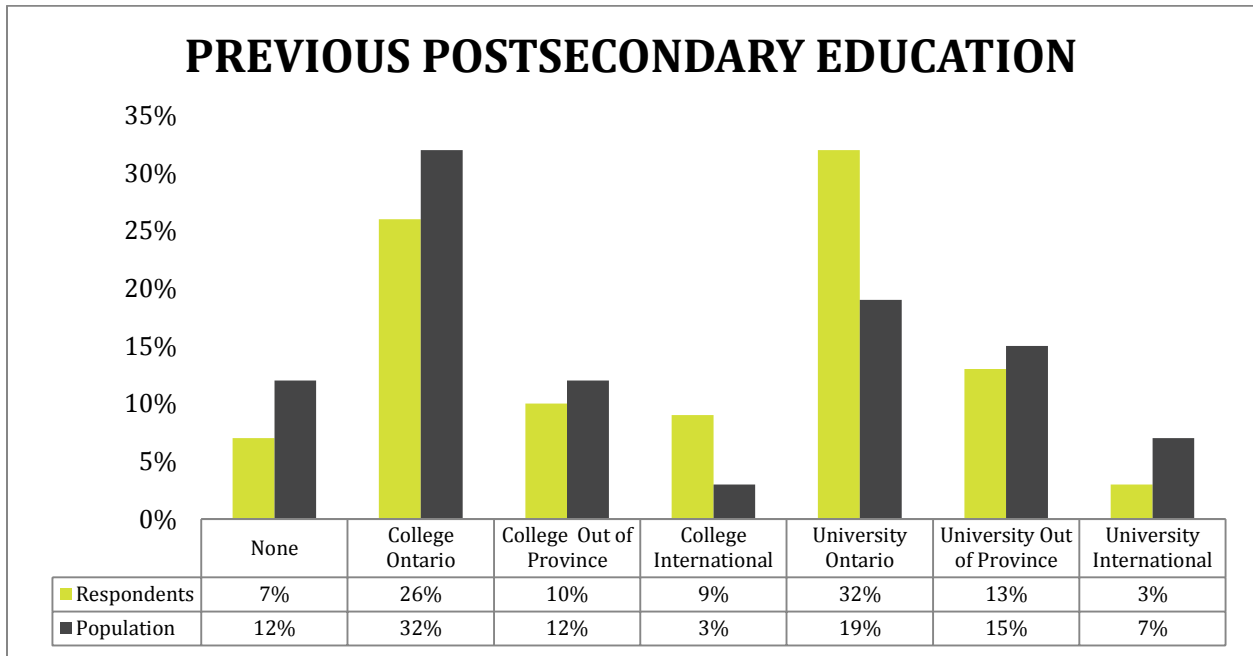


Figure 8 | Number of Attended Institutions

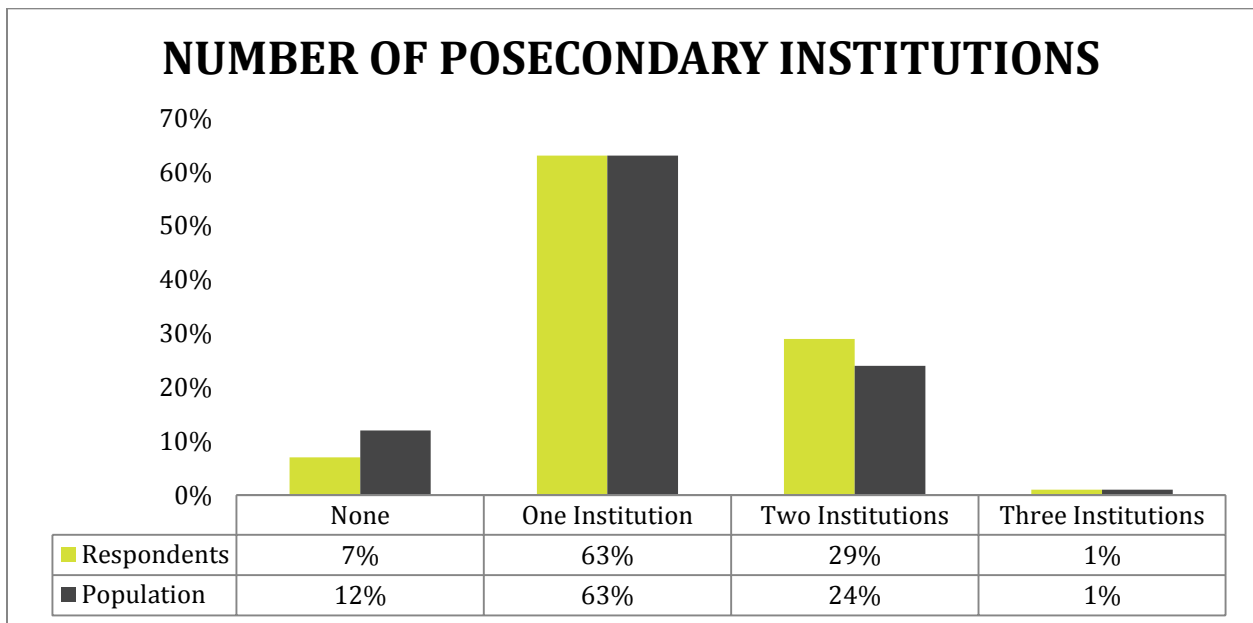
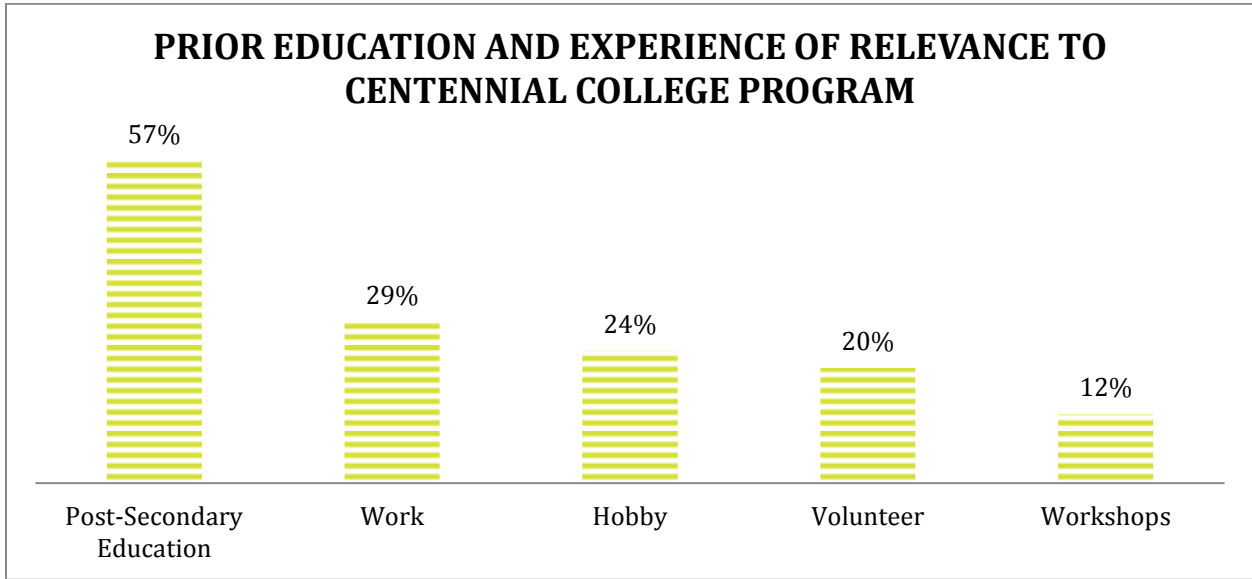
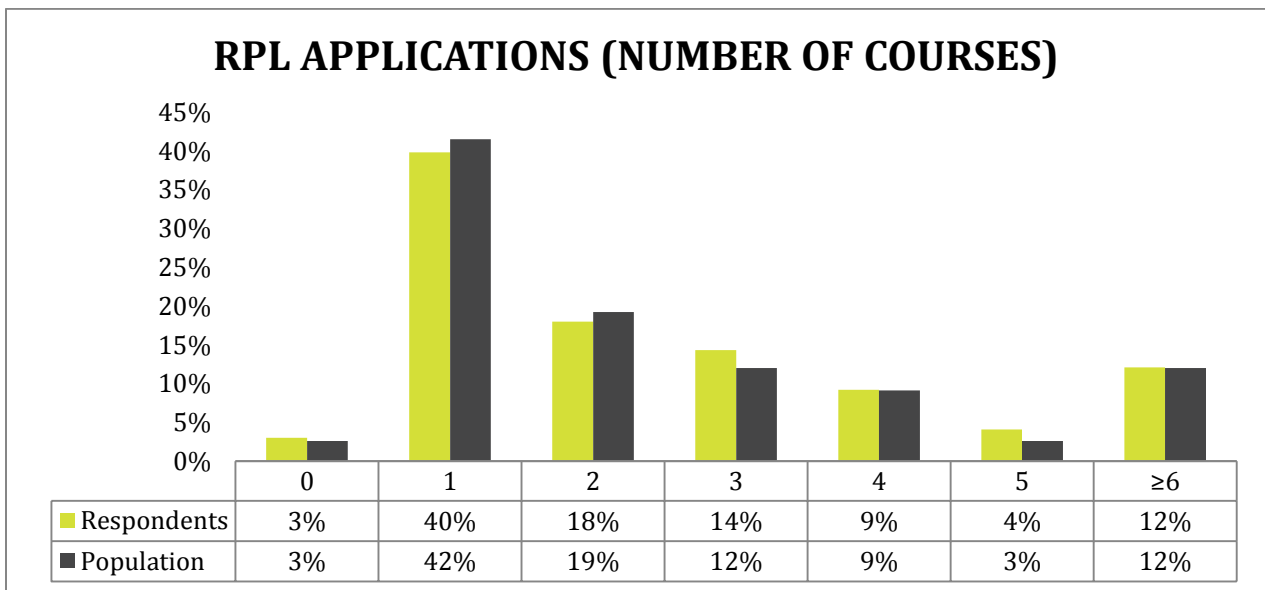


Figure 9 | Sources of Relevant Prior Learning



RPL credit-application patterns are similar between the respondents and the population (Figure 10). The survey responses indicate that all of the respondents applied for transfer credit or PLAR, with a majority applying for one course, followed by two, three and four courses. Interestingly, approximately one in ten students will apply for six or more transfer credits—equal to one or more semesters of study. One student applied for 31 credits and was awarded 18 credits; another applied for 19 credits and received 12. The transfer credit application trends of the respondent group reflect the population application trends observed through the admin database. Statistical analysis does not detect any significant difference between the respondent group and the population,  $\chi^2$  (df = 5) = 1.34,  $p = .93$ .

Figure 10 | Application for RPL Credit(s)



A comparison now follows of RPL credit awarded to the two study groups (Figure 11). The graph shows a similar pattern to those in the RPL credit application. A majority of students in the respondent group (40%) and the population (35%) received one credit award, followed by those who received no credit award, as illustrated in the graph. Again, statistical analysis showed no significant difference between the two groups,  $\chi^2$  (df = 5) = 5.22, p = 0.39.

Figure 11 | RPL Credit Awarded

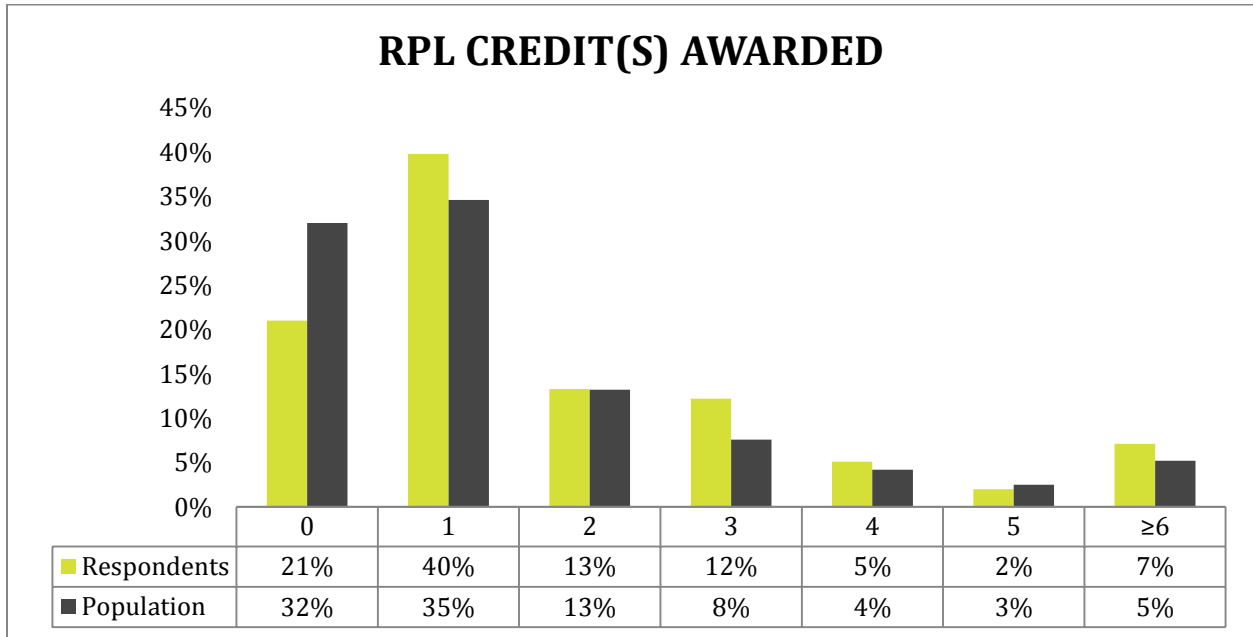
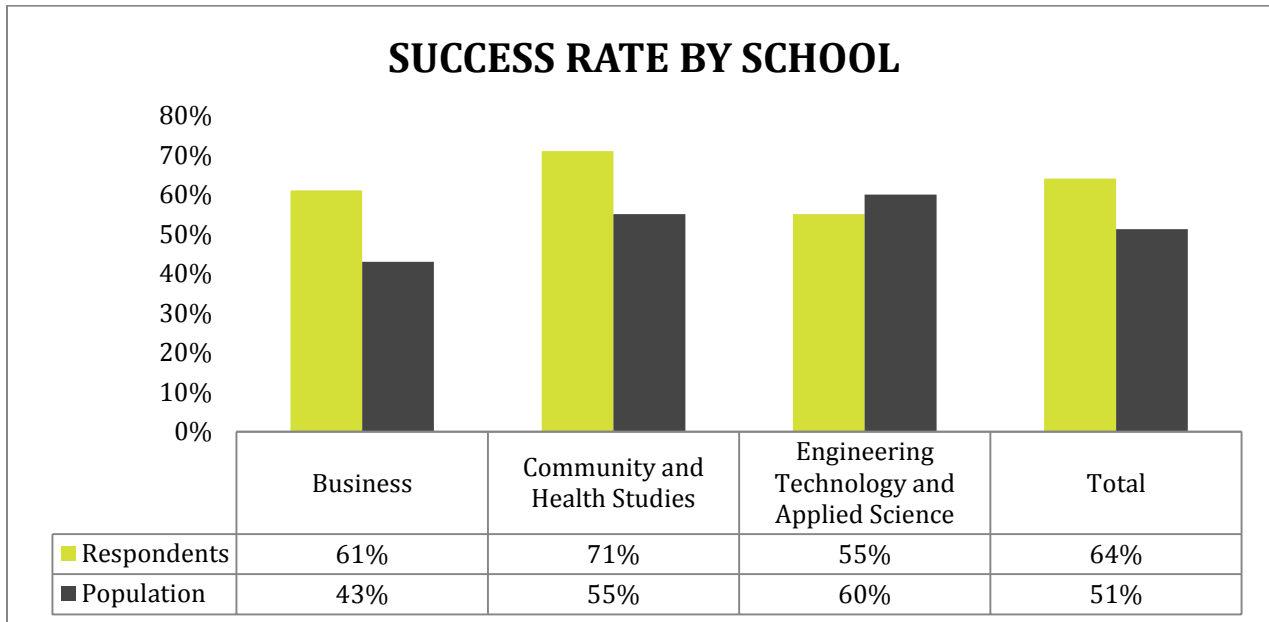


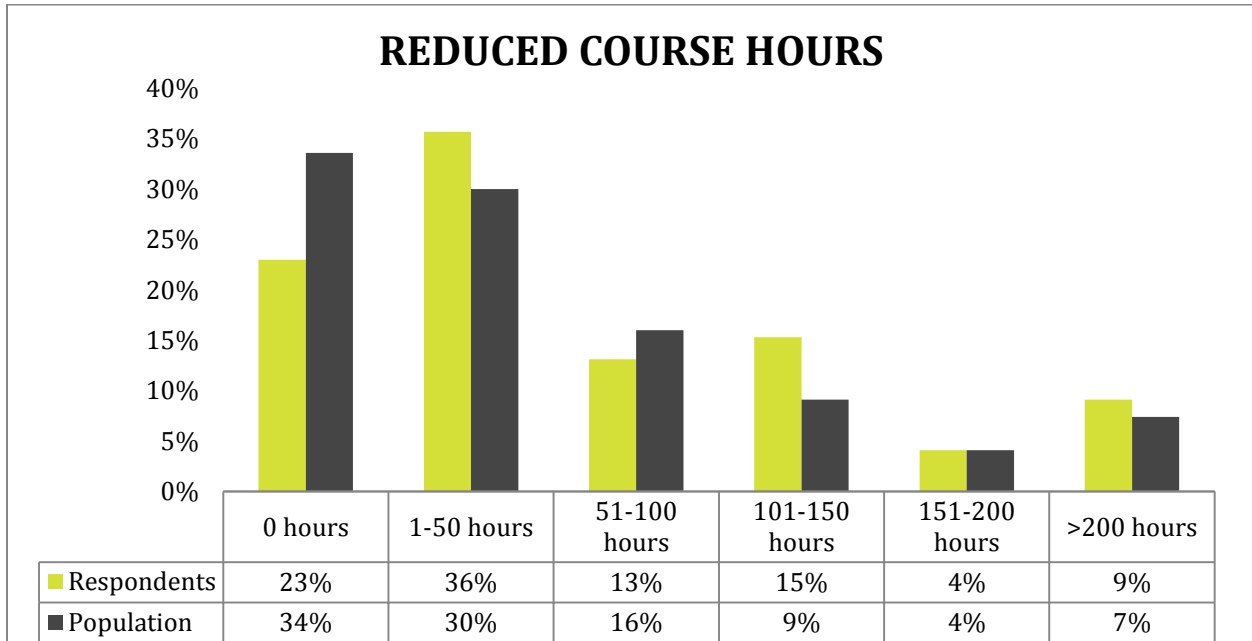
Figure 12 | Success Rate by School





A majority (71%) of participants in the Community and Health Studies program received transfer credit awards. The other two groups are business and engineering technology, which had 61% and 55% success rates, respectively (Figure 12). The success rates of the respondents (business and health studies) appear higher than those in the population data banks; however, engineering has a lower rate of success. On average, 64% of respondents received a TCR award in comparison to 51% of the population.

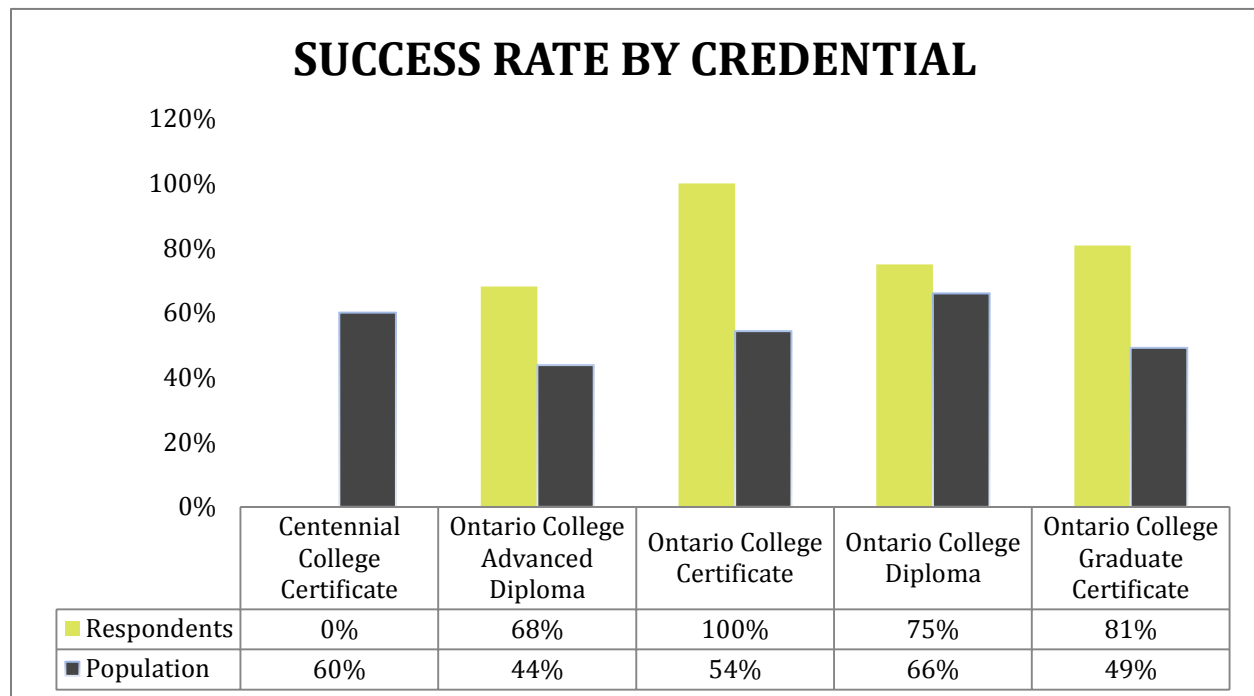
Figure 13 | Reduced Course Hours



In terms of total credits awarded to the three largest programs, respondents received 42 credits in business school, 86 in health studies and 46 in engineering school. For the population, the college awarded 145 credits to students in the business school, 234 to students in health studies and 194 to students in engineering school. A comparison of these numbers reveals no statistically significant difference [ $\chi^2$  (df = 2) = 4.66, p = .10] between the respondent and the population groups.

