

2020-12-16

Understanding the Experience of International Students in Cooperative Education

Rempel, Matthew

Rempel, M. (2020). Understanding the Experience of International Students in Cooperative Education (Doctoral thesis, University of Calgary, Calgary, Canada). Retrieved from <https://prism.ucalgary.ca>.
<http://hdl.handle.net/1880/112988>

Downloaded from PRISM Repository, University of Calgary

UNIVERSITY OF CALGARY

Understanding the Experience of International Students in Cooperative Education

by

Matthew Rempel

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF EDUCATION

GRADUATE PROGRAM IN EDUCATIONAL RESEARCH

CALGARY, ALBERTA

DECEMBER, 2020

© Matthew Rempel 2020

PREFACE

Many paths lead us towards the pursuit of education and inquiry. I look back on my journey and smile fondly. I would not describe myself as a traditional doctoral student or researcher. Prior to employment in post-secondary, my background consisted of entrepreneurship, business, and public service, and I knew exactly nothing about the education sector. I vividly remember the first day I met with my fellow students in our doctoral cohort, and within seconds, I came to realize just how outmatched and unprepared I was for what was coming next. As we engaged in inquiry, discussion, and our collective learning, I found myself Googling-as-we-go to understand the conversation by looking up the meaning of words, such as pedagogy, epistemology, and ontology, which did not exist in my vocabulary. Fast forward more than a few years later, and I find myself inspired, motivated, and ever learning from others, and perhaps, I am finding a place among a community of educators and scholars. I feel immensely privileged to have learned from, and with, our faculty and my new colleagues and friends.

Selecting this research topic was an exceptionally easy decision for me. This inquiry is aligned to my profession certainly, but perhaps more profoundly, I personally am in awe of the courage and resiliency of international students studying in Canada. I would be thrilled if the findings of this research can be used to support our international students in their transition to employment and success in Canadian society. This dissertation titled “Understanding the Experience of International Students in Cooperative Education” has also been written to fulfill the completion of the Doctor of Education degree with a specialization in Leadership in Post-Secondary Contexts at the University of Calgary. Ethics approval for this research was granted by the University of Calgary Conjoint Faculties Research Ethics Board, Ethics ID: REB18-1835 on January 22, 2019. This document has been professionally edited.

ACKNOWLEDGEMENTS

I would like to acknowledge the participants in my study. I thank you for sharing your time, opinions, and your personal stories with me. Without a doubt you have had an impact on me, my viewpoints, and understanding of international students, and I have been personally touched by your immense courage, optimism, and inspiration. I am grateful that you all were a part of this research and appreciate you.

I would also like to recognize the entire team at the University of Calgary. The faculty, administration, and the members of my committee have all been insightful, curious, motivated, and genuinely supportive of my progress, development, and learning throughout this entire educational experience. I cherish the summers on campus, the scholarly debate and shared learning, as well collaborating and working together throughout the research phase of the program. To my supervisor, Dr. Colleen Kawalilak, who took me under her wing when I needed her most—thank you, thank you, thank you. Across the five years of doctoral studies there have been ups and downs for me, but since the day we met, the encouragement, support, and help you have provided me has ensured that the last part of this marathon has been nothing short of wonderful.

My thanks also extend to my colleagues at work who have had to endure me prattling on and on about my research. Maria, this would never have happened without you taking a chance on me and always being a champion of mine. I will never ever be able to express my gratitude. Another great support network I appreciate immensely comes in the form of a Whatsapp group and a cohort of doctoral students. Your friendship, messages, humour, and eternal optimism for progress have inspired me to continue when it was hardest to keep writing.

Lastly, and unequivocally the most important, I want to thank my family. Mom and Dad, I've been a student a long, long, long time now, and you've always been a bedrock of support and love. To Dad who taught me 7x7 the hard way and to Mom who shared my sheer and utter confusion trying to explain epistemology, I couldn't have done this without you. So, dare I say it? This is the last time ... nah, I've learned my lesson. To my wife and daughter, when this whole journey began, you were my fiancé and a dream of our future family. We've been through so much life together over the past five years, and you've had to share me with my studies and my computer. I love you. Thank you.

ABSTRACT

Canadian post-secondary institutions are experiencing significant growth in their international student populations. At the same time, there is a rising demand for work-integrated learning and specifically co-operative education (co-op) programs. The convergence of these topics has created a dramatic spike in the number of international students participating in co-op. The purpose of this research was to learn from the experiences of international students in co-op to provide evidence and recommendations that might help inform higher education and co-op departments in Canada in their approach to supporting and enabling the success of international students.

A mixed-method approach was utilized to collect quantitative and qualitative data from international students who had completed co-op at the college level in Ontario. A survey instrument was developed, and semi-structured interviews conducted from a subset of the survey respondents. The results were reported independently on both data sets and then amalgamated into a critical discussion of the findings and relevant literature. The data and findings are presented and organized into themes of preparedness for co-op, experiences during co-op, and the contribution of co-op departments.

The recommendations provided call for more research on this topic as well as leveraging experiential learning and alumni and employers in co-op preparatory curriculum. International students are not a homogenous group and, as such, require tailored supports and interventions, which include individualized services and education such as workshops, one-on-one advising, and the development of tools that enable students to self-identify their readiness and requirements prior to co-op. Lastly, it is recommended that co-op departments are appropriately resourced to meet the needs of international students and enable them to be successful in co-op.

TABLE OF CONTENTS

PREFACE.....	ii
ACKNOWLEDGEMENTS.....	iii
ABSTRACT.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
CHAPTER ONE: Introduction.....	1
Definitions of Terms.....	1
Background.....	5
Positionality of the Researcher.....	8
Rationale and Purpose.....	9
Research Question.....	11
Methodology and Method.....	11
Conceptual Framework.....	12
Significance of the Research.....	14
Chapter Summary.....	15
Organization of this Dissertation.....	16
CHAPTER TWO: Literature Review.....	17
Work-Integrated Learning and its Theoretical Underpinning.....	17
Defining and Explaining WIL.....	19
Perspectives of Students, Employers, and Post-Secondary Institutions.....	21
An Introduction to Co-operative Education.....	23
History and Definition.....	23
Educational Purposes of Co-op.....	25
Structure of Co-op Programs.....	27
Administration and the Quality of Co-op Experiences for Students.....	29
International Students' Experiences with Post-Secondary Education.....	31
Acculturation, Challenges, and Stressors.....	33
The Academic Environment and Student Supports.....	34

Transitioning to Employment and its Influence on Student Immigration	36
International Student Participation in Co-op and WIL	37
Outbound Co-op and WIL (Domestic Students Pursuing WIL Abroad).....	38
Benefits and Barriers for International Students.....	39
Language and Canadian Workplace Culture	41
Success Factors for International Students and Emerging Best Practices	43
Summary	45
CHAPTER THREE: Research Design	47
Research Questions	47
Ontology and Epistemology	48
Research Setting.....	50
Methodology	51
Definitions and Rationale	52
Explanatory Sequential Mixed Method (QUAN → qual)	53
Participants and Recruitment	59
Participants for Online Survey	60
Participants for Semi-Structured Interviews	61
Compensation for Participation	61
Language Considerations.....	62
Method	63
Online Survey Instrument	63
Interview Protocol.....	64
Data Analysis	66
Quantitative Analysis.....	66
Qualitative Analysis.....	67
Interpreting and Integrating Mixed Data	70
Ethical Considerations	71
Confidentiality	71
Informed Consent.....	72
Reciprocity	73
Research and Ethics Boards.....	73
Trustworthiness.....	73
Limitations and Delimitations.....	74

Summary	75
CHAPTER FOUR: Data Findings and Analysis	77
Quantitative Phase: Survey Data and Findings.....	77
Demographic Profile of the Survey Respondents	78
Preparedness and Perspectives Prior to Co-op.....	80
Co-op Experience and Perspectives during Co-op	86
Preparation Course and Supporting Students	96
Qualitative Phase: Interview Data and Findings.....	100
Demographic Profile of the Interview Participants	101
Preparedness and Perspectives Prior to Co-op.....	104
Co-op Experience and Perspectives during Co-op	106
Preparation Course and Supporting Students	116
Analysis.....	120
Analysis of the Demographic Information	120
Insights on Preparedness from the Quantitative Data.....	122
Insights on the Co-op Experience from the Quantitative Data	122
Insights for the Preparation Course and Supporting Students from the Quantitative Data	123
Emergent Themes Derived from the Qualitative Data	124
Summary	127
CHAPTER FIVE: Discussion and Recommendations	128
Overview.....	128
Preparedness for Co-op.....	128
Acculturation and Confidence in Canada	129
Academics and Classroom Learning	130
Employment and On-Campus Activities	131
Knowing What to Expect.....	134
International Students' Thoughts on Preparing for Co-op.....	135
What Can Be Learned About Preparedness?	137
International Student Experiences in Co-op	138
Success and the Value of Co-op	138
Different Treatment, Discrimination, and Employer Supervision.....	140
Communication and Interpersonal Relationships During Co-op.....	142

What can be Learned from International Students' Co-op Experiences?.....	143
Co-op Departments and Co-op Curriculum.....	145
Modalities, Length, and Content of the Preparation Course.....	145
Customized Classes, Workshops, and Advising for International Students.....	146
Advice for Co-op Departments.....	147
What Can Co-op Departments Learn from International Students?.....	149
Recommendations for Co-op Departments.....	150
Recommendation 1: Evolve Co-op Preparation Courses to include a Blend of Online Learning While Maximizing In-class Experiential Learning	151
Recommendation 2: Leverage International Student Alumni and Employers to Inspire International Students	151
Recommendation 3: Provide Workshops and One-On-One Supports for International Students	152
Recommendation 4: Develop a Self-Assessment Tool for International Students.....	152
Recommendation 5: Invest in Co-op Departments So They Can Better Support International Students and Workplace Supervisors	153
Limitations of the Research	154
A Call for Future Research	156
Final Reflections	158
Summary	159
References.....	161
Appendix A: Key Characteristics of Co-Op in Ontario.....	183
Appendix B: A Comparison of Critical Success Elements for Co-op and Perceptions of Quality Indicators.....	185
Appendix C: Survey Questions.....	187
Appendix D: Interview Questions	207
Appendix E: Correlation Matrix: Preparedness for Co-op.....	213
Appendix F: Correlation Matrix: Experiences in Co-op.....	214

LIST OF TABLES

Table 1. Definition of Terms	2
Table 2. An Example of Typical College Co-Op Program with Six Academic Semesters	29
Table 3. Survey Respondents by Ethnicity	79
Table 4. Student Preparedness for Co-op	81
Table 5. Success in Co-op and Value of Co-op	86
Table 6. Success in Co-op and Value of Co-op by Ethnicity	89
Table 7. Success in Co-op and Value of Co-op by On-campus Experience.....	91
Table 8. Success in Co-op and Value of Co-op by Employment Experience	93
Table 9. Comfort Communicating in English during Co-op	94
Table 10. Value of a Co-op Preparation Course	97
Table 11. Home Country of Interview Participants	102

LIST OF FIGURES

Figure 1. Conceptual framework for the international student experience in co-op.	13
Figure 2. Visual model for mixed-method sequential explanatory design. This illustrates the phases, procedures, and outcomes of the mixed-method approach to this research.	57
Figure 3. Data collection and research question alignment. Primary and secondary research questions are displayed in relationship to independent variables and influencing factors that were measured and explored through this research.....	65
Figure 4. Perspectives prior to co-op	82
Figure 5. Preparedness by gender and age.....	83
Figure 6. Preparedness by GPA and credential type.....	84
Figure 7. Preparedness by employment experience.....	85
Figure 8. Work-term experiences 1.	87
Figure 9. Work-term experiences 2.	87
Figure 10. Success in co-op by gender and age.	88
Figure 11. Success in co-op by time in Canada.	89
Figure 12. Success in co-op by GPA and credential type.....	90
Figure 13. Success in co-op by previous participation in on-campus activities	92
Figure 14. Success in co-op by previous employment experience.	92
Figure 15. Value of co-op by previous employment experience.	93
Figure 16. Importance of communication skills (ranked order)	95
Figure 17. Students' preferred modality for a preparation course	98
Figure 18. Students' preferred amount of instruction time.....	98
Figure 19. Importance of preparation course topics (ranked order).	99
Figure 20. Where students seek help (ranked order)	100

CHAPTER ONE: Introduction

In Chapter One, I introduce the research that was conducted to explore the experiences of international students in co-operative education (co-op) programs in post-secondary education. As context for this research, pertinent background is provided as well as the positionality of the researcher. An overarching research question is presented with three secondary questions, followed by a brief explanation of the methodology and method of the research. To introduce how I conceptualized the variables or factors that impact the experiences of international students in co-op, a framework is provided that visually depicts some of the key elements that will be explored and how they are connected. An overview is then presented of the significance of the research, followed by definitions of terms used throughout this dissertation. Lastly, a summary of the chapters of this document and their organization is provided.

Definitions of Terms

A list of terms commonly used by staff involved in the administration or delivery of co-op programs is presented in Table 1. They do not represent formal definitions. It is provided to share the vernacular used by practitioners in this field; therefore, I have not provided references. This list is presented for those who may not have subject matter knowledge of co-op programming.

Table 1. *Definition of Terms*

Term	How the Term is Used in This Document
Co-operative Education (co-op)	<p>A term used to signify programs in post-secondary that include semesters where a student ceases to take academic classes and instead is employed in a workplace where they will gain experience related to their program of study. These co-op experiences are vetted and sanctioned by the academic institution. Employment is typically for one academic semester at a time, and then students return to classroom studies.</p> <p>Sometimes, the term internship is used in a similar context to co-op; however, internships are often much longer in duration than co-op and may or may not be paid employment.</p>
Co-op Work-term or Work-term	<p>A term used to signify the time a student in a co-op program is employed and supervised in the workplace. Typically, a co-op work-term is one academic semester in length.</p> <p>Synonyms: placement or work experience.</p>

Term	How the Term is Used in This Document
Work-Integrated Learning (WIL)	<p>An umbrella term that represents many academic programs that include work-related experiences for students integrated with their academic studies.</p> <p>WIL can be used to signify programs that include field placement, practicum, apprenticeship, co-op, internship, mandatory professional practice, or others in the curriculum.</p> <p>Synonyms: workplace learning or work-based learning</p>
Co-op Practitioners	<p>A term used to signify staff employed at a post-secondary institution involved with and/or responsible for the provision of co-op to students.</p> <p>Synonyms: co-op coordinators, co-op advisors, or co-op staff.</p>
Co-op Departments	<p>A term used to signify the organization of co-op practitioners. Co-op departments may be centralized, decentralized, or hybrid models; however, when the term is used, it is intended to represent the staff involved in the administration of co-op, irrespective of the different organizational structures in post-secondary institutions.</p>

Term	How the Term is Used in This Document
Supervisor	<p>A term used to signify the person responsible for providing direction and supervision to a co-op student while that student is on a co-op work-term. This is typically a manager within a company who hires and employs the co-op student and not an individual employed by the student's post-secondary institution.</p>

Table 1 continued

Employer, Workplace, Industry, or Site of Employment	<p>These are terms used to signify organizations in the public, non-profit, or private sectors that employ co-op students.</p>
--	--

Industry is a term used to acknowledge many individual employers.

Preparation or Pre-employment	<p>These are terms used to signify the workshops, training, curriculum, or classes that occur prior to a student beginning a co-op work-term. The nature, modalities, and design of these types of preparation programming are varied amongst different academic institutions. Most programs have some form of pre-employment or preparation content available for students.</p>
-------------------------------	--

Term	How the Term is Used in This Document
International Students	<p>A term used to signify a student who leaves their country of residency or citizenship to pursue education in another country.</p> <p>International students in co-op are international students who also complete their co-op work-term in a country other than their residency or citizenship. Their work-term is often in the same country of their post-secondary institutions in which they are enrolled.</p>

Background

Post-secondary institutions are currently experiencing broad-scale internationalisation of higher education (Altbach & Knight, 2007; Chankseliani, 2018; Childress, 2009; Kehm & Teichler, 2007; Take & Shoraku, 2018). Knight (2003) proposed, “Internationalization at the national, sector, and institutional levels is defined as the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education” (p. 2). The concepts of internationalization are broad and multifaceted. For this research, the term was delimited to attracting and enrolling international students in post-secondary institutions and the implications of that action. Canada has not shied away from this phenomenon and has in fact embraced it (Canadian Bureau for International Education, 2016; Larsen, 2015). Some have argued that internationalization is primarily an economic incentive designed to extract higher tuition from international students (Stein & de Andreotti, 2016; Viggiano, López Damián, Morales Vázquez, & Levin, 2018), while others have suggested reframing internationalization to recognize the economic remunerations, but to also capitalize on the societal, academic, and multicultural benefits for countries, post-secondary institutions,

faculty and staff, and students (Garson, 2016). Regardless of how internationalization has evolved over time (Kehm & Teichler, 2007), now, more than ever, post-secondary institutions are recruiting larger volumes of international students. In Canada, there were 494,525 international students studying during 2017 at all levels of education, with three-quarters of those at the post-secondary level (Canadian Bureau for International Education, 2018, p. 1). At Ontario colleges, 34,155 international students were enrolled, which represented over 15% of the total college student enrollment (Decock, McCloy, Steffler, & Dicaire, 2016).

Recruiting and attracting international students to study in Canada is also part of the Government of Canada's policy agenda. Canada's *International Education Strategy* set targets to double the international student population from 239,131 in 2011 to over 450,000 by 2022 (Government of Canada, 2014, p. 11). Recognizing that Canada's population and economic growth depends on immigration (Picot, 2013), York University released a report in 2016 that suggests international students are "ideal" immigrants from Ontario employers' perspectives. Students from other countries experience the Canadian education system, learn in an academic environment that promotes the practice and use of English, and have time during their education to become more comfortable living within Canadian communities. Additionally, international students are generally a younger population that have the potential for many years of employment and productivity in the economy after graduation should they become a Canadian citizen (Desai-Trilokekar, Thomson, & Masri, 2016). Canada's labour market can integrate these graduating international students to harness our collective human capital and to fill labour market gaps, and this could be realized as a global competitive advantage for Canada (Arthur, 2013). These indicators suggest that significant numbers of international students will continue to be

present in Canadian post-secondary institutions. The challenge is to learn how to best support international students in their learning, education, and experience in Canada.

Another significant trend in higher education relates to the popularity and growth of work-integrated learning (Academica Group, 2016; Patrick et al., 2008; Sattler, 2011). Work-integrated learning (WIL) is a pedagogical approach that deliberately positions students in educational and workplace settings where they come to learn through the deliberate integration of both environments (Billet, 2009). For example, co-op is a form of WIL that consists of “alternating academic terms and paid work terms” (Co-operative Education and Work-Integrated Learning Canada, n.d., para. 1) and “formally integrates a student’s academic studies with work experience” (Education at Work Ontario, n.d., para. 1). Co-op is a highly popular form of WIL that has seen substantial growth in Ontario. In 1986, 7% of college graduates participated in co-op, and by 2010, it grew to 22% of all college graduates (Rodriguez, Zhao, & Ferguson, 2016). As co-op and WIL continue to become integrated into the landscape of Canadian higher education, the relationship among post-secondary institutions, employers, and students in the workplace will be a critically important topic.

The convergence of these two trends has resulted in a substantial increase of international students in co-op programs. In Ontario, this situation is acute, acknowledged by experts, and is being addressed and promoted through provincial policy and incentives. Premier Wynne commissioned a report in 2016 entitled “Workforce of Tomorrow: A Shared Responsibility” that highlighted Ontario’s objectives to transition international students into the workforce and to ensure that all students receive a form of experiential or WIL in their education at the post-secondary level (The Premier’s Highly Skilled Workforce Expert Panel, 2016). As a result, the Ontario Government has committed to developing actions for expanding opportunities for

students to learn through experience and funding more work placements (Office of the Premier, 2016). The global impacts of internationalization, the governmental pressures for immigration of international students through the post-secondary education system, and the desired universal application of WIL for all post-secondary students, has created a perfect storm for co-op departments in Ontario. Now more than ever, there is a critical need for research related to international students in co-op. Data and recommendations can be used to assist post-secondary institutions make informed decisions on how to structure and tailor their programs and supports to address the volume of international students participating in co-op and promote their success.

Positionality of the Researcher

I am currently the Director for Career-Integrated Learning at a College in Ontario. My portfolio includes responsibility for Co-operative Education and the department and staff who work within it. We are a large college and have over 50 academic programs that include co-op. My passion is for students and their success. I personally believe that the blend of experiences that students have within and outside the classroom contribute to the development of well-rounded individuals ready to face all of life's personal and professional challenges and opportunities.

It is also my opinion that the traditional ways of preparing and supporting students for co-op, specifically international students, are not sufficient or tailored to their unique needs. I share my bias with full transparency as it relates to this research. To encourage impartiality, I approached data, research instruments, and participant responses in a way that took into account Feldman's (2003) consideration for skepticism, truth, and justification as an approach to being thorough, thoughtful, and impartial. Christians (2011) stated that researchers should: "hang up their values along with their coats as they enter their lecture halls" (p. 63). While I appreciate the

intention of this statement, I would be remiss if I didn't argue that this is not possible to completely exclude my values from this research. I did, however, approach all aspects of this project with as an impartial, objective, and non-judgemental perspective as I could. I did this recognizing that my profession is in the field of co-op and I have been heavily influenced by my peers, role models, and colleagues with whom I have spent the last six years of my career. I had not studied as an international student personally and thereby did not have a lived experience upon which to draw during the collection and interpretation of the data; however, I do believe my professional background served as a strength for this research. I was mindful to balance personal and professional bias throughout the research process to critically cogitate on my biases, respect and interpret only the data and voices of research participants, and to deliberately challenge myself by contemplating contradictions to my interpretations as a reflective process.

Lastly, I recognize and disclose that this research was both educationally and professionally motivated. I conducted the research in the field of my profession and to meet the requirements to complete the Doctor of Education. Additionally, it may also contribute to my professional career and my position at my institution. I accepted and respect this balance of objectives and still believe strongly that this research is needed. It will provide practical data and information that benefits other co-op practitioners who are confounded by this complex topic.

Rationale and Purpose

Responding to the growth of international students in co-op is a challenge for post-secondary institutions, employers, and students alike. The primary goal of international students enrolling in Ontario colleges is for employment and career preparation (Decock et al., 2016); however, research has demonstrated that international students experience issues ranging from language barriers, bias and/or discrimination from employers, to a lack of professional networks,

limited job search skills, career indecision, understanding and successfully navigating workplace culture, transitioning from student to worker, lack of help seeking behaviours, high family expectations for their careers, and inadequate career supports in post-secondary institutions (Arthur & Flynn, 2013; Crockett & Hays, 2011; Ingram & Ens, 2011; Sangganjanavanich, Lenz, & Cavazos, 2011;). The challenge presented to post-secondary institutions lies in how to prepare international students for the employment environment with a readiness to be successful in the workplace. Curriculum that integrates academic and workplace learning is known to help prepare students for employment after graduation (Higher Education Quality Council of Ontario, 2016). When looking to literature and research specifically related to international student experiences in WIL, there has been a significant lack of research, and this gap urgently needs to be addressed (Andrade, 2016; Gribble, Dender, Lawrence, Manning, & Falkmer 2014; Paku & Coll, 1999; Tran & Soejatminah, 2016). This gap in the literature is likely a result of the combination of the recent growth of international students, higher demand for WIL in post-secondary education, and the political, societal, and economic forces that are inspiring a closer link between education and industry.

I designed this research to focus on the international student experience and what could be learned from it to inform practices and supports provided by co-op departments. The research sites are large colleges in Ontario with a substantial international student population. The data and recommendations from this research may be able to assist institutions make evidence-informed decisions related to their programming, practices, and supports for international students. More broadly, the data and findings may also be used to promote international student success, to facilitate their readiness to be employed in the Canadian workplace, and ultimately

contribute to preparing future Canadian citizens to be employed and productive members of our communities and labour force.

Research Question

The primary question that was addressed by the research is: What can be learned from the perspectives of international students enrolled in Co-operative Education that can support Co-operative Education practitioners develop evidence-informed programming?

Secondary research questions to supplement this inquiry were:

- What factors contribute to international students' preparedness for their co-op work-terms?
- What opportunities and challenges do international students experience in co-op?
- What do international students value from co-op?

Methodology and Method

For the research, I employed a mixed-methods research methodology that draws upon both quantitative and qualitative data in a sequenced and complimentary design (Creswell, 2015; Leech & Onwuegbuzie, 2009; Teddlie & Tashakkor, 2006). This research approach was motivated by the view that collecting, mixing, and using both quantitative and qualitative data has the potential to lead to a better understanding than using one approach exclusively (Creswell & Clark, 2007). Phase one of the research involved the distribution of an online survey instrument to collect quantitative data (Czaja & Blair, 2005) distributed to approximately 450 international students who have completed co-op. Phase two of the research invited 10 survey respondents to participate in semi-structured interviews. This allowed participants to elaborate on their experiences to the degree that they chose to through open-ended questions (Turner, 2010).

The intention was to collect qualitative data that compliments or expands upon data collected through the survey instrumentation.

Conceptual Framework

I have learned throughout my career that there are many variables that impact student success in co-op programs. These factors can range from individual traits and personality characteristics of each student, how program curriculum influences workplace readiness, to how we educate students to search for jobs, prepare resumes, and perform during interviews. There are many other contributors to student experiences, such as families, friends, professors, workplace supervisors, co-op practitioners, and academic administrators. It was difficult in some cases to disaggregate this collage of influences empirically, especially considering that some of these factors may not be within the sphere of influence of post-secondary institutions. To narrow the scope of this study, I focused specifically on identifying where and how co-op practitioners and staff can support international students.

The conceptual framework I developed is displayed in Figure 1 and visually presents the experience of international students in co-op. This framework has been informed partially through my lived experience as an administrator of co-op programs and partially through my interpretation of themes found within existing research and literature. I believe they are the salient and priority factors that contribute to an international student's experience in co-op.