About 77% of the respondents experience a reduction in course hours (due to RPL credit approvals), as opposed to 66% of the population (Figure 13). The reduction varies from 1 to >200 hours, with 36% of the respondents obtaining between 1 and 50 hours. On average, the respondent group had 81.14 hours of reduction per student, while the population had 68.18 hours. The independent t-test does not show a significant difference in mean values between the categories  $t(503) = 1.20, p = 0.23$ .

Figure 14 | Success Rate by Credential



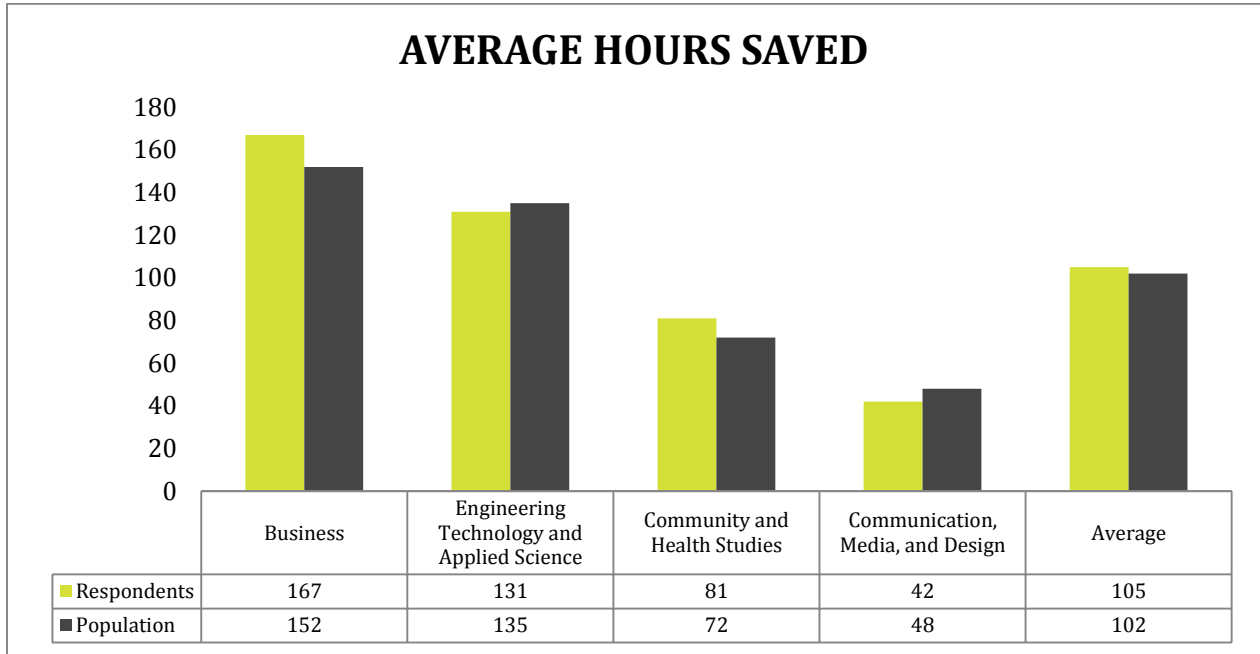
Among the respondents who applied for transfer credits, the Ontario College Diploma (OCD) program had the largest number of applicants (51), followed by 22 applicants in an Ontario College Graduate Certificate program and 20 in an Ontario College Advanced Diploma program. There are only a few remaining respondents in the other credential categories.

Three Ontario college-certificate students applied for a total of 7 credits, and all were successful (100%). Twenty students in advanced diploma programs applied for 69 credits, but they received 47 (68%). Of the diploma student group, 51 applicants applied for 140 courses, and they were awarded 105 credits (75%). Graduate certificate students applied for a total of 26 courses, and they received 21 transfer credits (81%) (Figure 14).

The above pattern is reflected in the population, with 196 students applying for credit in a diploma program, 79 applicants in the OCGC and 79 applicants in the OCAD. However, the success rates in the population are smaller than those of the respondents in every category except for the Centennial College Certificate.

The comparison of frequencies with chi-square analysis only accounted for three credentials (diploma, advanced diploma and graduate certificate) because the number of respondents in other groups was very small (1 for Centennial College Certificate and 3 for Ontario College Certificate). Chi-square analysis of the three programs yields a value of  $\chi^2(df = 2) = 0.17, p = 0.91$ . This implies that there is no significant difference between the frequencies of respondents and the population.

Figure 15 | Average Hours Saved



On average, respondents in business, engineering technology and health studies saved 167, 131 and 81 hours, respectively (Figure 15). These numbers are quite similar to those averages in the administrative database. The analysis of the 2x4 matrix does not indicate any statistically significant difference between the two groups with  $\chi^2$  (df = 3) = 1.46, p = 0.69.

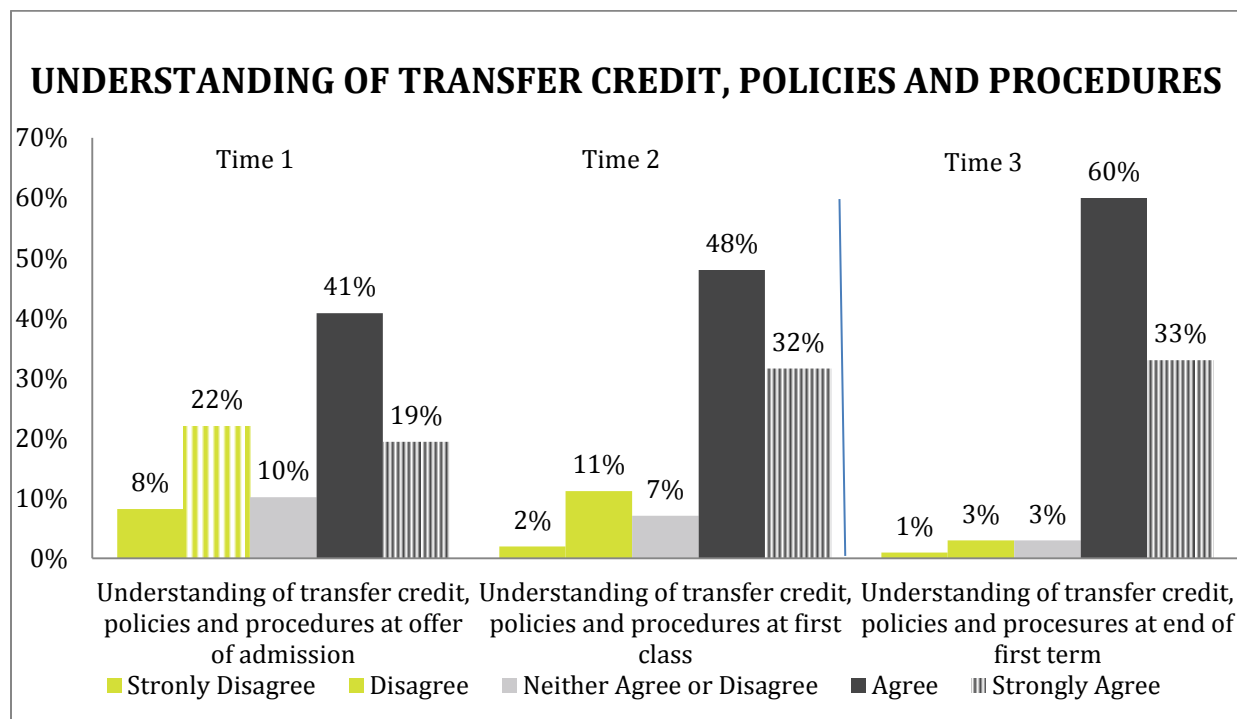
*Understanding of Transfer Credit and PLAR*

The remaining results for this study are derived exclusively by analysing the respondent group. Student understanding of transfer credit and PLAR is examined at three distinct time periods: at offer of admission (Time 1), on the first day of class (Time 2) and near the end of the first term (Time 3). Time 1 and Time 2 responses were collected by the pre-survey, and Time 3 responses were collected by the post-survey. The results of the three questions were then compared with analysis of variance for statistically significant differences.

Across time, there is an upward trend of students reporting that that they understand credit transfer and its related policies (Figure 16). By extension, there is a downward trend of students reporting that they do not understand transfer credit.

An analysis of the data shows an increasing agreement of understanding the transfer credit policies and procedures with average mean changes from Time 1 (M = 3.42) to Time 2 (M=3.96) and Time 3 (M = 4.17). There is a significant difference in the level of agreement, with p < .05 for the three conditions [F(2, 291) = 13.51, = 0.000]. Post hoc analysis with Bonferroni correction suggests that both Time 2 and Time 3 are significantly different from Time 1. However, there is no significant difference between Time 2 and Time 3.

Figure 16 | Understanding of Credit Transfer and Policies



Another method of analysis is the repeated-measures ANOVA, which is available in SPSS’s General Linear Model (GLM). This method assumes equal variance among the differences of pairs in data. Thus, the variance of differences between Time 1, Time 2 and Time 3 are roughly equal. Therefore, if  $(\text{time 1} - \text{time 2}) \approx (\text{time 2} - \text{time 3}) \approx (\text{time 1} - \text{time 3})$ , then there is a sphericity assumption. SPSS uses Mauchly’s test to check whether data are departed from sphericity. If data violate sphericity assumptions, degrees of freedom will need adjustment with either Greenhouse and Geisser or Huynh and Feldt.

Mauchly’s test of the sample indicates that the assumption of sphericity has been violated,  $\chi^2(2) = 14.04, p = .001$ ; therefore, the degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ( $\epsilon = .89$ ). This demonstrates that there is a significant difference in the understanding of transfer credit and its related policies, where  $F(1.79, 169.75) = 17.42, p < .001$ .

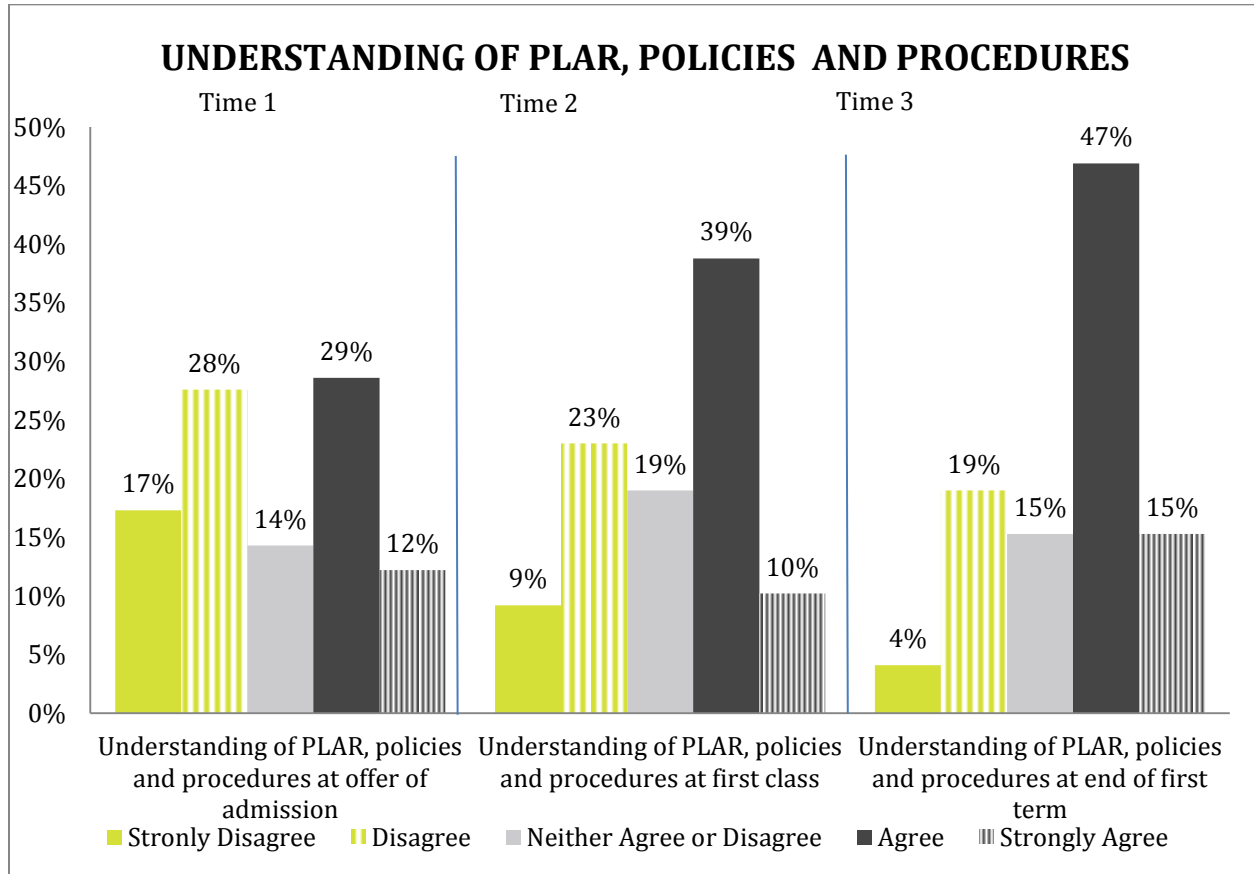
Post hoc analysis with Bonferroni correction suggests that there are significant differences in student understanding between offer of admission and at the first class, as well as between offer of admission and at the end of the term. However, there is no significant difference in understanding between the first class and the end of the term.

Understanding of PLAR somewhat differs from understanding of transfer credit, as there is less overall understanding of PLAR. Further, while there is an upward trend in PLAR understanding across time, this trend is not as pronounced as the increase in understanding of transfer credit (Figure 17).

The same analysis of transfer credit was also applied to PLAR. Student agreements gradually increase from Time 1 to Time 2 to Time 3, respectively, with mean value changes from 2.91 to 3.15 to 3.51. The ANOVA shows a significant difference among the three values [ $F(2, 291) = 6.12, p =$

0.002]. Post hoc analysis with Bonferroni indicates that student agreement at Time 3 is statistically significantly greater than at Time 1. There is no significant difference between Time 1 and Time 2 or between Time 2 and Time 3.

Figure 17 | Understanding of PLAR



The logic for repeated-measures ANOVA is also applied to the understanding of PLAR and policies. Mauchly’s test of the sample indicates that the assumption of sphericity has been violated,  $\chi^2(2) = 7.04, p = .03$ ; therefore, the degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ( $\epsilon = .95$ ). The result shows that there is a significant difference in understanding of the PLAR policies,  $F(1.90, 184.61) = 14.20, p < .001$ .

Post hoc analysis with Bonferroni correction suggests that both Time 2, and Time 3 are significantly different from Time 1. There is also a significant difference between Time 2 and Time 3.

Similar to the survey data, during the focus groups and phone interviews, students expressed a strong understanding of the term ‘transfer credit’, whereas knowledge of the term ‘PLAR credit’ was significantly weaker. This could be attributed to the fact that the majority of the students interviewed were students who had applied for transfer credit. Students were asked what it means to be a transfer student or a PLAR student, which resulted in students’ providing definitions for what transfer credit means. Overall, students expressed that transfer credit is the process of gaining credit for skills and experiences that were previously gained at another institution to avoid

repetition of course material. The following are ways in which students described their understanding of what it means to be a transfer student:

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*"It's just taking the same skills that you're learning here from somewhere else, and just bringing them here".*

*"Don't repeat the same work, if you took ... [a] computer's course at the other school, why are you taking it again when you come here? So it's just giving you credit for the work that you've done".*

*"Just the fact that you [went] to a previous post-secondary school and are able to use some of those credits to complete your new program faster".*

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Students were also asked about which recognition of prior learning policies and procedures was clearly outlined at the point of intake. Students expressed a lack of understanding about what PLAR is and the process for obtaining PLAR credit.

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*"Oh yeah! I didn't ... I wasn't aware of the PLAR process. The PLAR cost \$175".*

*"I saw the posters all over the school about PLAR, but I didn't really ... I don't know the timing of it. It's just written to get more information on it".*

*"I was, uh, given the choice to take just the PLAR and have someone gauge my knowledge. I thought I understood [that] PLAR is just an interview. I learned that because I thought it was an actual examination, I had to study, but someone told me they just... the advisor told me, it's just an interview to see where your knowledge is".*

*"I wasn't sure about one of the steps because it said somewhere that before I paid my fees I have to write the exam within 6 months. But I wasn't sure if that was true or not for the PLAR".*

---

Although students had a strong understanding of what transfer credit means, it appeared that many students found out about the process of applying for transfer credit after they received their offer of admission, which can be seen in the survey data by the increase in understanding of the term 'transfer credit' and the policies and procedures as the semester went on.

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*"I did this all in the summer, so I had to really look online through myCentennial or even Centennial College to see how the process is".*

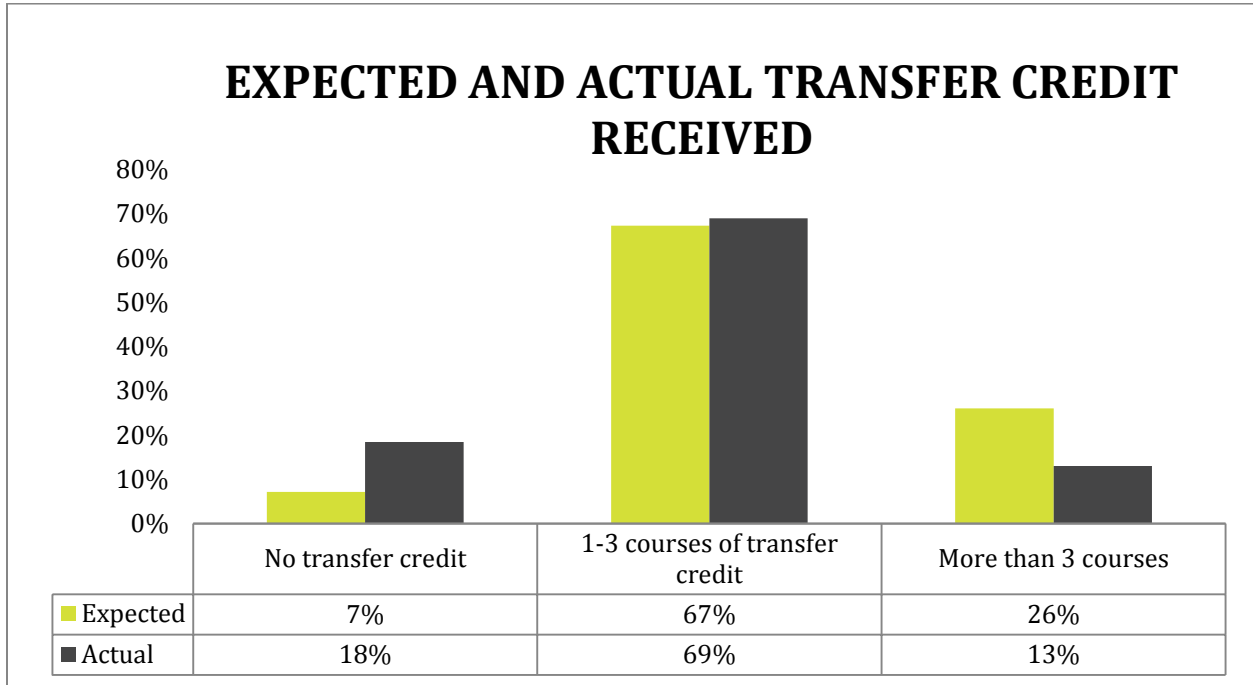
*"I didn't know until I came in and spoke to the advisor again after I got accepted to Centennial".*

*"No one really told me about it. No one sent me any notices about it, it was just ... I had to google it, because I thought I could get a transfer credit".*

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*Expected and Actual RPL Credit*

Figure 18 | Expected and Actual Transfer Credit Received

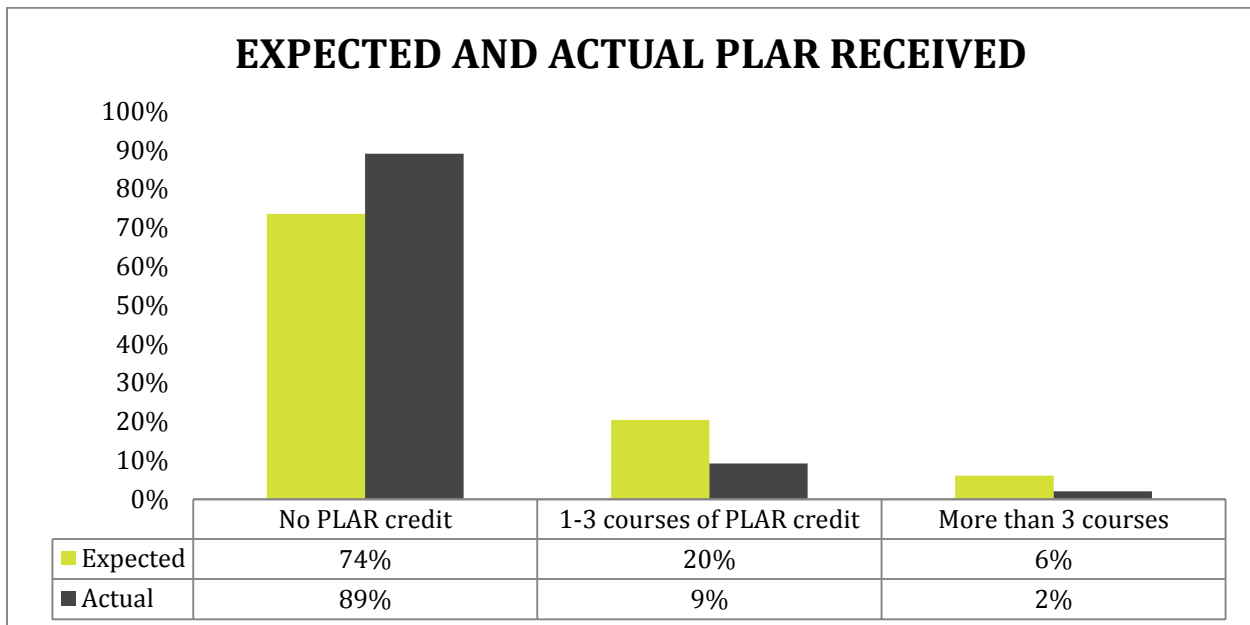


The data show a close match of expectations and realities for those who received one to three transfer credits, with expectations being surpassed for those who expected no transfer credit and expectations not met for half of those who expected more than three transfer credits (Figure 18). Chi-square analysis suggests a significant difference between transfer credit expectations and realities [ $\chi^2$  (df = 2) = 8.28, p = 0.016].

A great majority of students (74%) did not expect to receive PLAR credits, which was confirmed in their beliefs in the post-test survey. This is due to the fact that the large majority of survey respondents only applied for transfer credit. About 15% of students expected to receive some PLAR credits but did not. In total, only 11% of respondents received any PLAR credit.

As the graph suggests, the percentage of participants who received one to three courses is lower in actuality than in expectation (Figure 19). This is also true for people who applied for three or more credits (6% vs. 2%). Chi-square analysis shows a significant expectation-reality gap for PLAR credit [ $\chi^2$  (df = 2) = 7.56, p = 0.02].

Figure 19 | Expected and Actual PLAR Credit Received

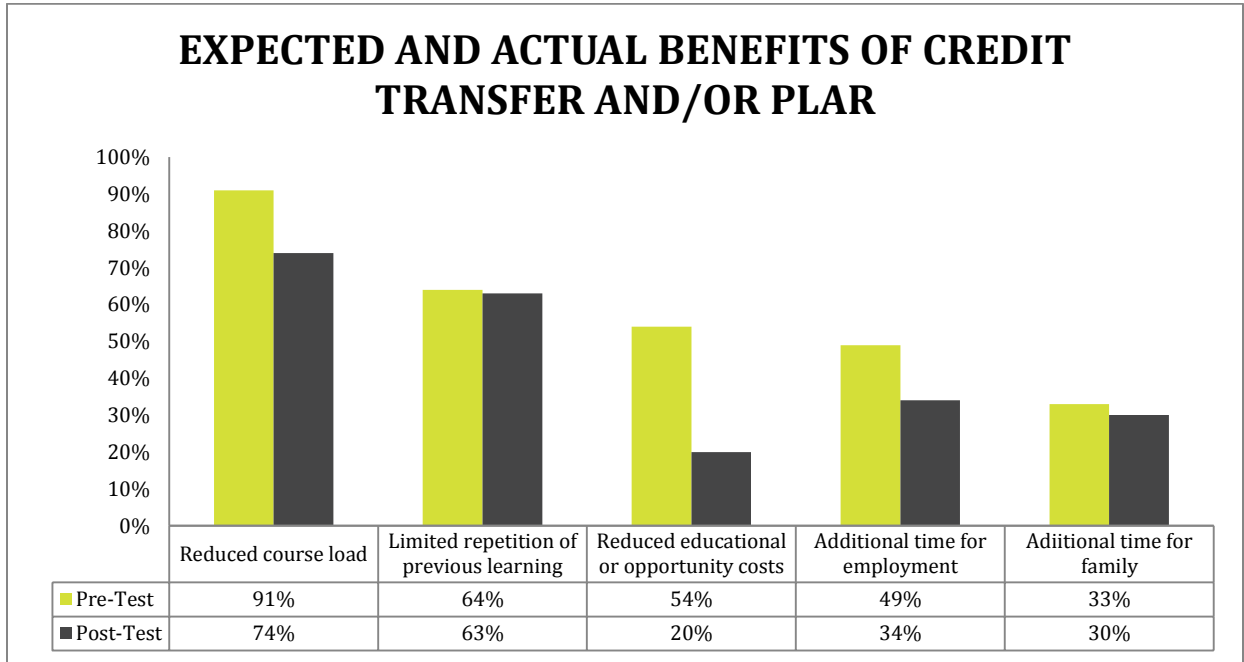


A comparison between the pre-test and post-test respondents has been completed regarding their understanding of the benefits of credit transfer (Figure 20). About 91% of participants during the pre-test believed that credit transfer would reduce their course load, but this expectation decreased to 74% in the post-test. About 54% of participants thought it would reduce the educational and opportunity cost, but only 20% retained the same opinions at the end of the course. Statistical analysis suggests a significant difference [ $\chi^2(df = 4) = 10.49, p = 0.033$ ] in the distribution of the frequencies among the five types of benefits, meaning there is a significant expectation-reality gap across the five benefits.

During the focus groups and phone interviews, students emphasised that the main benefit to receiving recognition or prior learning credit was that they were able to reduce their course load, which allowed them to focus more on their other courses and their employment. They also expressed that it was a validation of their previous learning and they did not have to waste time and money to repeat previous learning.



Figure 20 | Expected and Actual Benefits of Credit Transfer and/or PLAR.



The survey shows a significant drop from the expectation to the actual reduced educational and opportunity cost benefit, which was also highlighted in student focus group and interview responses. Many students expressed frustration that they did not receive a refund for courses for which they received a transfer credit. This is often a result of Centennial’s fee structure, as students do not receive a refund unless they receive enough recognition of prior learning credit that they are able to reduce their course load by a semester or more.

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*“So that saves you time, that reduces your load ... [so] that you can concentrate on other [important] courses which ... you are studying. Rather than studying [what] you are already studied, it’s better to learn something which is ... adding a value to your degree or to your knowledge”.*

*“I’m very happy [that] I didn’t have to take an extra course. That’s just more stress on me, and I’m also working full time so that’s helpful for sure”.*

*“I don’t need to waste more time or more money to do the same thing”.*

*“I mean, yes it was like less workload, but the same time I’m able to focus on those courses, right? Because they’re really, really important. Instead of rushing through my things”.*

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As the majority of students only received 1-3 credits, they were not eligible for a refund. Also, in cases when students did receive a larger number of transfer credits, due to the nature of scheduling Centennial courses, there was less flexibility to change a students’ model route to allow for reduced semesters. Additionally, they found the cost of PLAR to be a barrier, and students who had

international credentials found the cost of a credential evaluation to be expensive. Students outlined their concerns regarding the lack of cost benefits and cost barriers:

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*“The only thing I didn’t like [was] how each course is paid as one whole [and not per] course ... I’m used to taking things as each course, you know what I mean. So I can be flexible on how much I can take. ... Here it’s like you pick the whole thing and you pay one straight fee”.*

*“It’d be nice if I got some money back, though”.*

*“Apparently, some W-E-S evaluation that I didn’t know about was needed. And when I found out that I had to pay for it, I didn’t have the money at the time, so I just didn’t continue”.*

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Though not a question that was addressed in the surveys, when students were asked during the focus groups and interviews if their experience had differed from that of their high school counterparts, students often expressed the benefit of possessing a certain level of mastery and maturity that was lacking among students who came to college straight from high school. They felt that they possessed more academic, employment and life experiences which made them more knowledgeable about college policies, procedures and the expectations of post-secondary institutions. They also noted that their academic skills and strategies were better developed than those of their high school counterparts.

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*“Well for one, I think that when you do attend another post-secondary institution, you are kind of well versed in the rules and the expectations especially. ... You know things about deadlines and [how] there are no extensions. And small things, you know, make the biggest difference. ... Aside from your education, you have those skills. You’re able to you know ... have that maturity”.*

*“We have an advantage as well of how to predict outcomes and to have a better study strategy [over] somebody who is coming from high school”.*

*“I feel like I have a better overall understanding of material, even though it’s something completely new to me in a sense. I do feel like I can think in a broader perspective”.*

*“I just find going back after doing a university degree [to be] very helpful in terms of [understanding] how to write essays. I understand how to study, what to study, what not to study. [I am p]robably in a better situation than someone coming right out of high school. ... I think there’s a difference between like the high school way you learn and the university or college way you learn”.*

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### *RPL Information Sources and Available Supports*

Students reported on what sources of information they use to become informed on matters of transfer credit and PLAR, and this was completed in both the pre- and post-test (Table 6).

Table 6 | Information Sources for Transfer Credit

	Expectation (Pre-Test)	Reality (Post-Test)
<b>Centennial College website</b>	61%	62%
<b>Centennial College on-campus staff</b>	41%	32%
<b>Centennial College recruitment team or their agents</b>	20%	15%
<b>Friends and co-workers</b>	18%	15%
<b>Secondary school teacher(s) and/or guidance counsellor(s)</b>	13%	6%
<b>Other institution staff</b>	12%	8%
<b>Other institution website</b>	11%	7%
<b>Family</b>	10%	6%
<b>Other</b>	5%	6%

The results suggested that the Centennial College website and on-campus staff were the most sought-after resources for information about credit transfer. Nearly 90% of the respondents utilised multiple sources of information to learn about credit transfer.

While it is interesting that the percentage scores for most information sources dropped between the pre- and post-test, statistical analysis of the pre- and post-test surveys does not yield a significant difference in the distribution of frequencies from these sources of information [ $\chi^2(df = 8) = 4.18, p = 0.84$ ].

Similarly to the survey results, during focus groups and interviews students frequently referenced receiving most of their information regarding recognition of prior learning through the Centennial College website:

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*“I knew that I could apply for it online because it was ... I think it was a little icon on the side of the screens for like Centennial, that you could transfer over credits, and I knew that you were able to in any case”.*

*“I looked [on] the website and I thought I could ... I found everything I need to know, literally. How they work, how to regist[er] and [use] myCentennial. So for me, it was really straightforward”.*

*“I checked on their website ... Centennial’s website, [to learn] which documents were required, how many credits I could get”.*

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The other main source of information students said they utilised was information and advising provided from Centennial College staff, especially from Enrolment Services and from advisors, faculty and coordinators in the academic schools:

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*“When I was applying for transfer credit, I had one of the actual people who were reviewing it contact me to give me my best options”.*

*“When I applied to a program that I wished to attend, I first was able to see the list of all the courses that I would be taking in the whole program at myCentennial. I noticed there was an English course and that it required a previous test in English, entrance testing. So I called the admissions office and found out [from admissions] that I could actually apply [for] the transferring of credits ... and got a brief explanation of how to do it. They basically say, go to my.Centennial, and you’ll be able to find it. So, I went on the website, and I also went to I believe the English department to review the process of how to do an English credit transfer”.*

*“I inquired with my program coordinator [about] which credits I could transfer from [the institution] to Centennial, and she advised me that math wasn’t one of them, even though I took math at [the institution]”.*

*“First ... even before I applied for the program at Centennial. I came in ... walked into the school and spoke to the advisor concerning how, is there a way like they would take some courses that I completed previously in a university [and] transfer [them] over. At that point, they informed me that the transfer credits should be done online”.*

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Respondents reported expected and actual use of Centennial RPL support functions (Table 7), and downward trending gaps were observed across all six functions: clear information (-26%), guidance on application procedures (-6%), assessment and decision assistance (-23%), RPL file management (-30%), program advising (-16%) and grade calculation assistance (-18%). What respondents were not asked is, of these support functions, which were expected to exist and how valuable were they to the student RPL experience.

Table 7 | Available RPL Supports

	Expectation (Pre-Test)	Reality (Post-Test)
<b>Clear info regarding eligible transfer credits</b>	81%	55%
<b>Guidance on application procedures</b>	55%	49%
<b>Assistance understanding transfer credit and/or PLAR assessments and decisions</b>	53%	30%
<b>Assistance managing your transfer credit/PLAR file</b>	49%	19%
<b>Program advising</b>	33%	17%
<b>Assistance with grade calculation</b>	22%	4%

Unlike the RPL sources of information results, the difference in pre- and post-test results is statistically significant regarding support functions,  $\chi^2$  (df = 5) = 12.63, p = 0.02, meaning students recanted previously held beliefs that they accessed support. In attempting to explain this finding, it is possible that at the end of the term students became increasingly critical of the support they received and thus disqualified its status as actual support.

Concerning our focus groups and interviews, there was very little confusion about how to actually submit a transfer-credit application. However, students did reference frustration about the support they received after they submitted their transfer-credit applications, which may account for the perceived drop in available supports from the pre- to the post-survey, especially among students who were initially denied their transfer credit.

At the point of the pre-survey, many students may not have received recognition of their prior learning decisions, so they may not have been able to accurately gauge the assistance they would have received with understanding assessments and decisions and managing their RPL file. Students wanted to be able to have a dialogue with the person who assessed their transfer of credit so that they could know more specifically why it was denied. They also expressed difficulties with multiple re-submissions of transfer credit applications.

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*“Because the course outline didn’t really say much about the accounting part of it, they kept rejecting it, but on the syllabus, like, not the course outline. But the grading scheme [...] all the information she wanted was there. So I actually had to email her that separately, talk to her about it, like this is what I had, so I think it would be better if we could have a face to face [and] be like, yeah, this is the work, this is this, this is what we learned, so all this”.*

*“And um ... in terms of credit, I almost got most of them ... some of them I didn’t, and I didn’t understand why I didn’t. Where [were] they getting this information from?”*

*“Only when I had deny, deny, deny ... I requested talking to a supervisor ... it was like all one and not the other. And that was fine. That was explained to me”.*

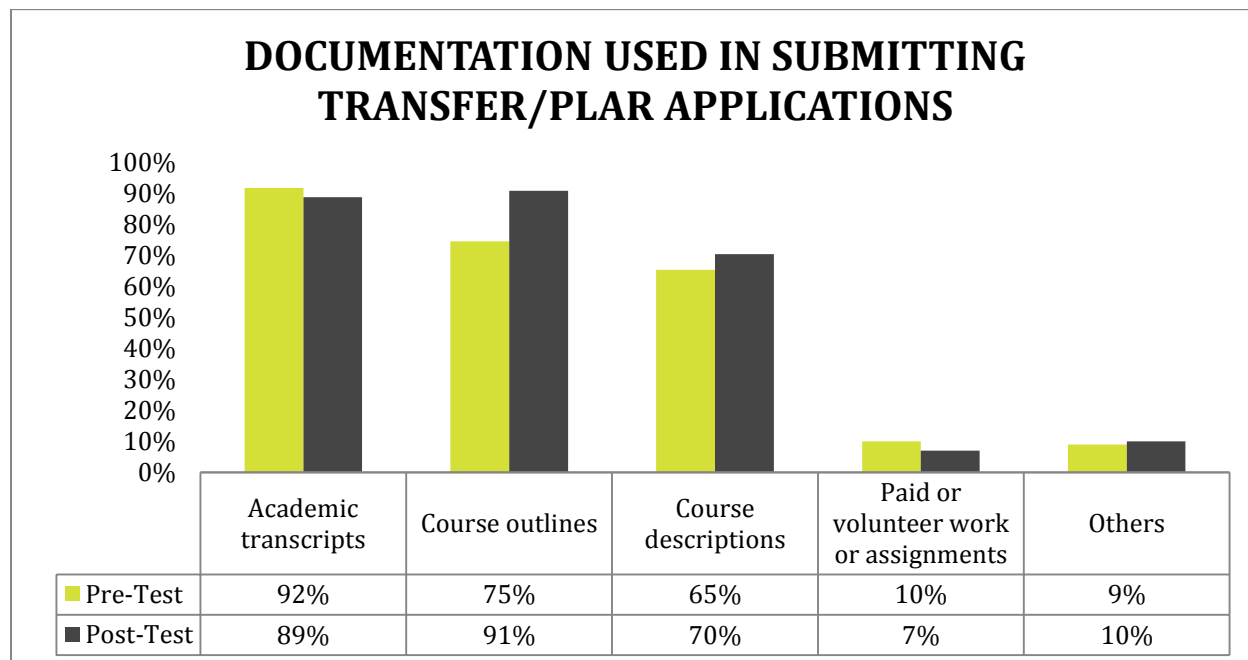
*“I thought it would be a lot quicker than what it was. She was saying it’s ... they want you to do all the work and send in the stuff ... but if you don’t do it right ... they say, like, to read the course outline, and then check your course outline and see if they match, but that’s open to interpretation, like ... yeah, yeah that matches, that matches, but in there they’re going NO! They just throw it back at you, and you’re like rejected. Okay, what do you need then?”*

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### *Applying for RPL Credit*

A great majority of students indicated in the pre-test survey that they used academic transcripts (92%), followed by course outlines (75%) and course descriptions (65%). The post-test survey displayed a slightly different trend, with course outlines (91%) followed by transcripts (89%), course descriptions (70%) and others (7%). The ‘Other’ category comprises a small number of independent study, community activity, portfolio, hobbies, and seminar and non-credit university/college courses (Figure 21).

Figure 21 | Documentation used in Submitting Transfer/PLAR Applications



There is no statistically significant difference between the pre- and post-test surveys,  $\chi^2$  (df = 5) = 1.90,  $p = .75$ .

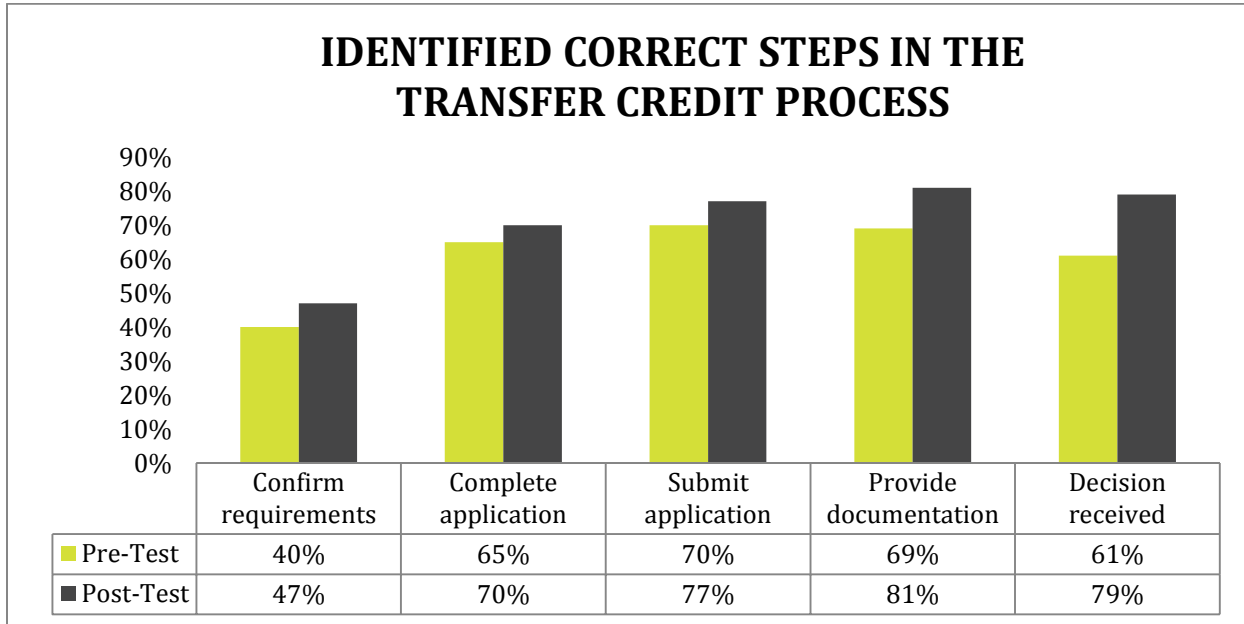
Students were asked to identify the five steps in the transfer/PLAR process (Figure 22). This task acts as a means to measure true understanding of the transfer credit process; subsequently, it offers an interesting comparison with perceived transfer credit process clarity.