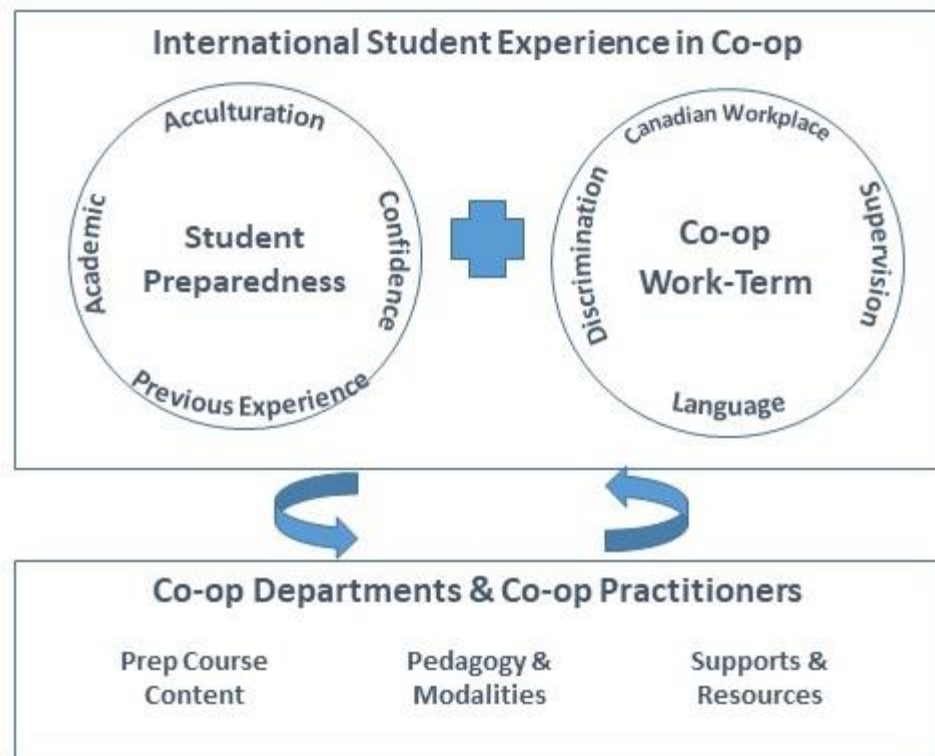


Figure 1. Conceptual framework for the international student experience in co-op.

The framework acknowledges that there are two components that impact the overall experience a student has in co-op. First, how prepared a student is to engage in co-op will impact their experience. For international students, factors such as their acculturation, program of study, confidence, and readiness to work in Canada, as well as previous volunteer or work-related experiences may accumulate as their preparedness for co-op. The voice of international students in a Canadian context is needed to confirm and inform understanding of these factors and was partially addressed in the findings of this study. Many of these factors represent an area of opportunity where co-op departments and staff can actively be engaged in supporting student preparation for co-op. Second, the student's perception of co-op is impacted by their experience while employed and participating in a work-term. In this case, variables such as working within

the Canadian workplace and its employment culture, supervision by their employer, the student's ability to speak English and engage in social communication, as well as any perceived or real incidents of discrimination. While on the co-op work-term, the student is primarily off campus and not supervised by academic staff members. This domain is where co-op practitioners and staff may have a limited impact on the experiences of international students.

Through this research, I aspired to further understand the variables that contribute to student preparedness and co-op work-term experiences as well as identify what co-op departments and practitioners can do to promote positive student experiences. As demonstrated in the following chapter, co-op departments and staff provide preparation workshops, courses, and content designed to assist in preparing students for co-op. There are a range of pedagogical approaches to co-op and a variety of modalities for delivering the curriculum. While students are participating in co-op, they are also able to access on-campus supports and resources. This conceptual framework is designed to show that co-op departments and staff can influence the student experience through supporting student preparedness and students on their co-op work-term. The variables presented in this framework are weaved throughout the literature explored in the following chapter and embedded within the research method and data collection instrumentation to enable measurement.

Significance of the Research

This research is aligned to or has significance for:

- International student success and retention in co-op
- Co-op departments to better support and understand international students
- Colleges and universities with international students and work-integrated learning programs

- Government of Canada's immigration plan
- Government of Canada's international education plan
- Ontario's workforce development policy objectives
- Ontario's post-secondary education system
- Employers and industries that hire international students

My desired outcome for this research is that co-op practitioners and departments in post-secondary institutions can use the findings to evolve their practices and pedagogy in co-op programs. This research may also contribute to the general knowledge and understanding of strategies for supporting international students be successful in co-op programs. Through their success, this may also lead to more favourable outcomes for students, higher education, as well as Ontario's and Canada's immigration and economic objectives.

Chapter Summary

In Chapter One, I introduced this research, provided relevant context for the research (i.e., political, student demand, and converging priorities in post-secondary education) and outlined my conceptual framework and approach to conducting the research. I employed a mixed-methods research design that was utilized to elicit data from international students who have completed a co-op work-term in at three large post-secondary colleges in Ontario. The data findings from this study can inform our collective understanding of the international student experience as it relates to their preparedness for employment in co-op, their opportunities and challenges in co-op, and which learning moments they most value in co-op. This information is beneficial for co-op staff, departments, higher education, and indirectly impacts the success of government policy (i.e., immigration objectives) and the Canadian economy.

Organization of this Dissertation

In Chapter One, I provided an overview and introduction to the research. In Chapter Two, I provide a review of current literature related to the research topic. Presented in this chapter is a summary of the theoretical context and definitions related to WIL, co-op, international student experiences in post-secondary and employment, and lastly, international student experiences with WIL. In Chapter Three, I provide details related to the research methodology, methods, data collection, analysis, ethical considerations, and limitations and delimitations. A comprehensive report of the data findings is presented in Chapter Four. Lastly, in Chapter Five, I summarize the lessons learned from this research and my interpretations of the data in discussion format. The discussion is followed by recommendations for co-op departments, calls for future research, and concluding statements. Reference lists and appendices can be found at the end of this document.

CHAPTER TWO: Literature Review

Through this research, I investigated the experiences of international students in co-operative education. First, to consider the academic and post-secondary context for all students participating in co-op, work-integrated learning (WIL) is explored, including a brief presentation of its theoretical underpinning. Building upon this framework, the history, definitions, purpose, structure, quality and administration of co-op is presented. Second, to conceptualize international students situated in post-secondary education and their experience related to obtaining employment, I provide relevant information associated with international student acculturation, academic and support services, as well as transition to employment and factors that contribute to immigration decisions. Lastly, the intersection of international students and their participation in WIL is explored to highlight the benefits, barriers, impact of language and the Canadian workplace culture, as well as introduce some emerging best practices.

Work-Integrated Learning and its Theoretical Underpinning

The theoretical underpinning and philosophy of co-op is often cited as grounded in the ideas and theories of John Dewey from the 1930s and further refined by David A. Kolb in the 1980s (Hays & Helmlin, 2017; HECQO, 2016; Jones & Quick, 2007; Linn, 2004). Dewey (1938) championed the bridge between learning and experience. He argued that students need to be able to relate their learning to practical experience in order to feel a sense of purpose in their education. He challenged the educators of the time to create the conditions in the classroom for students to be able to equate unfamiliar concepts being taught with ordinary life experiences and proposed, “We always live at the time we live and not some other time, and only by extracting at each present time the full meaning of each present experience are we prepared for doing the same thing in the future” (p. 49). Kolb contributed to the body of knowledge, theories, and

definitions of learning from, and through, experience. His highly regarded book entitled *Experiential Learning: Experience as the source of learning and development* as well as his more recent second edition (Kolb, 1984, 2015) reinforced that learning is defined as “the process whereby knowledge is created through the transformation of experience” (Kolb, 2015, p. 49).

Kolb’s experiential learning cycle articulated how learning occurs through a revolving cycle of:

1. having a new experience or encountering a new situation (i.e., concrete experience)
2. considering that new experience and observing any inconsistency between the learners current understanding and that experience (i.e., reflective observation)
3. through reflection new understanding takes shape or modifies existing ideas (i.e., abstract conceptualization)
4. by practice, application, and experimentation the learner creates new meaning (i.e., active experimentation)

Experiential learning occurs when an individual is able to relate their experience into their understanding of the environment, their behaviours, and perceptions of the world around them. The application of experiential learning can be observed when learners are participating in vocational activities or embedded in a workplace setting. The experiences gained can complement theoretical and academic learning and transform their knowledge and experience into new meaning and understanding.

The literature did focus primarily on Kolb’s (1984, 2015) theory; however, Linn (2004) cited other contributors to the learning theories related to co-op, such as Sternberg and Wagner’s practical intelligence and Bandura’s self-efficacy. Practical intelligence suggests that job performance is not always correlated with intellectual intelligence and that knowing how to do something is a competency taught outside of the traditional classroom theory. Similarly, self-

efficacy refers to relative competence and can be used to predict performance. More broadly related to learning and learning theory, both Linn (2004) and the Higher Education Quality Control Council of Ontario (2016) referred to Piaget's model that suggested learning is linked between existing concepts and lived experiences, Lewin's theory that promoted experiences as a significant component of learning, and Kegan who encouraged the use of the term meaning-making to articulate learning from experiences. Other contributors such as Mezirow's (2009) transformative learning theory, Schön's (1987) reflective practitioner concepts, and Billet's (2009) contributions to learning in the workplace can also be associated with WIL. These examples were referenced to provide some context to other learning theories related to co-op. This research is applied research and, as such, did not require significant theoretical variety. Considering the widely accepted position of Kolb's (1984, 2015) experiential learning model, it was treated as the primary theoretical underpinning for this research.

Defining and Explaining WIL

WIL is a broad educational approach and theory that encompasses many types of pedagogical concepts that involve students participating in a vocational, workplace, or employment setting. Defining WIL can be an elusive because it is a term used as "as an umbrella term used for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum" (Patrick et al., 2008, p. v). Kramer and Usher (2011) considered that WIL "refers to types of student employment experiences that are usually organized by their institution, related to their field of study and geared toward making connections between classroom learning and on-the-job experiences" (p. 2). This definition extends to employment-type positions that could be paid, unpaid, mandatory or voluntary.

The principle concept is that WIL experiences link theory learned in the classroom to practice in the field or employment environments. The Higher Education Quality Council of Ontario (Sattler, 2011) recognized the difficulty in deriving a pan-ultimate definition for WIL; however, it referenced Billett's definition of WIL as moving closer to gaining consensus as a shared definition that could be adopted in Ontario:

Work-integrated learning refers to the process whereby students come to learn from experiences in educational and practice setting and integrate the contributions of those experience in developing the understandings, procedures and dispositions required for effective professional practice, including criticality. Work-integrated learning arrangements include the kinds of curriculum and pedagogic practices that can assist, provide and effectively integrate learning experiences in both educational and practice settings. (Billett, as cited in Sattler, 2011, p. v)

While WIL is popular in Ontario (Sattler, 2011), Gibbs and Armsby (2010) argued that combining education and the workplace is problematic:

The notion of combining the two fields of social capital (work and education) forced into an alliance by the drivers of consumerism, globalization and an economic imperative has challenged conventional notions of the academy and with it the notion of the prescription of quality by authority rather than market mechanism. (p. 185)

This combination may also define university and college education over time by gradually changing the mandate of higher education hidden under the veil of WIL (Gibbs & Armsby, 2010). As many institutions increase WIL in their programs of student, success of these programs does hinge on employer acceptance of students as ready workers. Institutions that pride

themselves on applied education do consider employer feedback and input during curriculum development for work ready graduates. Whether WIL is the impetus or platform for shifting mandates for the entirety of higher education, is likely debatable and perhaps controversial, there does appear to have some relevance from a curricular perspective. An examination of learning outcomes and assessment practices for WIL programming may reveal weaker academic rigour than traditionally class-based curriculum. For example, Smith (2011) investigated the quality of WIL curricula and identified gaps in research, methodological issues, and the lack of a predominant evaluative framework. Conceptually, for WIL to be successful, it is critically important for higher education institutions and staff to coordinate two distinct environments: (a) classroom and (b) workplace, which involves managing both student and employer expectations to facilitate mutually beneficial WIL experiences for all stakeholders (Jackson, 2014). This extension of the classroom into an employment setting does have some inherent challenges. Regardless of the issues and critiques, according to the Premier's Highly Skilled Workforce Expert Panel, WIL has become extremely popular, and its growth is also promoted and stimulated through government policy (The Premier's Highly Skilled Workforce Expert Panel, 2016; Office of the Premier, 2016).

Perspectives of Students, Employers, and Post-Secondary Institutions

So why is WIL, and by extension co-op, so popular right now? Brooks et al. (2009) suggested that changes and global trends in education have placed heightened attention on post-secondary institutions and how they engage with the world of work. Market forces, politics, funding sources, and demands from both employers and students are pressuring post-secondary institutions to focus more consideration on their students and how employable they are after graduation (Brooks et al., 2009). For some students, some of the motivations for their

participation in WIL include a 13% youth unemployment rate (Statistics Canada, 2015) or a desire to develop professional knowledge and graduate employability competencies, such as problem solving, communication, and teamwork (Little & Harvey, 2006; Smith & Worsfold, 2013), as well as identify their future career (Canadian Council on Learning, 2008). These benefits generally outweigh some of the challenges WIL presents, such as a delay in graduation, unpaid positions, financial barriers, or managing the multiple demands of work and education concurrently (Sattler & Peters, 2013).

The value employers perceive is that WIL is the best way to screen students for future employment, and it enables students to acquire the competencies employers desire as part of their post-secondary education (Sattler & Peters, 2012). Students get on-the-job training, and employers benefit from an efficient hiring process and a pipeline of future employees (Hernández-March, Martín del Peso, & Leguey, 2009). The negative issue for employers is that it takes resources and capacity to coordinate WIL experiences for students, which is particularly difficult for small-to-medium sized enterprises (Patrick et al., 2008). Post-secondary institutions also value WIL programming because it enables student learning through theory to practice, strengthens relationships with industry, and tends to create high levels of student satisfaction (Peters, 2012).

Literature related to co-op and WIL are often synonymous. Other terminology in the literature associated with WIL includes work-based learning, placement, practicum, field experience, professional practice, and internships. Throughout this chapter, the term WIL will be used when the literature cited uses that term, and it is assumed that it also includes co-op as a form of WIL. The term co-op will be used when referencing literature that is exclusively related to co-op education.

An Introduction to Co-operative Education

Co-op education is grounded in experiential learning theory and reflective practice and is a curriculum model that deliberately links work experience with academic learning (Haddara & Skanes, 2007; Linn, Howard, & Miller, 2004). Students are able to productively engage in the workforce while applying their learning from the classroom. Co-op education positions students in alternating academic (classroom) and employment (workplace) semesters that enables the cycle of experiential learning between the two environments. Jones and Quick (2007) stated, “By requiring students to alternate between blocks of time in the class and on the job, cooperative education opens up opportunities for learners to pass through a learning cycle that includes both thinking and doing.” (p. 32). Students can apply their classroom theory in a workplace environment, reflect on how it connects, experiment and learn from the experience, and then return to the classroom with informed meaning to their original theoretical understanding.

History and Definition

Co-op dates back to 1906 when the University of Cincinnati enrolled 27 students in the first co-op program in American history. These programs were met with some resistance and were initially reserved for engineering students. They were designed to bridge the gap between theory and practice (Haddara & Skanes, 2007). Since then, co-op has grown dramatically. For context, for the 2018/19 year, the University of Waterloo had over 21,800 co-op work-terms in over 60 countries involving 7,160 active employers (University of Waterloo, n.d., para. 4). Co-op is a significant component of WIL and is “really considered to be the most formal, the most rigorous experiential education-type program in postsecondary institutions” (Ross, 2017, para. 9). Education at Work Ontario (n.d.) defined co-op as “formally integrates a student’s academic studies with work experience” (para. 1). Nationally, Co-operative Education and Work-

Integrated Learning Canada (n.d., Co-operative Education Definition section) defined co-op programs in post-secondary education as:

a program which alternates periods of academic study with periods of work experience in appropriate fields of business, industry, government, social services and the professions in accordance with the following criteria:

1. Each work term is developed in partnership with the employer and is approved by the co-operative education program as a suitable learning environment;
2. The student is engaged in productive work for which the student receives remuneration;
3. The co-op curriculum supports student learning goals, personal evaluation and reflection;
4. The student's performance in the workplace is supervised and evaluated by the student's employer;
5. The student's progress during their work term is monitored by the co-operative education program;
6. Both work and academic terms are full-time and follow a formalized sequence. The total amount of co-op work experience is normally at least 30% of the time spent in academic study. For programs of two years or less the total amount may be a minimum of 25%. A work term is defined as a minimum of 12 weeks and/or 420 hours full-time paid experience;

7. Co-op Programs begin and end on an academic term;
8. The student completing multiple work terms is normally exposed to the work environment during more than one season of the year.

Co-op is academic programming and not a job placement service. It allows for students to integrate their academic learning with practical employment experiences as an educational model. It provides defined learning outcomes, student preparation, partnerships with employers and student assessment (Canadian Association for Co-operative Education, 2005). In order to design co-op programs that achieve optimal learning for students, Ricks (1996) presented principles for co-op that underscore the importance of creating co-op opportunities where students are empowered in their learning, to be self-directive, taught and treated as adults, and involved in activities that promote transformational learning personally, professionally, and academically.

Educational Purposes of Co-op

In Ontario, the main educational purposes for co-op are an integration of theory and practice, career exploration and development, professional socialization, and workplace literacy and readiness. The Higher Education Quality Council of Ontario (HEQCO) researched key characteristics of co-op (see Appendix A) and developed a typology of WIL (Sattler, 2011). Co-op can help students develop socially and personally, practice their skills and mastery, and through experience, they are better able to plan their career into the future (Linn, 2015). It also creates a stronger sense of career-related interests and confidence in their abilities and skills (Drewery, Nevison, & Pretti, 2016; Drysdale & McBeath, 2012). While co-op experiences allow students to practice theory learned in their program of study within the workplace, learning

outcomes for co-op programs are also aligned to generalized employability skills. The Conference Board of Canada (2000) defined employability skills as the skills people “need to enter, stay in, and progress in the world of work—whether you work on your own or as part of a team” (para. 1). Per the Conference Board of Canada, employability skills can include (a) fundamental skills, which include communication, managing information, use of numbers, thinking and solving problems; (b) personal management, which include positive attitude and behaviour, being responsible, adaptable, learning continuously, and working safely; and (c) teamwork, which include working with others and participating in projects and tasks.

Students build their employability skills inside and outside of the classroom (Andrews & Russell, 2012), and this is found consistently across the world. As Sultana (2014) from India stated,

Employment prospects of the present-day youth are inextricably bound with their awareness of globally relevant soft skill. . . . Employers are looking for those employees who have a balance of technical knowledge in addition to the relevant soft skills. (p. 745)

Students gaining practical experience is valuable for graduates and employers (Council of Ontario Universities, 2014) and can be developed through co-op education.

Reflection and reflective practices are also an element of co-op programs and curriculum (Sattler, 2011). When students reflect, they are able to think critically about their experiences, broaden their perceptions and question their assumptions, and develop life-long learning skills for continuous improvement (HECQO, 2016). Through experience and reflection, new meaning can be made. This brings theory and practice together in ways that deepen student understanding and learning.

Harvey, Coulson, MacKaway, and Winchester-Seeto (2010) conducted a literature review of reflective practice and theory in co-op. They found: “The research reviewed is inconclusive in

establishing a relationship between reflection and learning through cooperative education experience. Practice, as reported in the literature, is however, almost universal in the application of reflection to cooperative education learning situations” (p. 140). For such mainstreaming of reflective practice in co-op, certainly there exists anecdotal evidence and perceptions that reflective practice does enhance student learning. It may be that the direct linkages have not been theoretically explored or published and yet to be included in Harvey et al.’s review. Reflection can occur in different domains of the student experience and learning. Academically, students can reflect on application of theory to practice. Students can also critically reflect on their skills development and reflection on life-long learning can lead students to gain a deeper understanding of their professional practice, career, and personal development (Harvey et al., 2010). Designing effective co-op curriculum should involve deliberate reflective queues and assignments for students to maximize the learning from their co-op experiences.

Structure of Co-op Programs

Co-op programs are generally structured as being self-directed, where the students have some control and accountability in selecting and acquiring their co-op placements. While the term placement can be used in the verbiage related to co-op, it is a misrepresented term because students are not placed or told where their co-op will be held. Part of the learning for students is that they must participate in a competitive job search process with other co-op students, where they each secure employment through designing a resume, networking, applying to job positions, interviewing, and ultimately being offered employment (Canadian Association for Co-operative Education, 2005). Prior to the student’s co-op work term, co-op programs provide pre-employment training, workshops, and/or seminars. This training is delivered by co-op staff or, in some cases, through online modules. The content of a preparation course typically involves “co-

op program objectives and expectations, job seeking skills, transferring skills to the workplace, workplace conduct, developing learning objectives, job performance progress and evaluation” (p. 7). Preparing students for how to secure a co-op work-term, what positions might support their learning objectives, and what to expect while on a work-term enable students to make the most of their co-op experience (Weighart, 2009).

While co-op preparation curriculum appears to be consistent in its purpose and is administered across post-secondary institutions, a possible risk and critique of this type of curriculum is that it is not founded in critical theory. For example, preparedness for employment, workplace culture, resume and interview preparation, and other skills related to fitting into the workplace are in fact dictated by employers and industry. Some argue that this is a vocationalization of curriculum (Johnston, 2007); however, students taught within a pre-employment preparation course find value in topics such as job search strategies, networking, resumes, interviewing, and others, and thereby recognize that this contributes to their success in co-op programs (Reddan, 2008).

Co-op work-terms can vary in length. Length is typically measured in academic semesters (4-month block) or in number of hours in the workplace. In Canada, co-op work-terms are usually in 4-month blocks, but can be two semesters (eight months) or even three semesters (12 months). In Ontario diploma programs, co-op work-terms are typically one semester in length (refer to Table 2). There is evidence to support that work experiences need to be a minimum of a term in length or over 350 hours, so that students have time to build relationships, understand workplace culture, and become integrated with their co-workers (Fleming & Eames, 2005).

Table 2. *An Example of Typical College Co-Op Program with Six Academic Semesters*

Year 1			Year 2			Year 3		
Fall	Winter	Summer	Fall	Winter	Summer	Fall	Winter	Summer
Term 1	Term 2	Term 3	Co-op Work Term 1	Term 4	Co-op Work Term 2	Term 5	Co-op Work Term 3	Term 6

Source: Compiled from Canadian Association for Co-operative Education (2005).

Students are assessed by their workplace supervisor. Supervisor observations are provided through the use of a survey, interview, or in written feedback that describe the student's performance while employed. Representatives from the co-op office or faculty then review the supervisor's evaluation, assess a work-term report or reflective paper submitted by the student, confirm the minimum hours of work have been achieved, and then provides the student a summative evaluation. The majority of co-op programs are evaluated on a pass/fail or credit/no-credit basis and may or may not be for academic credit (Lumsden & Rowe, 2008). The predominant role of employers in the assessment of student learning, development of employability skills, and achievement of learning outcomes is arguably the most contentious topic in work-integrated learning and co-op (Ferns & Zegwaard, 2014).

Administration and the Quality of Co-op Experiences for Students

Administering co-op programs is very unique and different from other academic programs within post-secondary education. Lazarus, Oloroso, and Howison (2012) suggested, The administration of co-op programs calls for individuals who possess a unique set of skills and insights equipping them to draw together constituencies that do not normally

coexist peacefully. . . . With one foot in the world of the employer, co-op administrators must be able to plant the other foot in the world of academia. (p. 181)

This is a difficult balance for any educator. Additionally, administrators of co-op provide leadership, operational management, and manage risk, liability, and other clerical functions such as documentation management (Taylor, 2003). Co-op departments can be centralized to provide co-op coordination and management on behalf of programs within the academic faculties or decentralized with co-op staff reporting directly through their respective academic faculties for each program. In some cases, a centralized/decentralized model is structured where there are centralized management functions with embedded or decentralized co-op staff assigned to a faculty or program (Canadian Association for Co-operative Education, 2005).

When considering the critical elements for co-op programs to be successful and what constitutes quality co-op, the viewpoints and lived experiences of directors of co-op programs, co-op practitioners, employers and site supervisors, and students should all be included. Researching the perspectives of each of these stakeholders (Page, Geck, & Wiseman, 1999; Stull, Loken, Bartkus, & Bratton, 1994) has led to a combination of co-op quality indicators (see Appendix B). They include the use of educational standards and create opportunities for students to practice professionalism, develop work ethic, be exposed to practical problem solving, as well as opportunities to think critically (Wiseman & Page, 2001).

Interestingly, over a 20-year span and across different countries, consistencies were found in these studies that reinforce factors of quality in co-op. Coll and Chapman (2000) proposed the dimensions of quality co-op include: the process of student selection and matching students with employers for mutual benefit, supporting students while participating in co-op, co-op staff working and communicating with employers, and the benefits that employers have by

investing co-op students into their workforce. Since the early 2000s, there have been evolutions in what students value in co-op. For example, a more recent and Canadian study was conducted to measure student perceptions of quality co-op work-terms, and it indicated the three factors students thought most significantly impacted the quality were: (a) characteristics of the co-op role, such as role clarity, work-family balance, and autonomy; (b) interpersonal dynamics, such as relationship with supervisor, co-workers, and social activities in the workplace; and (c) organizational elements, such as whether the workplace is a learning environment that enables students to explore their academic learning in a practical context (Drewery, Nevison, Pretti, Cormier, et al., 2016).

An additional contributor to quality from student perspectives is that if they see a greater degree of connection between the work-term and their program of study, they have higher satisfaction, are more engaged in their work term, and perform well (Drewery, Pretti, & Barclay, 2016). Ultimately, quality co-op requires mutually beneficial relationships between employers seeking a productive co-op student employee and the student seeking a workplace learning experience that can contribute to fulfilling their objectives. As co-op departments and practitioners consider how they support students in the process, develop their pedagogies, and structure program learning outcomes, they must consider quality indicators and appreciate the mutuality of value required in relationships between students and employers.

International Students' Experiences with Post-Secondary Education

International students find studying in Canada at the post-secondary level attractive for a range of reasons. Students from other countries perceive Canada to be fair and with an openness to foreign students. They consider it a safe place to study free from violence and crime. Canada also has a reputation for providing high quality education and having competitive costs of living

and tuition when compared to other countries (Madgett & Belanger, 2008). Generally, there is a high perception of the value of a Canadian academic credential (Canadian Bureau for International Education, 2016). While this viewpoint is typically accepted, Stein and de Andreotti (2016) provided a contrary and critical lens to the internationalization of higher education by arguing that there is an undertone of racism and Western supremacy that permeates the global imaginary. They also argued that there is exploitation of international students for their significantly higher tuition fees that they pay. This critical lens may provide a healthy counter viewpoint to the generally accepted and positive outlooks of international students studying in Canadian institutions.

Extending beyond graduation, Canada has provided pathways for students to immigrate to Canada. By attracting international students into the Canadian higher education system, Canada's academic institutions and government agencies are benefiting by achieving immigration objectives and internationalization (Canadian Bureau for International Education, 2016). International students have the opportunity to experience education in another country and pathways to immigration. Not surprisingly, the act of moving away from their home to a country with different cultural and academic norms and, in many cases, language can be a difficult proposition. Smith (2016) outlined a host of challenges identified by the international student experiences, ranging from limited social integration, accessing on-campus services, adequate housing, misaligned expectations, social isolation, language barriers, learning cultural norms, rules, and regulations, overcoming stereotypes, learning public transportation, weather and clothing, finding familiar foods, challenges with oral presentation assignments, and personal finances. It is important for post-secondary institutions to recognize the challenges international

students experience. This needs to be balanced by other institutional objectives such as revenue generation and transparently presented to students being recruited to study in Canada.