The analysis gives some latitude to participants in identifying the process, i.e. if students identified any of these three steps (completing the application, submitting the application and providing documentation) as steps 2, 3 or 4 or any sequence of these three steps, it is considered correct. However, students had to identify step 1 (confirm requirement) and step 5 (decision received) correctly. The pre-test and post-test of the above criteria are compiled and presented in Figure 21.

The information collected from the above paragraphs reduced the identification process to three steps: beginning, middle and final steps. Based on the above criteria, each student could get a maximum of 5 marks if he or she identified the five steps ‘correctly’. Because the same students identified the five steps on both the pre- and post-test, the paired t-test is applied to see whether the students improved their understanding of the process at the end of the course.

The results suggest that the students improved their understanding of the process at the end of their course, with mean values increasing from 3.08 to 3.53,  $t(97) = -2.37$ ,  $p = 0.015$ .

Figure 22 | Identification of Steps in the Transfer Process



Pre- and post-survey results indicate that fewer than half of the students confirmed requirements for transfer credit and/or PLAR with an advisor as their first step. This is likely due to the fact that many students sought out recognition or prior learning information on their own, as survey results indicate that less than half of the students used a Centennial College staff member as a source of information about recognition of prior learning.

During focus groups and interviews, students were asked to outline the process and stages that they went through to apply for transfer credit and PLAR. Students all outlined the same middle steps for applying for transfer credit, as they are all completed at the same time with the online system. However, students received different types of advising. Some students received advising prior to submitting their applications, whereas some received it during the process if they had difficulty and some sought advice afterward for more clarification. The majority of students stated that they knew a transcript and course outline would be used to evaluate a transfer credit.

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*“So I knew that they would need my transcripts just to see that I actually did pass the course. And I did [think] I would need the course syllabus”.*

*“Well from previous experience back home ... I would expect that you need to have the course outline and the syllabus and, you know, something ... your transcript to show what grade you received in the application”.*

---

Some students were surprised that they needed to submit a course outline and had difficulty obtaining one, especially if they were an international student or if they had been out of formal schooling for a long time.

*“Because I studied abroad, ... it was a[n] issue for me to get a course outline. They probably finished that thing 10 years ago or 12 years ago, and I just... how [am] I going to get that? I mean ... that time ... barely computers ... just speaking in a third-world country, coming here and well you need learning objective or course outline. I can’t get that. And it’s in another language, on top of all that”.*

*“I didn’t know about the outlines because, like, what if I were a student that took a Program, like, a couple of years ago? And how would I show a proof of the subject outline that I have from [the] previous [program]? Because you know ... how they change it. ... They update it all the time, right?”*

*“I expected it to be somewhat easy, but then there w[ere] some steps I didn’t know, like I thought you needed a high mark to get your credit transferred, but I didn’t know you [needed] to send in a course outline as well, which wasn’t easy for me because some of the courses I took ... a long time ago, and [I don’t] have the outline. So it was kind of hard for me to pull that up because the course wasn’t there [any]more. It wasn’t on the site. So I had to message or do a lot to get the outline back”.*

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Others expressed dissatisfaction that they had to submit a transcript, as they thought their transcript would already be on file with Centennial so they would not need to re-submit it.

*“I thought that they’re stored somewhere ... like where to do a transfer credit ... that they could just look at it and be like, oh yeah, he actually has a transfer. But they told me that I had to request the number ... the electronic transcript, and that takes several business days to occur. So that’s what I really did not appreciate”.*

*“We send you the official transcript ... why on earth do we have to send you a copy and paste on [Microsoft Word] version of the same outline? When you can just get it straight from ... the official school ... get the official outline”.*

*“[What] I didn’t really like the most was the fact that I had to reorder my transcript from [the institution]. I just want to be able to apply to Centennial—they stored all my credit information somewhere, so that when I apply for a transfer credit, I could just immediately ... start the process, as soon as possible. And they have a copy of my actual transcript somewhere, stored on the database”.*

---

Meanwhile, a few students thought that the information would be sent directly from their previous institution or that Centennial would request it from their institution so that it would be official.

*“Well, I just expected to have the, you know ... my university send the transcript from there directly to school here, and they would do everything from there”.*



*“I figured they would contact the advisors or the coordinators at the other school, and get all the information from them”.*

*“They wanted the course outlines, they wanted the transcripts. If you have the transcripts of that specific year, specific course ... you can always go to the ... the professor of the school and ask them to ... fax you a copy of the transcript. Whereas what I did was copy and paste the course outline from the internet. ... You can edit, add [and] remove where they had facts from the school and no one would be able to interfere with the course outline”.*

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The majority of students only had to submit a transcript and a course outline, as the online system only allows students to upload those two documents. Centennial's new online system was intentionally designed that way in an attempt to maintain a consistent process across the college. Previously, when students submitted paper transfer credit applications, there were many instances when students were asked to provide additional documentation to support their transfer credit applications, such as assignments and essays. In the case of one student, they were asked to provide additional assignments to the transfer credit assessor:

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*“But I didn't know they'd ask for assignments. I ... thought that they were just going to ask for course syllabus [and] the transcript to see what grade you got”.*

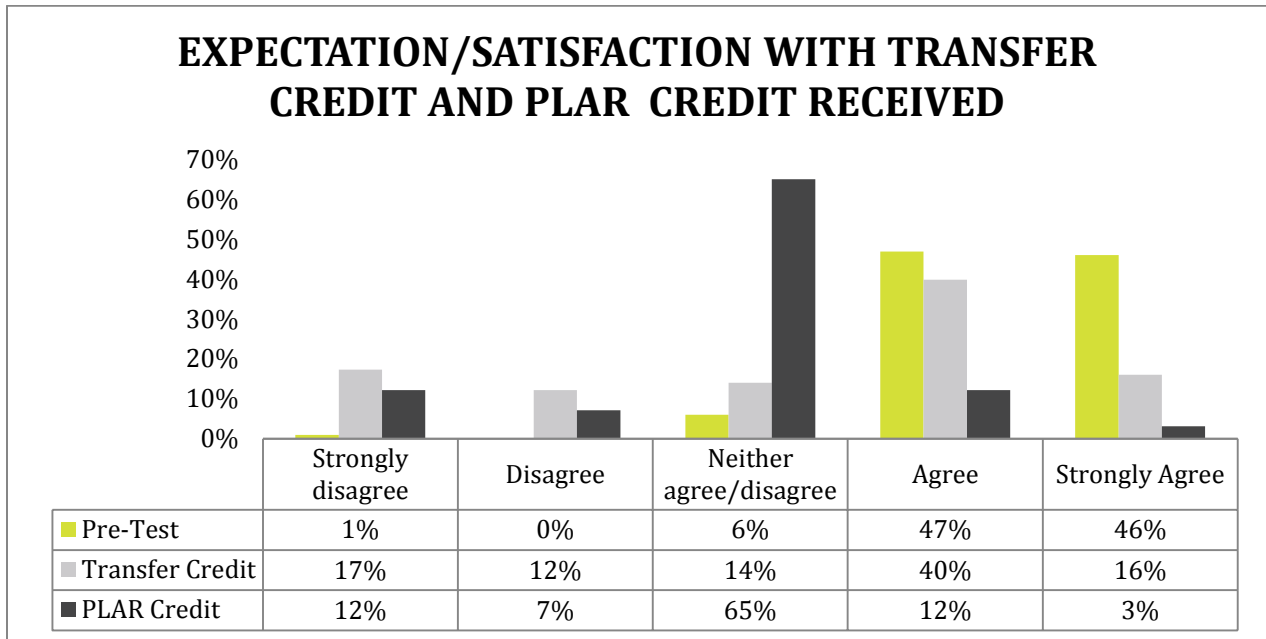
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### *Expectation-Satisfaction with RPL Credit*

In the pre-test survey, those who agree and strongly agree that they expected to receive credit for all RPL applications make up 47% and 46% of the respondents, respectively (Figure 23). In the post-test, the number of respondents who are satisfied with the amount of credit received declined to 40% and 16%. The percentage decreased even more regarding the post-test PLAR to 12% of participants who agreed and 3% who strongly agreed.

This graph suggests that students disagree with the amount of credit they received from the college. ANOVA statistics also confirm this graph, with mean values declining from the pre-test (4.32) to post-test transfer credit (3.17) to post-test PLAR (2.81). These are significantly different,  $F(2,291) = 50.18$ ,  $p < .00$ . Post hoc with Bonferroni correction indicates that the pre-test is significantly different from the two post-tests. There is no statistically significant difference between the two post-tests (transfer credit and PLAR credit).

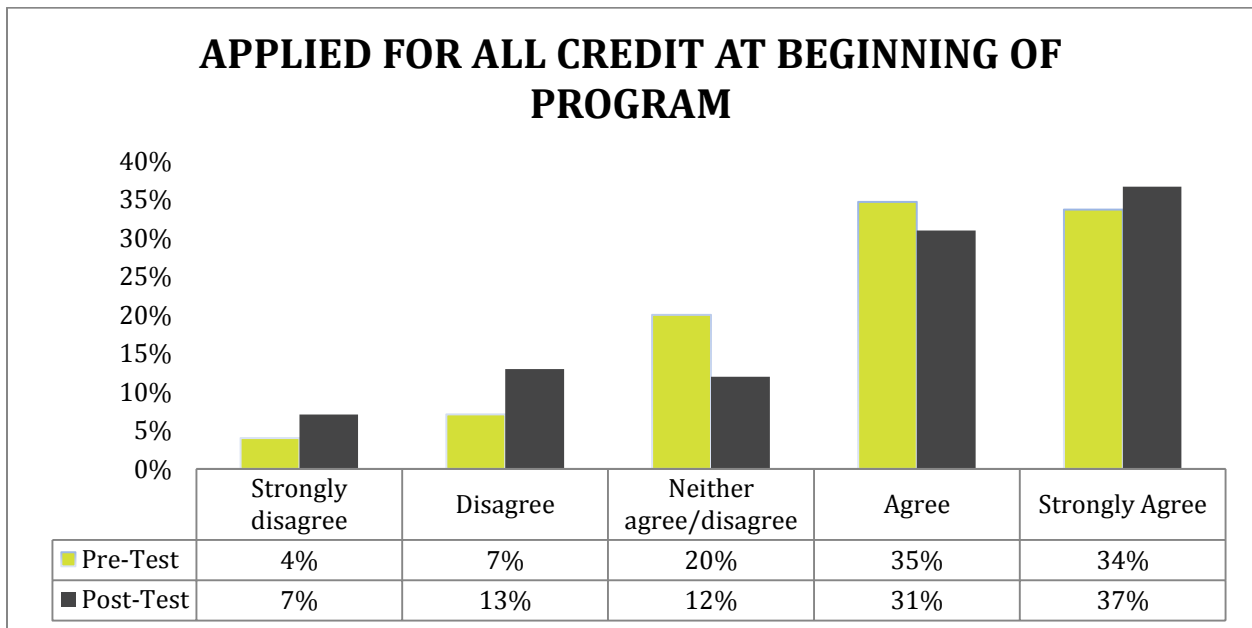
Figure 23 | Expectation/Satisfaction with Transfer Credit and PLAR Credit Received



*Preference: Start of Term v. Continuous RPL Applications*

Respondents also gave their opinions whether they preferred to apply for all transfer credits/PLAR at the beginning of their program in the pre-survey and then in the post-survey indicated whether they actually did apply for all their transfer credits at the beginning of their program (Figure 24). The mean value of the pre-test ( $M = 3.83$ ) is almost the same as that of the post-test ( $M = 3.69$ ).

Figure 24 | Application Timing



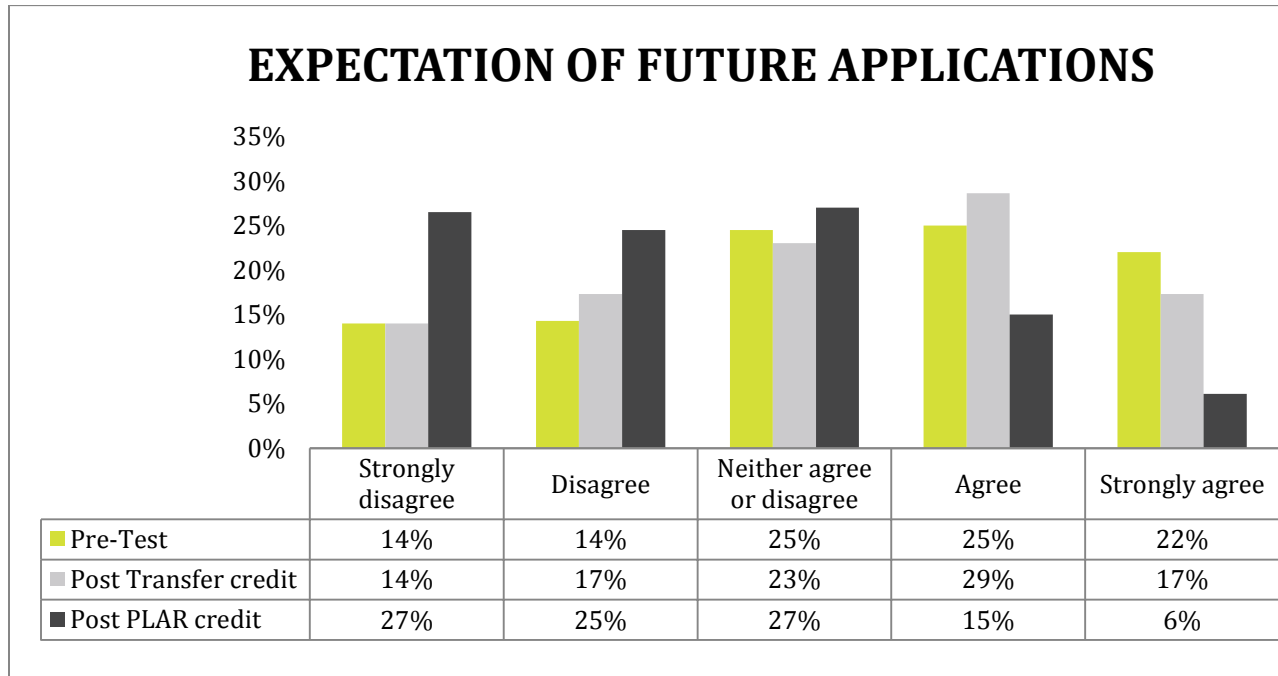
There is no statistically significant difference of opinions between the pre- and post-test,  $t(97) = 0.79, p = .43$ . Sixty-nine percent of respondents state a preference for applying all RPL credit at the beginning of the term.

Related questions were asked during the pre and post surveys. During the pre-survey, students were asked whether they prefer to apply for transfer credit and PLAR at multiple points in the program. In the follow up post-test, students were asked whether they expect to apply for additional transfer credit and PLAR throughout the course of their program (Figure 25).

The three columns of each category reflect the opinions of respondents for pre-test, post-test for transfer credit and post-test for PLAR. The average mean scores of the three questions are 3.19 (pre-test), 3.16 (post-test for credit transfer) and 2.46 (post-test PLAR). The decline in mean values is statistically significant,  $F(2, 291) = 9.79, p < .00$ .

The post hoc with Bonferroni control indicates that the post-test (PLAR) is significantly different from the pre-test and the post-test (credit transfer). There is no statistically significant difference between the pre-test and the post-test (credit transfer). This could be due to the fact that the pre-survey question joined transfer credit and PLAR together in one question, whereas in the post-survey they were separated into two separate questions about whether students intended to apply for additional transfer credit or PLAR. In the pre-survey when students were answering about whether they preferred to apply for transfer credit and/or PLAR at multiple points throughout their program they may have been referring more to transfer credit when they answered, which would affect why less students responded that expected to apply for more PLAR during their program.

Figure 25 | Expectation of Future Transfer/PLAR Credit Applications

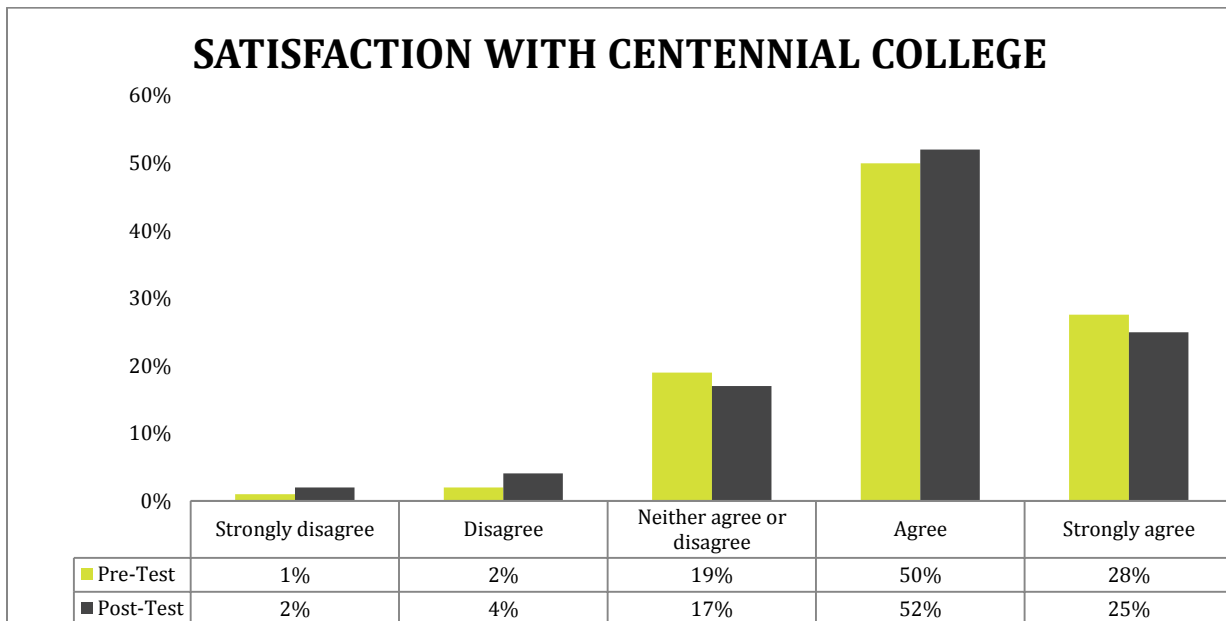


*Satisfaction with College, Program and RPL*

An investigation into RPL student satisfaction with the college, program and RPL process now follows.

Only a small percentage of students in the pre- and post-test surveys disagreed with the statement 'You are satisfied with choosing Centennial College'. About 78% (agree and strongly agree) of students in both the pre-test and post-test surveys were satisfied with choosing the college as their postsecondary institute (Figure 26).

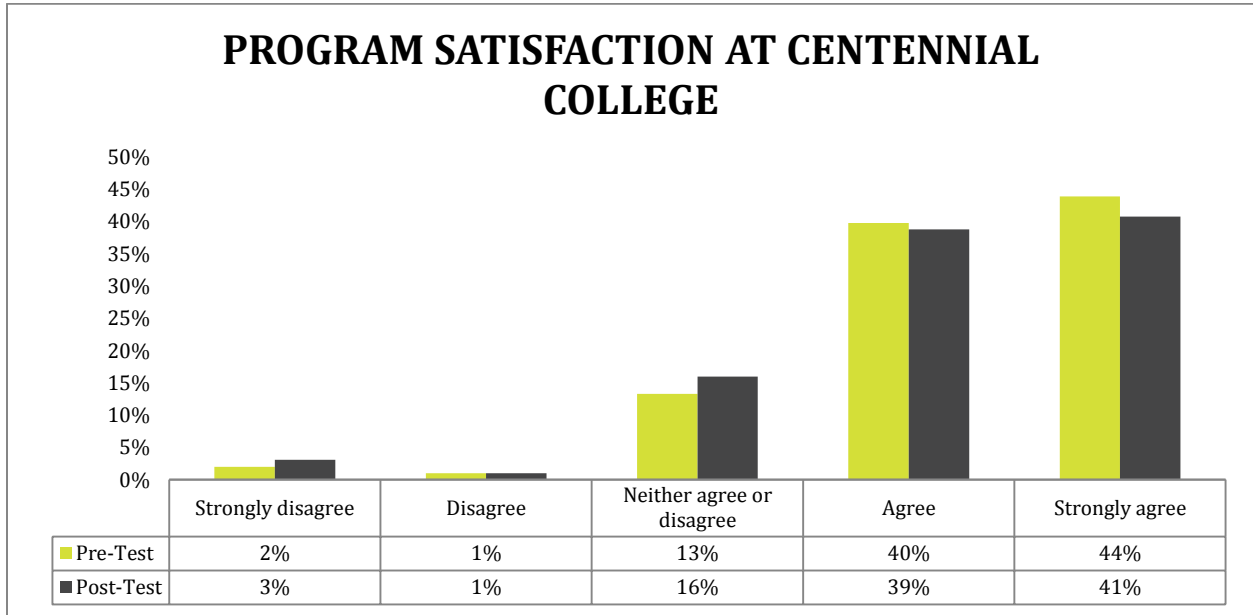
Figure 26 | Satisfaction with Centennial College



There was no significant difference between the pre- and post-test surveys,  $t(97) = 0.324, p = 0.747$ .

Interestingly, respondents may show an even greater affinity with their program (80-84%) than with the college (Figure 27). A large percentage of respondents agree (40%) or strongly agree (44%) with the questions in the pre-test survey. Both categories show slight downward shifts in the post-test, while the disagreement categories are relatively unchanged. Pair-wise t-test shows no significant difference between the pre-test and post-test [ $t(98) = 1.11, p = 0.271$ ].

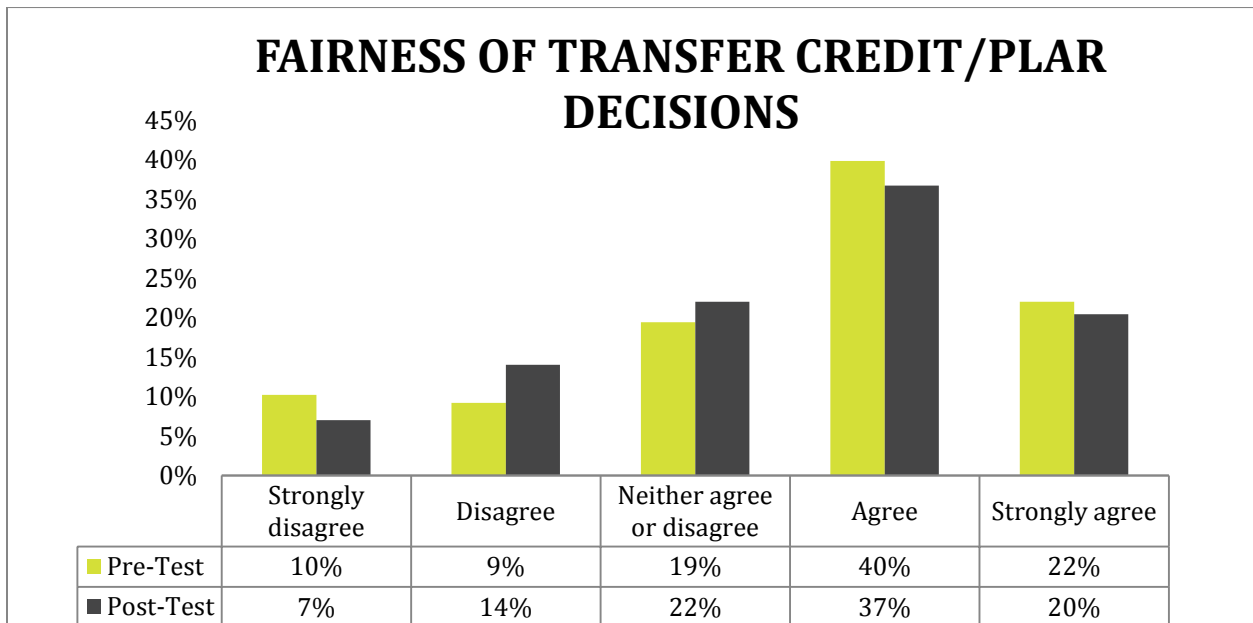
Figure 27 | Program Satisfaction with Centennial College



Satisfaction with RPL is split into three separate factors: 1) fairness, 2) quickness and 3) clarity.

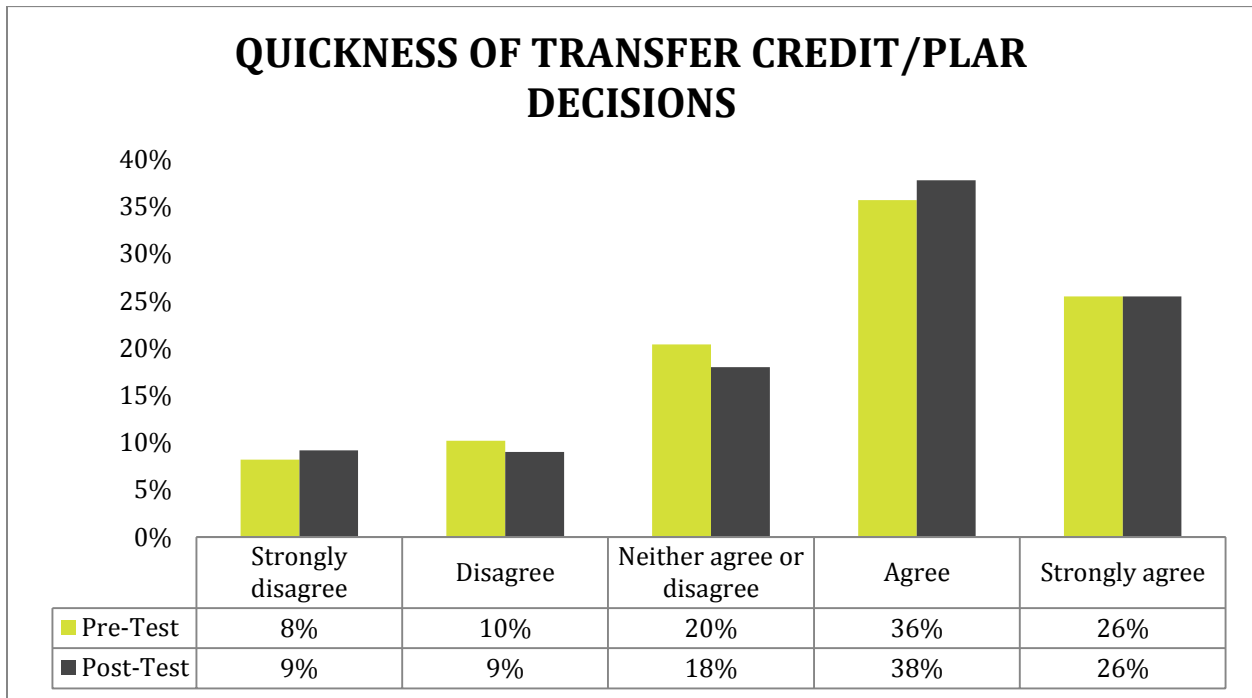
Responding to the fairness of transfer credit from participants shows an overall 61% agreement with the statement in the pre-test questionnaire (Figure 28). The ratio slightly decreases to 57% in the post-test survey. The slight difference in percentage is shifted to the 'neither agree/disagree' category in the post-test. Generally, participants did not change their opinions in the post-test, as is reflected in the pair-wise  $t(97) = .614, p = 0.54$ .

Figure 28 | RPL Satisfaction – Perceived Fairness



A majority of students agreed with the statement that Centennial College quickly awards transfer credit/PLAR (Figure 29). In the pre-test, the ‘agree’ and ‘strongly agree’ categories added up to 62%, while the disagree categories tallied to 18%. These percentages remained stable in the post-test survey with pairwise  $t(97) = 0.38, p = 0.71$ .

Figure 29 | RPL Satisfaction – Perceived Quickness



Focus groups and phone interviews indicated that a lot of students were surprised that the transfer credit application would be online, so this may have impacted why they thought the process would be quick, as online processes are sometimes perceived to be quicker.

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*“I didn’t expect I would have to do everything online”.*

*“But it was, like, really convenient, is all I have to say because, yeah, everything is so, like, automated. Like, when I did it before at ... another college, it was like you had to fill out everything by hand and then go to somebody in person”.*

*“When I appl[ied] for the transfer credits, I was really surprised because this is really streamlined. Like everything is online”.*

---

The majority of students also felt that they received their transfer credit decisions a lot quicker than they expected to. Most students reported that they received a decision in anywhere from a couple of days to a couple of weeks:

*"I definitely thought that I wouldn't find about the credit transfer for a few Weeks. ... That's how long [the previous institution] took. They took forever for me to find out, but I really liked that Centennial let us ... let me know within I think ... a week".*

*"I thought that it would take a little longer. I think my first credit was approved within two days, the GNED; that was pretty fast".*

*"I probably thought it would take like a week. But it only took two days".*

---

However, some students expressed that they had to wait a couple of months for a decision. This could be the result of students having to re-submit documentation multiple times or it could be the result of students applying in the summer. Because the online transfer credit system was launched across all academic schools in summer 2015, there were some delays in transfer-credit decisions over the summer because full-time faculty were on summer vacation. Thus, it took some time to find and train contract faculty to conduct transfer credit assessments.

---

*"Over the past, I don't know, maybe three to four weeks they notified me when statuses were updated, and I guess more towards the last month in August right before school [I] got kinda worried ... so I did make a couple of calls, even [in] July and stuff, like that asking Centennial, okay, like, how does this work? How come I'm not seeing any changes because I had course selection over July I think?"*

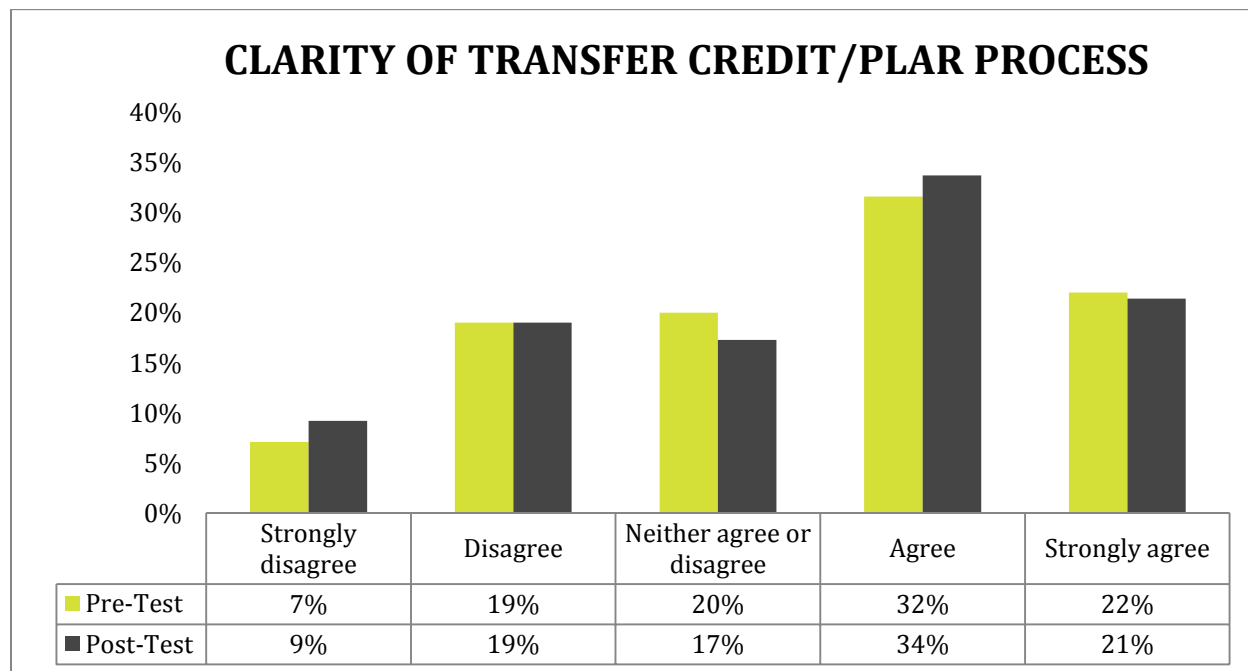
*"I applied in the second week [after] starting college for the transfer credit, and I received the transfer credit in I think [the] ninth week or tenth week ... Because, by the end of that time, I don't know why that was happening, but I ... asked ... many, many times ... 'what's happening, what's happening?' But there was no direct person that I could speak to about my transfer credit".*

*"Two months ... It was in the summer, and I didn't really start until September. So I didn't think there was any rush to do them".*

---

For clarity in the transfer credit and PLAR process, the pre- and post-test yielded relatively the same results, with 54% (agree and strongly agree) in the pre-test and 55% in the post-test survey for the same categories (Figure 30). There is a 2% increase in the 'strongly disagree' category of the post-test survey. Overall, there is no statistical difference [ $t(97) = -0.32, p = 0.75$ ] between the pre-test and the post-test, indicating that participants did not change their opinions.

Figure 30 – RPL Satisfaction – Perceived Clarity



During the focus groups and phone interview, students were asked to comment on what policies and procedures were clearly outlined. One of main trends was that students commented that the online transfer credit application process was simple and clearly outlined:

---

*“I didn’t expect it to be so simple and convenient; you just have to, like, upload a couple files and stuff, and that was it”.*

*“I found the application process pretty simple”.*

*“I was just trying to find out how it was going to be, and then there was like a kind of step-by-step guide on the website. I just kind of followed it”.*

*“It was really nice that you advertise like how to use this whole system ... and how fast it is. So it encourages people to actually use it”.*

*“I looked in the website, and I thought I could [have] found... I found everything I need to know, literally. How they work, how to regist[er] and my.Centennial. So for me it was really straightforward”.*

---

Students also stated they knew that there needed to be similarities between their previous course and the Centennial course in which they wanted to gain a transfer credit:



*"I would need my transcripts to actually see that I took the courses, and they also need my syllabus, to see what actually was ... what actually was done in the course so the people at Centennial can actually see that actual equivalence to the courses at Centennial. And if [the equivalence is proven], I guess then it can be reasonably awarded, the transfer credit".*

*"I knew that we needed our grades, our transcripts and obviously like the course outline, course syllabus so they could match up like if the course has the same information that people are already saying".*

---

Although most students who participated in a phone interview had applied for transfer credit rather than PLAR, those students who knew what PLAR was did comment that information about PLAR being available was clear on course outlines and mentioned in classes.

---

*"Well, on the course description, it actually says if you can PLAR out of it. I really like that. ... Like right on the first page of the course description it says 'Eligible for PLAR: yes or no'".*

*"Well it's like the PLAR process was explained very well in each class, so it's a lot of information about PLAR".*

---

Students were also asked to specifically comment on policies and procedures that were not clearly outlined. Students stated that they had a hard time finding course outlines for courses they wanted to transfer so they did not know if the content was similar.

Within the online transfer credit system, students are able to see the course description and course learning outcomes for courses in their model route, but because the online system was new and Centennial was integrating it with a new online course outline system, there were some courses where the information was not uploaded into the transfer-credit application system. In these cases, students were provided with contact information for their academic school so that they could reach out to the school to receive a course outline. Also, some students tried to find course outlines prior to logging into the online application system, so they experienced difficulty because not all course outlines are provided on the Centennial College website.

---

*"I guess during the summer when I did it, when I applied for transfer, the course outline for Centennial College courses wasn't actually on the website, so you couldn't tell what they actually wanted for the two Englishes. I guess one was about essay writing, [and] the other one was about old works or poems and books".*

*"Some of them do and some of them don't have like a course outline for the course you're trying to get credit for, like it would say something like, oh, 'well, the course outline is not available at this time. Please contact a professor' or something like that. ... It's a bit of a hassle when you can't really see what the courses [are]".*

*“Like it was a pretty straightforward process, the only, I guess, problem that was a little bit frustrating ... for lack of a better word, was when some of the credits didn’t have the description—like you had to contact the school, and sometimes it’s hard to get the right person. That was the only time that it was I guess a little bit annoying”.*

---

Students also expressed that they were unsure of whom to go to for advising on recognition of prior learning. This could be because in promotional materials students are told to speak with a school-based advisor for recognition of prior learning, but at the time of the focus groups and interviews each academic school had its own advising model, so there were no specific contact names listed. Centennial has since moved to a more consistent college-wide pathways advising model.

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*“It was just too much walking around. I thought one-stop shop, you got the Hub, they help you there, not ... go upstairs to see the business people, go down the hall to see the GNED people, [then the] L-Block down here to see the COMM people”.*

*“Like you didn’t really know contact information, like call this extension or email this person”.*

*“The information wasn’t readily available to you, to go diggin’, searchin’ from one department to another tryin’ to find who knows what”.*

*“When I went to inquire about transfer credit, there was no one that I could speak to directly for the transfer credit, and I ha[d] to go to wherever ... to explain it to someone, and then they explain[ed] ... to someone that this is the case and this is the thing. So I would prefer if I can speak to someone straight away about my transfer credit”.*

---

Students also still expressed some confusion over what criteria were used for making transfer-credit decisions:

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*“How somebody actually looks at and compares it. Like what’s the guidelines that they’re using to look at? ... I think it’d be cool to know what they’re grading or judgement scheme is”.*

*“[I] just wasn’t aware that it didn’t have to be, like, exact matches”.*

*“I wasn’t sure which courses I c[ould] get an exception from, and it was just really hard for me to verify ... and you get declined offers”.*

---

Students also mentioned that it was unclear that transfer credit was an option, and they had to search for transfer credit information because they were not provided with the information upon intake. Others stated that they found out information from friends or from professors during class. These recommendations for more avenues to disseminate information will be explored in the recommendations section.

*Transfer Credit Success Predictors*

This section of the analysis searches for predicting factors that could make students successful in obtaining credit transfers. The success rate is the dependent variable in the study. It is defined as the ratio of RPL award/ RPL application. Of the 98 respondents, 94 students applied for TCR credits. Only one person applied for both TCR and PLAR credits. Three students who did not apply for TCR did put in an application for PLAR credit, however.

Multiple variables are tested as predictors, including, gender, age, time passed since high school, previous postsecondary education and program of study. The first stage of this study is to look at the bivariate correlation between the various independent variables and the success rate.

Table 8 | Correlation Matrix of Various Predictors and Success Rate

	1	2	3	4	5	6	7	8	9	10	11	12
1	1											
2	.09	1										
3	-.14	-.08	1									
4	.13	.16	-.13	1								
5	.08	-.25*	.94**	-.08	1							
6	.09	.24*	-.05	.13	.00	1						
7	-.00	-.24*	.10	-.16	.05	-.27	1					
8	-.02	.13	-.20	.02	-.04	-.40**	-.23*	1				
9	.11	.12	-.07	.01	-.08	-.23	-.13	-.20	1			
10	.23**	.07	.08	.05	-.00	-.06	.10	-.07	.05	1		
11	.49**	.08	-.14	.16	-.26*	.12	.03	-.07	.07	.18	1	
12	.38**	.10	-.01	.11	-.12	.09	-.10	-.04	.01	.13	.61**	1
13	.44**	.16	.00	.19	-.04	.15	-.12	.06	-.21*	.22*	.52**	.58**

\*. p< .05, \*\*. p< .01

- 1: Success rate
- 2: Domestic
- 3: Age
- 4: Gender (Female 1)
- 5: Time passed since high school
- 6: Ontario University
- 7: University outside the province
- 8: Ontario College
- 9: College outside the province
- 10: Post awareness of TCR
- 11: Fairness
- 12: Quickness
- 13: Clarity

There are four significant correlations between the success rate and four independent variables (Table 8). These are the post-test perceptions of fairness, clarity and quickness and post-test awareness of credit transfer policy. No significant correlation is found between success rate and previous postsecondary education. There is a high correlation ( $r = .94$ ) between time passed since high school and age, suggesting that the two variables represent the same construct. Therefore, time passed since high school is excluded from the regressions. In addition, the last three variables (fairness, quickness and clarity) have high correlations among themselves.

The second phase of the analysis is the hierarchical multiple linear regressions (HMR), in which variables were entered as a block into the equation (Table 9). Demographics (age and gender) were

the first block to be entered, followed by previous postsecondary education (university and college) and the post perception of clarity, quickness, fairness and awareness of the credit transfer process. School of study should not be a factor for success rate because individuals would obtain transfer credit based on their previous postsecondary education and experience, not on the schools that they are attending.