Literature on the mobility of international students and the cultural adjustment from studying in another country are often split into two categories: (a) social adjustment, which involves interactions with domestic students and society; and (b) academic adjustment, which involves understanding the new learning environment, teaching styles, and approach to education of the host country (Gu, Schweisfurth, & Day, 2010; Nicolescu & Galalae, 2013). This holistic view provides context to influences on an international student's experience when they are studying abroad.

Acculturation, Challenges, and Stressors

From a social and psychological perspective, international students experience acculturation when studying in another country. Berry (2005) defined "acculturation is the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members" (p. 698). The process of acculturation can be stressful and can cause anxiety for international students. For example, language barriers cause anxiety as students try to interact in social and academic settings. This impacts a student's ability to make friends, build networks, and interact in the community. Compounded by sociocultural stressors such as not understanding host country social networking, the nature of friends and relationships, and an ability to fit in within the cultural and social norms of the country can lead to student isolation, feelings of loneliness, and social exclusion. Research has shown that these acculturation stressors for international students are associated with depression and other negative psychological impacts (Smith & Khawaja, 2011).

Perhaps contributing to the challenges intrinsic to acculturation, international students are also transitioning into a post-secondary learning environment. Andrade (2006) claimed, “Research comparing international and resident students demonstrates that international students have greater adjustment difficulties and experience more stress and anxiety” (p. 143). Her research showed that international students experience the same adjustment challenges to post-secondary as domestic students do, as well as heightened social challenges, difficulties with language and culture, and higher degrees of stress and anxiety, plus they have more feelings of homesickness and loneliness than domestic students.

Lastly, there are some practical realities for international students to navigate such as securing accommodations and weathering new climates. Calder et al. (2016) found that international students can be very financially constrained, to the point that some may be choosing between paying for rent and having enough money to afford food: “Some international students struggle to meet their basic needs” (p. 104). Academic institutions that recruit international students should ensure appropriate supports and services are available to welcome new international students and help to decrease levels of stress at all stages of their academic journey and transition into WIL or employment.

The Academic Environment and Student Supports

Academically, international students are exposed to different pedagogies, classroom practices, lectures, and teaching that occur in different ways than they are used to in their home country’s educational system. Some students may feel underprepared, worried about being able to speak up or answer questions in class, and unclear on what appropriate relationships with faculty or professors are (Gu et al., 2010). Understanding the importance of a course syllabus, recognizing what a “good” mark is in a different educational system, tricks on multiple-choice

tests, note taking habits, or different methods of evaluation can be difficult for international students (Pilote & Benabdeljalil, 2007). International students certainly have difficult and unique post-secondary experiences, but it may be that post-secondary institutions have not adapted to supporting international students very well. Kilbride and D’Arcangelo (2002) argued that the “college is only partially successful in assisting immigrant students to meet their needs, and that partial success varies markedly in different areas of need” (p. 20) and proposed that “what is missing is a structural recognition of the significant numbers of students for whom the community college is their introduction to Canada and the Canadian educational system” (p. 23). Additionally, it should be noted that there are learning differences between international and domestic students (Stowe & Clinebell, 2015), and there are predictors of academic success, such as competency with English language, writing skills, as well as opportunities to share experiences in their home language with other students (Li, Chen, & Duamnu, 2010). Post-secondary institutions can recognize these opportunities and tailor supports and services for this student population and their unique learning requirements.

Much of the research on international students identifies challenges, barriers, and difficulties; however, it may be time to transition from this deficit-based thinking and move towards a more positive and constructive narrative. Building a rationale for further investment in on-campus services and supports can be tied to a business rationale or institutional priorities such as retention. For example, Schulte and Choudaha (2014) found that international students were leaving their school for a variety of reasons, including lack of integration into campus life, academic challenges, financial difficulties, and lack of opportunities for employment. Smith (2016) argued that there are best practices emerging for supporting international students that can assist international student retention. Recognizing that international students are not a help-

seeking student population, there are programs and approaches that can be leveraged to inspire them to access on-campus services such as language supports and career services (Fenton-Smith & Michael, 2013). Through a willingness to adopt tailored supports for international students, post-secondary institutions can facilitate the conditions for these students to build upon their strengths, thrive in Canada, and achieve success.

Transitioning to Employment and its Influence on Student Immigration

International students are faced with all of the traditional hurdles of finding, interviewing for, and ultimately receiving an offer of employment that all job seekers experience. Additionally, the trends presented in the literature demonstrate that international students are experiencing or perceiving discrimination, having challenges with language in the workplace, cultural barriers, difficulty in job seeking activities, and having limited networks to leverage (Spencer-Rodgers, 2000). Smith and Khawaja (2011) reported that international students also experienced barriers to employment, such as a requirement for references, not having previous work experience in the host country, and difficulty traveling to where the jobs were located. Shifting to a solutions orientation, international students can be better supported through career counselling (Crockett & Hays, 2011) and work-integrated learning opportunities that enable them to develop experience in the workplace, to build their professional networks and resumes, and to learn about the job market and future employment prospects (Arthur & Flynn, 2013; Nunes & Arthur, 2013). Through experience, international students can learn the nuances of small talk, interpersonal relations, workplace hierarchy, and cultural norms in employment contexts. They can build confidence and focus on strengths that can be attractive attributes to employers, such as adding diversity in the workforce and being able to speak multiple languages (Sangganjanavanich et al., 2011).

Employment can be a significant driving factor for when international students are considering staying in the country of their education after graduation (Nunes & Arthur, 2013). Research has also shown that interpersonal relationships influence a student's decision to stay as well as access to career supports (Popadiuk & Arthur, 2014). Additionally, factors such as familiarity with the country, ease of obtaining permits or VISAs to stay, perspectives of racism, and ability to integrate into the workforce (Mosneaga & Winther, 2013) contribute to their decision making. While the policy conditions related to work-permits in Canada have changed over time (Immigration, Refugees, and Citizenship Canada, 2018), a continuing challenge for students is obtaining and using work-study permits. The application process can be complex, confusing, and in some cases, becomes a barrier for employers who are not sure how to employ international students or recent graduates (Bond, Areepattamannil, Brathwaite-Sturgeon, Hayle, & Malekan, 2007). The significant influence post-secondary institutions can have on fostering an environment where international students can identify mentors, develop their professional networks, build healthy interpersonal connections, and be supported in obtaining work experiences can all enable a smoother transition into the workforce and by extension into permanent residency within Canada.

International Student Participation in Co-op and WIL

There appears to be limited literature related to international students' experiences in co-op education programs as identified by this literature review and as echoed by other researchers of WIL (Andrade, 2016; Arthur & Flynn, 2013; Barton, Hartwig, & Cain, 2017; Gribble et al., 2014; Paku & Coll, 1999; Tran & Soejatminah, 2016). Of the research available, there is a distinction made between two types of international students in co-op. One definition is when students leave their country and educational institution for a co-op work-term in another country.

The other, which is more relevant to this research, is when international students study in a new country and conduct their co-op or WIL experience in the country where they are also studying.

Outbound Co-op and WIL (Domestic Students Pursuing WIL Abroad)

Students who leave their home and their home country of study to have a co-op employment experience abroad have a range of reasons for pursuing this type of experience. Behrisch (2016) investigated the motivations of students from a Canadian university and determined that those participating in international co-op work-terms were inspired by “the craving for novelty” (p. 279) and that these students were less motivated by learning and personal growth. Research has shown that international co-op work-terms do have many professional and personal benefits, such as increased self-confidence, enhanced career prospects, developed language and soft skills, as well as a broader cultural competence (Coll & Chapman, 2000; Gribble et al., 2014; Ward, Frost, & Yonge, 2004; Ward & Laslett, 2004). Even with these benefits, the reality is that 97% of post-secondary institutions in Canada have education abroad programs, but very few students take advantage of that opportunity (Behrisch, 2016). Some reasons cited for low participation include the costs, fear of being homesick, housing, and challenges with securing VISAs or work-permits (Behrisch, 2016; Coll & Chapman, 2000; Gribble et al., 2014).

From an employer perspective, Van Mol (2016) learned that employers did value an international internship more than they valued a student who had studied abroad, but employers did not acknowledge much value to either experience when recruiting or hiring for employment. Employers who hire co-op students from other countries may be doing it for altruistic reasons or to continue positive relationships with their local post-secondary institution (Coll, 2004). Regardless of the lukewarm response from employers on the value of these experiences, students

have an opportunity to learn, grow, and experience other cultures, which can be valuable to their personal development. Academic institutions should have a vested interest in the success of domestic students engaged in international WIL. They could develop programming specifically designed to support their success and develop their cultural competence (McRae, Ramji, Lu, & Lesperance, 2016).

Benefits and Barriers for International Students

When reviewing the literature related to international students participating in co-op in the country in which they are studying, Tran and Soejatminah (2016) so eloquently conveyed, “There is a relative paucity of empirical research on WIL for international students” (p. 338). Of the few studies I was able to identify, some consistent themes that articulate the experience and perspectives of international students participating in WIL. First, there are many benefits to WIL for international students that include all the benefits that domestic students gain from WIL as well as specific opportunities for international students to gain relevant work experience in the country they may be interested in immigrating to after graduation (Paku & Coll, 1999). As Tran and Soejatminah suggested, WIL is a way for international students to “Get Foot in the Door” with local employers to gain experience and ultimately help employers feel comfortable hiring them after graduation. The experience also builds their cultural awareness and competency, can provide financial and economic wellbeing, and enables a social connectedness, which all contribute to their growth as an individual (Tran & Soejatminah, 2016).

The benefits are clear; however, international students also experience barriers to participation in WIL. Crawford, Wang, and Andrews (2016) found that international students are challenged to secure WIL placements. For example, 45% of international students failed to find a placement versus 20% of domestic students in the United Kingdom. Their study controlled for

academic reasons and suggested there are other non-academic related barriers for international students to participate in WIL. Other studies have shown that international students experience problems with communication in the workplace, understanding local colloquial terms, fitting in, socializing, and conversing in English (Paku & Coll, 1999; Tran & Soejatminah, 2016). This may be as a result of limited language skills or cultural awareness of appropriate behaviours in the workplace. Other barriers to their participation also include discriminatory practices of employers, bias cultures and individuals, and an unwillingness of employers to hire an international student when they could hire a domestic student instead (Paku & Coll, 1999; Tran & Soejatminah, 2016).

In some cases, international students have been treated very poorly in the workplace. For example, Wall, Tran, and Soejatminah (2017) found through 105 in-depth interviews with international students who had participated in WIL that they believed they were treated much less favourably than domestic students and accepted this treatment by acknowledging their “position” or “status” as less than a domestic student. In the workplace, they witnessed jokes at their expense, were often forced to accept unpaid positions, and had a scarcity of tasks assigned to them that would enable workplace learning. This behaviour became normalized, and international students came to expect this treatment. They also felt that their experiences were less relevant due to the limited tasks they were given and that they were not able to apply their skills and knowledge during the placement (Wall et al., 2017). We hope that this experience does not apply to all international students in all countries; however, it is a strong reminder and acknowledgement that international students can be a vulnerable population and may not receive fair or equitable treatment in the workplace while participating in WIL programs.

Other research from Ontario portrayed international students as having difficulties in securing placements (Sattler, 2011). They also reported that there are administrative issues related to work-permit extensions for students who are on modified academic schedules or are out of alignment with work-study permit schedules. International students can also experience difficulties securing work-terms when a security screening is required, such as when working in confidential environments or for government agencies. Recognizing these additional circumstances, there should be specific and distinct programming for international students (Sattler, 2011). Alternatively, some positive results were captured in another large-scale follow-up survey of recent graduates in Ontario. This study found that international students were more likely to participate in WIL programs than domestic students, and the outcomes related to their employability and growth and development were significantly greater than other international students who did not participate in WIL (Sattler & Peters, 2013). These Ontario-specific studies are encouraging for international students in Ontario and by extension in Canada. In relation to international students, the majority of literature found international students, and also international students in WIL, predominantly focused on issues, challenges, and barriers. Dialogue and discourse focused on solution-oriented programming and interventions needs to become more common in the rhetoric.

Language and Canadian Workplace Culture

The relative importance of language skills and the ability to communicate is of paramount importance to an international student's experience in co-op. Language is not simply ELTS (International English Language Testing System) scores. It is also how we share, build relationships, interact socially, build trust, and in the context of English, it can extend, in part, as a culture of power and dominance. For example, Sachtleben (2002) argued that for international

students to be successful in WIL, the solution does not lie singularly with students who need to learn and practice English. Employers and organizational outlooks also need to adapt:

As long as the gatekeepers and their students think there is a solution that lies solely with the students just improving their level of English, there will continue to be intercultural miscommunication, frustration and both academic and work placement failures. (p. 19)

For international students to be successful in co-op, we need to help them understand how English is used in employment contexts and move beyond simply supporting them with modest semantics like how to ask for job instructions, call in sick, or follow safety regulations while at work. This can be achieved through bridging programs and language supports prior to co-op (Scahtleben, 2002). To better understand elements of workplace communication, Brown and Ayres (2006) investigated and compared the relative value of certain factors, such as idiomatic speech, written, spoken, and general social etiquette like politeness and manners in the workplace. They found that spoken communication and accuracy were perceived to be of very high importance by both employers and employees. Similarly, written communication and being aware of workplace culture, social etiquette, and ability to work in teams were ranked high as well. Interestingly, there were some discrepancies between employee and employer viewpoints. There were different opinions on the relative value of idiomatic speech, such as the use of expressions or colloquial everyday terms that are likely not used in the international student's home country or language (e.g., "break a leg," which can mean good luck). Close to half of employers did find idiomatic speech to be very important for international employees to be successful; however, only 16% of employees rated this skill as being very important (Brown & Ayres, 2006). This disconnect may inform how cultural miscommunications occur and further

reinforces the critical role post-secondary education can have in bridging the gap between international students and employers.

In the Canadian context, Ingram and Ens (2011) conducted a comparison of expectations and outcomes for international engineering graduates in Canada. These international engineering students were new Canadians with foreign engineering backgrounds, and they leveraged co-op as a way to build increased technical skills and their understanding of Canadian engineering standards. Through this co-op program, the international student's confidence increased as well as their language skills and socialization with others. As a result, students felt more comfortable working in Canada by learning the patterns and norms of Canadian organizational culture (Ingram & Ens, 2011). It is clear that language and its extension to culture, communication, and the ability to work with others in the workplace is a critical issue and one that warrants further investigation. For international students pursuing co-op and academic institutions that wish to support them, understanding how language and communication impact the student experience and the perspectives of employers may be an important step towards determining the most effective supports and programming.

Success Factors for International Students and Emerging Best Practices

When distilling the factors that will encourage international student success in WIL, Gribble, Blackmore, and Rahimi (2015) found that the primary influence is competency in English. They also recognized that international students require support in finding WIL experiences and that they can have unrealistic expectations for their WIL program. International students might expect that they will work for the biggest or most popular organization; however, the reality is that they may not be an attractive asset to employers, competitive with domestic students, or able to secure their ideal work experience (Gribble et al., 2015). In some cases when

international students are unable to find a suitable WIL employer, they may get relegated to participating in irrelevant on-campus WIL or other low-quality learning experiences to complete their WIL requirements (Tran & Soejatminah, 2017). These situations demonstrate that there is a critical need for preparation and pre-WIL programming that supports international students. Post-secondary institutions can promote the preparedness of international students for WIL as well as provide supports for them during their WIL (Gribble et al., 2015; Wall et al., 2017).

Australia has been progressive on the topic of international students in WIL and in supporting their success. Starting with a National Scoping Study (Patrick et al., 2008), the Australian Government identified international students as a group that “must be addressed urgently” (p. 24). Building upon this report, the government committed to funding institutional capacity for WIL and ensuring access and inclusive WIL for marginalized populations such as international students (Peach, Moore, & Campbell, 2015). Funded research from this movement allowed for the development of the Work Placement for International Student Program (WISP), and a model of effective practice was developed (Barton et al., 2017). It encompassed deliberate reflective practice that is structured and enables students to learn from their experiences to grow. The model also recognizes that international students are learning in and about multiple environments at once (e.g., school, work, country, etc.). The model also accounts for multi-level socialization while promoting a process of cultural development that builds cultural knowledge and competency (Barton & Hartwig, 2017; Barton et al., 2017). Encouraging international students to use on-campus services and to participate in volunteerism and out-of-classroom programming may be an effective way to support their success in WIL. Other ideas such as establishing a community of learners who can work together to share their learning, reflect, and provide support to each other can also benefit international students. Lastly, ensuring that

workplace supervisors meet with students prior to the WIL experience to discuss success strategies are all leading recommendations for how to promote international student success in WIL (Barton et al., 2017).

The research demonstrates that international students experience challenges and barriers to success in WIL and that supports are needed from post-secondary institutions. The difficulty for faculty and staff trying to support these students is that they may not recognize their need for help or exhibit help-seeking behaviours. Designing WIL programming or curriculum that is a pre-requisite for international students to complete before their WIL experience may be a solution, although it may not be an equitable solution if only international students are required to complete that component of the curriculum. Contrarily, if supports and resources remain outside of curriculum, then staff and faculty may not be able to reach the international students before they participate in WIL. Lastly, the challenges of language, cultural competency, securing WIL, and dealing with discriminatory practices in the workplace may not be the lived experience of all international students. Stereotyping all international students into a category that implies they will not be successful without deliberate intervention may, in fact, perpetuate the biases that exist and discriminatory viewpoints of employers articulated in the literature. The findings presented in this chapter reinforce the critical need for more research on how to support international students in co-op and what specifically co-op departments can do to be part of the solution.

Summary

This chapter began with an introduction to the theory of WIL and co-op as educational approaches that bridge classroom theory with the application of vocational skills in the workplace. Furthermore, a systematic exploration of co-op education, its history, purpose,

structure, indicators of quality, and administration were presented. International student experiences in post-secondary education and employment were then explored to provide context to their lived realities, challenges, and opportunities. The intersection of international students in WIL was explored, focusing on benefits and barriers to WIL, language and the Canadian workplace, and a brief introduction to emerging best practices. The research has demonstrated a historically deficit-based approach to articulating the experiences of international students, and it may be time to evolve that to a strength-based narrative. Ultimately, the research has exposed a gap in the literature and a desperate need to better understand international student experiences in co-op.

CHAPTER THREE: Research Design

Canadian post-secondary institutions are increasing their yearly enrolment of international students (Government of Canada, 2014) in an environment where there is significant growth and demand for Cooperative Education (Sattler, 2011). An issue faced by Cooperative Education (co-op) departments is how to support and prepare international students for employment in their co-op work-term within the Canadian workplace. This research was an inquiry into the perspectives of international students in co-op that may assist co-op departments in addressing this phenomenon. In Chapter Three, I introduce the mixed-method design of the research and the ontological and epistemological viewpoints of the researcher. The research setting, methodology, participants, and recruitment are explored, followed by the methods and data analysis approaches. The chapter concludes with a summary of ethical considerations, the anticipated trustworthiness of the data, and delimitations.

Research Questions

The research study was an inquiry into the perspectives of international students in co-op, structured by using a single overarching primary and three secondary research questions developed through an interpretation of themes discovered within the literature review. They are aligned to organize an investigation that would yield data particularly relevant for co-op departments that can be used to inform practices, pedagogy, and supports offered to international students.

The primary question addressed by the research was: What can be learned from the perspectives of international students enrolled in Co-operative Education that can support Co-operative Education practitioners develop evidence-informed programming?

Secondary research questions to supplement this inquiry included:

- What factors contribute to international students' preparedness for their co-op work-terms?
- What opportunities and challenges do international students experience in co-op?
- What do international students value from co-op?

Ontology and Epistemology

While reviewing potential research paradigms for this study, I was influenced by Morgan (2007), who argued that in the historical context of paradigms as worldviews, epistemological stances and shared beliefs have anomalies, irony, and politics within the research community. Morgan introduced an alternative pragmatic approach to methodology that rejects traditional dualism (i.e., positivism versus constructionism) and the stances that this dualism forces researchers to take (i.e., quantitative versus qualitative research). Morgan's point of view was that inquiry is not strictly for the pursuit of knowledge, but is also to acquire knowledge in the pursuit of a desired outcome. Johnson and Onwuegbuzie (2004) shared a similar stance related to pragmatism as an alternative paradigm for research. Some of the general characteristics of pragmatism that have influenced me and this research approach are that pragmatism endorses practical theory or praxis, is rooted in human experience in action, and that knowledge is constructed and based on reality and the experiences of individuals. As a student completing a dissertation and as a practicing professional in the field of co-op, it is important to me that the research, findings, and recommendations provide a practical and immediate benefit to my professional environment and to this important field of study. Therefore, the research was designed to expand knowledge on the experiences of international students in co-op and to provide specific and relevant information for co-op departments and practitioners.

The choices I have made throughout my career reflect my interests and natural philosophical underpinnings towards relevancy. Throughout my career, I have been the type of individual who often creatively solves problems and who designs frameworks and templates based on existing models, tailored and customized to a specific scenario. As such, I most closely self-identify as a pragmatist who is not loyal to only one type of research paradigm, but is open and adaptable to leveraging any research philosophy that best serves the situation at hand (Bloomberg & Volpe, 2012). For me, having the freedom of choice and the opportunity to consider what best suits the political, economic, and cultural environment that the research is situated was critically important. This freedom to consider various techniques and approaches helped enable me to seek out fact and truth and further the collective knowledge on my topic of choice (Creswell, 2012b). Employing a mixed-method research design also aligned with my philosophical framework and pragmatic research paradigm.

Similarly, I think there is value in strong criticism and having a skeptical mindset. When designing the instrumentation, analyzing the data, and presenting my interpretations, I took into account Feldman's (2003) consideration for skepticism, truth, and justification as an approach to being thorough, thoughtful, and impartial. Christians (2011) stated in black and white terms that researchers should "hang up their values along with their coats as they enter their lecture halls" (p. 63). While I appreciate the intention of this statement, I would be remiss if I did not argue that it was not possible to completely exclude my values from this research. I did, however, approach all aspects of this project with an impartial, objective, and non-judgemental perspective as I could. I did this fully recognizing that my profession is in the field of co-op, and I have been heavily influenced by my peers, role models, and colleagues with whom I have spent the last

three years of my career. I tried to be cognizant of this bias and perspective and attempted to be objective and neutral.

Research Setting

HECQO has recently conducted large-scale research that explored work-integrated learning (WIL) in Ontario. Their research was focused on the broader umbrella topic of work-integrated learning of which co-op is a primary form. Their study has led to a richer understanding of the importance of co-op, the motivations, and the barriers to entry that international students face. This context demonstrates how much international students appreciate co-op (Sattler & Peters, 2013), but does not get specific enough around supports for international students and what co-op departments can do to evolve their practices. HECQO's research did set a strong foundation in Ontario for deeper exploration of topics related to WIL, such as international students in co-op.

Canada has seen dramatic growth in the number of international students enrolled in all levels of study. The Canadian Bureau for International Education (2016) reports that there were 353,000 international students studying in Canada in 2015. This represents a 92% increase in international students since 2008, of which 43% or 143,428 reside in Ontario (Canadian Bureau for International Education, 2015, p. 23). Additionally, within the college system in Ontario, international student enrolment has been continuing to grow annually. In the 2015-16 academic year, over 34,000 international students were enrolled in college (Colleges Ontario, 2016). Considering the rich and foundational research conducted by HEQCO and the sheer volume of international students currently in the Ontario college education system, conducting research on international student experiences in co-op is extremely relevant and timely.

For this research, three large Ontario-based colleges were selected as research sites. They were institutions with an adequate sample population of international students in co-op and were selected based on the following attributes:

- Mature institutions with 50 years of history in providing post-secondary education.
- Large student populations of over 20,000 full-time students.
- Approximately 25% of the student population at each institution were international students representing over 70 different countries.
- Enrolls students in large-scale co-op programs spanning multiple credential types, such as degree level, diploma, and post-graduate certificates.

The breadth of existing literature focused on WIL in Ontario that is related to co-op and the maturity and scale of these Ontario-based institutions, with their rich international student population and co-op programs, positioned these sites as very attractive for this research. Permission was requested and received from senior administration at each institution. Additionally, I applied for ethics approval at all three institutions individually and received approval from their respective ethics board.

Methodology

Through this research, I tried to capture data that would promote a better understanding of the perspectives of international students who have completed a co-op experience. By collecting data that measure and describe the international student experience, I was able to use these data to inform recommendations for co-op departments. I used a mixed research methodology that drew upon both quantitative and qualitative data in a sequenced and complimentary design.

Definitions and Rationale

When selecting a mixed-methods research framework or methodology, I looked at definitions of mixed-methods research and rationales for its use. Johnson, Onwuegbuzie, and Turner (2007) reviewed contemporary definitions of mixed-methods research, and through their research, they provided the following general definition:

Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration. (p. 123)

My motivation to employ mixed methods was also influenced by Green, Caracelli, and Graham (1989) who believed that there are five rationales for selected mixed research. One of these purposes is

COMPLEMENTARITY [emphasis in original] seeks elaboration, enhancement, illustration, clarification of the results from one method with the results from the other method. . . . [and furthermore, the rationale] to increase the interpretability, meaningfulness, and validity of constructs and inquiry results by both capitalizing on inherent method strengths and counteracting inherent biases in methods and other sources. (p. 259)

I designed this research to be complementary in nature by combining, corroborating, expanding, and exploring through multiple datasets to foster a deeper and richer understanding of the phenomenon.

The research questions and the purpose of the research also informed the methodological approach. In this case, the questions in the research required the use of two types of data. For both the primary and secondary questions, the factors that influence student perspectives, reflections on experiences, and thoughts and opinions of how co-op departments can better support students can be quantified and measured numerically. In order to represent a broad sample of student opinions, compare and contrast results, and explore trends on a larger scale, a quantitative phase of inquiry was required. Data from this phase were then interpreted to articulate relevant findings across both datasets. From the quantitative data, I was able to provide a numerical expression of the relative importance of variables and influencing factors; however, it is lacking in its description of why these results are occurring. Qualitative inquiry captured the narratives and words that described these experiences directly from international students. This enhanced my data and helped explain their realities. When I designed and completed this research I was, and still am currently, motivated by the view that collecting, mixing, and using both quantitative and qualitative data has the potential to lead to a better understanding than using one approach exclusively (Creswell & Clark, 2007).

Explanatory Sequential Mixed Method (QUAN → qual)

In selecting a mixed research methodology, I reviewed typologies that have been developed for mixed-methods research (Creswell, 2015; Leech & Onwuegbuzie, 2009; Teddlie & Tashakkor, 2006). While in the last decade literature has surfaced related to conducting mixed methods research, Leech and Onwuegbuzie (2009) acknowledged that:

A number of [mixed method] designs that currently prevail leaves the doctoral student, the beginning researcher, and even the experienced researcher who is new to the field of

mixed methods research with the challenge of selecting optimal mixed method designs.
(p. 265)

It is encouraging that multiple options can be tailored to suit the needs of the research questions; however, as a doctoral student, I acknowledge the challenges associated with selecting this type of research method. The typologies tend to agree that within mixed-methods research, the use of quantitative and qualitative data is required to be considered mixed, and there is often more than one phase in the research, although that may not be required to be defined as a mixed method (e.g., mono-strand or mono-phase designs). Through review of typologies, mixed-method designs can be categorized into concurrent mixed, sequential mixed, and conversion mixed.