Table 9 | Regression Weights of Independent Variables, Predicting the Success Rate

Variable	B	SE	$\beta$	R <sup>2</sup>	Adj.R <sup>2</sup>	$\Delta R^2$
<b>Step 1</b>				.03	.01	.03
<b>Constant</b>	.79	.18				
<b>Gender (female 1)</b>	.09	.08	.12			
<b>Age</b>	-.01	.01	-.12			
<b>Step 2</b>				.04	-.01	.01
<b>Constant</b>	.79	.20				
<b>Gender (female 1)</b>	.09	.08	.11			
<b>Age</b>	-.01	.01	-.13			
<b>Attended Ontario University</b>	.05	.10	.06			
<b>Attended Ontario College</b>	-.02	.10	-.03			
<b>Step 3</b>				.25	.21	.21
<b>Constant</b>	-.20	.21				
<b>Gender (female 1)</b>	.04	.08	.04			
<b>Age</b>	-.01	.01	-.06			
<b>Attended Ontario University</b>	.02	.09	.03			
<b>Attended Ontario College</b>	.01	.09	.01			
<b>Post-test Perception of Fairness</b>	.15	.03	.47**			

\*\*Coefficient is significant at .01

$R^2 = .03$  ( $p > .05$ ) for step 1,  $\Delta R^2 = .01$  ( $p > .05$ ) for step 2,  $\Delta R^2 = .21$  ( $p < .01$ ) for step 3

One issue that researchers usually come across in the combination of a large number of variables and small sample size is the overfitting of the equation. Tabachnick and Fidell (2012) suggest that the sample size should not be smaller than  $50 + 8M$ , where  $M$  is the number of independent variables. Therefore, a sample size of 98 should not fit more than 6 variables. Other scholars, such as Hair, Black et al. (2010) recommend 15:1 as an ideal ratio of records to variables. Here, I started with eight independent variables and decided which variable should be eliminated later in the analysis with collinearity diagnostics (tolerance and variance proportion).

HMR analyses data by entering variables into blocks of independent variables. The first block usually behaves as a covariate (also known as control); the subsequent blocks are the variables of interest that analysts want to use for prediction. The common practice is to enter data based on the sequence of less controllable to more controllable by participants.

The first block of hierarchical MLR to be entered is respondents' age and gender, leaving domestic status out of the first block. Students who would obtain transfer credit are more likely to have previous postsecondary education in Ontario. Because the majority of participants previously attended either an Ontario university or an Ontario college, these two variables were selected for entry into the second block. The third block is the opinion and attitude of the participants, which

included perception of fairness, perceptions of quickness, perception of clarity and post-test awareness of the TCR policies and procedures.

The first block reports  $R^2 = .03$ ,  $p = .21$ . This is not significant, and neither age nor gender predicts the respondents' success rate. The second block, which comprised previous postsecondary education background, is not significant. This block only made minor changes ( $\Delta R^2 = .01$ ,  $p = .78$ ). The last block made a significant contribution to the equation, as  $\Delta R^2$  increased by .21,  $p = .00$ . Table 9 also suggested that perception of fairness is the reason why the third block significantly improved the  $R^2$  value. Post-test awareness of TCR, post-test perception of quickness and post-test awareness of clarity did not significantly contribute to the prediction of the success rate. The final model is significant, with  $F(5, 92) = 6.01$ ,  $p < .00$ .

*RPL Credit Satisfaction Predictors*

All participants answered the question about their satisfaction with Centennial College. Their opinions about the college were generally positive with regard to the amount of credit awarded, the quickness of the decision to award and the fairness of the decision to award. More than 50% suggested that the process of obtaining credit is straightforward and clearly outlined. These are good indicators that students are satisfied with Centennial College.

Table 10 | Correlation Matrix of Various Predictors and Post-Test Satisfaction with the Amount of TCR

	1	2	3	4	5	6	7	8	9
1	1								
2	.08	1							
3	.18	.42**	1						
4	.13	.36**	.61**	1					
5	.22*	.22*	.52**	.58**	1				
6	.12	-.05	-.09	-.05	.03	1			
7	.16	.30**	.67**	.61**	.54**	-.02	1		
8	.23*	.14	.49**	.38**	.44**	-.09	.59**	1	
9	.10	.63**	.37**	.28**	.43**	.02	.27**	.19	1

\*.  $p < .05$ , \*\*.  $p < .01$

1: post-test awareness of TCR policy

2: post-test program satisfaction

3: post-test RPL fairness

4: post-test RPL quickness

5: post-test RPL clarity

6: post-test number of info sources

7: post-test satisfaction with TCR amount

8: RPL success rate

9: post-test college satisfaction

The last section of this study tested seven variables as to whether they could be used as predictors of students' satisfaction of TCR received at Centennial College (Table 10). The correlation matrix shows a number of significant correlations among these nine variables. The collinearity diagnostic from SPSS will be used as a guide to exclude independent items that are related among themselves. The control variable is the pre-test expected TCR approval.

The study simulated the first regression study with a three-step HMR (Table 11). The analysis went through three iterative processes because of the interferences from the collinearity of the two variables (post-test fairness and post-test satisfaction with the selected program).

Table 11 | Regression Weight of Independent Variables, Predicting Post-Satisfaction with the Amount of TCR Awarded

Variable	B	SE B	$\beta$	R <sup>2</sup>	Adj.R <sup>2</sup>	$\Delta R^2$
<b>Step 1</b>				.03	.02	.03
Constant	3.49	.24				
Pre-test expected TCR award	-.13	.08	-1.66			
<b>Step 2</b>				.36	.35	.34
Constant	2.01	.28				
Pre-test expected TCR award	-.10	.06	-.13			
Success Rate	2.06	.29	.58**			
<b>Step 3</b>				.54	.52	.18
Constant	.22	.66				
Pre-test expected TCR award	-.09	.06	-.12			
Success Rate	1.41	.28	.40**			
Post-test awareness of TCR award	.04	.13	.03			
Satisfaction with choosing Centennial College	.12	.12	.07			
Post-test perception of quickness of TCR awards	.46	.09	.43**			

\*\*Coefficient is significant at .01

$R^2 = .03$  ( $p > .05$ ) for step 1,  $\Delta R^2 = .34$  ( $p < .01$ ) for step 2,  $\Delta R^2 = .18$  ( $p < .01$ ) for step 3

The last block (Step 3) is free from collinearity among the independent variables, and the final model is significant  $F(5,92) = 21.62$  and accounted for 54% of the variance in post-test satisfaction with the amount of credit transfer. Success rate and post-test perception of quickness make significant contributions to the transfer credit satisfaction equation.

**Results: 2013-14 and 2014-15 Aggregate**

*Transfer Credit Success Predictors*

The regression studies combined the survey data from 2013-14 and 2014-15 into a total of 192 samples. The aim of this section is to search for the predicting factors that enable students to obtain transfer credits, which will reduce education time and expenses. Success rate is defined as the ratio of credit award/credit application. Among the 192 respondents, 189 students expected to receive a credit award.

Prior to the regression study, it is a common practice to peruse the relationship among the variables by conducting a bivariate correlation among the dependent and independent variables. A total of 13 variables are included in the correlation study. These are success rate, gender, age, time passed since high school, domestic status, post awareness of TCR, fairness, quickness, clarity and previous university/college attendance (inside and outside Ontario).

Table 12 | Bivariate Correlations Between Success Rate and Other Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1	1											
2	.09	1										
3	-.05	.03	1									
4	.07	.16	-.03	1								
5	.05	-.18	.16*	-.09	1							
6	.07	.25**	.25*	.10	.04	1						
7	-.03	-.23**	-.23**	-.12	.12	-.04	1					
8	.11	.13	.13	.05	-.15	-.43**	-.31**	1				
9	-.04	-.14	.14	.07	-.13	-.19**	-.17*	-.04	1			
10	.31**	-.11	.12	.16*	-.10	.14	.02	.09	.03	1		
11	.36**	-.13	.05	.17*	-.13	.05	-.02	.07	.06	.54**	1	
12	.27**	-.03	.17*	.11	-.03	.03	-.15*	.08	-.01	.38**	.52**	1
13	.27**	-.13	.12	.14*	-.13	.02	-.15*	.16*	-.08	.34**	.53**	.60**

\*. p < .05, \*\*. p < .01

1: Success rate

3: Age

5: Time passed since high school

7: University outside Ontario

9: College outside Ontario

11: Fairness

13: Clarity

2: Domestic status

4: Gender

6: Ontario University

8: Ontario College

10: Post awareness of TCR

12: Quickness

There are 25 pairs of significance among the 91 pairs of correlation (Table 12). Success rate appears to correlate with post awareness of TCR and perceptions of fairness, quickness and clarity. These last four variables also correlate among themselves, but they are not greater than .60. Nevertheless, these variables will be checked with multicollinearity diagnostics in the next section. Domestic status is correlated with university attendance, but not significantly correlated with college attendance.

The next section is the regression analysis (Table 13). Hierarchical linear multiple regression (HMR) is the method of choice because it allows investigators to enter variables in a block. The common practice is to enter in a sequence of time (past to present and/or uncontrollable to controllable). For example, age and gender are not controllable by the respondents; therefore, they are candidates for early entry. Previous university or college attendance is in the middle, followed by the perceptions of quickness, fairness and clarity. Thus, it is reasonable to enter variables into three blocks.

Table 13| HMR with Success Rate as the Dependent Variable

Variable	B	SE	$\beta$	R <sup>2</sup>	Adj. R <sup>2</sup>	$\Delta R^2$
<b>Step 1</b>				.02	-.01	.02
<b>Constant</b>	.78	.15				
<b>Age</b>	-.01	.01	-.05			
<b>Gender</b>	.09	.07	.11			
<b>Time passed since high school</b>	.01	.01	.06			
<b>Step 2</b>				.06	.03	.04
<b>Constant</b>	.66	.15				
<b>Age</b>	-.01	.01	-.05			
<b>Gender</b>	.07	.07	.08			
<b>Time passed since high school</b>	.01	.01	.08			
<b>Ontario University/College (ONUC)</b>	.33	.13	.20			
<b>Step 3</b>				.14	.11	.08
<b>Constant</b>	.29	.18				
<b>Age</b>	-.01	.01	-.05			
<b>Gender</b>	.03	.06	.04			
<b>Time passed since high school</b>	.01	.01	.10			
<b>Ontario University/College</b>	.28	.13	.17**			
<b>Fairness, quickness, clarity (FQC)</b>	.11	.03	.29**			

\* p = .05, \*\*. p = .01.

The first regression equation, which utilised 12 independent variables, produced an adjusted R<sup>2</sup> of .13. This means the tolerance values of each individual variable must be greater than .87. There were several variables that had tolerance values less than this cutoff point. These values with low tolerance are previous university and college attendance (ON University .51, Outside ON University .73, ON College .50 and Outside ON College .76), fairness (.53), quickness (.55), clarity (.50), domestic status (.74) and post-awareness of TCR (.67). Because the standardised coefficients of ON University and ON College were statistically significant, the two variables were combined and averaged into a single variable (ONUC). The same situation also applied to fairness, quickness and clarity (FQC). The two newly created variables (ONUC and FQC) were used as new variables and reanalysed with HMR. This is a procedure recommended by Leach, Barret and Morgan (2008) on how to handle multicollinearity.

The second regression result is shown in Table 13 with only five variables left in the equation. Table 2 also indicates that the two newly created independent variables (ONUC and FQC) significantly contributed to the regression model. It also shows that when gender, age, domestic



status and time passed since high school (block1) were entered, they did not significantly predict the success rate,  $F(3,153) = .86, p = .46$ . Adding block 2 (ONUC) did not significantly predict the success either,  $F(4, 152) = 2.24, p = .07$ . The entire group of variables (block 3), however, predicted the success rate,  $F(5,151) = 4.71, p < .01, R^2 = .14$  and adj.  $R^2 = .11$ .

All variables in the equation have tolerance in the range of .95 to .99. These values are free from multicollinearity, as they are above the cutoff .89 (1 - .11). The final equation for this model is:

$$\text{Success rate} = .29 - .01\text{Age} + .03\text{Gender} + .01\text{Time passed} + .28 \text{ ONUC} + .11\text{FQC}$$

The equation comprises five variables that do not violate the overfitting rule. Tabachnick and Fidell (2012) recommend that researchers use the formula  $50 + 8M$ , where M is the number of variables. Hair, Black, Babin, and Anderson (2010) use a ratio of 15:1 for cases/variables. This study has 162 participants; therefore, it can afford to have at least 11 independent variables.

*RPL Credit Satisfaction Predictors*

A large majority of respondents are happy with the chosen programs (83%) and Centennial College (80%). The bivariate correlations (Table 14) show that six variables are significantly correlated with student satisfaction with the amount of TCR awarded. These variables are post awareness of TCR, satisfaction in the chosen program, fairness, quickness, clarity and satisfaction with choosing Centennial College. They also correlate among each other, as the r-values fall in the range of .22 to .60. These are in the acceptable range, and researchers should not be concerned with multicollinearity. More than 50% of respondents indicate that Centennial College shows its fairness and quickness in awarding the credits. More than 57% agree that the processes of obtaining credits are clearly outlined. On average, students used three documents to apply for credits.

Table 14 | Bivariate Correlation between Satisfaction with the Amount of TCR Awarded and Other Variables

	1	2	3	4	5	6	7
1	1						
2	.77**	1					
3	.33**	.26**	1				
4	.68**	.54**	.36**	1			
5	.50*	.38**	.31**	.52**	1		
6	.38**	.34**	.20**	.53**	.60**	1	
7	.06	.09	-.03	.10	-.04	.02	1
8	.31**	.22*	.67*	.31**	.27**	.34**	.01

\*.  $p < .05$ . \*\*.  $p < .01$

- |   |                                  |
|---|----------------------------------|
| 1. Satisfaction with amount of TCR      | 2. Post awareness of TCR awarded |
| 3. Satisfaction with the chosen program | 4. Fairness                      |
| 5. Quickness                            | 6. Clarity                       |
| 7. Number of documents                  | 8. Satisfaction with choosing CC |

The hierarchical multiple linear regression (Table 15) starts with entry of block 1, which includes a number of documents and post awareness of TCR. It is followed by block 2, with the addition of

fairness, quickness and clarity. The last block adds satisfaction with the program and satisfaction with choosing Centennial College.

Table 15 | HMR with Satisfaction with the Amount of TCR Awarded as the Dependent Variable

Variables	B	SE	$\beta$	R <sup>2</sup>	Adj.R <sup>2</sup>	$\Delta R^2$
<b>Step 1</b>				.59	.59	.59
<b>Constant</b>	.49	.24				
<b>Post awareness of TCR</b>	.78	.05	.77**			
<b>Number of document</b>	-.01	.06	-.01			
<b>Step 2</b>				.71	.70	.12
<b>Constant</b>	-.35	.24				
<b>Post awareness of TCR</b>	.56	.05	.55**			
<b>Number of document</b>	-.02	.05	-.02			
<b>Fairness</b>	.39	.06	.34**			
<b>Quickness</b>	.17	.05	.17**			
<b>Clarity</b>	-.10	.05	-.09			
<b>Step 3</b>				.71	.70	.01
<b>Constant</b>	-.56	.31				
<b>Post awareness of TCR</b>	.56	.05	.55**			
<b>Number of document</b>	-.02	.05	-.02			
<b>Fairness</b>	.39	.06	.34**			
<b>Quickness</b>	.17	.05	.17**			
<b>Clarity</b>	-.12	.06	-.12*			
<b>Satisfy with the program</b>	-.05	.08	-.04			
<b>Satisfy with choosing CC</b>	.14	.08	.10			

\*. p =.05, \*\*. p =.01

The first block, comprising of two variables (i.e. number of document, post awareness of TCR) significantly predicted student satisfaction with the amount of TCR awarded (STCR),  $F(2,189) = 135.94$ ,  $p < .01$ . The second block (fairness, quickness and clarity) also significantly predicted the STCR with  $F(5, 186) = 88.97$ ,  $p < .001$  with  $\text{adj.}R^2 = .70$ . This is a large effect size, and Centennial College should try to maintain its current achievement. The last block added satisfaction with the program and satisfaction with choosing Centennial College. This is also significant, with  $F(7,184) = 34.40$ ,  $p < .01$ , but the change in  $R^2$  is very small ( $\Delta R^2 = .01$ ). This implies that satisfaction with the program and satisfaction with choosing Centennial College did not contribute to the equation. However, the last block has an additional significant variable (Clarity) with  $\beta = -.12$ ,  $p = .03$ . Although eight variables were utilised in this study, there was no indication of multicollinearity issues. All independent variables had tolerance values greater than 0.3 (1.0-.70).

The final equation for this model is:

$$\text{Satisfaction with the amount of TCR awarded} = -.56 + .56 \text{ Post awareness of TCR} - .02 \text{ number of document} + .39 \text{ Fairness} + .17 \text{ Quickness} - .12 \text{ Clarity} -$$

.05 satisfaction with the program + satisfaction with choosing CC.

*College Satisfaction Predictors*

A large majority of respondents are happy with the chosen programs (83%) and Centennial College (80%). The bivariate correlations (Table 16) show that five variables are significantly correlated with student satisfaction with choosing Centennial College (SCC). These variables are post awareness of TCR, satisfaction in the chosen program, fairness, quickness and clarity. They also correlate among each other, as the r values fall in the range of .20 to .60. These are in the acceptable range, and the researchers should not be concerned with multicollinearity. More than 50% of respondents indicate that Centennial College shows fairness and quickness in awarding the credits. More than 57% agree that the processes of obtaining credits are clearly outlined. On average, students used three documents to apply for credits.

Table 16 | Bivariate Correlation between Satisfaction and Other Variables

	1	2	3	4	5	6	7
1	1						
2	.22**	1					
3	.67**	.26**	1				
4	.31**	.54**	.36**	1			
5	.27*	.38**	.31**	.52**	1		
6	.34**	.34**	.20**	.53**	.60**	1	
7	.01	.09	-.03	.10	-.04	.02	1

\*. p < .05. \*\*. p < .01

- |  |                          |
|--|--------------------------|
| 1. Satisfaction with choosing Centennial | 2. Post awareness of TCR |
| 3. Satisfaction with the chosen program  | 4. Fairness              |
| 5. Quickness                             | 6. Clarity               |
| 7. Number of documents                   |                          |

The hierarchical multiple linear regression starts with entry of block 1. It is followed by block 2, with the addition of satisfaction with the program, fairness, quickness and clarity.

The regression of the satisfaction with choosing Centennial College performs better than the success rate equation. The first entry block, comprising two variables (number of document and post awareness of TCR), significantly predicted SCC,  $F(2,189) = 4.81, p < .01$ . The second entry block (satisfaction with program, fairness, quickness and clarity) also significantly predicted the SCC with  $F(6, 185) = 30.12, p < .001$  with  $adj.R^2 = .48$ . This is a large effect size, and Centennial College should try to maintain its current achievement. Table 17 also indicates that satisfaction with the program ( $\beta = .65, p < .01$ ) and clarity ( $\beta = .26, p < .01$ ) significantly contributed to the prediction of student satisfaction with Centennial College.

Table 17 | HMR with Satisfaction with CC as the Dependent Variable

Variables	B	SE	$\beta$	R <sup>2</sup>	Adj.R <sup>2</sup>	$\Delta$ R <sup>2</sup>
<b>Step 1</b>				.05	.04	.05
<b>Constant</b>	3.42	.26				
<b>Post awareness of TCR</b>	.16	.05	.22**			
<b>Number of document</b>	-.01	.07	-.01			
<b>Step 2</b>				.49	.48	.45
<b>Constant</b>	.81	.28				
<b>Post awareness of TCR</b>	-.04	.05	-.01			
<b>Number of document</b>	.02	.05	.02			
<b>Fairness</b>	-.01	.06	-.01			
<b>Quickness</b>	-.07	.05	-.09			
<b>Clarity</b>	.20	.05	.26**			
<b>Satisfied with the program</b>	.66	.06	.65**			

\*. p = .05, \*\*. p = .01

Again, there was no collinearity issue in the equation, as tolerance values are in the acceptable range of .52 to .99. However, post awareness of TCR was significant ( $\beta = .22$ ,  $p < .01$ ) in step 1, but became insignificant in step 2 ( $\beta = .01$ ,  $p = .97$ ). Reviewing the SPSS collinearity diagnostics table indicates that the post awareness of TCR had a variance proportion of .36, which is below the cutoff value of .50. However, stepwise regression suggests that clarity ( $\beta = .63$ ,  $p < .01$ ) and satisfaction with the program ( $\beta = .21$ ,  $p < .01$ ) are the only two variables that contribute significantly to the prediction of SCC. This implies that post awareness of TCR does not make a significant contribution to the equation. Stepwise regression also yields an identical R<sup>2</sup> of .49.

The regression equation for this model is:

$$\text{Satisfaction with Centennial College} = .81 - .04 \text{ awareness of TCR} + .02 \text{ number of document} \\ - .01 \text{ Fairness} - .07 \text{ Quickness} + .20 \text{ Clarity} + .66 \text{ Satisfaction with the program}$$

### Discussion and Conclusion

The conclusion of this report provides a summary of the findings and a few policy and practice recommendations for Centennial College. This is based on results from the representative sample of the 417 students who applied for transfer credit or PLAR in the 2014-15 academic year.

#### Summary

The vast majority of RPL students are domestic students enrolled in programs from one of three schools: the School of Business, School of Community and Health Studies, and School of Engineering Technology and Applied Science. Close to half of the RPL applicants are enrolled in a two-year diploma program, and they are on average 26-27 years of age.

Roughly 20% of applicants apply for only one transfer credit (with another 30% applying for 2-3 transfer credits), demonstrate a 58% success rate, and will save on average 104 hours of time by not being in class. Conversely, only 4% of RPL students apply for PLAR, and they are slightly less likely to be successful than their credit-transferring counterparts.