For the purpose of this research, I employed a sequential mixed-methods approach, starting with quantitative inquiry followed by qualitative inquiry. Leveraging the basic notational system introduced by Morse (1991), my design can be labelled as QUAN→qual, demonstrating these two sequential phases of research, where capitalization describes emphasis or priority on that particular phase. Teddlie and Tashakkor (2006) offered a point of disagreement between typologies and argued that emphasis or priority should not and cannot be given prior to conducting the research, “because the actual priority of approach (QUAL, QUAN) is determined after the study is conducted” (p. 13). While I agree in principle with this statement, Morgan (1998) challenged the priority-sequence model and suggested the purpose of this type of design is that: “[A] smaller qualitative study helps evaluate and interpret results from a principally quantitative study. Can provide interpretation for poorly understood results, help explain outliers, etc.” (p. 368). Similarly, Creswell and Clark (2007) outlined a sequential and explanatory design that is a two-phase mixed method design that “helps explain or build upon initial quantitative results” (p. 71). I anticipated that capturing the perspectives of international students (a non-

homogenous group) was going to provide a wide variety of data to explore, so I proposed to use a small qualitative follow-up phase to help understand the response patterns from the quantitative data.

Therefore, the methodology for the research ultimately became an explanatory mixed-method design that collected and analyzed both quantitative and qualitative data. Using an online survey instrument, quantitative data were collected from international students who had completed co-op in a large Ontario-based post-secondary institution. These data were used to identify perceptions from this population and the degree of influence that some specific factors have on preparedness for co-op, student co-op experiences, and student opinions on how co-op departments can better support international students. In the following qualitative phase, a small subset of respondents to the survey was invited to participate in semi-structured individual interviews. The intent of these interviews was to build upon the quantitative results and to explain the experiences and perspectives of international students in more depth. Refer to Figure 2 for a graphical representation of the phases of this research design, purposes of each phase, and data outcomes at the completion of each phase of the design.

I had originally intended to do a demographic review of the quantitative data to inform and to guide the purposeful sampling for the qualitative phase of the research (Creswell & Clark, 2007); however, a limited number of participants volunteered for a follow-up survey, and they were all invited to the qualitative phase. In retrospect, it was fortuitous that this method was flexible enough to accommodate the lower response rates and reinforced the rationale I used for my original research proposal. I designed the semi-structured interview schedule and questionnaire to be independent of the results from the quantitative phase. This also supported the convenience of scheduling through a single research ethics board approval process. The

timing of data collection was critical, as many of the students who had completed co-op and met the eligibility criteria for this research were graduating within the academic term that the survey was released. Therefore, structuring a mixed-method design where the follow-up survey questions were contingent on the results from the survey would have complicated the method or derailed the data collection process. Choosing a design where this dependency was not required mitigated these risks, and I do not believe it diminished the quality of this research. Displayed in Figure 2 are the phases and procedures sequenced within the research design, including anticipated products or outcomes of each procedure. Capitalization of QUANTATIVE or QUANT denotes emphasis on quantitative data and procedures as part of the method design.

Quantitative phase: Online survey. An online survey instrument was used for the collection of quantitative data because it allowed for recruitment of a specific population (i.e., international students who have completed co-op). It was a familiar and convenient survey tool for this population and offered the accessibility of collecting data in digital form with relative ease (Van Selm & Jankowski, 2006). My process to design a survey instrument was influenced by Calder (1998) and Fink (2017) for step-by-step guidance on the procedures for developing cross-sectional surveys. It also leverages SAGE Designing Survey steps of drafting a preliminary sampling plan, preparing a questionnaire outline, planning operations, and the development of a preliminary data analysis plan (Czaja & Blair, 2005).

I designed a new survey instrument, as this research investigated a phenomenon that is not well-published in the existing research literature. The tool was developed to collect data from the research participants with precision and aligned with both the primary and secondary research questions. The focus for this survey design was driven by the need for descriptive statistics related to the target population rather than by complex analytical and

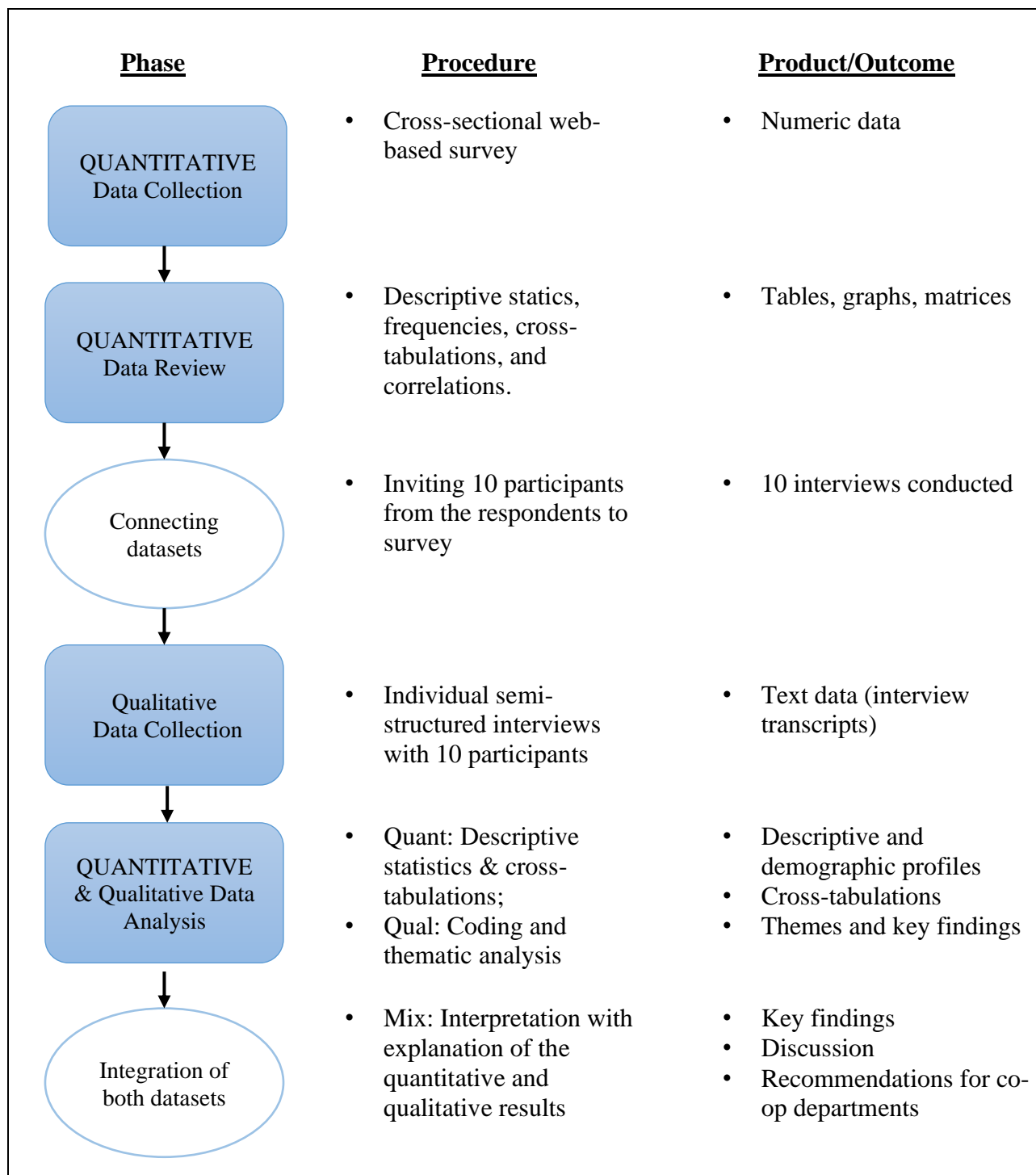


Figure 2. Visual model for mixed-method sequential explanatory design. This illustrates the phases, procedures, and outcomes of the mixed-method approach to this research.

predictive testing of a predetermined hypothesis. Therefore, the survey instrument was structured to collect demographic information, rankings, and the opinions of the respondents using closed-ended questions. Intentionally, this approach allowed for data to be collected and organized by descriptive statistics and cross-tabulations regardless of the number of respondents. Because of the current gaps in the literature related to international students in co-op, even with a limited data set, basic descriptive information about this student population would be helpful and relevant.

Qualitative phase: Semi-structured interviews. Semi-structured interviews were conducted following the completion of data collection from the online survey instrument. Carruthers (2007) argued that for graduate students, semi-structured interviews are the only type of interview that can be used after a quantitative survey phase. He suggested that unstructured interviews require a great deal of skill to conclude properly and that other qualitative studies that simply count how many subjects do or say a similar data response is a poor approach to qualitative research. Carruthers also referenced Borg and Gall, who stated, “The semi-structured interview, therefore, has the advantage of being reasonably objective while still permitting a more thorough understanding of the respondent’s opinions and the reason behind them than would be possible using a mailed questionnaire” (p. 65). During the semi-structured interviews, I was able to preselect open-ended questions and ask them consistently. The questions were designed in a way that allowed the participant to answer in as much detail as they would like (Turner, 2010). The other benefit is that probing follow-up questions were established, so there is consistency in the main questions while maintaining the flexibility and ability to promote further exploration when required (Rabionet, 2009). This method for linking data from a survey and

making use of it within a mixed-method design through semi-structured interviews is referred to as “data-linked nesting” (Schatz, 2012, p. 183).

Schatz (2012) provided examples of research projects where a selection of interview participants are drawn from the survey respondents. They were used to compare groups, to understand outliers, and to provide a more comprehensive description and understanding of the phenomena. She noted that motivators for this approach include corroboration, elaboration, and initiation. This type of qualitative data can be coded as “narrative data,” which can then be compared directly to quantitative survey results (p. 192). The approach I took for the semi-structured interviews was based on the concepts of data linking and coding narrative in order to compare and elaborate qualitative themes to the trends identified in the quantitative analysis. Lastly, I had anticipated that through a comprehensive and robust research process that starts with a large data population, followed by individual interviews, I would have an in-depth and intimate understanding of the research subjects and phenomenon. As Carruthers (2007) suggested, this approach leads to comprehensive research with integrity and also builds a sense of satisfaction and fulfilment.

Participants and Recruitment

The participants for this study were international students registered at one of three Ontario Colleges and who have completed their co-op work-terms. Some programs require students to complete one, two, or three work-terms. To be included in this research, students must have completed all of the co-op requirements in their academic programs first. It was necessary that the students have completed co-op for two reasons: (a) so that they are able to holistically reflect on their entire experience in co-op, including their preparation course before co-op, the activities required to secure a work-term, and their thoughts and opinions after co-op

is concluded; and (b) so there were no ethical issues or conflict of interest between my role as an administrator responsible for co-op and students' academic progression, grades, or other academic influences. As demonstrated in the research design, the priority data set was quantitative. Therefore, the online survey instrument was only available to students who met the criteria of being an international student who had completed their co-op. The intent was to capture as large a sample set as possible from this population. Participants from the original sample were invited to partake in individual semi-structured interviews to elicit a broader and more comprehensive individualized description of the international student experience in co-op. To minimize conflict of interest, perceptions of coercion, or any other ethical issues, recruitment of the student participants was not done by the researcher. Instead, administrative representatives from each college promoted and introduced the research to students.

Participants for Online Survey

Administrators at each college, such as the Dean of Students or Director of Co-op, each agreed to distribute the survey instrument via email to all co-op students enrolled at the time of distribution who met the described criteria. It was anticipated that the recruitment population consisted of approximately 450 students, of which 92 students responded to the online questionnaire. All eligible students were invited to participate in order to promote as large a sample for the data collected in the survey instrument. The email invitation to possible participants clearly indicated: (a) that completing the online survey instrument was voluntary and would not be connected to their academic records, (b) individual survey responses and identities would remain confidential, (c) the results would be included in a report that would be published and made available to the public, and (d) that the purpose of this research was to support and to inform improved practices for co-op offices.

Participants for Semi-Structured Interviews

As part of an explanatory mixed-method design, 10 participants were recruited from the respondents to the online survey. I designed into the survey instrument a question that asked respondents if they would be willing to participate in a follow-up one-on-one interview. If they select yes, they were able to provide their email address so that they could be contacted by the researcher directly. Invitations to participate in the semi-structured interviews were selected in a similar fashion to that of a confirming sampling (Creswell, 2012a), where research participants would be involved in further explaining the findings from the online survey. Onwuegbuzie and Collins (2007) offered a similar sampling approach as part of their typology for sampling designs whereby participants of a QUANT → qual mixed approach are considered nested sampling for the qualitative follow-up phase. This type of sampling was selected to allow me to consider trends to be confirmed and/or explored further from the initial review of the quantitative data. Criteria for selection would have included a representative sample informed by demographics, outlier results, and/or unexpected themes identified from the survey descriptive analysis. This continuity in independent variables should support the qualitative follow-up results that align and better elaborate the quantitative results from the survey (Schatz, 2012). I was not able to select participants in this manner because of low volunteer and participation rates. Therefore, all students who volunteered for a follow-up interview were invited to an interview. The fact that 10 students were interviewed was serendipitous.

Compensation for Participation

Bosnjak and Tuten (2003) researched the various incentives and motivators for subject participation in online surveys and found that prizes or award incentives were the most successful to inspire volunteer participation. I have been awarded a grant for this research and

had the resources to offer an incentive to participants of the study. Influenced by the University of Calgary's ethics board, I ultimately offered a \$5 dollar gift card to Starbucks to all students who completed the online survey. My intention was to provide an incentive to maximize the participation and, thus, the size of the dataset. All students received this incentive electronically by leaving their email address. Students who participated in the semi-structured interviews received a \$10 gift card to Tim Hortons. In this case, the gift card was not to motivate students to participate, but more simply, to acknowledge their time and involvement in this research and to thank them for participating.

Language Considerations

This study included international students as participants who, in many cases, may not identify English as their first or primary language. Therefore, plain language was used in all communications within the research, such as recruitment materials, consent forms, survey questionnaire, interview questions, and such. The intent was to mitigate any comprehension concerns between the purpose of and questions being asked and the responses provided by the students. It was also assumed that these international students were currently enrolled in an English-based educational institute and must have passed language assessments for admittance. The criteria to enroll at Ontario colleges include proficiency in English. For example, OntarioColleges.ca, the website through which international students apply to Ontario colleges, stated, "If you are applying to a program taught in English, and if English is not your first language, proof of English proficiency is required" and "Some colleges may also ask you to take a college language assessment test before being accepted as a full-time student in a college program" (Ontario College Application Service, n.d.). A variety of language assessments are utilized as part of the student application process. Furthermore, students who have completed co-

op are usually in their third or fourth year of study at the post-secondary level, and to be successful in their academic pursuits, they must be proficient at and comprehend English. Therefore, through use of plain language as a mitigation strategy and by the nature of the student's previous success in English learnt within post-secondary education, language was not identified as an issue that would negatively impact this research.

Method

The research data were collected in two phases. First, through an online survey instrument and then second through semi-structured individual interviews. The instruments for collecting this data were created specifically for this research and were customized to the primary and secondary research questions. The design of the instruments was also aligned thematically to elicit responses and were organized so that the findings can be compared, contrasted, and complementary in nature.

Online Survey Instrument

Customized to the primary and secondary research questions, a cross-sectional survey was used to capture data from the participants at a single point in time (see Appendix C). Fink (2017) suggested that cross-sectional survey data can be thought of as a "snapshot of a group of people" (p. 119) and that in the case of this research, that group was international students who had completed co-op. The survey was designed to be completed in 15-20 minutes so that it was not overly burdensome for respondents. All questions were closed-ended questions designed to provide a numeric dataset. The survey was distributed in a web-based instrument using Qualtrics. Once the survey closed, the raw data file (Excel) was downloaded onto the researcher's personal computer and that file was password protected for security and confidentiality. A backup copy of this raw data file was saved on a separate USB key, password protected, and stored at the

researcher's personal residence. Ultimately, the data were imported into SPSS (on the researcher's computer) for statistical analysis and computations.

Interview Protocol

In-depth individual semi-structured interviews with international students who had participated in the online survey enabled a deeper acknowledgement and appreciation of student experiences. Individual interviews were audio recorded, transcribed, and then used for this research report. Interviewees were informed of how their comments would be used prior to the interview. Direct quotations and comments are provided in Chapter Four, but without the participant's name or any other identifying information (i.e., co-op employer name, business name, or locations). The interview protocol included open-ended questions that aligned with the primary and secondary research questions (see Appendix D). Students were encouraged to share as little or as much as they would like about their experiences. According to Turner (2010), effective research questions are (a) open-ended so respondents can choose their responses and how to answer the questions, (b) neutral to avoid influencing the answers, (c) one topic and/or question asked at a time to maintain focus, and (d) clearly worded and avoid terms/terminology that may confuse the respondent. This approach was followed in the development of the interview questionnaire. Additionally, probing questions were utilized when interviewees did not elaborate or if they required encouragement to expand their responses. Probing questions were used for two functions: (a) to elicit comments specific to research questions; and (b) to encourage the respondent to delve deeper into their experiences, reflect, and provide comprehensive and thoughtful responses.

Both the quantitative online survey instrument and the interview protocol and questions were entirely and linearly aligned to the research question, themes, and influencing factors

represented in Figure 3. Data collection and instrumentation were designed with a thematic configuration to independent and dependent variables identified from the literature review chapter and those related to the primary and secondary research questions.

<i>Independent Variables</i>	<p align="center">Primary Research Question: What can be learned from the perspectives of international students in Cooperative Education that can support co-op departments develop evidence-informed programming?</p>		
<p><i>Ethnicity</i></p> <p><i>Gender</i></p> <p><i>Age</i></p> <p><i>Grade-Point Average</i></p>	<p>Sub-Question Theme: Preparedness</p> <p>What factors contribute to international students' preparedness?</p>	<p>Sub-Question Theme: Co-op Experience</p> <p>What opportunities and challenges do international students experience?</p>	<p>Sub-Question Theme: Co-op Departments</p> <p>What do international students value from co-op and how can co-op departments support them?</p>
<p><i>Credential / Program</i></p>	<p align="center"><i>Influencing factors to be measured below</i></p>		
<p><i>Employment Experience</i></p> <p><i>Compensation</i></p> <p><i>Extra-curricular Experience</i></p>	<ul style="list-style-type: none"> - Academic and program content - Preparation Course & Co-op Department - Confidence to be employed (and in Canada) 	<ul style="list-style-type: none"> - Supervisor/supervision - Discrimination - Language and Communications - Canadian workplace culture 	<ul style="list-style-type: none"> - Prep Course Topics: (e.g. Resume, workplace culture, professionalism, etc.) - Preferred learning modality - Available supports and resources

Figure 3. Data collection and research question alignment. Primary and secondary research questions are displayed in relationship to independent variables and influencing factors that were measured and explored through this research.

Data Analysis

Before articulating how I analyzed the data, I will describe the degree of integration for the methodology, as it informs the approach to data analysis. The integration points within the research design include the creation of the research questions, data collection processes, and comparison of analyzed data from both sources for interpretation. As Caracelli and Green (1993) articulated, “Where complementarity is the primary purpose for mixing methods, the decisions guiding separate versus integrative processing of the different data types are not as clear-cut” (p. 203). Caracelli and Green also observed that when multiple data sources are used to measure overlapping facets of the phenomenon, integrative data analysis is not useful. Therefore, in this study, the research question design drove the data collection procedures, and the interpretation of results was influenced by both datasets that were analysed separately and compared against each other for completeness, explanation, illustration, and utility (Bryman, 2006), rather than a fully integrative data analysis. Utilizing integration through narrative, I employed a weaving approach (Fetters, Curry, & Creswell, 2013) whereby three key themes were explored as presented in discussion found in Chapter Five and derived from the secondary research questions displayed in Figure 3.

Quantitative Analysis

Quantitative data from the survey instrument was uploaded into an SPSS software data analysis system after it was cleaned and reviewed for missing data (Creswell & Clark, 2007). I reviewed the data to see if any unusable data such as a respondent selecting the same response for each question and removed all the data collected when I was testing the instrument prior to recruitment.

Using SPSS, I computed frequencies and descriptive statistics for the data collected on each survey question. These descriptive statistics were done to assess central tendency, variability, and relative standing (Haan, 2013). The SPSS system calculated minimum, maximum, mean, standard deviation, variance, frequency, percent, valid percent, and cumulative percent. Following this exercise, I then computed cross tabulations. For the subtheme of preparedness, I then cross referenced against all the independent variables (e.g., ethnicity, age, grade point average, etc.) and the influencing factors (e.g., confidence and academic program preparation). The same procedure was conducted for sub themes two (co-op experience) and three (co-op departments). Lastly, I used SPSS to create correlation matrices to compare variables across the three themes (i.e., preparedness, co-op experience, and co-op departments) and to calculate Pearson correlations to investigate if there was a statistically significant linear relationship between variables. Two-tailed significant test were calculated at the 0.01 and 0.05 levels. All these data were exported from the SPSS system for analysis. Once the raw data were computed, I considered different approaches to presenting the data for readability and to assist in interpreting the data. Using Microsoft Excel, I created stacked bar charts, tables, and graphs to visually represent the data presented in Chapter Four.

Qualitative Analysis

With some exceptions, Lapadat and Lindsay (1999) argued, “Empirical examination of transcription processes, products, and their implications is singularly lacking in the research literature.... A quest for one standard set of conventions is not likely to satisfy all, and it is not theoretically tenable” (p. 81). They also suggested that transcription is adopted and modified based on the research and research setting as appropriate; however, researchers should be aware that the process of transcription is important as well as the product. Through this research, I

recorded all interviews with an electronic audio recorder. Text transcriptions were manually converted into an electronic document format (*.doc) by listening and typing the words spoken. The text was rendered free from coughs, vocal pauses (e.g., um), involuntary sounds, stutters, and other interview noises. Manually typing the audio to text allowed me to listen many times to the participants' responses and thoroughly consider their words, intentions, and suggestions for this research. I also considered the merits of sharing the transcripts with the interviewees for confirmation of accuracy, empowering the interviewees, and showing respect for the interviewees' time. However, Hagens, Dobrow, and Chafe (2009) and Mero-Jaffe (2011) argued that the disadvantages to the procedure, possibility of censorship or modified content, and the relatively limited benefit to accuracy and the outcomes of the research exceed the benefits. The interview data was used to support the explanation of the data from the quantitative phase of the methodology and also to contribute to the validation of the results. The need of enhanced accuracy and validation from the interviewees was not be required. Similarly, sharing transcriptions with interviewees could impact the timelines of the research project and may create more work on behalf of the interviewees. Therefore, I did not share copies of the transcriptions with interviewees.

Since I had listened to each recording many times already during the transcription process, I printed each and immediately began reading the data to start highlighting and identifying content that I would use for coding. I specifically reviewed the data for content related to the themes and influences found in Table 1 and in this study's conceptual framework. However, as Bloomberg and Volpe (2012) cautioned, "Your conceptual framework must remain flexible and open to change throughout the entire analytic process" (p. 143). Recognizing that the conceptual framework I developed prior to the research might evolve based on these data, I

attempted to keep an open mind to that concept while reviewing the data. With these data, I looked to identify categories and themes from the data independent to the quantitative data, but I did compare these data to the categories and themes I presented in the literature review and the conceptual framework.

Nvivo software was used to store and treat the transcripts. Saldaña (2016) proposed two cycles of coding when conducting qualitative methods. First, I reviewed the individual interviews transcripts and highlighted anything that seemed relevant to the research question, themes, and influencing factors. For the second cycle of coding, I employed pattern coding (Saldaña, 2016) that assisted in organizing the content into categories or labels. I then compared these categories deliberately with the influential variables represented in Figure 3 as part of the conceptual framework (Bloomberg & Volpe, 2012) for explanatory analysis. Throughout this exercise, I refined the descriptive codes using a word or two that summarized the topic. Examples of my nodes in Nvivo, include Country, Time in Canada, Immigration Canada, Idioms, Classroom Learning, Socializing in Canada, among others. Similarly, I created categories for all the notes in Nvivo. For example, Demographics and Introduction was a category that contained codes such as Country, Credential, Time in Canada, and others. I reviewed and considered and refined the categories continually and moved codes within the categories until the data were organized and relevant to the research question. Ultimately, nine categories, 51 codes, and 789 references were coded in total.

Using my professional experience working with international students, I also employed judgement in the interpretation of what the students were trying to convey in the interview. I have found that students who come from other countries sometimes use language that is native to their home culture or home country schooling systems. For example, I have noticed that

international students may use the word “placement” rather than “co-op.” Understanding these nuances and the context of the words international students use helped and was important to the integrity of this research.

Lastly, to synthesize and create findings from the qualitative data, I read all the coded content in each category multiple times. I reviewed for trends, concepts, and relationships within each category. Relating these data to the secondary research questions, I documented the findings and also identified quotations from the research participants that illustrated or represented these findings in Chapter Four. These quotations were selected to appropriately reflect a concept that reinforce or help to explain aspects of the quantitative data findings. From the findings and through thematic analysis, I then identified and documented six key themes or learning from the data that were relevant to this research study. While the emphasis of the research design was on the quantitative findings, the categorization and coding of qualitative data yielded rich and insightful information that contributed significantly to the outcomes of this research study and assisted in further explaining international student experiences in co-op.

Interpreting and Integrating Mixed Data

As Creswell (2015) articulated, a key motivator for employing a mixed method design is that it leverages the strengths of both types of data. In this explanatory sequential mixed method research design, both quantitative and qualitative datasets were analyzed separately. Afterwards, both data sets were analyzed concurrently. I drew inspiration from Onwuegbuzie and Teddlie’s (2003) “Framework for Analyzing Data in Mixed Methods Research.” Specifically, I used elements of their procedure of “1) Data reduction; 2) Data display; . . . 4) Data correlation; 5) Data consolidation; 6) Data comparison; and 7) Data integration” (p. 374). I deliberately omitted their third step that suggests the transformation of data. For this study, I did not convert

qualitative data into quantitative data as a part of the analysis. It was not required as part of my explanatory design. The critical aspects of the analysis were relating, comparing, and explaining quantitative results with the qualitative data.

To interpret the data, I thoroughly reviewed the findings from the quantitative data and compared them to the qualitative findings. I did this by staying focused on the primary research question and the secondary research questions that informed the three key themes from Figure 3. In a narrative form, I organized a discussion in Chapter Five that covered each theme thoroughly, presented my interpretations of the data on each theme, and compared them to existing literature on the subject. This ultimately was an amalgamation and integration of data from this study, my lived experience as a practitioner, and information from other research studies. Leveraging both quantitative and qualitative data from this study, I was able to demonstrate with these data findings in an explanatory format what can be learned from international students in co-operative education from this study.

Ethical Considerations

Confidentiality

There is a very minimal and remote risk that a participants' identity may be linked to their comments presented in this study. The interpretation of their comments by others may or may not cause difficulties for the participant and contribute to a negative outcome: for example, if a participant made a comment about their workplace using a wording that might identify them to others. If they are identified by their statement and it in some way is interpreted negatively, then this might result in a decrease in status of that participant with the employer, depending on its interpretation. This is a remote possibility, but it does exist. Participants were all informed

that their comments may be published and that all reasonable efforts would be made to maintain confidentiality and anonymity.

Mitigation strategies employed: All data, comments, or quotations provided by participants were reviewed and altered if required, so that details that could link the participant to their comments were minimized and/or not published. Participants' names were not used in any part of presenting the research.

Informed Consent

There is also the potential for the perception of coercion in this study, as the researcher is an Associate Dean/Director at a college. It may have caused participants to perceive a power dynamic or feel pressured to participate in the study. Additionally, participants may have believed they could gain favour from the Associate Dean/Director by volunteering for this research study. Having completed the study, this does not appear to be the case; however, to be transparent, I have referenced it in this document.

Mitigation strategies employed: In Phase One of the study, students were reminded that their participation in the study was voluntary and would not be used for any type of credit, academic or otherwise, as part of the informed consent and recruitment materials. Recruitment of students for this research was done by an administrator from each college and not by the researcher. In Phase Two of the study, students were again reminded that their participation was voluntary and would not be used for any type of credit, academic or otherwise, as part of the informed consent and recruitment materials. Students were also informed that the researcher (an Associate Dean/Director) would abstain from any academic decisions related to the student for the remainder of the academic year to eliminate any perceptions of bias or unfair treatment. For

example, any appeals related to the student's co-op program would be heard by a substitute, rather than by the researcher.

Reciprocity

Students who participated in this study may not immediately experience benefits from their involvement in the research because participants are individuals who have already completed co-op. Instead, the benefits, if any, of their involvement will be recognized mostly by future international students and their contribution to advancement of practices that support future international students in general. The onus will be on the researcher, the site institution, and others to use the results provided responsibly in order to inform future practices, to evolve co-op models, and/or to better support international students in co-op in the future.

Research and Ethics Boards

An ethics approval was received and complied with at the Conjoint Faculties Research Ethics Board at the University of Calgary as well as with each of the research site's Research Ethics Boards. While application to the research site's board was not required, I took these steps to demonstrate a commitment to be ethical and transparent, and I designed this research in a way that can withstand scrutiny. Risks to student participants were disclosed, including appropriate mitigation strategies related to confidentiality of data, ethical uses, interpretation of results, data storage, security, approaches to informed consent, and ethical research practices.

Trustworthiness

As Onwuegbuzie, Johnson, and Collins (2011) boldly explained, "Mixed research, although growing exponentially in popularity, still is in its adolescence" (p. 1255). The issues of trustworthiness, legitimation, and validity are an ongoing evolution within the field of mixed research. I acknowledge that the procedures or inferences in mixed research are among some of

the least developed issues in mixed research. I consider legitimation in this mixed research to be a continuous process that is iterative and dynamic, rather than as a singular procedure that takes place after data has been collected. My approach was to consider a typology of mixed-methods legitimation types (Onwuegbuzie et al., 2011) and to use these checks and balances at all phases of the research proposal, design, implementation, and interpretation of data. The key aspects of the typology that impacted my research relate to my ability to navigate multiple paradigms (i.e., quantitative and qualitative) while balancing my knowledge base as a practitioner in my field of study to appropriately present insider views and observer views. Lastly, commensurability served as a focus for me throughout the research. This is the notion of inter-subjectivity and blending of paradigms to ultimately discover a viewpoint that provides thoughtful and well-considered interpretations of the data. My intention is that through this approach, it will serve to promote trustworthiness of my research findings and interpretations.

Limitations and Delimitations

Some limitations to the research design are related to the participant populations and the response rates. The research was structured to collect data from international students; however, the data sets were limited by the enrolment and demographic distribution of international students at the research sites. Related to enrolment and student demographics, it is possible that the lived experiences of international students at large colleges in Ontario may or may not be similar or comparable to colleges outside of Ontario or in other university settings. Additionally, participation rates impacted the statistical computations that could be calculated and reliable degrees of accuracy and significance. Lastly, there may be response bias from the sample pool of volunteer participants in this study, which may influence the data and findings.

The research design was also structured specifically with constraints that warrant disclosure. A delimiting factor I imposed on this research was related to the criteria for participation in the study. International students who participated in the study must have *completed their co-op work-terms*, but must have also not yet graduated from their post-secondary institution. While their reflections and experiences may be relatively recent in their memories, this did limit their context and awareness of this phenomenon to that point in time in their growth, education, and development in the Canadian higher education and employment eco-systems.

I also put a constraint on this research to only study international students. With this delimitation, I am not able to directly compare their experiences with those of domestic students. This was intentional, as there is already a body of literature related to domestic students and their co-op experiences, whereas the current gap in the literature is in relation to international students. The comparison between the two may not be necessary to provide an expansion of knowledge that could be useful to co-op offices on this topic. Lastly, I am seeking to learn from international students in co-op to inform co-op department practices. I recognize there are other influences and factors that contribute to student success, but for this research, I narrowed the scope and focused on co-op staff and departments. This research did not investigate perspectives of senior administration, co-op departments and their staff, or look to capture feedback from employers and supervisors of co-op work-terms.

Summary

In this chapter, I provided an overview of the research, methodology, and outlined the details of the research questions. First, the primary and secondary research questions were introduced, and then the research paradigm and methodology. This research approach describes

the use of an explanatory sequential mixed methodology that links the sample population between two research phases (QUAN → qual). Second, participants and recruitment, specific methods and data collection, and analysis procedures were explained. I then concluded this chapter with a description of ethical considerations, trustworthiness, and delimitations.

CHAPTER FOUR: Data Findings and Analysis

The purpose of using a mixed-method design is to draw upon both quantitative and qualitative data in a complimentary design. In Chapter Three, the data collected and calculated to address the primary and secondary research questions were presented in sequential order, starting with the quantitative phase of the research method and followed by the qualitative findings. This design was selected to promote elaboration, illustration, and clarification of the data (Green et al., 1989). In the quantitative section, I provide an overview of the respondents to the survey and the demographic profile of the research subjects. Data from each section of the survey instrument are then displayed thematically and organized by each of the three secondary research questions. Following the quantitative data findings, I provide a brief overview of the volunteers for follow-up interviews and the approach taken in the ten semi-structured interviews. Each of the findings has a narrative explanation and direct quotations from the interviewees that illustrate and further support and describe the finding. Analysis is then provided of the quantitative data findings, as well as six emergent themes derived from the qualitative data analysis. The joint interpretation of quantitative and qualitative data of this mix method approach is provided in Chapter Five as part of discussions and recommendations.

Quantitative Phase: Survey Data and Findings

The survey was distributed to international students from three different colleges who met the criteria of having completed a co-op work-term. Each school indicated that the survey was distributed to approximately 150 students for a total of approximately 450 students eligible to participate. The incentive for participation in the survey was consistent at each school; however, of the 92 survey respondents the distribution of respondents by school was 60%, 24%, and 16%, respectively. Question one of the survey was answered by 92 respondents, and by the

conclusion of the survey, there were 82 respondents. All data was used in calculations including data collected from respondents that did not finish the questionnaire. The survey data was imported into SPSS for analysis. The findings are displayed in four sections starting with the demographic profile of the respondents, then followed by preparedness and perceptions prior to co-op, student experiences during co-op, and by the co-op preparation course and supports for students.

Demographic Profile of the Survey Respondents

The survey instrument included questions designed to capture basic demographic profile of the international students who responded as well as collect information about their previous work experiences, participation in extra-curricular activities, and length of time living in Canada. The results are organized thematically for ease of readability.

Gender, age, ethnicity and time in Canada. The respondents to the survey provided a broad representation of cultural background, balanced gender participation, and a range of time spent in Canada prior to their co-op experience. From a gender perspective, 52% identified as Male, 48% as female, 0% as neither male nor female and 0% responded as other. The ages provided were 3% identifying as 17 to 19 years old, 54% as 20 to 24 years old, 25% as 25 to 29 years old, and 18% as 30 years or older. The allocation of ethnicity amongst the students can be found in Table 3. There was a minimum of one representation across all ethnicities provided in the survey instrument except for two: (a) Japanese and (b) First Nations, Métis, or Inuit. The most frequent ethnicities were South Asian (30%), Latin American (15%), and Chinese (15%). A category of other was provided for students who did not self-identify by the ethnicities provided in the survey, and 11% respondents selected other. The majority of respondents had been in Canada two years or less before their first co-op experience, with 24% less than a year, 52% one

to two years, 18% three to four years, 6% four to six years, and 1% indicating they had been in Canada over seven years.

Table 3. *Survey Respondents by Ethnicity*

Ethnicity	Frequency	Percent
Arab	1	1
Black (for example African, Haitian, Jamaican, Somali, etc.)	1	1
Caucasian / White	12	13
Chinese	14	15
Filipino	1	1
Korean	3	3
Latin American	14	15
South Asian (for example, East Indian, Pakistani, Punjabi, Sri Lankan, etc.)	27	30
Southeast Asian (for example, Vietnamese, Cambodian, Indonesian, Laotian, etc.)	7	8
West Asian (for example, Afghan, Iranian, Turk, etc.)	1	1
Other	10	11
Total	91	100

Credentials, grades, and on-campus activities. All students participating were from three large post-secondary colleges that offer a range of academic credentials that include co-op. Across the participants, 17% were enrolled in a degree, 42% in an advanced diploma, 21% in a diploma, and 20% in a graduate certificate program. Students were also asked to select their grade point average and were provided with both a numeric and letter grade options from which to choose. Of the total survey respondents, 16% answered 4.0/A+, 64% selected 3.5-3.9/A, 15% indicated 3.0-3.4/B, 2% at 2.5-2.9/C, and 2% preferred not to answer. To collect information about what on-campus activities students participated in, students were asked to select all that

apply from categories provided. The results presented in order of highest to lowest frequency were None (40%), Volunteering (33%), Extra-curricular (23%), Tutoring/Mentoring (13%), Research Projects (12%), Student Union (7%), Co-curricular (5%), and Other (5%).

Previous employment experience and compensation during co-op. The survey asked respondents to indicate what types of employment experience they had had prior to their co-op experience, with a question that allowed them to select all that apply. The results are presented in order of highest to lowest frequency. In answering this question, 41% of respondents indicated they had previous full-time employment experience in their home country, 36% had part-time experience in Canada, 20% did not have any employment experience, 14% had on-campus employment experience, 11% had full-time Canadian experience, 9% had part-time experience in their home country, and 5% indicated they had other work experience. From their co-op work-terms, 88% of respondents received financial compensation, 12% did not, and 0% indicated they received an honourarium.

Preparedness and Perspectives Prior to Co-op

The survey instrument was structured into sections that corresponded with each of the secondary research questions. Within the Preparedness section, respondents were asked to answer questions about how prepared they felt prior to co-op, and questions related to their perceptions about co-op before completing a work-term. The majority of students (74%) indicated that they either felt very prepared or prepared for their co-op work-term. There was minimal standard deviation or variance between responses on this question (refer to Table 4). Additionally, more students felt comfortable in Canada and interacting with Canadians (82%) than they felt prepared for co-op. Students also felt that their academic preparation (78%) had more of an impact on their feeling of preparedness than the co-op preparation course (64%).

Table 4. *Student Preparedness for Co-op*

Response	Frequency	Percent
Very Prepared	17	20
Prepared	47	54
Unsure / Neutral	16	19
Unprepared	6	7
Total	86	100

Std. 0.81; Variance 0.65

As displayed in Figure 4, there was a wide range of results provided when students were asked if they felt they would be treated differently during co-op because they are an international student. While 42% of students believed they would be treated differently, 38% felt they would not be treated differently, leaving 21% feeling uncertain. On this question, there was a higher standard deviation (1.12) and variance (1.25) than many of the other responses to questions within this section of the survey. Students in this study seemed to agree that international students had different needs than Canadian students when preparing for co-op, but this question also had a higher standard deviation (1.12) and variance (1.26). Student perspectives on comfort in Canada, academic preparation, and the co-op preparation course all had lower standard deviations and variances that were less than 1. The larger standard deviations and variances indicate less uniformity of opinion amongst the sample population than the other questions, where the survey respondents had similar response patterns to each question.

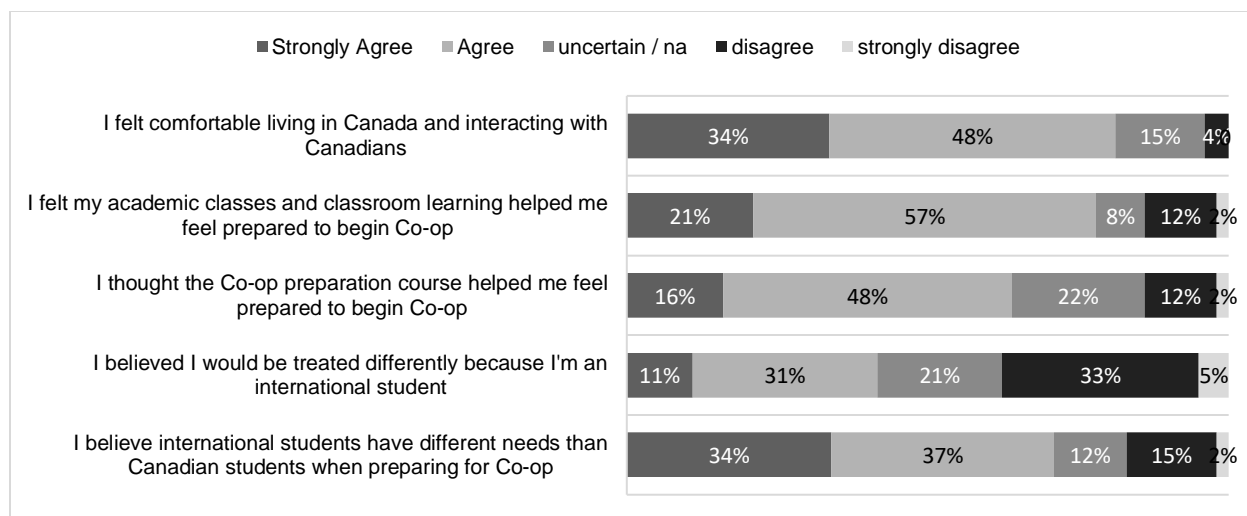


Figure 4. Perspectives prior to co-op

Preparedness by gender, age, ethnicity, and time in Canada. There did not appear to be any difference in students' perceptions of preparedness for co-op by gender, with 75% of males and 73% of females feeling prepared for co-op; however, notably, 28% of males felt very prepared compared to 10% of females. Comparing the age categories demonstrated a clear trend that older international students in this study tended to feel more prepared for co-op than younger international students (refer to Figure 5). Ethnicity results with more than five respondents demonstrated that Chinese (78%), Latin American (79%), and South Asian (81%) students felt more prepared than Caucasian/White (55%), and Southeast Asian (58%). Time in Canada did not seem to influence perceptions of preparedness for co-op. Students who had been in Canada less than a year reported that 26% felt very prepared and 58% prepared, compared to students who had been in Canada four to six years, where 20% very prepared and 60% as prepared.

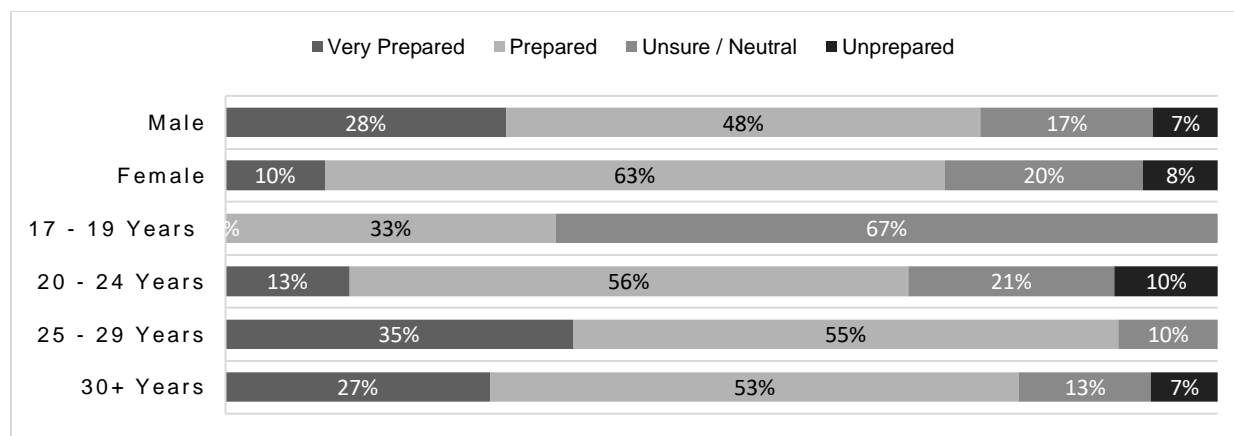


Figure 5. Preparedness by gender and age

Preparedness by credentials, grades, and on-campus activities. International students studying in degree (86%) and graduate certificate (88%) programs felt the most prepared by credential compared to advanced diploma (64%) and diploma (77%) students. Most students identified as A+ or A level students with 80% of A+ students reporting they felt prepared for co-op and 73% of A level students respectively (refer to Figure 6). Due to the low number of respondents in the B and C level grade categories, it is difficult to determine if there is a relationship between GPA and student preparedness from these data. Comparing student perceptions of preparedness against their participation in campus activities shows that 77% of students who did not participate in any activities felt prepared for co-op, exceeding the results from participation in tutoring/mentoring (75%), volunteering (70%), student union (66%), and extra-curricular (60%) activities. Students who participated in co-curricular (100%, $n = 5$) and research projects (90%, $n = 10$) had the highest perceptions of preparedness.

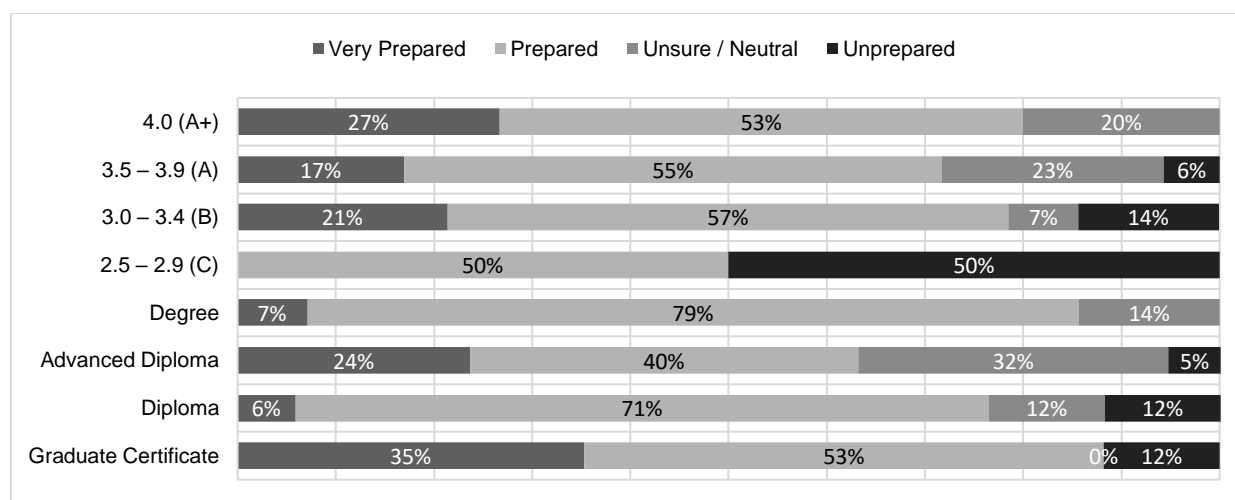


Figure 6. Preparedness by GPA and credential type

Preparedness by previous employment and compensation during co-op. The results reported in Figure 7 show that by a significant margin, international students who took part in this study who had experience employed full-time in Canada prior to their co-op felt prepared for co-op (90%) followed by full-time experience in their home country (80%). Students who described themselves as not having previous employment experience (77%) had higher perceptions of preparedness for co-op than those with part-time experience in Canada (70%) and on-campus employment experience (62%). Students with part-time experience from their home country did not seem to feel prepared for co-op (13%). While most students received compensation for their co-op experience, those who did had much higher feelings of preparedness (77%) versus those who did not receive compensation (50%).

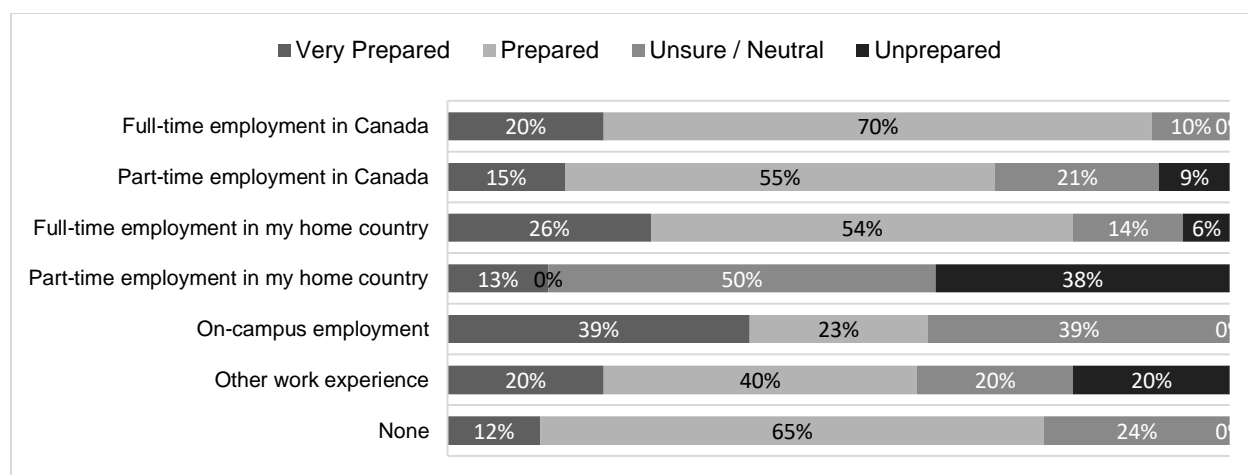


Figure 7. Preparedness by employment experience

Correlations. Pearson correlation calculations were conducted using SPSS software. The correlation matrix is presented in Appendix E. Correlation between variables found to be significant at the 0.05 level (2-tailed) include:

- There was a strong positive correlation between feelings by respondents that international students would be treated differently and that international students having different needs than Canadian students [$r = 0.360, n = 86, p = 0.001$].
- Feelings of preparedness had correlation with thinking the co-op preparation course helped students feel prepared for co-op [$r = 0.241, n = 86, p = 0.026$], and there was a significant positive correlation between preparation courses helping students feel prepared for co-op and academic classes helping students feel prepared for co-op [$r = 0.544, n = 86, p = 0$].
- Feelings of comfort living in and interacting with Canadians had positive correlations with perceptions that the co-op preparation course helped [$r = 0.271, n = 86, p = 0.012$], that academic classes helped students feel prepared [$r = 0.242, n = 86,$

$p = 0.025$], and negative correlation with beliefs that international student have different needs than Canadian students when preparing for co-op [$r = -0.272$, $n = 86$, $p = 0.011$].

Co-op Experience and Perspectives during Co-op

The next section of the survey instrument corresponded with the secondary research question related to international students' experiences in co-op. Within this section, respondents were asked to answer questions about how successful they were in co-op, was co-op valuable to them, and about the experiences they had during their work-term. A significant majority of students (93%) believed they were successful in co-op, and 93% believed their co-op experiences were valuable to them. There was a statistically significant correlation between the variables of success and value and minor standard deviations and variance among the responses (refer to Table 5). This indicates that the students who participated in this survey felt there were successful and placed high value on their co-op experiences.

Table 5. *Success in Co-op and Value of Co-op*

Response	I was successful in my Co-op work-term		My experiences in Co-op are valuable to me	
	Frequency	Percent	Frequency	Percent
strongly agree	56	67	55	66
agree	22	26	22	27
uncertain/ not applicable	4	5	5	6
disagree	1	1	1	1
strongly disagree	1	1	0	0
Total	84	100	83	100

Std. 0.75; Var. 0.56 Std. 0.67; Var. 0.44
Correlation [$r = 0.594$, $n = 83$, $p = 0.000$]

As displayed in Figure 8, respondents also felt strongly that they were able to apply what they learned from their education (86%), gained relevant work experience for their future (89%), and had the opportunity to be as productive as Canadian co-op students (85%). Students also felt comfortable asking for help or instructions during their work-term (88%), which suggests students felt safe to ask for clarity when they did not understand their work assignments.

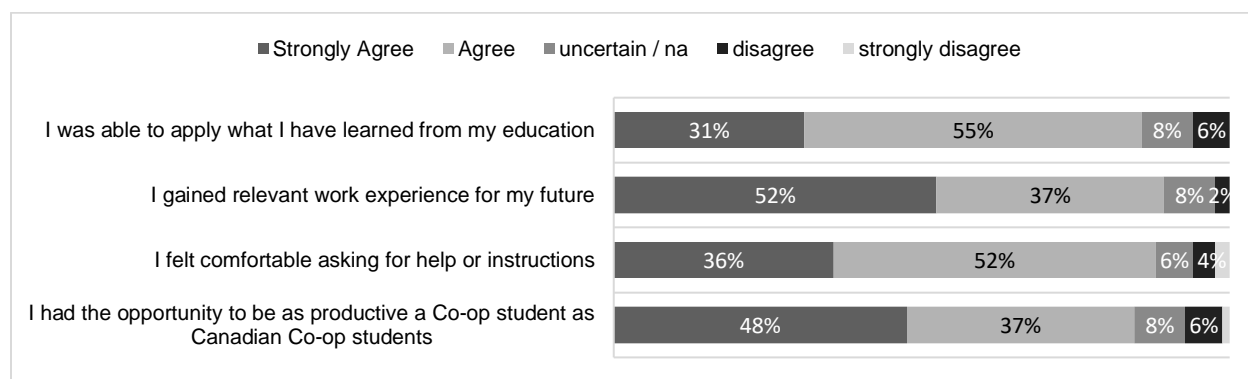


Figure 8. Work-term experiences 1.

When asked if students experienced discrimination during their work-term, 8% reported they did and 17% selected uncertain/not applicable. Similarly, 11% of respondents felt their supervisor treated them differently because they were an international student, and 8% chose uncertain/not applicable (refer to Figure 9).