Centennial College RPL students experience an increased perceived understanding of credit transfer and PLAR from an offer of admission to the end of their first term. A significant difference was found for understanding of transfer credit between these two time periods: 60% of students have an understanding of transfer credit and its policies at offer of admission, and this jumps to 93% at the end of the first term. The same significant trend is observed with PLAR, albeit less pronounced. A test used in the survey to measure students' actual understanding of proper steps corroborated these findings. For the most part, the respondents report that they prefer to apply for transfer credit at the beginning of their program and are satisfied with the amount of credit they receive. However, PLAR applicants show some uncertainty or dissatisfaction with the lack of credit they receive—perhaps attributable to only having a mediocre understanding of PLAR and its policies.

While the data show evidence of students' developing realistic expectations, there are multiple occurrences of statistically significant gaps between expectations and realities. Student expectations noticeably fall short for those who expect more than three transfer credits and those who expect PLAR credit.

Sizeable (i.e. +10%) expectation-reality gaps also exist across numerous other variables: reduced course load benefit, reduced educational costs benefit, additional time for employment benefit, clear information regarding eligible transfer credits, assistance with understanding RPL decisions, assistance managing the RPL file, program advising and assistance with grade calculation.

RPL students are overwhelmingly satisfied with Centennial College (78%) and their program (82%). In regards to satisfaction with the RPL process itself, respondents find the process fair (59%), quick (61%) and clear (55%). Students do not experience a change in opinion on these three facets of satisfaction across the first term, suggesting that movement through the RPL process bears no effect.

The researchers also sought predicting factors related to RPL success and satisfaction. The only significant predictor found for RPL success was the perceived fairness of the process. Despite

findings from Arnold and Woodhead (2015) that credit transfer understanding plays a role in RPL success, those findings were not replicated in the analysis of the three 2014-15 cohorts.

Interestingly, satisfaction with the RPL process revealed two significant predictors. First, success rate has an effect on satisfaction; a likely explanation is that a higher success rate yields a narrower expectation-reality gap and leads to a more satisfying experience. Second, perceived quickness of the RPL process is also a predictor of satisfaction. This may be explained by students' past experiences with slow, bureaucratic processes at other educational institutions.

This study also aggregated data between the 2013-14 cohorts from Arnold and Woodhead (2015) and the 2014-15 cohorts for this study. This leads to a data set that is approximately double in size, and thus may produce more predictors through regression analysis.

The aggregate data set offers two predictors for RPL success: Ontario PSE credential and FQC. For predicting RPL credit satisfaction, post-awareness of transfer credit and FQC are predictors of satisfaction.

Unexpectedly, the analysis yields predictors of Centennial College satisfaction as well: clarity and program satisfaction. It is possible that students look to clarity of information and overall opinions of their program as a means to gauge Centennial College quality—and by extension satisfaction with the institution.

## **Recommendations**

A few recommendations arise from the results that pertain to Centennial College RPL policy and practice. While these recommendations are specific to Centennial College, other colleges would be welcome to consider similar adoptions to their own institutional practices. All efforts should be undertaken to maintain a process that is fair, quick and clear:

- *Consistent Decision-Making:* A fair process requires consistency on at least two fronts. One, decisions must be consistent with posted standards (e.g. 80% affinity). Two, decisions must be consistent across applicants. Ability to achieve this consistency hinges on clear, published criteria for assessment along with robust transfer credit assessment training for all staff. While Centennial currently does both to some degree, it is suggested that the college revisit this and look to see how consistency can be further improved.
- *Policies and Procedures:* Administrators should change policy to allow students to use two courses from their previous institution to apply for one transfer credit at Centennial. This would allow students to apply for more transfer credits when one course alone does not meet 80% affinity.
- *Increase Initial Support:* Centennial now has dedicated pathway advisors to provide advice and guidance to prospective Centennial students. Between these advisors and the dedicated advisors for incoming students, there is great capacity for initial RPL support to be improved, including the promotion of ONTransfer.ca's course transfer function, so that students can make more accurate choices when applying for transfer credit. In order to accomplish this, RPL staff experts need to transfer knowledge and expertise to these student-facing advisors.

- *Further Automate Processes:* Centennial has an online transfer credit application system that allows students to upload transcripts and outlines; this same system allows faculty to assess applications and render decisions. However, many students cite frustration with having to upload transcripts after already providing them as part of their college applications. The college and students would both benefit from streamlining of transcript submissions, as well as incorporation of PLAR self-assessments into the online system.
- *Access to Other Institution Outlines:* While this is more of a system-wide recommendation, students find it challenging to find course outlines for courses previously taken at other institutions. The Ontario PSE system should consider developing a central repository of outlines/syllabi that is accessible for college staff and students.

In conclusion, students have their expectations met across a number of variables. Primarily, students are generally precise in their transfer-credit applications, and there are minimal gaps regarding expected resources and sources of information. Despite this, sizeable gaps do exist regarding information clarity and various supports.

First-term progression produces little difference in RPL student attitudes, although students' understanding of both credit transfer and PLAR increases. This understanding is very important, as it is suggested that there is a relationship between transfer-credit understanding and RPL satisfaction, as well as between that understanding and RPL success.

A satisfying experience for students seems to hinge most on FQC. An RPL process that is fair, quick and clear promotes satisfaction with the RPL process. Perhaps most importantly for college consideration, a fair, quick and clear RPL process appears to promote satisfaction with the college itself.

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Appendix A

Transferability Expectations and Realities Survey 2014/2015

Letter of Invitation

Greetings,

We are writing to request your participation in the research study entitled, *Transferability Expectations and Realities*. For 5 minutes of your time, you will receive an opportunity to win an iPad 5<sup>th</sup> Generation. There will be additional participation opportunities to win a tablet and/or receive a cash honourarium.

As an incoming Centennial College student with potentially relevant prior learning, you have been identified as a participant candidate for this study. Your candidacy for participation has been based upon your application for transfer credit and/or prior learning assessment and recognition (PLAR) for the 2014-2015 academic year.

Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take a moment to read the details of this study and its benefits.

*WHO IS CONDUCTING THE STUDY?*

All research will be carried out at Centennial College under the supervision of Rachel Oh, Pathways Advisor and Sean Woodhead, Manager, Pathways and Academic Partnerships

*WHAT IS THE PURPOSE OF THE STUDY?*

The purpose of this study is to collect information on students' transfer and PLAR credit experiences, especially at the point of intake. The data will be used to measure incoming student expectations against subsequent received credit, as well as student perceptions regarding transferability. Study results may inform College and/or system-wide policy and process improvements.

*WHAT WILL YOU NEED TO DO IF YOU TAKE PART?*

As a part of this study, we are asking you to participate in a survey discussing your: 1) knowledge of credit transfer and PLAR concepts; 2) expectations for credit transfer and PLAR processes and outcomes; and 3) satisfaction with the current credit transfer and PLAR system in place at Centennial College. This survey will take approximately 5 minutes to complete and you will receive an iPad 5<sup>th</sup> Generation raffle ticket.

In addition, we will collect information from your academic record regarding demographics, registered courses and Recognition of Prior Learning (RPL) applications.

You will be asked to provide consent to be a part of this research study by checking a box on the survey itself. In providing consent, you confirm that you have been given the opportunity to discuss the study, all of your questions have been answered and you agree to participate.

*WHO IS ORGANIZING AND FUNDING THE RESEARCH?*

This study is organized and funded by Centennial College and the Ontario Council on Articulation and Transfer (ONCAT). In 2011, the provincial government announced funding of nearly \$74-million over five years to operate a new centralized system that facilitates transfers among institutions. New centralized credit system objectives include: 1) reducing the need for students to repeat coursework; 2) developing more transfer opportunities; 3) providing on campus advisors and orientation programs; and 4) refining a centralized website that will assist students in identifying credits for transfer (Ministry of Training, Colleges and Universities, 2011). Centennial College is supporting this provincial initiative by participating in and leading many transferability projects, including this study, which will provide fruitful recommendations regarding necessary RPL support structures.

*WHAT ARE THE POSSIBLE DISADVANTAGES IN TAKING PART?*

There are no foreseeable risks associated with participating in this study. The research risk is extremely low. You will be instructed to share and disclose only that information with which you are comfortable. The data collected is not sensitive and there is no more risk involved than in everyday interactions.

*WHAT ARE THE BENEFITS OF TAKING PART?*

Participation in the research study benefits participants and the scholarly community. In identifying RPL reality-expectation gaps, colleges and universities can use the study results to:

- 1) Motivate discussion within institutions regarding their effectiveness in communicating credit transfer and PLAR rights and responsibilities;
- 2) Participate in expectation management at the point of admission; and
- 3) Develop or revise support structures that facilitate the translation of relevant prior learning into postsecondary credit.

*WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?*

Yes, all responses will be kept strictly confidential and your involvement is voluntary. You may withdraw at any time or decline to answer any question with which you are uncomfortable. You will not be judged or evaluated and you will not be at risk of harm. All data collected from individuals who choose to withdraw will be removed from the study results. Your identity will be kept anonymous within all research writing and publications.

*CONTACT AND FURTHER INFORMATION*

## Transferability Expectations and Realities

P.O. Box 631, Station A  
Toronto, Ontario, Canada M1K 5E9  
T 416-289-5000  
centennialcollege.ca

If you are interested in participating in the *Transferability Expectations and Realities* research study, please complete the following survey. Your contribution to this study is greatly appreciated. Responses are requested by [insert date].

<http://fluidsurveys.com/s/TransferabilityExpectationsandRealities4/>

If you have any questions related to your rights as a participant in this study, please contact [ethics@centennialcollege.ca](mailto:ethics@centennialcollege.ca) or the Chair, Dr. Lynda Atack at [latack@centennialcollege.ca](mailto:latack@centennialcollege.ca).

We are happy to answer any questions you may have about this study. Please keep a copy of this letter for your records.

Sincerely,



**Rachel Oh**  
Pathways Advisor  
Centennial College  
PO Box 631, Station A  
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**Appendix B**

**Transferability Expectations and Realities Survey 2014/2015**

**Pre-Survey**

*Sent from Manager, Pathways & Academic Partnerships to incoming Centennial College students who have applied for transfer credit and/or PLAR credit*

This survey will collect information on students’ transfer and PLAR credit experiences, especially at the point of intake. The data will be used to measure incoming student expectations against subsequent received credit, as well as student perceptions regarding transferability adjusted between the initial point of intake and near the first term’s end. This survey is being conducted by Centennial College and the Ontario Council on Articulation and Transfer (ONCAT). All answers will be kept strictly confidential and used for statistical purposes. While participation in this survey is voluntary, your cooperation is important to ensure that the information collected in this survey is accurate and comprehensive.

This survey will take approximately 5 minutes to complete. Students who complete the survey will receive a raffle ticket to be entered into a draw for an iPad 5th Generation.

Participant Consent: I have been given the opportunity to discuss this study. All of my questions have been answered to my satisfaction. I agree to take part in this study and understand that I am free to withdraw at any time.

Student Number: \_\_\_\_\_ Program: \_\_\_\_\_

**Demographics**

1. Where was your high school located?
  - Within Canada (Please specify province) \_\_\_\_\_
  - Outside of Canada (Please specify country) \_\_\_\_\_
  
2. What was your overall average grade in high school?
  - 90% - 100% A+
  - 80% - 89% A
  - 75% - 79% B+
  - 70% - 74% B
  - 65% - 69% C+
  - 60% - 64% C
  - 55% - 59% D+
  - 50% - 54% D
  - 0% - 49% F

## Transferability Expectations and Realities

3. What was your overall average grade at your previous post-secondary institution?
- 90% - 100% A+
  - 80% - 89% A
  - 75% - 79% B+
  - 70% - 74% B
  - 65% - 69% C+
  - 60% - 64% C
  - 55% - 59% D+
  - 50% - 54% D
  - 0% - 49% F
4. Between finishing high school and enrolling in your current Centennial College program, the following amount of time has passed:
- Less than 1 year
  - 1-2 years
  - 3-4 years
  - 5-9 years
  - 10+ years
  - Did not graduate high school
5. (Please select all that apply) Prior to enrolling at Centennial College you:
- Were employed in a job that is related to your current program
  - Volunteered in a role that is related to your current program
  - Had a hobby or hobbies related to your current program
  - Completed university, college, polytechnic and/or vocational/technical education related to your current program
  - Completed workshops or seminars that were not for college or university credit and related to your current program
6. (Please select all that apply) If you completed postsecondary education prior to enrolling at Centennial College, what form of education did you complete?
- Attended a Canadian college, polytechnic and/or vocational/technical institution
  - Attended a Canadian university
  - Attended an international college, polytechnic and/or vocational/technical institution
  - Attended an international university
  - Did not study at a university, college, polytechnic and/or vocational/technical institution
7. You expect to complete your program within:
- One year
  - Two years
  - Three years
  - Four years
  - Five years
  - More than five years
  - Do not expect to complete my program

8. Ideally, you hope to complete most courses with grade points of:
- 90% - 100% A+
  - 80% - 89% A
  - 75% - 79% B+
  - 70% - 74% B
  - 65% - 69% C+
  - 60% - 64% C
  - 55% - 59% D+
  - 50% - 54% D
  - 0% - 49% F
9. Realistically, you expect to complete most courses with grade points of:
- 90% - 100% A+
  - 80% - 89% A
  - 75% - 79% B+
  - 70% - 74% B
  - 65% - 69% C+
  - 60% - 64% C
  - 55% - 59% D+
  - 50% - 54% D
  - 0% - 49% F

**Credit Transfer and PLAR Concepts**

10. (Please rank on the scale) At the moment that you received an offer of admission to Centennial College, you understood the term ‘credit transfer’ and the policies and procedures regarding the awarding of credit.
- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree
11. (Please rank on the scale) At the moment that you attended your first class at Centennial College, you understood the term ‘credit transfer’ and the policies and procedures regarding the awarding of credit.
- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree
12. (Please rank on the scale) At the moment that you received an offer of admission to Centennial College, you understood the term ‘prior learning assessment and recognition’ (PLAR) and the policies and procedures regarding the awarding of credit.
- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree



13. (Please rank on the scale) At the moment that you attended your first class at Centennial College, you understood the term ‘prior learning assessment and recognition’ (PLAR) and the policies and procedures regarding the awarding of credit.

- Strongly Disagree   
  Disagree   
  Neither Disagree Nor Agree   
  Agree   
  Strongly Agree

14. (Please select all that apply) Your understanding of credit transfer has been informed by:

- Family
- Secondary school teacher(s) and/or guidance counselor(s)
- Centennial College recruitment team or their agents
- Friends and coworkers
- Centennial College website
- Centennial College on-campus staff
- Other institution website
- Other institution staff
- ONCAT website
- Other: \_\_\_\_\_

15. (Please select all that apply) Your understanding of PLAR has been informed by:

- Family
- Secondary school teacher(s) and/or guidance counselor(s)
- Centennial College recruitment team or their agents
- Friends and coworkers
- Centennial College website
- Centennial College on-campus staff
- Other institution website
- Other institution staff
- ONCAT website
- Other: \_\_\_\_\_

**Expectations and Preferences**

16. At the moment that you received an offer of admission to Centennial College, you expected to obtain:

- No transfer credit
- 1 transfer credit
- 2 transfer credits
- 3 transfer credits
- 4 transfer credits
- 5 transfer credits
- 6 transfer credits
- 7 or more transfer credits

17. At the moment that you received an offer of admission to Centennial College, you expected to obtain:
- No PLAR credit
  - 1 PLAR credit
  - 2 PLAR credits
  - 3 PLAR credits
  - 4 PLAR credits
  - 5 PLAR credits
  - 6 PLAR credits
  - 7 or more PLAR credits
18. (Please select all that apply) At the moment that you received an offer of admission to Centennial College, you expected to use the following documentation and/or experiences to determine whether to submit an application for transfer credit and/or PLAR credit:
- Academic transcript(s)
  - Course description(s)
  - Course outline(s)/syllabi
  - Assignments and/or assessments
  - Portfolio(s)
  - Independent study, personal projects and/or reading
  - Community and family activities
  - Paid or voluntary work, travel and/or military service
  - Hobbies and/or professional associations
  - Non- university and/or college courses and/or training programs
  - Seminars and/or workshops
  - Other
19. (Please rank all that apply in order) At the moment that you received an offer of admission to Centennial College, you expected to complete the following steps when applying for transfer credit and/or PLAR credit:
- Confirm requirements for transfer credit and/or PLAR with an advisor
  - Transfer credit and/or PLAR assessment received (awarded or denied)
  - Provide documentation (e.g. transcript(s), course outline(s) etc.) for transfer credit(s) and/or complete PLAR assessment(s) with an RPL assessor
  - Complete the Transfer of Credit Application and/or PLAR Application
  - Submit all applications and any applicable fees

Transferability Expectations and Realities

20. (Please select all that apply) At the moment that you received an offer of admission to Centennial College, you expected to experience the following forms of credit transfer and/or PLAR support:
- Clear information regarding eligible transfer credits
  - Guidance on application procedures
  - Program advising
  - Assistance with grade calculation(s)
  - Assistance managing your transfer credit and/or PLAR files (e.g. deadlines, transcript(s), documents etc.)
  - Assistance understanding transfer credit and/or PLAR assessments and all decisions
21. (Please select all that apply) At the moment that you received an offer of admission to Centennial College, you expected to experience the following benefits if awarded transfer credit and/or PLAR credit?
- Limited repetition of previously learned material
  - Reduced course load
  - Reduced time to completion
  - Reduced educational or opportunity costs
  - Additional time for family
  - Additional time for employment
22. (Please rank on the scale) When you applied for transfer credit and/or PLAR credit, you expected the application to be approved and the requested credit to be awarded.
- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree
23. (Please rank on the scale) You would prefer to apply for all your transfer credit and/or PLAR credit at the beginning of your program.
- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree
24. (Please rank on the scale) You would prefer to apply for your transfer credit and/or PLAR at multiple points throughout your program.
- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

**Satisfaction**

25. (Please rank on the scale) You are satisfied with choosing Centennial College for your postsecondary education.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

26. (Please rank on the scale) You are satisfied with your choice of program at Centennial College.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

27. (Please rank on the scale) You believe Centennial College fairly awards transfer credit and/or PLAR credit.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

28. (Please rank on the scale) You believe Centennial College quickly awards transfer credit and/or PLAR credit.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

29. (Please rank on the scale) The process of obtaining transfer credit and/or PLAR credit at Centennial College was straightforward and clearly outlined.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

**Thank you!** We appreciate you taking the time to complete this survey. Your feedback is important to us and will assist in improving Centennial College’s credit transfer and PLAR system.

If you have any questions about this survey, please contact Sean Woodhead at [swoodhead@centennialcollege.ca](mailto:swoodhead@centennialcollege.ca).

Please check the box below if you wish to participate in a 5 minute follow-up survey in (December/April/August). You will receive an additional two raffle tickets for the iPad 5<sup>th</sup> Generation draw for your participation.

## Appendix C

### Transferability Expectations and Realities Follow-Up Survey 2014/2015

#### Letter of Invitation

Greetings,

Thank you for taking the time to participate in the *Transferability Expectations and Realities* research study. We enjoyed learning about your initial: 1) knowledge of credit transfer and prior learning assessment and recognition (PLAR) concepts; 2) expectations for credit transfer and PLAR processes and outcomes; and 3) satisfaction with the current credit transfer and PLAR system in place at Centennial College.

Having almost completed your first term at Centennial College, you will have now experienced the credit transfer and/or PLAR system in relation to your coursework. Therefore, we are contacting you at this time to participate in a follow-up survey. We would like to hear about your first term and the realities you have experienced.

Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take a moment to read the details of this study and its benefits.

#### *WHO IS CONDUCTING THE STUDY?*

All research will be carried out at Centennial College under the supervision of Rachel Oh, Pathways Advisor and Sean Woodhead, Manager, Pathways and Academic Partnerships.

#### *WHAT IS THE PURPOSE OF THE STUDY?*

The purpose of this study is to collect information on students' transfer and PLAR credit experiences, especially at the point of intake. The data will be used to measure incoming student expectations against subsequent received credit, as well as student perceptions regarding transferability. Study results may inform College and/or system-wide policy and process improvements.

#### *WHAT WILL YOU NEED TO DO IF YOU TAKE PART?*

At this stage in the study, we are asking you to participate in a follow-up survey discussing your: 1) knowledge of credit transfer and PLAR concepts; 2) realities of credit transfer and PLAR processes and outcomes; and 3) continued satisfaction with the current credit transfer and PLAR system in place at Centennial College. This survey will take approximately 5 minutes to complete. You will receive a \$15.00 Tim Horton's gift card as well as two additional raffle tickets for an iPad 5th Generation draw!

You will be asked to provide consent to be a part of this research study by checking a box on the survey itself. In providing consent you confirm that you have been given the opportunity to discuss the study, all of your questions have been answered and you agree to participate.