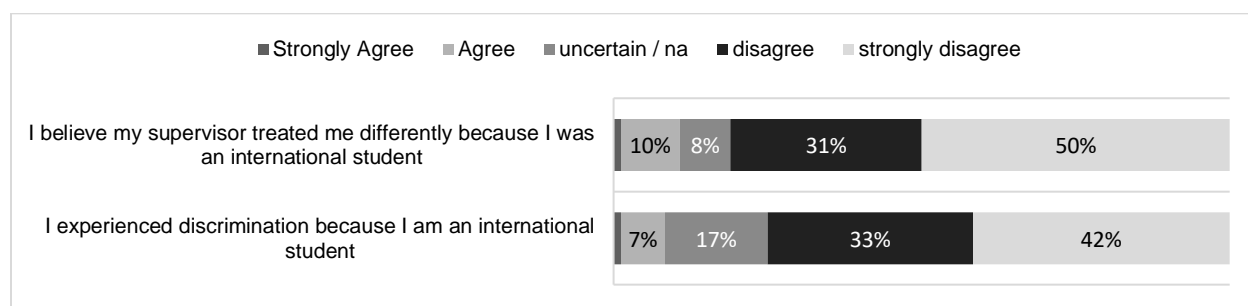


Figure 9. Work-term experiences 2.

Co-op experience by gender, age, ethnicity, and time in Canada. Men tended to attribute slightly more value from co-op (98%) and success in co-op (96%) than women, who responded that they valued co-op (88%) and felt they were successful (91%). These data also show that as age increases, student perceptions of their success in co-op increase (refer to Figure 10).

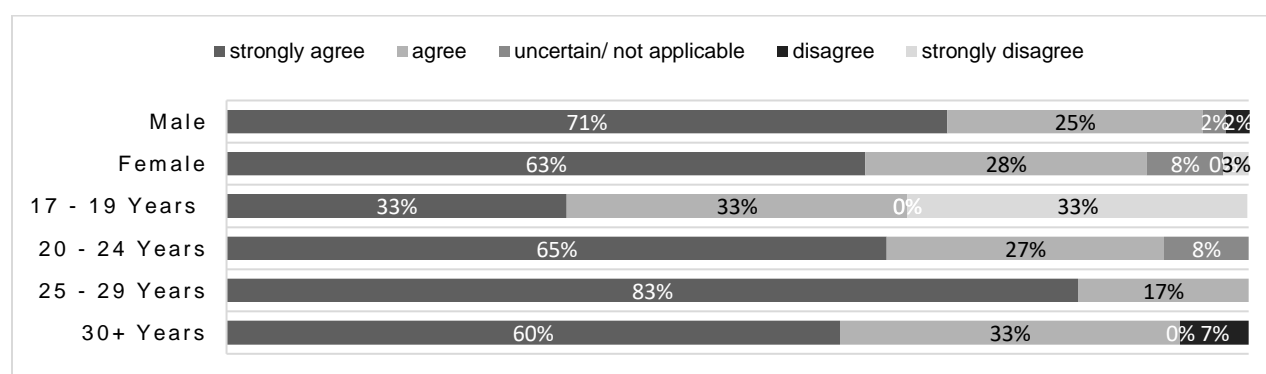


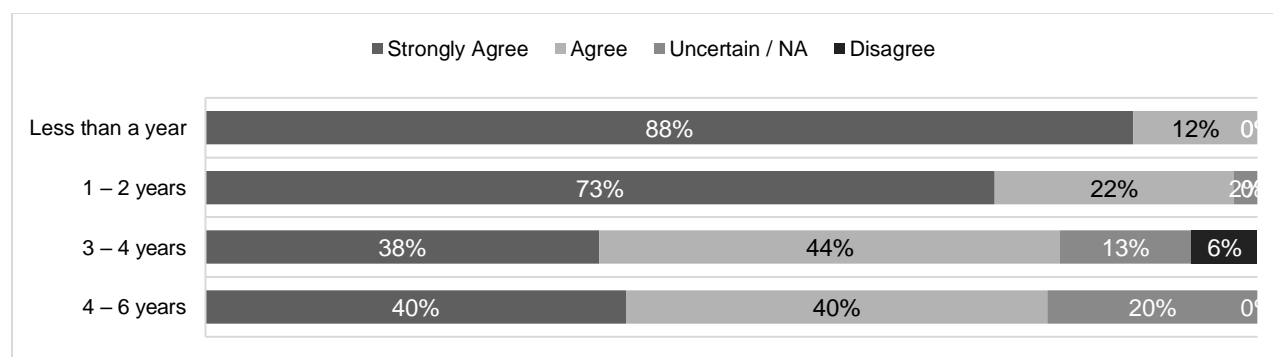
Figure 10. Success in co-op by gender and age.

Success in co-op and value of co-op scores by ethnicity are presented in Table 6. The results are mostly similar across each ethnicity, though there were some variances, and certain demographic groups perceived success in co-op and the value of co-op differently. For example, 82% of Caucasian of the international students felt they were successful in co-op; however, 91% believed the experience was valuable for them. Contrarily, 100% of Latin American students felt they were successful in co-op; however, 86% felt their experiences were valuable.

Table 6. *Success in Co-op and Value of Co-op by Ethnicity*

Response: Strongly Agree / Agree	Success	Value
Southeast Asian	100%	100%
South Asian	96%	100%
Latin American	100%	86%
Chinese	86%	86%
Caucasian / White	82%	91%

Students who had been in Canada longer had decreasing perceptions of success in co-op and value of co-op (refer to Figure 11). For example, 100% of students who had been in Canada less than a year before starting co-op felt they were successful, and 95% valued their experience; whereas, 82% of students in Canada three to four years found success in co-op, and 94% felt it was valuable.

Figure 11. *Success in co-op by time in Canada.*

Co-op experience by credentials, grades, and on-campus activities. Student perceptions of success varied slightly between credential types and GPA. Students who reported higher grades tended to report higher levels of success in co-op. Comparing credential types, graduate certificate students reported the highest rates of success in co-op, with 94% strongly

agreeing that they were successful in co-op, followed by diploma, advanced diploma, and degree students respectively (refer to Figure 12). Student perceptions of value in co-op were consistent across GPA and varied slightly across credential types. Of the degree students, 93% agreed they valued co-op; however, only 43% of students choose strongly agreed, while students in other credentials had much higher proportions of strongly agree responses. Students in advanced diplomas, diplomas, and graduate certificates had much higher strongly agree responses when reporting that they valued their co-op experience, with results of 70%, 65%, and 80% respectively.

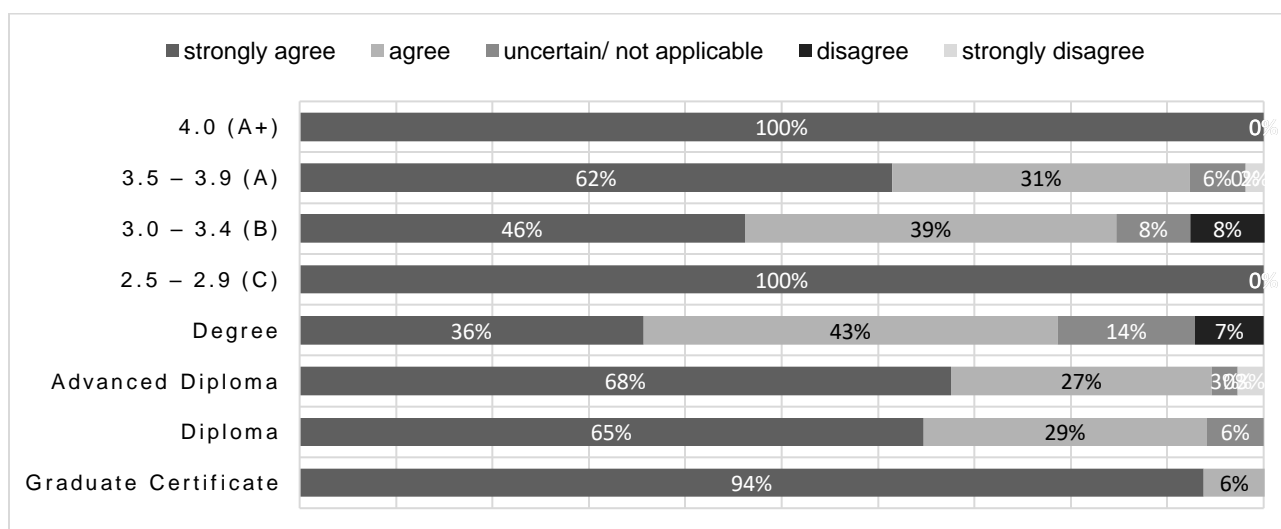


Figure 12. Success in co-op by GPA and credential type

Crosstabs of student participation in on-campus activities were reviewed against their responses on success in co-op and value of co-op (refer to Table 7). Perceptions of success in co-op varied slightly across the on-campus activities type. Comparing the strongly agree scores only across activity type, many indicated that co-curricular (80%), student union (83%), and tutoring/mentoring (83%) were activities conducted by students who strongly felt they were

successful in co-op. For comparison purposes, strongly agree and agree scores were summed together and presented in Figure 13 to display perceptions of success in co-op and value of co-op by students who had participated in on-campus activities. While there was some variability between the scores of success and value by on-campus activities; notably, students who had not participated in any on-campus activities indicated higher scores for success in co-op and value of co-op than many of the other on-campus activity types.

Table 7. *Success in Co-op and Value of Co-op by On-campus Experience*

	Success in Co-op	Valued Co-op
Extra-curricular	90%	85%
Co-curricular	80%	100%
Research Projects	90%	100%
Student Union	100%	83%
Tutoring or Mentoring	92%	92%
Volunteering	93%	97%
Other	60%	80%
None	97%	97%

% of respondents who selected strongly agree and agree

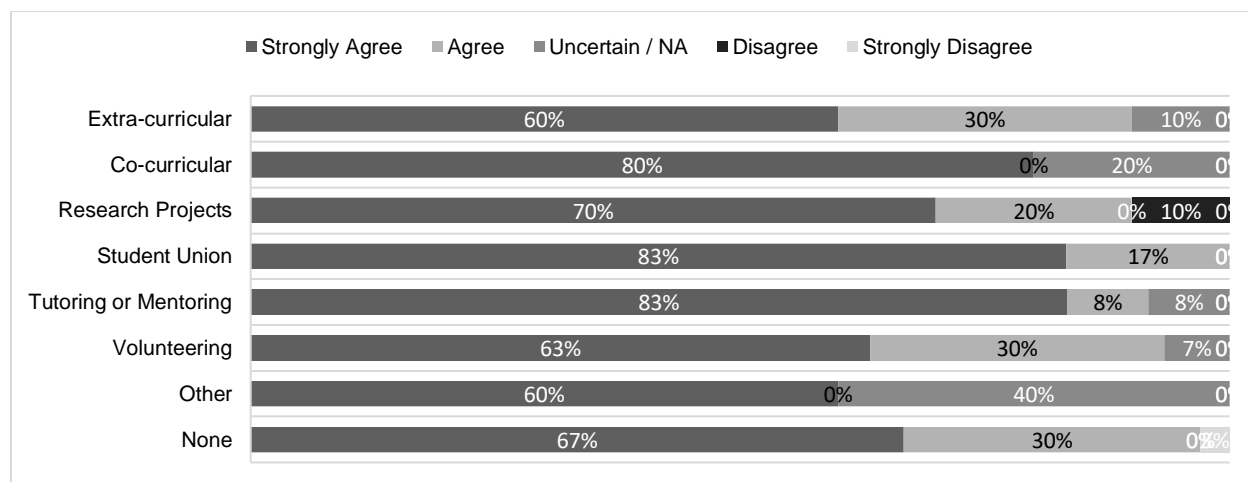


Figure 13. Success in co-op by previous participation in on-campus activities

Co-op experience by previous employment experience and compensation during co-op. Students with full-time work experience in Canada or their home country or part-time experience in Canada tended to have higher perceptions of success than those who indicated they had part-time experience in their home country, on-campus employment, or other work experiences. Students who did not have any previous work experience had the highest perceptions of success in co-op (refer to Figure 14 and Table 8).

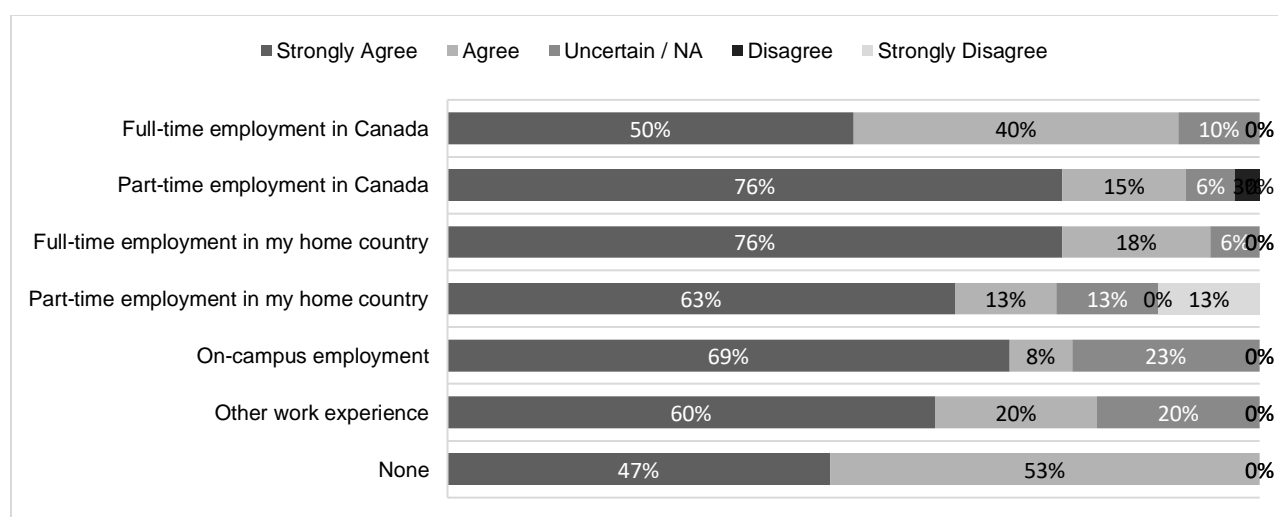


Figure 14. Success in co-op by previous employment experience.

Students who perceived the least amount of value from their co-op experience were those who had previous part-time employment in their home country (76%) and on-campus employment (85%). Students with employment experience in Canada or full-time employment from their home country valued co-op; however, students without any previous work experience all strongly agreed or agreed that they valued their co-op experience (refer to Figure 15 and Table 8).

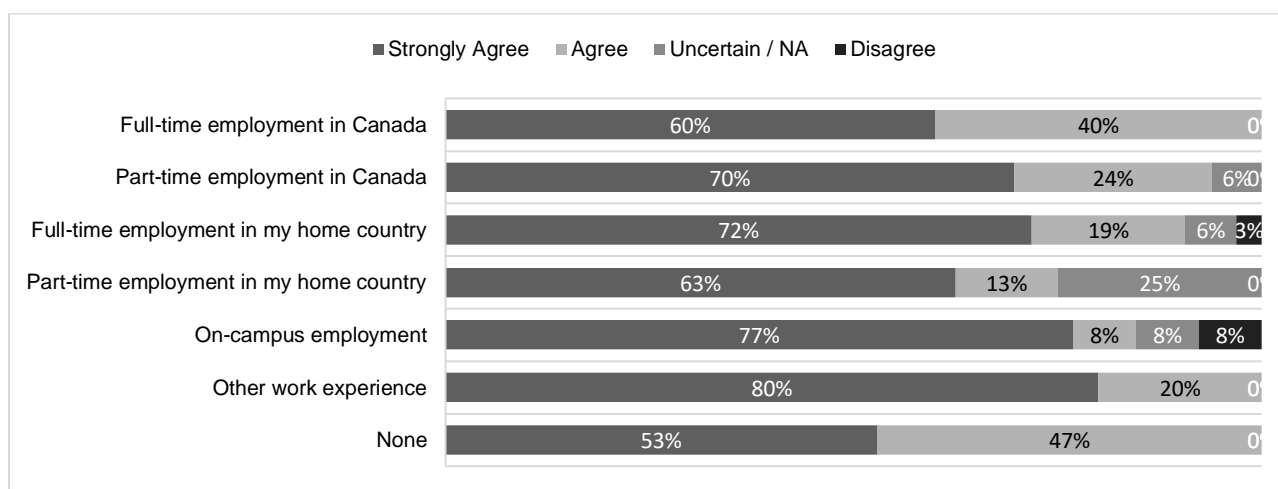


Figure 15. Value of co-op by previous employment experience.

Table 8. Success in Co-op and Value of Co-op by Employment Experience

	Success in Co-op	Valued Co-op
Full-time employment in Canada	90%	100%
Part-time employment in Canada	91%	94%
Full-time employment in my home country	94%	91%
Part-time employment in my home country	75%	75%
On-campus employment	77%	85%
Other work experience	80%	100%
None	100%	100%

% of respondents who select strongly agree and agree

Compensation crosstabs were also reviewed and indicated that 96% of students who received compensation for co-op felt they were successful, and 96% felt co-op was valuable. Of students who did not receive compensation for co-op, 70% felt they were successful and 70% found their co-op experiences valuable.

Perspectives on communication. Respondents believed that communication skills during a co-op work-term are very important (82%) or important (18%). When asked how comfortable they were communicating in English, 10% were unsure, and only one respondent was uncomfortable (refer to Table 9).

Table 9. *Comfort Communicating in English during Co-op*

Response	Frequency	Percent
Very comfortable	32	38
Comfortable	42	51
Unsure / Neutral	8	10
Uncomfortable	1	1
Total	83	100

Std. 0.68; Variance 0.47

Students were asked to rank the importance of communications skills. Speaking English was clearly ranked as the most important communication skill required. Writing or emailing and reading English received similar rank scores, followed by making casual conversation or small talk, followed lastly by understanding Canadian phrases, idioms, or slang (refer to Figure 16).

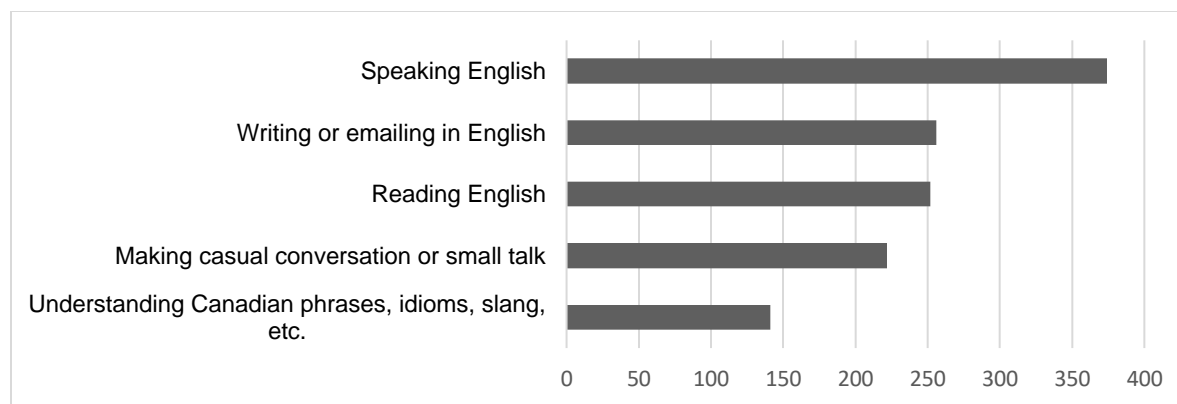


Figure 16. Importance of communication skills (ranked order)

Correlations. Success in co-op had statistically significant and positive correlation with five of eight variables within this section of the questionnaire. Correlation between variables found to be significant at the 0.05 level (2-tailed) include:

- My experience in co-op are valuable [$r = 0.594$, $n = 83$, $p = 0.000$]
- Opportunity to be as productive as Canadian students [$r = 0.517$, $n = 84$, $p = 0.000$]
- Gaining relevant work experience [$r = 0.508$, $n = 84$, $p = 0.000$]
- Being able to apply what they learned [$r = 0.344$, $n = 84$, $p = 0.001$]
- Feeling comfortable asking for instructions [$r = 0.253$, $n = 84$, $p = 0.020$]

Success in co-op had statistically significant and negative correlation with two of eight variables:

- Experiencing discrimination [$r = -0.351$, $n = 84$, $p = 0.001$]
- Supervisors treating them differently [$r = -0.236$, $n = 84$, $p = 0.031$]

The value of co-op to students had similar correlations to that of success in co-op; however, the strength of correlation was notably higher with three variables:

- Gaining relevant work experience [$r = 0.676$, $n = 83$, $p = 0.000$]
- Being able to apply what they learned [$r = 0.479$, $n = 83$, $p = 0.000$]

- Feeling comfortable asking for instruction [$r = 0.450, n = 83, p = 0.000$]

Students who reported that they had experienced discrimination had positive correlations with their believe that their supervisors treated them differently because they were an international student and negative correlations with having the opportunity to be as productive as Canadian students or having comfort to ask for help or instructions:

- Supervisors treated them differently because they were an international student [$r = 0.616, n = 84, p = 0.000$]
- International students had the opportunity to be as productive as Canadian students [$r = -0.624, n = 84, p = 0.000$]
- Was comfortable asking for help or instructions [$r = -0.475, n = 84, p = 0.000$]

Refer to Appendix F for the correlation matrix.

Preparation Course and Supporting Students

In the final section of the survey, students were asked questions related to the preparation course that occurs prior to co-op work-terms. At all three research sites, a similar preparation course model is utilized. Preparation courses are seven weeks and two hours per week that totals 14 hours of in class instruction. A co-op advisor or instructor facilitates the course, which is mandatory for completion prior to a student being allowed to participate in a co-op work-term. This context is provided in advance of the results because it is the model that all survey respondents have already experienced. Most students did agree that a preparation course before co-op is valuable, with 33% strongly agreeing and 49% agreeing; however, 18% of respondents were either neutral or disagreed that it is valuable (refer to Table 10).

Table 10. *Value of a Co-op Preparation Course*

Response	Frequency	Percent
Strongly agree	27	33%
Agree	41	49%
Unsure / Neutral	8	10%
Disagree	5	6%
Strongly disagree	2	2%
Total	83	100%

Std. 0.943; Variance 0.889

Modality and hours of instruction. To elicit responses from students on how they might prefer to engage and learn in a co-op preparation course, two questions were asked that allowed them to indicate their preference for modality and their preferred number of hours of instruction. Given the option, students believed that the preparation course should be mandatory. Of the survey respondents, 48% wanted in class instruction, 8% preferred online or self study, and 21% selected a hybrid of in-class and online learning. Only 21% of students indicated they prefer an optional co-op preparation course, and 2% would have preferred to not have a co-op preparation course at all (refer to Figure 17).

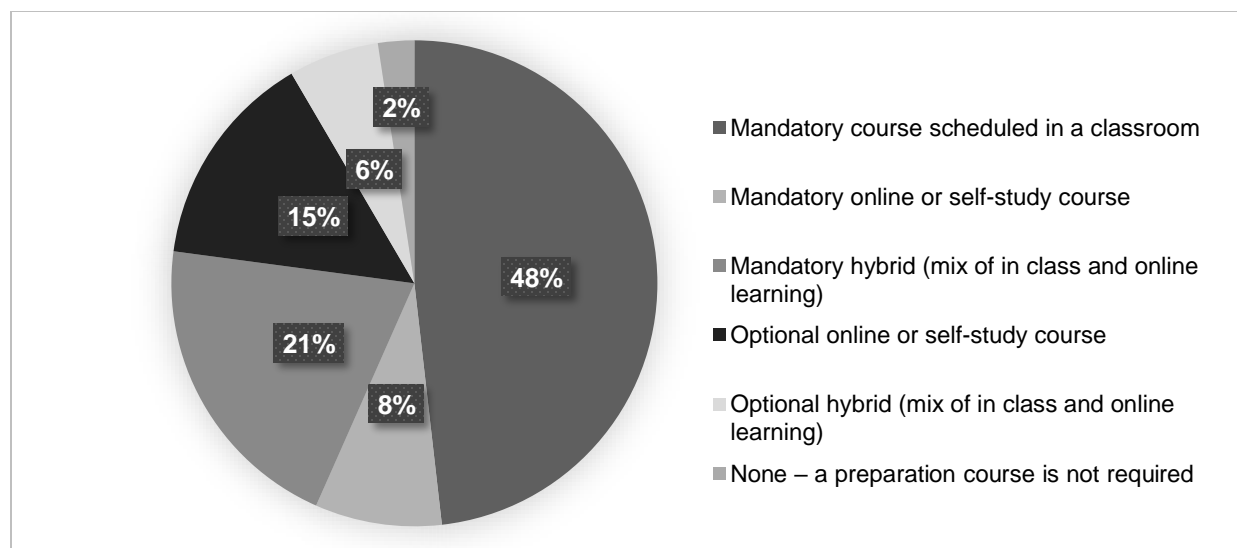


Figure 17. Students' preferred modality for a preparation course

When asked how many hours of instruction or class time students felt was required to prepare international student for co-op, 31% of students selected 14 hours (refer to Figure 18). This is the amount of classroom instruction time they received in their co-op program. Other students selected six to nine hours (20%), 10 to 13 hours (18%), and 28 hours or more (15%). More students preferred less than the traditional 14 hours of instruction time (49%) compared to those who wanted more (21%).

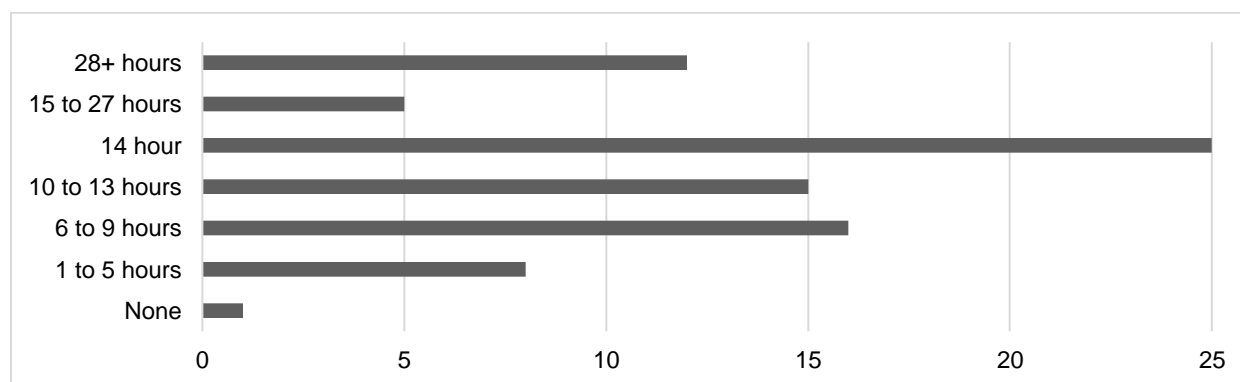


Figure 18. Students' preferred amount of instruction time

Co-op preparation topics. Students were asked to rank the order of importance of co-op preparation course topics and, specifically, asked to think about which topics best prepare international students. Of the six topics provided in the survey as options, resume and job search strategies was ranked first, followed by interview preparation and practice, communication and professionalism, and what to expect in the Canadian workplace respectively (refer to Figure 19). Low ranked results included co-op policies and a category provided for other.

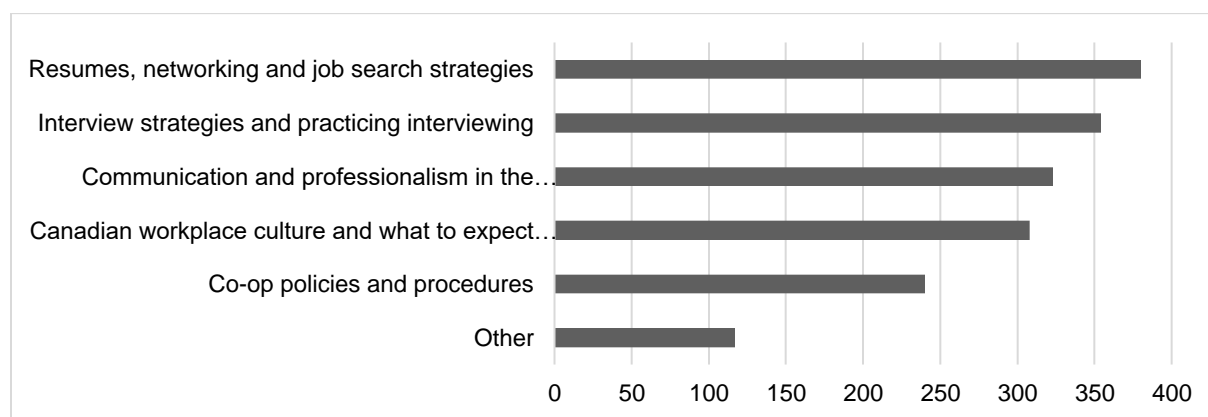


Figure 19. Importance of preparation course topics (ranked order).

Help-seeking behaviours. Students were provided a list of people and supports and asked to order where they would go first to last for help if they were experiencing difficulty in co-op. Students reported they would first ask co-workers and workplace supervisors for help and then co-op office staff. The students ranked internet searches at a higher rank than asking their faculty members for help, followed by previous course notes and friends and family respectively (refer to Figure 20). Ranked significantly last were options for other and not asking for help.

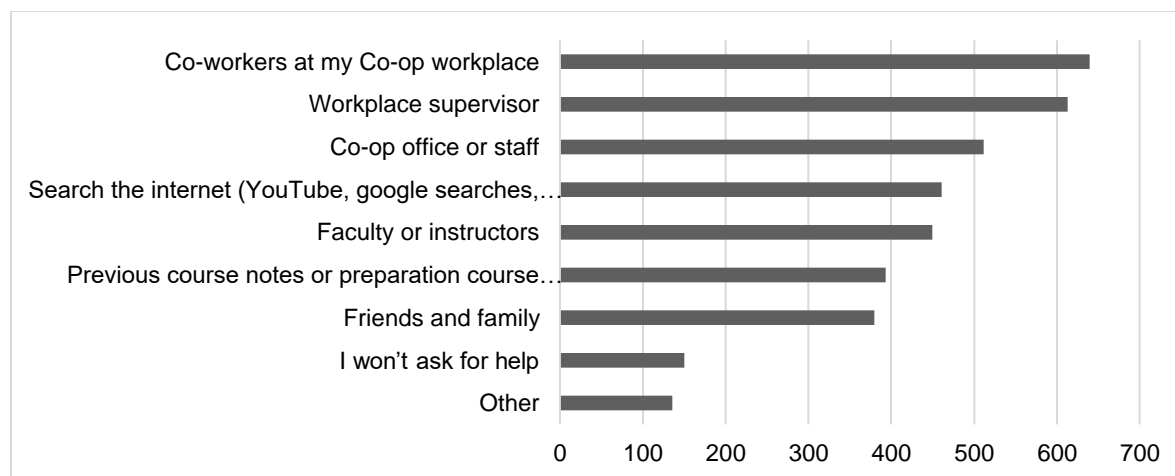


Figure 20. Where students seek help (ranked order)

The last two questions of the survey asked students about specific interventions customized for international students. When asked if a preparation course designed for international students would be beneficial, 61% said yes, 15% no, and 24% thought maybe, but were not sure. When asked if international students would benefit from optional workshops, training, or one-on-one advising specifically designed to practice Canadian workplace communications, 82% said yes, 11% no, and 7% chose maybe, but were not sure.

Correlations. Students' perspectives on the value of a co-op preparation course were positively correlated with their perceived value of co-op in general [$r = 0.433$, $n = 83$, $p = 0.000$] and their success in co-op [$r = 0.263$, $n = 83$, $p = 0.016$]; however, there was not a statistically significant correlation between their value of a preparation course and their feelings of preparedness before co-op (see Appendix E).

Qualitative Phase: Interview Data and Findings

Participants invited to follow-up interviews were recruited from the survey respondents who gave permission to contact them after the survey. All students who expressed interest in a follow-up interview were invited to participate, and 10 interviews were scheduled and

conducted. Participants from two of the three schools are represented in this phase of the study. The interviews were conducted in person at the student's campus in private locations, and one interview was conducted remotely through Skype. A semi-structured script was used for each interview (see Appendix D). The interviewers followed the script and allowed for ad hoc follow-up questions, free-flowing conversation, and allowed interviewees to take the conversation in any direction they wanted. Quotations presented in this section were selected to represent evidence or reinforcement of a sentiment, finding, or perspective prevalent in the data. The participant quotations are presented verbatim to provide insight to how students communicated their perspectives in their own words and intonations and to provide transparency to how they were interpreted for this study. Interviewees were randomly assigned a letter acronym to present their comments and quotations consistently throughout the following sections and to maintain their autonomy. The students interviewed were appreciative of the monetary incentive provided; however, it was clear they volunteered to be interviewed out of interest for the topic, desire to share their experiences, altruistic motivations, or a genuine desire to help other international students in co-op.

Demographic Profile of the Interview Participants

The home country of the students interviewed are provided in Table 11. Gender was balanced with five men and five women. The students interviewed were from a range of academic programs, such as computer programming, cyber security, engineering, accounting, film and television, and human resources. Students were enrolled in degree, advanced diploma, and post-graduate certificate programs. Some students had one work-term experience, whereas others had up to three. Co-op was mandatory in some programs and optional in others. Students had been in Canada between two and six years and all received compensation for their co-op work-

term experience, with one student receiving an honorarium instead of employment wages. From an employment perspective, some students had part-time job experience in Canada, and others had over 10 years of full-time experience in their home country. Six of the interviewees had some form of part-time or full-time work experience in Canada prior to their co-op, two had employment experience in their home country only, and two did not have any employment experience prior to co-op.

Table 11. *Home Country of Interview Participants*

Home Country	Frequency
Brazil	1
Caribbean	1
China	2
Croatia	1
Ukraine	2
India	2
South Korea	1

The volunteers for the interviews had a wide range of different life experiences and motivations for selecting education in Canada. Some were mature students seeking new credentials, some came straight from high school or equivalent systems, and some students were in Canada to follow family members who came first, while others came with a clear goal of employment and obtaining permanent residency. Descriptions of why the students came to Canada to study were shared: Interviewee C stated, “This was a new experience that I wanted to take. I’ve never travel before and this was something I always wanted to do. So here I am.”

Interviewee H shared, “Actually, it was my sister’s decision to study Canada. I wanted to study in Spain, but just because in Canada’s was much easier to apply for PR.” Interviewee E observed, “The thing is jobs.... I think it best choice for me was to get my qualifications. As there are younger individuals coming in with it with the qualifications.” In referring to a scenario unique to Interviewee D, “The economy in eastern Europe in general is not that good. So, all our youth is basically moving to Germany, Ireland, or anywhere else, ...so I chose Canada.”

When the students were asked why they agreed to volunteer for the interview, there was a range of responses from them wanting to help other international students to simply volunteering because they understood how hard it is to find research subjects from their own in class research assignments. For example, Interviewee C shared:

When the survey came out I was really excited and I was like I want to definitely want to fill this out so that people coming after me into the same program don’t necessarily face the same difficulties or just its seamless for them as far as I can help, I try to help.

Similarly, Interviewee G indicated:

I want to I have a really positive impact. I mean experience in my co-op company and I want to share some great experiences with you and I also want to be a part of your product it might be really helpful.

Other motivations from participants suggested they wanted to help other international students: “I just thought, I know there are a lot of international students they couldn’t find any co-op here in Canada that they had to go back to their home country to finish it.” Whereas, Interviewee A had altruistic motivations for supporting this research: “Well, I don’t mind to do

interview. . . . I know how hard it is to actually get people to make into a schedule and actually sit talk to you.”

The range of background, motivations, age, gender, previous work, and educational experiences was diverse and provided an excellent distribution of perspectives. The students interviewed shared some of their challenges and difficulties in Canada and with co-op. However, it should be noted that this group of students would generally be considered successful students in their academic and co-op work-term experiences, representing a highly engaged and motivated student group. For the purpose of this research, the spectrum of participants was enlightening and likely consistent to that of Canada’s international student population; however, the differences among them were significant and reinforced that international students cannot be summarized as a homogenous group. They all have vastly different lived experiences, perspectives, and viewpoints on being an international student in Canada.

Preparedness and Perspectives Prior to Co-op

Preparedness and perceptions of preparedness were unique to each student interviewed. Some of the factors that contributed to students feeling prepared or not prepared were their comfort with English, previous work experience, understanding and knowing what to expect in the Canadian workplace, among others. Each student’s unique situation, background, and experiences shaped how prepared they felt prior to co-op. For example, Interviewee E had years of experience working in their home country for a multinational firm: “I was pretty confident. Like I said, I’ve been in the field for a few years, and I have international experience.” Whereas, Interviewee B felt confident because they had focused at school, learned what to expect in the workplace, participated in class, and were academically successful: “I felt very prepared because

I knew what I was going to do, and I took all the classes that like gave me a good base for the task that is my employer was expecting me to do.”

Contrarily, some students felt unprepared because they did not have any employment experience before co-op, as indicated by Interviewee C, who stated, “It was confusing because I’ve never been at a workplace period at that point time. I hadn’t worked back home. I hadn’t worked here. So, it was a new experience that was actually looking forward to though.” Others were concerned about their language skills and how challenging that may be in the workplace. Students expressed worry about their accent, speaking and communicating with others, and if they would be able to understand instructions or customers during their work experience, such as Interviewee F, who said, “[I was] not prepared at all because we came here thinking that every English is not good enough.” Lastly, some students were simply confident because they did not believe they could be prepared for co-op regardless of your previous experience or academic preparation, as expressed by Interviewee D:

Because you can’t really get prepared to what you’re going to be doing at the workplace at college because every workplace has a different set of rules that you need to follow. So, while you can learn theory and all that fun stuff at the college, you really can’t see how it’s done in industry or really done at the workplace until you get to the workplace.

Students described a sense of anxiety, nervousness, or stress prior to co-op. The factors that contributed to these feelings were different for each individual, but consistently, this sensation of anxiety was prevalent, even if it was mixed with a sense of excitement and anticipation for a new experience. Interviewee D shared, “I mean, a little bit scared, a little bit excited, but that’s with any job or with anything you start to do that news.” This concern was supported by Interviewee J, who noted, “I was also much worried.” Student feelings were mixed.

As Interviewee C explained, “t was really daunting, and I guess I was really exciting as well. At the same time, it’s just a double-edged sword, I guess.” As well, Interviewee G shared, “Half of my mind has some so exciting ones that, but in other on the other, I have a really nervous.” Explicitly, Interviewee F proposed that the feelings of stress are related to being an international student, with their comment: “Being international student is very stressful.”

Student confidence was linked to two factors: (a) confidence to secure employment or get a co-op job, and (b) knowing what to expect during the work-term or during the job. Many of the students developed confidence to get a job through developing a resume they were comfortable with, practicing interview skills, and utilizing the on-campus services and co-op preparation course. Knowing what to expect at the job was more convoluted to synthesize. Some students were concerned with knowing what the appropriate dress code at work might be or the human resources rules, such as payment, hours, and taking sick days, and others were unclear about health and safety and their rights as a worker in Canada. Knowing what to expect was different across the co-op work experiences and types of positions the students secured for employment. Friends and family, other students, and co-op instructors played a role in helping students understand these expectations; however, the students interviewed in this study still learned more on the job than was taught in class. They also expected that they would be told, trained, or educated on the job by their employer once they arrived for their co-op work-term.

Co-op Experience and Perspectives during Co-op

The students interviewed in this study selected co-op for a variety of reasons. They stated that they appreciated the chance to apply theory to practice, to meet people in industry, to gain work experience, and to help them get prepared for employment after graduation. The students specifically reinforced the necessity for international students to build a professional network in

Canada, to understand and learn the Canadian workplace and its norms, practice English and communication skills, and they noted that work experience is beneficial should they apply for permanent residency in Canada.

Inclusion and safety. The students interviewed did not experience any different treatment from their employers because they were international students, and they felt they had fair access and opportunity to co-op work-terms. For example, Interviewee J disagreed with hearsay opinions of other international students and claimed, “I had a lot comments from international students.... If you’re an international student and you are going with domestics, there are less chance for you to get a job.... I completely disagree with that point.” Similarly, Interviewee C suggested, “I don’t think there was anything separating from the domestic students. I think all of us pretty much had the same experiences.”

There were some comments about Canadian systems, legislation, and mixed opinions on whether there are completely balanced or fair opportunities for international students compared to domestic. Some of the students did think domestic students had a competitive advantage over international students, such as Interviewee H who stated, “When the employer would decide who to hire, Canadian or international student.... I believe that with absolutely same set of skills, employers would prefer to hire Canadian.” This perspective was supported by Interviewee I who shared, “I think domestic students have more opportunities because even for me my team wanted me to start as soon as I can. However, I’m not allowed to because I don’t have a work permit.” International students also commented on work permits as an inconvenience that impacts hiring decisions. As shared by Interviewee I, “I feel like sometimes they just might not hire an international student, because there might be issues with VISA and work permit stuff. We did have to get a co-op work permit prior to our co-op internship.” Additionally, certain

organizations in Canada require work permits and security clearances that can hinder international student success in securing co-op work-terms as well as creating bias or exclusions for international students. Interviewee D mused that:

My company is really inclusive, so they don't really care where you're from, but maybe, for example, let's say government job you need to be Canadian to work at a government job, but I believe there are some companies with prejudice against immigrants as well.

The concerns raised by the students were less about discrimination to an individual student because of their cultural background, but it appeared to be more related to the complexities and limitations of work permits and favourability of Canadian work experience versus international experience. The students also referenced the two or three months it took to secure a work permit, barriers related to police checks or security screening, and the number of work-terms students could have in their program of study. The Canadian workplace was described to be very multicultural, which helped students feel more included and not segmented or different. Interviewee A portrayed the diversity of the workplace with the following observation:

I'm pretty sure everybody there was from Canada or at least raised in Canada, but then they all with different background. . . . Five or six different cultural background in very small office since it is very diverse, and then it's more easy to get accepted I feel like. It's not like one dominant culture in the workplace; . . . if it's very diverse itself already, and then it just easier to like get along and easier to blend in.

International students from this study have shown they can have enriching, rewarding, socially engaging, and inclusive experiences in the Canadian workplace. Co-workers were

described as friendly, available to answer questions, supportive, and sociable. Supervisors are accessible, open to answering questions, and genuinely interested in supporting the international students in this study to be successful in co-op. Participants of this study described the Canadian workplace as friendly and respectful, as supported by Interviewee D, “I mean, pretty friendly and relaxed. I come to my supervisor with any problem I had without any issues and he would take the time of his day to help me.” Other comments included: “In one word. Friendly” (Interviewee C); “A respectful environment where everybody feels safe and valuable” (Interviewee B); “I think the company I worked for is very inclusive” (Interviewee D); and “I was a bit surprised like yeah, how chill it was. How cool and relaxed it was as compared to back home” (Interviewee E).

While the students interviewed in this study represent students who had successful co-op experiences, their interpretations were that the Canadian workplace was inclusive, willing to accept and develop international students as much as domestic students, and socially and culturally welcoming. Co-workers and supervisors treated everyone with respect and supported their learning and success. International students from this study received full-time employment offers during their co-op for after graduation with their co-op employers, letters of recommendations, or through their experience and networking. were able to obtain employment for after graduation.

Workplace culture and communication. Workplace culture and communication within the workplace are a defining influence on international student experiences in co-op. The Canadian workplace, social decorum, and workplace etiquette are different from what students are familiar with from their home country. As students navigate the Canadian workplace and

interact with co-workers and customers, the importance of communication during co-op, both professionally and socially, leaves a lasting impression on international students.

The relationship between the employees and management was surprising for international students who took part in this study. The students interviewed were more familiar with strict and hierarchical command structures in the workplace. In these environments, workers receive instruction from management and then attend to their assigned tasks. There are not many opportunities for questioning authority or socializing with superiors. Contrarily, Canadian supervisors work with their fellow co-workers regardless of rank or position. In addition to the formal discussions of tasks and assignments, supervisors engage in informal chats or small talk with employees. This is welcomed and appreciated by the international students, but it can contribute to additional stress and anxiety as the students become comfortable with this style of interaction with their supervisor. The stress stems from how foreign it is to be engaging with management in this fashion and also because of the importance of small talk in these conversations. Casual conversation and small talk are something that may not be comfortable for all international students. Organizational hierarchy and communication between employee ranks were articulated by the respondents in detail. Interviewee C shared their experience:

Because I had always seen a boss and an employee relationship, which is a hierarchy where pretty much you do your work, you report to the boss, that's pretty much it.... But a symbiotic relationship where the employer wants something from you, and you from the employer, I had never imagined that happening. So that was a good surprise at the end.

They also stated that:

Where you sit next to your employer. You sit next to your boss. There is no boss concept anymore. It's only your supervisor, your employer, your manager, your team leader kind of things. Where you sit and chat with them, and it's almost like a friend sitting there who [has] just a little bit more experience and a little bit more time in that firm, as well as the informal chats.... It seemed really surprising because I've always been a kind of a person who knows what authority is, or who the authority is, and has always known my boundaries. I guess you could put it that way.

Similarly, this sentiment was reinforced by Interviewee A, who shared:

I feel like it's different with what I know ... back home. Like here, at least if I need to talk to my direct supervisor or like my manager, I can just talk to them ... usually before we start our shift, then we go get coffee together and talk about like what's going on the weekend, like briefly, like anything new happen in life.

Another example was stated by Interviewee I, who claimed, "Back home is more strict. Yeah, so, um, it's like the ranking is pretty clear. You just have to do what you're told, and your boss is there and that's the boss and we can't be friends."

International students in this study also referenced the differences in cultures, such as when and how to be introduced to others, using titles instead of names when referring to supervisors, dress codes, food and cooking, handshaking protocols, and others. Students also commented on the political correctness that is necessary and appropriate in the Canadian workplace. While these cultural elements may not have impacted whether an international student could complete their co-op work assignments or tasks, these are the learning moments that the international students remembered and how they defined the Canadian workplace. The

students interviewed often laughed when telling these stories, smiled knowingly, or were keen to share their learning with others. The impact adapting to the Canadian workplace had on them personally and as a part of their growth and development had importance and meaning to the students.

Interactions between supervisors, co-workers, and customers are rooted in language and communication. For some of the international students who participated in this study, it may have been the most significant barrier to success and caused anxiety and embarrassment. Some international students may be worried about their accent or may learn to overcome that insecurity as well. For example, Interviewee E said

I thought that to have to try to adapt and I realize that everyone is keeping their accent... Everyone kept their own original accent, and so I decided why would I going to change mine? Just need to speak clear. That's it. So, I don't have any problems with it.

Communicating in English can be a source of anxiety and embarrassment. Students commented on their mastery of English being stronger with technical terms and content they learned in their program of study. They were less confident in social circumstances with terminology that they had not been taught in school. Additionally, students described strength in reading English and hesitancy in speaking it or that they might not have the ability to understand others who have accents speaking English. These factors are different for each student and contribute to how comfortable a student is in the workplace and communicating with others. For example, Interviewee H shared, "I was afraid to make a sentence, and all language I was just hesitating." This was reinforced by Interviewee F who provided a specific example:

They would say ... do something, and I'm sorry, could you repeat? Yeah do something, could you say it again, and do something.... So, for the fifth time, is like, oh ok, I still

didn't get it, and I'm feel ashamed of asking what to do.... I'll do whatever I think they're saying; sometimes it works, sometimes no.

Compounding the challenges international students may experience with language, there are social elements, idioms such as "hit the rood" or "keep me in the loop," and small talk. Students may not know what "trick or treat" means during Halloween or have knowledge of local sports, teams, or Canadian foods. These topics can be common discussion points in the workplace and impact how included international students feel. Interviewee G indicated:

Hard part is communication with co-workers. Communication with co-workers or with clients or with suppliers in terms of work has no problem because I know the terms and I know the knowledge, so there was no problem to work with them. But besides the working, sometimes I had difficulty in understanding what they are talk about, especially, you know, the small talk or not anyhow, anything that is not related to work.

Random encounters and communicating with others can also surprise international students as explained by Interviewee C:

Your employer is going sit beside you and talk to you. Just random. They're just going to talk to you, anything about anything, so you gotta either have an opinion on it, or you just try to figure out what's happening. Because in a lot of situations where we had the informal chats, we used to talk about some things that I had no idea about. So, at that time, thinking on my feet, I had to then tell them that I don't know about this. Sometimes it was embarrassing, sometimes it was ok.

Small talk can be where language and culture collide for international students. Casual conversations with co-workers and supervisors can create very positive and impactful memories

for international students in co-op as well as anxiety. International students acknowledged that preparation for these informal chats, small talk, and social communications in the workplace are not taught in their curriculum. While these experiences leave lasting memories for international students, they recognized that investing time in developing these skills is secondary to academic progression and the actions necessary to secure a co-op. They deprioritized learning culture and social communication and focused on the hard skills necessary to complete the work of their co-op experience, even though the social elements may have had the most significant emotional impact on them in their co-op experience.

The value of co-op. International students articulated that the opportunity to learn more about Canada, the Canadian workplace, and practice English were invaluable. Co-op provides students with real life experience and a chance to apply theory to practice and develop their resumes. A co-op program is a way to get a foot in the door, develop a professional network, and even provides compensation for employment. They valued the experience to learn about themselves and meet new people, and it prepared them for the next phase of their lives after graduation. When asked if they would recommend co-op to other international students, every student interviewed responded that they would and provided examples of why co-op is particularly important for international students. Interviewee G proposed:

I believe most of international students has a difficulty to speak English like me. For my understanding, co-op experience is the way the most international students overcome the fear of speaking English ... and also the most of international students doesn't have work experience in Canada, but co-op gives them the opportunity to work in Canadian culture with Canadian, you know the mindset. So, definitely international students especially has to do co-op to for better understanding in Canada.

They also had a very great experience in co-op and shared,

I found a co-op experience is so, so, so amazing experience. I recommend the other students who are the fellow students, let's do co-op. Let's do co-op would be really definitely helpful to look for your career and start your career, so you learn lot. So whenever I see the new students and newcomer ... I always recommend. I highly recommend that the co-op. (Interviewee G)

Interviewee C was keen to recommend co-op to international students and stated,

I would definitely recommend co-op. I've been recommending co-op to a lot of my friends who are thinking about coming here. I've strongly urged them to not take any other course, but to take a course that has either an optional co-op or a mandatory co-op because it really helped me. And they're pretty much coming from the same idea where they haven't worked before, they're finishing their college, and they just want to transfer here. So, I am of the strong opinion that you should go for a co-op.

With a pragmatic viewpoint, Interviewee E noted,

It's a start. It's a foot in the door because most companies looking for the Canadian experience. If you can use the opportunity of being in school, it makes it easier for you to get a job when you're finished, and you can work and get paid when they're here.

Lastly, Interviewee D underscored the route to employment and residency: "It's the path to permanent residency for an international student. Even if you don't get a permanent job afterwards, you have something to put on your resume, so it can help you get a job afterwards."

Preparation Course and Supporting Students

The students interviewed all experienced a similar preparation course structure. It consisted of a seven-week course with one- to two-hour classes delivered by a staff person or instructor from the co-op department. While each instructor can take a different approach to delivering the material of the course, content such as resumes, interviews, co-op policies and procedures, how to use the co-op job board, and what to expect from co-op are the typical topics covered.

Co-op preparation course. International students felt that this information was mostly relevant and required. Content specifically related to resumes and interview preparation was highly valued and followed by what to expect in the workplace. International students seemed to prioritize education that helped them find and secure a co-op job, whereas what to do or expect afterwards appeared to be secondary.

The students had a range of opinions on if the content should be the same or different for domestic versus international students. Some felt that it should be tailored as much as possible to the audience. For example, one student mentioned they were in a class where the majority of students were international, and it would make sense for that class to have a customized content specific for international students. Other students recognized the logistical complexities of customizing course content for all audiences and suggested that the co-op preparation course stay the same, but with additional resources, supports, and workshops available for international students. Additionally, international students believed that one-on-one coaching and advising is necessary and recommended that those services to be available or mandatory for international students.

Relevance of the co-op preparation course may be based on each individual student's background and previous experience. Mature students or domestic students with a lot of existing work experience did not seem to need as much time and attention focused on resumes and interview preparation; whereas, students who have not worked at all may require a lot of time on the same topics. Similarly, some responding international students required more content on the Canadian workplace, its culture, etiquette, and what to expect during co-op; whereas, this content might be repetitive or boring for domestic students who have had employment already. The students were not shy to suggest that the content of the preparation course and how it is delivered can be boring or perceived to be not related to their field of study. When students feel this way, it can lead to disengagement and absenteeism, and the learners are not able to benefit from the lessons of the class. To address these concerns, international students from this study felt that the content needed to be more engaging, experiential versus lecture style, and enable practice-based learning. For example, Interviewee C provided the following advice:

I think it would have been more helpful if a lot more of practical to an extent, co-op, or the Canadian workplace examples would have been a lot more helpful, rather than hypotheticals, I guess. We pretty much just got if this is the workplace and this is what you gotta do. You have to be professional and you have to follow rules at work, which was pretty much a given, but I think if more scenario examples would have played out in class, that would have made a lot more difference.

Interviewee E presented a different alternative relative to their viewpoint and background:

I think because I have my experience already. For me, online would have been great, and it goes back to [what] I mentioned previously . . . for adult students who have already been in the work field, maybe you should have a chance to do it online.

Whereas, Interviewee J indicated a different approach for international students might be appropriate:

Because you know domestic students, they already know the jobs structure here, but international, they come from a different country. They don't know how it work here. I would think, right, that is a huge role for the co-op office for every college.