*WHO IS ORGANIZING AND FUNDING THE RESEARCH?*

This study is organized and funded by Centennial College and the Ontario Council on Articulation and Transfer (ONCAT). In 2011, the provincial government announced funding of nearly \$74-million over five years to operate a new centralized system that facilitates transfers among institutions. New centralized credit system objectives include: 1) reducing the need for students to repeat coursework; 2) developing more transfer opportunities; 3) providing on campus advisors and orientation programs; and 4) refining a centralized website that will assist students in identifying credits for transfer (Ministry of Training, Colleges and Universities, 2011). Centennial College is supporting this provincial initiative by participating in and leading many transferability projects, including this study, which will provide fruitful recommendations regarding necessary Recognition of Prior Learning (RPL) support structures.

*WHAT ARE THE POSSIBLE DISADVANTAGES IN TAKING PART?*

There are no foreseeable risks associated with participating in this study. The research risk is extremely low. You will be instructed to share and disclose only that information with which you are comfortable. The data collected is not sensitive and there is no more risk involved than in everyday interactions.

*WHAT ARE THE BENEFITS OF TAKING PART?*

Participation in the research study benefits participants and the scholarly community. In identifying RPL reality-expectation gaps, colleges and universities can use the study results to:

- 1) Motivate discussion within institutions regarding their effectiveness in communicating credit transfer and PLAR rights and responsibilities;
- 2) Participate in expectation management at the point of admission; and
- 3) Develop or revise support structures that facilitate the translation of relevant prior learning into postsecondary credit.

*WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?*

Yes, all responses will be kept strictly confidential and your involvement is voluntary. You may withdraw at any time or decline to answer any question with which you are uncomfortable. You will not be judged or evaluated and you will not be at risk of harm. All data collected from individuals who choose to withdraw will be removed from the study results. Your identity will be kept anonymous within all research writing and publications.

## Transferability Expectations and Realities

### CONTACT AND FURTHER INFORMATION

If you are interested in continuing your participation in the *Transferability Expectations and Realities* research study, please complete the following follow-up survey. Your contribution to this study is greatly appreciated. Responses are requested by [insert date].

<http://fluidsurveys.com/s/TransferabilityExpectationsandRealitiesFollow-Up4/>

If you have any questions related to your rights as a participant in this study please contact [ethics@centennialcollege.ca](mailto:ethics@centennialcollege.ca) or the Chair, Dr. Lynda Attack at [latack@centennialcollege.ca](mailto:latack@centennialcollege.ca).

We are happy to answer any questions you may have about this study. Please keep a copy of this letter for your records.

Sincerely,



**Rachel Oh**  
Pathways Advisor  
Centennial College  
PO Box 631, Station A  
Toronto, Canada, M1K 5E9  
[racheloh@centennialcollege.ca](mailto:racheloh@centennialcollege.ca)



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**Appendix D**

**Transferability Expectations and Realities Follow-Up Survey  
2014/2015**

**Post- Survey**

*Sent from Manager, Pathways & Academic Partnerships to incoming Centennial College students who have applied for transfer credit and/or PLAR credit*

This survey will collect information on students’ transfer and PLAR credit experiences, especially at the point of intake. The data will be used to measure incoming student expectations against subsequent received credit, as well as student perceptions regarding transferability adjusted between the initial point of intake and near the first term’s end. This survey is being conducted by Centennial College and the Ontario Council on Articulation and Transfer (ONCAT). All answers will be kept strictly confidential and used for statistical purposes. While participation in this survey is voluntary, your cooperation is important to ensure that the information collected in this survey is accurate and comprehensive.

This survey will take approximately 5 minutes to complete. Students who complete the survey will receive a \$15.00 Tim Horton’s gift card as well as two additional raffle tickets for an iPad 5<sup>th</sup> Generation draw! Gift cards will be mailed to students’ home addresses or made available for pick-up at Centennial College.

Participant Consent: I have been given the opportunity to discuss this study. All of my questions have been answered to my satisfaction. I agree to take part in this study and understand that I am free to withdraw at any time.

Student Number: \_\_\_\_\_ Program: \_\_\_\_\_

**Demographics**

1. Has your program at Centennial College changed since enrolment?
  - Yes, a program change has occurred
  - No, a program change has not occurred
  
2. You expect to complete your program within:
  - One year
  - Two years
  - Three years
  - Four years
  - Five years



- More than five years
  - Do not expect to complete my program
3. Ideally, you hope to complete most courses with grade points of:
- 90% - 100% A+
  - 80% - 89% A
  - 75% - 79% B+
  - 70% - 74% B
  - 65% - 69% C+
  - 60% - 64% C
  - 55% - 59% D+
  - 50% - 54% D
  - 0% - 49% F
4. Realistically, you expect to complete most courses with grade points of:
- 90% - 100% A+
  - 80% - 89% A
  - 75% - 79% B+
  - 70% - 74% B
  - 65% - 69% C+
  - 60% - 64% C
  - 55% - 59% D+
  - 50% - 54% D
  - 0% - 49% F

**Credit Transfer and PLAR Concepts**

5. (Please rank on the scale) You are aware of and understand the term ‘credit transfer’ and the policies and procedures regarding the awarding of credit.
- Strongly Disagree   
  Disagree   
  Neither Disagree Nor Agree   
  Agree   
  Strongly Agree
6. (Please rank on the scale) You are aware of and understand the term ‘prior learning assessment and recognition’ (PLAR) and the policies and procedures regarding the awarding of credit.
- Strongly Disagree   
  Disagree   
  Neither Disagree Nor Agree   
  Agree   
  Strongly Agree
7. (Please select all that apply) Your understanding of credit transfer has been informed by:
- Family
  - Secondary school teacher(s) and/or guidance counselor(s)
  - Centennial College recruitment team or their agents
  - Friends and coworkers

- Centennial College website
- Centennial College on-campus staff
- Other institution website
- Other institution staff
- ONCAT website
- Other: \_\_\_\_\_

8. (Please select all that apply) Your understanding of PLAR has been informed by:

- Family
- Secondary school teacher(s) and/or guidance counselor(s)
- Centennial College recruitment team or their agents
- Friends and coworkers
- Centennial College website
- Centennial College on-campus staff
- Other institution website
- Other institution staff
- ONCAT website
- Other: \_\_\_\_\_

#### Realities and Additional Expectations

9. For your current Centennial College program you obtained:

- No transfer credit
- 1 transfer credit
- 2 transfer credits
- 3 transfer credits
- 4 transfer credits
- 5 transfer credits
- 6 transfer credits
- 7 or more transfer credits

10. For your current Centennial College program you obtained:

- No PLAR credit
- 1 PLAR credit
- 2 PLAR credits
- 3 PLAR credits
- 4 PLAR credits
- 5 PLAR credits
- 6 PLAR credits
- 7 or more PLAR credits

11. (Please select all that apply) You utilized/referenced the following documentation and/or experiences when submitting an application for transfer credit and/or PLAR credit:

- Academic transcript(s)
- Course description(s)
- Course outline(s)/syllabi
- Assignments and/or assessments

## Transferability Expectations and Realities

- Portfolio(s)
- Independent study, personal projects and/or reading
- Community and family activities
- Paid or voluntary work, travel and/or military service
- Hobbies and/or professional associations
- Non- university and/or college courses and/or training programs
- Seminars and/or workshops
- Other
12. (Please rank all that apply in order) You completed the following steps when applying for transfer credit and/or PLAR credit:
- Confirm requirements for transfer credit and/or PLAR with an advisor
  - Transfer credit and/or PLAR assessment received (awarded or denied)
  - Provide documentation (e.g. transcript(s), course outline(s) etc.) for transfer credit(s) and/or complete PLAR assessment(s) with an RPL assessor
  - Complete the Transfer of Credit Application and/or PLAR Application
  - Submit all applications and any applicable fees
13. (Please select all that apply) You experienced the following forms of transfer credit and/or PLAR support:
- Clear information regarding eligible transfer credits
- Guidance on application procedures
- Program advising
- Assistance with grade calculation(s)
- Assistance managing your transfer credit and/or PLAR files (e.g. deadlines, transcript(s), documents etc.)
- Assistance understanding transfer credit and/or PLAR assessments and all decisions
14. (Please select all that apply) You experienced the following benefits having been awarded transfer credit and/or PLAR credit:
- Limited repetition of previously learned material
- Reduced course load
- Reduced educational or opportunity costs
- Additional time for family
- Additional time for employment
- N/A
15. (Please rank on the scale) You applied for all your transfer credit and/or PLAR credit at the beginning of your program.
- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

16. (Please rank on the scale) You expect to apply for additional transfer credit during the course of your program at Centennial College.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

17. (Please rank on the scale) You expect to apply for additional PLAR credit during the course of your program at Centennial College.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

**Satisfaction**

18. (Please rank on the scale) You are satisfied with choosing Centennial College for your postsecondary education.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

19. (Please rank on the scale) You are satisfied with your choice of program at Centennial College.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

20. (Please rank on the scale) (Please rank on the scale) You are satisfied with the amount of transfer credit you have currently been awarded at Centennial College.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

21. (Please rank on the scale) You are satisfied with the amount of PLAR credit you have currently been awarded at Centennial College.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

22. (Please rank on the scale) You believe Centennial College fairly awards transfer credit and/or PLAR credit.

- Strongly Disagree     Disagree     Neither Disagree     Agree     Strongly Agree

## Transferability Expectations and Realities

Nor Agree

23. (Please rank on the scale) You believe Centennial College quickly awards transfer credit and/or PLAR credit.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

24. (Please rank on the scale) The process of obtaining transfer credit and/or PLAR credit at Centennial College was straightforward and clearly outlined.

- Strongly Disagree     Disagree     Neither Disagree Nor Agree     Agree     Strongly Agree

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**Thank you!** We appreciate you taking the time to complete this survey. Your feedback is important to us and will assist in improving Centennial College's credit transfer and PLAR system.

If you have any questions about this survey, please contact Sean Woodhead at [swoodhead@centennialcollege.ca](mailto:swoodhead@centennialcollege.ca).

Please check the box below if you wish to participate in a 60 minute focus group discussing your credit transfer and/or PLAR experiences. Students will receive a \$20.00 cash honourarium for their participation. In addition, complimentary pizza and drinks will be served at each focus group session!

## Appendix E

### Transferability Expectations and Realities Focus Group

#### Letter of Invitation

Greetings,

Thank you for taking the time to participate in the *Transferability Expectations and Realities* research study. We enjoyed learning about your: 1) knowledge of credit transfer and prior learning assessment and recognition (PLAR) concepts; 2) expectations and realities; and 3) satisfaction with the current Recognition of Prior Learning (RPL) system in place at Centennial College.

We are contacting you at this time in response to your interest in participating in a 60 minute focus group discussing your credit transfer and/or PLAR experiences. A focus group consists of a small number of individuals brought together to discuss their perceptions, opinions and beliefs on a specific topic. Questions are asked in an interactive group setting where participants are free to talk with other group members.

Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take a moment to read the details of this study and its benefits.

#### *WHO IS CONDUCTING THE STUDY?*

All research will be carried out at Centennial College under the supervision of Rachel Oh, Pathways Advisor and Sean Woodhead, Manager, Pathways and Academic Partnerships.

#### *WHAT IS THE PURPOSE OF THE STUDY?*

The purpose of this study is to collect information on students' transfer and PLAR credit experiences, especially at the point of intake. The data will be used to measure incoming student expectations against subsequent received credit, as well as student perceptions regarding transferability. Study results may inform College and/or system-wide policy and process improvements.

#### *WHAT WILL YOU NEED TO DO IF YOU TAKE PART?*

At this stage in the study, we are asking you to participate in audiotaped, semi-structured focus group that will center on the existence of expectation-reality gaps and rationales for these gaps (student estimations of relevant prior learning and institutional communication of expectations and standards). Your insights will reveal how support structures can be constructed and/or revised to provide a more productive system. The focus group will be audio taped with your permission. Approximately eight to ten

students will participate in each 60 minute semi-structured focus group. Due to the confidential nature of this study you will be asked to keep all discussion that takes place within the focus group private. You will receive a \$20.00 cash honourarium for your participation!

You will be asked to provide consent to be a part of this research study by written confirmation at the commencement of the focus group. In providing consent you confirm that you have been given the opportunity to discuss the study, all of your questions have been answered and you agree to participate.

### *WHO IS ORGANIZING AND FUNDING THE RESEARCH?*

This study is organized and funded by Centennial College and the Ontario Council on Articulation and Transfer (ONCAT). In 2011, the provincial government announced funding of nearly \$74-million over five years to operate a new centralized system that facilitates transfers among institutions. New centralized credit system objectives include: 1) reducing the need for students to repeat coursework; 2) developing more transfer opportunities; 3) providing on campus advisors and orientation programs; and 4) refining a centralized website that will assist students in identifying credits for transfer (Ministry of Training, Colleges and Universities, 2011). Centennial College is supporting this provincial initiative by participating in and leading many transferability projects, including this study, which will provide fruitful recommendations regarding necessary RPL support structures.

### *WHAT ARE THE POSSIBLE DISADVANTAGES IN TAKING PART?*

There are no foreseeable risks associated with participating in this study. The research risk is extremely low. You will be instructed to share and disclose only that information with which you are comfortable. The data collected is not sensitive and there is no more risk involved than in everyday interactions.

### *WHAT ARE THE BENEFITS OF TAKING PART?*

Participation in the research study benefits participants and the scholarly community. In identifying RPL reality-expectation gaps, colleges and universities can use the study results to:

- 1) Motivate discussion within institutions regarding their effectiveness in communicating credit transfer and PLAR rights and responsibilities;
- 2) Participate in expectation management at the point of admission; and
- 3) Develop or revise support structures that facilitate the translation of relevant prior learning into postsecondary credit

Rachel Oh and Sean Woodhead

P.O. Box 631, Station A  
Toronto, Ontario, Canada M1K 5E9  
T 416-289-5000  
centennialcollege.ca

*WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?*

Yes, all responses will be kept strictly confidential and your involvement is voluntary. You may withdraw at any time or decline to answer any question with which you are uncomfortable. You will not be judged or evaluated and you will not be at risk of harm. All data collected from individuals who choose to withdraw will be removed from the study results. Your identity will be kept anonymous within all research writing and publications.

*CONTACT AND FURTHER INFORMATION*

If you have any questions related to your rights as a participant in this study please contact [ethics@centennialcollege.ca](mailto:ethics@centennialcollege.ca) or the Chair, Dr. Lynda Atack at [latack@centennialcollege.ca](mailto:latack@centennialcollege.ca).

We are happy to answer any questions you may have about this study. Please keep a copy of this letter for your records.

Sincerely,



**Rachel Oh**  
Pathways Advisor  
Centennial College  
PO Box 631, Station A  
Toronto, Canada, M1K 5E9  
[racheloh@centennialcollege.ca](mailto:racheloh@centennialcollege.ca)



**Sean Woodhead**  
Manager, Pathways & Academic  
Partnerships  
Centennial College  
PO Box 631, Station A  
Toronto, Canada, M1K 5E9  
[swoodhead@centennialcollege.ca](mailto:swoodhead@centennialcollege.ca)



## Appendix F

### Transferability Expectations and Realities Focus Group

#### Consent Letter

[Insert date]

To the participants in this study,

The purpose of this study is to collect information on students' credit transfer and prior learning assessment and recognition (PLAR) experiences, especially at the point of intake. The data will be used to measure incoming student expectations against subsequent received credit, as well as student perceptions regarding transferability. Study results may inform College and/or system-wide policy and process improvements.

All research will be carried out at Centennial College under the supervision of Rachel Oh, Pathways Advisor and Sean Woodhead, Manager, Pathways and Academic Partnerships.

In 2011, the provincial government announced funding of nearly \$74-million over five years to operate a new centralized system that facilitates transfers among institutions. New centralized credit system objectives include: 1) reducing the need for students to repeat coursework; 2) developing more transfer opportunities; 3) providing on campus advisors and orientation programs; and 4) refining a centralized website that will assist students in identifying credits for transfer (Ministry of Training, Colleges and Universities, 2011). Centennial College is supporting this provincial initiative by participating in and leading many transferability projects, including this study, which will provide fruitful recommendations regarding necessary Recognition of Prior Learning (RPL) support structures.

The audiotaped, semi-structured focus group will center on the existence of expectation-reality gaps and rationales for these gaps (student estimations of relevant prior learning and institutional communication of expectations and standards). Your insights will reveal how support structures can be constructed and/or revised to provide a more productive system. The focus group will be audio taped with your permission. Approximately eight to ten students will participate in each 60 minute semi-structured focus group. Due to the confidential nature of this study you will be asked to keep all discussion that takes place within the focus group private. You will receive a \$20.00 cash honourarium for your participation!

Rachel Oh and Sean Woodhead

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Participation in the research study benefits participants and the scholarly community. In identifying RPL reality-expectation gaps, colleges and universities can use the study results to:

- 1) Motivate discussion within institutions regarding their effectiveness in communicating credit transfer and PLAR rights and responsibilities;
- 2) Participate in expectation management at the point of admission; and
- 3) Develop or revise support structures that facilitate the translation of relevant prior learning into postsecondary credit.

Involvement in the study is voluntary. You may withdraw at any time or decline to answer any question with which you are uncomfortable. You will not be judged or evaluated and you will not be at risk of harm. All data collected from individuals who choose to withdraw will be removed from the study results. Your identity will be kept anonymous within all research writing and publications.

If you have any questions related to your rights as a participant in this study please contact [ethics@centennialcollege.ca](mailto:ethics@centennialcollege.ca) or the Chair, Dr. Lynda Attack at [latack@centennialcollege.ca](mailto:latack@centennialcollege.ca).

Thank you in advance for your participation.



**Rachel Oh**  
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Centennial College  
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**Sean Woodhead**  
Manager, Pathways & Academic  
Partnerships  
Centennial College  
PO Box 631, Station A  
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By signing below, you are indicating that you are willing to participate in the study, you have received a copy of this letter and you are fully aware of the conditions above.

Name: \_\_\_\_\_  
Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Please initial if you agree to have the focus group audio taped: \_\_\_\_

Please initial indicating you have received your \$20.00 honorarium: \_\_\_\_

**Appendix G**

**Transferability Expectations and Realities Focus Group**

**Protocol**

Focus Group Protocol – 60 minute session

- I. *Settling in (5 mins)*
  - a. Welcome focus group participants to the session.
  - b. Research team introduction.
  - c. Describe the purpose of the study.
  - d. Describe the voluntary nature of participation and ask participants if they are comfortable having their discussion audio recorded. Inform participants that those who wish to withdraw from the study may do so at any time; all data collected from these individuals will be removed from the transcripts. Thank and dismiss those who are not interested in continuing their participation. Remind participants that due to the confidential nature of this study they will be asked to keep all discussion that takes place within the focus group private.
  - e. Ask the focus group members to introduce themselves and state their program at Centennial College.
  
- II. *Clarifying terms and concepts (10 mins)*
  - a. What does it mean to be a ‘transfer student’ and/or ‘PLAR student’? Do you use these terms to refer to your situation?
  - b. Has your experience at Centennial College differed from that of your high school counterparts? (*Prompts: admissions, financial, coursework*)
  - c. From your experience, map/illustrate the process for receiving transfer credit and/or PLAR at Centennial College? Please include all required processes/stages. What processes/stages were you not aware of upon intake?
  
- III. *Warm up –Information matrix (15 mins)*
  - a. Ask participants to fill in a matrix identifying incoming expectations for credit transfer and/or PLAR at Centennial College and their rationale. Identify credit transfer and PLAR expectations separately (if applicable).

	<b>Grades</b>	<b>Previous Program/ Coursework</b>	<b>Application/ Documentation</b>	<b>Policies/ Procedures</b>	<b>Timing</b>	<b>Assessment/ Amount of Credit Awarded</b>
<b>Expectation(s)</b>						
<b>Rationale(s)</b>						

- b. Reporting out
- i. At the point of intake, what expectations did you hold for credit transfer/PLAR?
  - ii. What was your rationale for these expectations?
  - iii. What resources and/or sources informed your expectations?
- IV. *Realities and satisfaction (25 mins)*
- a. What criteria does Centennial College use to award transfer credit? Were you aware of these criteria from the point of intake?
  - b. Are you satisfied with the amount of credit you have been awarded? Reasons for dissatisfaction? (*Prompts: original course or program was not designed for transfer; courses could not be used toward certificate/diploma/degree; did not know or understand transfer requirements*)
  - c. What policies and procedures for obtaining transfer credit and/or PLAR credit at Centennial College were clearly outlined at the point of intake?
  - d. What policies and procedures for obtaining transfer credit and/or PLAR credit at Centennial College were not clearly outlined at the point of intake?
  - e. What support structures can be constructed and/or revised to provide a more productive system at Centennial College?
- V. *Wrap-up (5 mins)*
- a. Summarize the main themes of the conversation – what did the research team hear? Go around the room to see if the participants agree with the summary and to see if they have anything to add, amend, etc...
  - b. Have we missed anything? Is there anything else that you wish to share that we haven't asked?

Thank participants for their time. Ask if they have any questions. Provide contact information if participants have anything additional they would like to share.