Students were asked what modalities, length, or full-scale changes they might suggest for the co-op preparation course. Generally, they felt the length and content were appropriate. International students in this study felt the course structure could work, provided there were optional one-on-one supports and workshops that might offer supplemental support for international students who needed it most. To demonstrate the range of opinions from students on this topic, Interviewee C suggested

I think online with an option to come in and talk to the professor. So, like I mentioned, the examples or the scenarios where they give you a small talk topic and you just talk about it with your professor, I think that would not be possible online.

Contrarily, Interviewee B adamantly stated, "Definitely not online courses because I think it's just something that people wanting to complete to get a mark," and Interviewee H thought a hybrid would be successful, such as having "some of the content like rules and policies legislation online and then mock interviews, the interactive pieces, in person."

One student suggested an intake test that ranked a student's language skills, previous experiences, resume, and readiness for co-op, and based on their results, the student would be obligated to take certain courses or participate in specific workshops. Students felt that if advising and workshops were optional, international students will not likely volunteer their time

even if they need it most. They suggested that employers or alumni might be best at promoting these options and helping international students understand how important it is to prepare for co-op and seek out the help they may need in advance.

Recommendations from international students. From the 10 international students interviewed in this study, the recommendations for how co-op departments can better support international students ranged dramatically. From this small sample pool of international students, it is clear that this group cannot be generalized or considered a homogeneous demographic. Their advice and comments were in some cases contradictory to each other, and their emphasis or focus areas were all unique based on their lived experience. In the context of co-op departments supporting all international co-op students, it is unlikely that a single intervention or new service or support is going to be the panacea to enable international students find success.

To further illustrate the variety of comments and recommendations from international students, one student believed that access to health and wellness counselling should be mandatory for international students to help them manage life and the stress related to being an international student in co-op; whereas, other students felt that international students should be treated identically to all the other students. Some students believed international students required double the preparation than domestic students; whereas, others believed that preparation support required should be based on their previous work experience and maturity. Students felt language was the primary barrier to success for international students, and there should be mandatory language training for the workplace. Ironically, Canadian work experience was not always a way to practice English in the workplace. One student worked at a Canadian restaurant that served authentic food from their home country, and their customers did not speak English. In this Canadian workplace, they were unable to practice English communication skills, and this

experience did not help them feel ready or prepared for co-op. Other students believed work permits were a challenge and immigration advisors for international students in co-op should be available on campus; whereas, other students thought the process was very straight forward. Customized, tailored, or just-in-time supports and services were recommended by international students, although they also felt that students would not attend optional offerings and were not sure how to motivate students to participate. Ultimately, the discourse of this finding does not lend itself to potential solutions; however, an important impression and finding from interviewing international students was that they are all different and require unique and varied supports to be successful in co-op.

Analysis

An analysis of the data related to each research sub-question is provided in this section. Insights, key findings, and themes identified from analysing the data are presented. First, an analysis and summary of the demographic data across both phases of the research study is provided. Quantitative analysis and key data points are then offered and organized by each secondary research question, followed by an articulation of the emergent themes derived from the qualitative data.

Analysis of the Demographic Information

All students who met the criteria of being an international student and completed a co-op work-term were invited to participate in the survey. The data demonstrate that the respondents were successful academically, many were mature students above the age of 25, they had a wide range of previous employment experiences, and they participated in on-campus activities. From these data, it also indicates that students who selected to participate in this research represented engaged, experienced, and successful international students. It is likely that many other students

who were not as engaged, academically successful, or experienced may have not participated in the research, and as a result, this sample pool may be biased.

From the demographic section of the survey, some of the relevant findings include:

- A balanced and diverse distribution of gender, ethnicity, and academic credentials
- 80% of respondents had strong academic standing (A or A+ students)
- 43% of respondents were 25 years or older
- 76% of respondents had lived in Canada for two years or less before participating in co-op
- 88% of respondents received financial compensation for their participation in co-op
- 80% of respondents had some form of work experience either in their home country or in Canada, and 20% of respondents did not have any work experience whatsoever prior to co-op
- 40% of respondents had not participated in any form of extra-curricular, volunteer-based, or other forms of on-campus activities.

From the demographics section of the qualitative interviews conducted, some of the relevant findings include:

- There was a balanced and diverse distribution of gender, ethnicity, previous education, and employment experience.
- Some students had significant experience in their home country and came to Canada as a mature student to pursue a life and career goals; whereas, other students came directly from the high school in their country, with the purpose to learn abroad or obtain permanent residency.
- Motivation for studying in Canada was extremely diverse.

- The students interviewed were engaged, cheerful, and represented international students who have been successful in their co-op and academic pursuits.

Insights on Preparedness from the Quantitative Data

Only 7% of survey respondents indicated they felt unprepared for co-op, and 80% felt comfortable living in Canada and interacting with Canadians. These data signal that the sample pool represents international students who felt relatively ready and confident to begin their co-op work-term. Some international students in this study did expect to be treated differently during their co-op and believed that international students require different preparation for co-op; regardless, they still felt prepared for co-op even with that perspective. There was not a statistically significant correlation between expectations to be treated differently and preparedness for co-op. Preparedness for co-op increased with age; however, time spent in Canada did not seem to be a factor that impacted perceptions of preparedness. Students who had prior full-time employment experience tended to feel more prepared for co-op, as well as students with high GPAs and those studying in degree or graduate certificate programs. Respondents without employment experience and students who did not participate in on-campus activities also felt relatively prepared for co-op and, in some cases, had higher perceptions of preparedness for co-op than students with other forms of employment experience and those who had participated in some on-campus activities.

Insights on the Co-op Experience from the Quantitative Data

Most students in this study believed they were both successful in co-op and that they valued their co-op experience. Factors that positively impacted their sense of success and value of co-op were opportunities to be as productive as Canadian students during co-op, comfort in asking for help or instruction, gaining relevant work experience, and application of theory to

practice. The factors that negatively impacted the international students' success in co-op and value of co-op were if they believed they experienced discrimination or different treatment because they were an international student. Students with the least amount of time in Canada presented as feeling they were the most successful and valued co-op. Perhaps related to time in Canada, older students perceived less success than younger. Students with high grades and students in graduate certificate programs reported the highest levels of success in co-op. Regardless of whether students participated in on-campus activities or had previous work experiences or not, students indicated success in co-op and perceived value in co-op. Lastly, all international students in this study believed communication is an essential skill for co-op, ranking speaking, writing, and readings as the most important communication skills.

Insights for the Preparation Course and Supporting Students from the Quantitative Data

International students who participated in this research agreed that a co-op preparation course is valuable. Their responses suggest they agree with the existing model of preparation classes that are mandatory and approximately 14 hours of in-class instruction. Some students would prefer a hybrid model that mixes in-class and online learning; however, close to half of respondents preferred in-person learning facilitated in a classroom. By ranking the importance of topics in a preparation course the data indicate that students prioritize learning that helps to secure a co-op job over learning that prepares them for the work experience itself. Most important to students are resumes and interview preparation. When it comes to help-seeking behaviours, international students seem to be willing and comfortable with asking for help and go to their co-workers and supervisor first, followed by co-op staff and other resources after. There was no correlation between the preparation course and students feeling prepared for co-op. Considering the highest ranked topics in the course may suggest that securing a co-op job was

valuable, but the preparation course many not help students feel more prepared for their work-term. Lastly, and contrarily so, international students from this study strongly agreed that international students would benefit from optional workshops with advising specifically designed to help them practice Canadian workplace communications; however, most of the respondents ranked that topic lower in the preparation course and also reported they felt very comfortable with Canadian communications prior to co-op. The students also believed that a customized preparation course for international students would be beneficial.

Emergent Themes Derived from the Qualitative Data

To summarize some of the emergent themes that have been derived from the qualitative data, I reviewed the code frequencies, prevalence of topic across all the interviews conducted, and considered the data relative to the research question. The meta themes that culminate the qualitative data analysis most pertinent to this study are presented in this section.

Theme 1: International students experience stress and anxiety regardless of how prepared they felt prior to co-op. Irrespective of a student's background, previous experience, time in Canada, general confidence, or academic readiness, international students do experience stress and anxiety prior to co-op. Helping to prepare students for co-op may reduce and alleviate some of their anxiety. It was clear that stress is universally experienced and is exasperated by their international student status.

Theme 2: The Canadian workplace can be inclusive, safe, and ideal for international students. The experiences of international students in this study were generally positive, and they worked in inclusive and supportive work environments. Students were very appreciative of their co-workers and the relationships formed. While there was some trepidation associated with work-permits and some believed that domestic students would be treated as preferential

candidates during recruitment, students did feel they were competitive in the Canadian market and able to secure full-time employment post graduation. The experiences shared by the students in this study portrayed Canada as an ideal setting for international students to pursue and achieve their goals in co-op.

Theme 3: Canadian workplace culture and communication are significant aspects of the international student co-op experiences. The international students shared stories of their workplace culture, getting to know Canadian norms and etiquette, and interacting with others as significant and influential factors in their co-op experience. Their excitement, the details provided while telling their stories, and the volume of responses related to workplace culture and communication were prevalent. How students interact with others in the workplace, the range of social interactions, and the hierarchy within the Canadian workplace positively impacted students. It seemed to inspire a positive and significant emotional response supporting fond memories of their time in co-op.

Theme 4: Traditional co-op preparation courses (somewhat) work for international students and would benefit from more experiential learning. International students from this study had a range of opinions on the traditional preparation course and did acknowledge that the format, purpose, and content served a purpose that has value. The content of preparation courses is designed for a broad audience, but the situations and requirements of individual international students vary dramatically. Overall, the preparation course somewhat worked for international students, more so for some, less so for other. Delivering the content with more experiential learning, context-relevant situations, and practice-based models would serve to improve the student experience and motivation to engage in the preparation course. Students perceived

practice-based learning more relevant and important than alternatives such as self-directed learning or lecture-style content delivery.

Theme 5: One size does not fit all. International students are all unique and require a range of supports and education to be successful in co-op. Albeit best intentions, there was no shared consensus from the international students on what services or supports would be best for students to be successful in co-op. It was clear that each student has individual learning needs, preferences, motivations, advice for further international students, and requirements to prepare for co-op. The students interviewed recognized that there was no clear answer to how to best support international students and, with some degree of irony, recognized the challenge for post-secondary institutions to address this situation. More supports and services seemed better than less, but recommendations for the content and approach to providing those interventions were variable and unclear. An individualized approach seemed the most appropriate option for each student, but the students interviewed also recognized the logistical and operational aspects (i.e., costs and time requirements) as a barrier for schools to deliver.

Theme 6: International students recommend co-op without reservation and believe it is particularly valuable for international students. International students from this study appreciated, valued, and perhaps even loved their co-op experiences. They are quick to recommend it to other international students, proud of their accomplishment, and believe that co-op has a transformation impact on their lives, education, and future. Students learned about the Canadian workplace, developed their networks, gained work experience, and in many cases, were offered full-time employment for after graduation. Co-op appears to be a critical aspect of an international student's education in Canada and is particularly valuable and important to them.

Summary

In this chapter, I presented the data that had been collected and calculated within this research study. First, the data and findings from the quantitative phase of the research were provided, followed by the qualitative phase of the method (QUAN → qual). The findings and analysis were deliberately presented separately between the two phases and without a detailed interpretation of their meaning. The quantitative data were computed using descriptive statistics, cross-tabulations, and correlation calculations. The qualitative findings were derived through coding and thematic analysis. This chapter concludes after all findings and analysis have been presented. To culminate the mixed-method approach, the analysis of both phases of the research are integrated and interpreted in Chapter Five through discussion and recommendations, relating the interpretations and findings with relevant literature.

CHAPTER FIVE: Discussion and Recommendations

Overview

The relevant findings and analysis presented in the previous chapter are advanced and amalgamated in this chapter, and the results of the mixed-method design are brought forward. The discussion is presented with interpretation of both quantitative and qualitative findings and analysis, comparison to existing literature, and organized to address the primary and secondary research questions. Recommendations for co-op departments as elicited from these research findings are presented, followed by limitations of this study. At the end of this chapter, suggestions for future research related to international students in co-op are presented, and finally, concluding statements are presented.

Preparedness for Co-op

The participants of this research study were comprised of motivated, successful, and engaged students. The majority had positive and successful experiences in co-op. The discussion and findings presented may be biased to the lived experiences of these students and may not reflect the perspectives and outcomes of students who were less engaged, academically successful, or those who did not have positive experiences in co-op. Of the students in this study, 75% identified as being prepared for co-op, and only 7% indicated they were unprepared. The first secondary research question was designed to capture data on what factors contribute to international students feeling prepared for co-op and how their background and experiences impact their readiness for co-op. Some of the key insights derived from this study are highlighted in this section.

Acculturation and Confidence in Canada

Acculturation is a complex multifaceted phenomenon and a process international students experience living, studying, and working in another country and has been explored by a range of different studies (Nicolescu & Galalae, 2013). Of the international students in this study, 82% felt comfortable living in Canada and interacting with Canadians prior to their co-op work-term. This may be a result of them experiencing integration in Canada that allowed them to maintain elements of their culture while interacting in another cultural environment (Berry, 2005). Acculturation undoubtedly impacts student readiness for co-op. Students from South Asia, Latin America, and China tended to feel more prepared for co-op than those who identified as Caucasian/White or Southeast Asian. The data from this study do not enable a further interpretation as to why results varied by ethnicity reported. It is possible that these results are related to how students from different ethnicities or countries typically experience acculturation and how they experience co-op. While some research has been done focusing on international students and their country of origin (Huang, Turner, & Chen, 2014; Li et al., 2010), understanding any trends or patterns of student acculturation from different countries and the impact on readiness for co-op may warrant further studies.

It was clear from this study that language is an important factor that impacts a student's confidence prior to co-op. Students commented on anxiety related to their accent and, in some cases, their ability to speak and comprehend English. For the students who were learning English or those who were not confident with English, it was a significant stressor and factor that impacted their readiness for co-op. This concept has been consistent with other studies and is a significant factor in understanding the international student experience (Andrade, 2006; Brown & Ayres, 2006; Gribble et al., 2015; Khawaja & Stallmann, 2011; Paku & Coll, 1999;

Sachtleben, 2002; Smith, 2016; Smith & Khawaja, 2011). For international students where their English skills were reasonably strong, language was not a significant issue that contributed to their feelings of preparedness. Students whose home country's education system is in English, English is a first language, and those who have learned English from a young age may have a different experience as an international student in co-op than those who have very minimal or limited exposure or skill in English. Preparation for co-op did not seem to be related to gender or the amount of time students have lived in Canada; however, there was a relationship between preparedness and that of the student's age. Older students tended to feel more prepared for co-op, which may be related to maturity and previous experiences that led to confidence and readiness for co-op.

Regardless of how prepared the participants of this study felt for co-op, 42% of these students still believed that they would be treated differently in co-op before they started their work-term. The expectation of being treated differently did not seem to impact their confidence living and interacting in Canada or their perceptions of preparedness for co-op. While not captured within the survey instrumentation, an overt and prevalent display of positive anticipation and optimism was shared by the students during interviews. Despite the fear of the unknown, anxiety, and the expectation to be treated differently, international students from this study remained hopeful, excited, and ready for their adventure in co-op. Perhaps this is an understated attitude or strength of international students. They seem to have a great sense of resilience, motivation, and optimism.

Academics and Classroom Learning

There appeared to be a relationship between a student's preparedness for co-op and their grade point average. Students with A+ grades felt most prepared and the results decreased as

grades lowered. Similar to the findings of Blair, Millea, and Hammer (2004) and Fletcher (1988), there may be some correlation between student academic achievement and success in co-op. Credential type also impacted results. Students in degree and post-graduate certificate programs both felt more prepared than students in diploma programs. Students also felt that their program and classroom learning had much more of an impact on their preparedness for co-op than the co-op preparation course. The data from this study are not able to verify why students in degree and post-graduate programs and students with higher grades tended to feel more prepared for co-op; however, it is possible there is a relationship between students who are experiencing success in school and the confidence that builds for co-op. Similarly, programs with higher enrolment standards, such as degrees and post-graduate programs, may attract students who are better prepared for academics and co-op. Age may also be related to this outcome, as students in degree programs tend to have their co-op work-terms later in a four-year credential versus diploma programs, where students may be doing co-op within their first year of study. Additionally, students enrolled in post-graduate certificates have already completed a degree level program as a requirement for post-graduate studies, which suggests they are older than students who are enrolled directly from a secondary school system. It is possible that maturity, as it relates to a years of life experience or age, has a higher impact on international student readiness for co-op than academic or classroom learning.

Employment and On-Campus Activities

It seems obvious that having previous employment experience ought to help international students feel prepared for co-op; however, the results of this study show that it does not always hold true relative to those without employment experience. Students with full-time employment experience in Canada felt significantly more prepared for co-op than students with other forms of

employment experience. Full-time employment experience in a student's home country (80%) and no work experience at all (77%) were the next two highest results followed by part-time experiences and on-campus employment. Unexpectedly, students without work experience felt just as prepared and, in most cases, more prepared than students who had work experience. Students helped explain this during the interviews with personal examples. International students that participated in this study felt that their employment experience in their home country may not be related to their field of study and, as such, did not increase their sense of preparedness. Alternatively, some students believed that if their experience was in their home language or culture, it would not help prepare them for co-op in Canada.

On-campus jobs such as working for a student union were also perceived to be similar to academic learning and that the on-campus experience was not relatable to the external world of work. Other illuminating examples were shared about how Canadian work experience may not necessarily lead to higher preparedness. For example, employment for a Canadian company that serves members of the community who have immigrated from the student's home country is not an experience that students believed would be relevant or in preparation for co-op work-term. In circumstances like these, the student would be conversing in their home country's language and with members of their culture. Ultimately, the experience may not assist a student feel comfortable beginning a co-op work experience within the Canadian workplace or speaking English.

Irrespective of the minimal and relative difference in student perceptions of preparedness, employers do prefer students who have previous employment experience (Sattler & Peters, 2012), and it has positive impacts on productivity (Rowe, 1988) and work environment socialization (Anakwe & Greenhaus, 2000). By extension, it is reasonable to assume this is also

true for co-op students. Therefore, international students with work experience are likely better prepared for co-op than those without experience.

While on-campus employment may not have had great results in helping students feel prepared for co-op, co-curricular record experiences (100%) and applied research projects (90%) seemed to have had a very positive impact. Co-curricular and extra curricular activities are ways to improve student employability skills (Drolet, 2010; Elias & Drea, 2013). Studies have shown that extra-curricular involvement can significantly influence student transitions into the workforce (Tchibozo, 2007). Students who are motivated to volunteer their time and participant in on-campus learning activities also tend to have higher grades (Bergen-Cico & Viscomi, 2012). The opinions of the international students from this study are contrary to some of these volunteer opportunities. Students who had not participated in any on-campus activities reported feeling more prepared than those who had engaged in tutoring/mentoring, volunteering, student union, and extra-curricular activities. Why or how these different activities helped or did not help international students feel prepared for co-op were not explored in the interviews, so the relative impact is unclear from the data.

Other Canadian studies have argued that participation in out-of-classroom activities are an excellent way to learn about Canadian culture, practice language, and experience socialization in within a Canadian context (Nunes & Arthur, 2013). Students may have reported how prepared they felt for co-op; however, their perceptions of readiness may or may not be aligned with their actual readiness for co-op. Studies have shown that students with previous out-of-class experiences are more attractive to employers (Elias, 2014), and international students with those experiences are likely better prepared for the world of work. The relative confidence and readiness of students without work or on-campus experiences in this study is certainly interesting

and may be related to the relative faith students have in their academic institutions and employers to teach them what they need to know, when they need to know it.

Knowing What to Expect

A complicated and unmeasured intangible identified from this research is a concept I am calling “knowing what to expect,” which primarily was identified through the interview process. A significant stressor and source of anxiety for the international students is when they do not know what to expect at their co-op, how to prepare, or what the Canadian workplace will be like. The intangibles that contribute to knowing what to expect appeared to be individually unique. Knowing, or not knowing, what to expect is impacted by their lived experiences, cultural background, and familiarity with Canadian workplaces. For example, some students were baffled and surprised that in Canada, you are allowed to call in sick for work if you are not feeling well or that they may refuse unsafe working conditions. These are basic legislated rights in Canada; however, depending on the student’s home country, these may not be workplace cultural norms. Another example are students who do not understand human resource systems, such as compensation, when and how payment is received, or what to expect from your employer for training and onboarding. For other students, the unknowns are the fundamentals of what to wear to work, how to communicate in a professional matter, workplace etiquette, or appropriate social interactions and networking during office hours.

These findings are supported by the research conducted by Ingram and Ens (2011), who identified how critical it is for international students to learn about cultural norms and Canadian workplace culture. As they identified in their study, skilled immigrants with previous work experience find these elements of the transition to Canada difficult. Preparation prior to a co-op work-term can play a critical role in developing student cultural and social capital development

of international students. Much of this type of preparation enables students to know what to expect. By comparison, students in this study discussed these elements more than preparation for the actual work duties and assignments they would have during co-op. Students were provided opportunities to discuss their workplace responsibilities, but in the context of being an international student and how being an international student impacted their experience in co-op, the work itself seemed to have less priority over these other factors. Language, Canadian culture, workplace interactions and social atmosphere, hierarchy and reporting relationships, rules, norms and etiquettes of the Canadian workplace seemed to have a great personal and emotional impact on the students. Recognizing the balance of priority to international students, co-op departments in Canada need to review their preparation curriculum and consider the proportions and balance of the content they are teaching.

International Students' Thoughts on Preparing for Co-op

While 80% of students in this study felt prepared for co-op, 71% of the students believed international students have different needs than Canadian students when it comes to preparing for co-op. When asked what international students need to become prepared or what should be different from what they received in their programs, the answers varied and were inconsistent in both the survey data and the interview responses. Some themes did arise that may offer insights. First, language and Canadian workplace norms were a priority. Some students believed the best way to prepare for co-op was to take supplemental language courses, practice conversational and workplace communication skills, and increase their mastery of English. Secondly, other students prioritized receiving help in obtaining employment over language and workplace norms. For them, developing a good resume that would be successful in Canada and interview preparation

were of the utmost importance. Thirdly, the concept of knowing what to expect in the Canadian workplace is necessary to become prepared for co-op.

International students interviewed generalized themselves as a demographic group that typically has poor language skills, limited or no Canadian work experience, and need help with resumes, networking, and interview preparation. In a more general sense, some students simply stated that international students need all the same education, support, and help as domestic students, but more of it because they do not have the same starting point or advantages as domestic students. This perspective was reinforced by studies and viewpoints of Arthur and Flynn (2013) and Tran and Soejatminah (2017). From this study, the students providing these comments sometimes contradicted each other or even themselves. In one interview, a student shared an ironic laugh with the interviewer when they realized they were suggesting the opposite of what they had suggested in the previous question on the same topic. The challenge with generalizing how to better prepare international students for co-op is that preparation is unique and different to each student. Gribble et al. (2015) also argued that there is no one-size fits all solution to support international students prepare for work-terms.

From this study the more international students feel comfortable living in Canada, the less they believe preparation is required. On that spectrum, it implies that the needs of each student vary based on their acculturation or confidence engaging in Canada. This is consistent with the findings of Gu et al. (2010), who suggested that intercultural adaptation is not linear and is rather a “complex set of shifting associations between language mastery, social interaction, personal development” (p. 7) and that of Reynolds and Constantine (2007), who demonstrated lower intercultural competence is related to lower career outcome expectations. Individualization and customization comprise a challenge for co-op programs in Canada because of how they have

evolved for scale and are structured. Co-op departments deliver high-volume programs and leverage the economies of scale in their operational models.

Individualization and customized co-op programming is not necessarily conducive to a preestablished learning environment where the preparation course modalities were established to cater to the masses. For example, an international student without any previous work experience, who is younger, not comfortable interacting with Canadians, and not completely confident in English may need a significant amount more preparation support for co-op than a mature student with lots of previous full-time work experience who is fully fluent in English. This are an immensely wide spectrum of student personas all enrolled in the same co-op preparation course. Contrarily with domestic students, it may be easier to predict the minimum baseline of their readiness for co-op and teach to the average student. The growth in co-op has been by replicating this prevalent model of co-op preparation courses that were designed for a domestic student audience. It is not surprising that merging all students, domestic and international, experienced or not experienced, young and older, and those with a range of mastery in English is not meeting the needs of all students. Co-op departments, and higher education in general, need to overcome this hurdle and may need to consider alternative approaches to co-op preparation for all students.

What Can Be Learned About Preparedness?

The combination of acculturation or comfort in Canada that includes mastery of English as well as the intangibles of knowing what to expect in co-op play a pivotal role in supporting international students prepare for co-op. Factors such as age, possibly home country and its difference or similarity to Canadian culture, and previous life and employment experiences all contribute to a students sense of preparedness and readiness for co-op. International students that participated in this research expected to be treated differently during their work-term and yet

remain optimistic and excited for co-op. Regardless of how prepared or confident students feel about their first co-op, there is an underlying and significant feeling of anxiety and stress. Addressing, understanding, and offering support for the emotional stress of being an international student in co-op can be a way to help students feel more comfortable. Recognizing each student as an individual and on a spectrum of preparedness for co-op and then catering programming and services that meet their needs in preparation for co-op could significantly increase the student experience and help students feel prepared and ready for co-op.

International Student Experiences in Co-op

The second secondary research question was established to learn what international students experience during co-op, what was successful, what they valued, and what might inform co-op departments design and facilitate co-op programs. The following discussion highlights some of the key insights derived from the research findings.

Success and the Value of Co-op

The international students included in this study felt strongly that they were both successful in their co-op and found their experience in co-op to be valuable. Success in co-op was correlated with gaining relevant work experience, opportunity to be as productive as Canadian students, application of learning in the workplace, and feeling comfortable asking for help and instruction. Similarly, the value of co-op was correlated with gaining relevant work experience, the application of theory to practice, and feeling comfortable asking for help and instructions. These findings are aligned with recent studies in Canada that consider student satisfaction, value of co-op, and quality of co-op experiences (Drewery, Nevison, Pretti, Cormier, et al., 2016; Drewery et al., 2016; Nevison, Drewery, Pretti, & Cormier, 2017).

Generally, it appears that international students and domestic students seem to value much of the same aspects of co-op.

Students who studied in a post-graduate certificate programs, had previous full-time employment experience, or were mature/older students reported higher perceptions of success in co-op. It may be that these factors are related. For example, an international student pursuing a graduate certificate is likely a mature student who had already completed an undergraduate program and might also have previous employment experience. This was the case for a couple of the interview participants. They moved to Canada to gain education in a new field or verify their credentials in Canada and had a goal to immigrate. This student profile fits the variables of age (older students), credential (post-graduate certificate), and employment experience (full-time employment in their home country). The combination of these factors led to highly successful co-op experiences. As Bond et al. (2007) identified, international students with work experience found it easier to secure employment after graduation.

For international students who are pursuing permanent residency or immigration to Canada, their perceived value of co-op was high because it supported these goals and provided them with work experience they felt would be necessary to start their career and life in Canada. Oddly, younger international students in this study without previous work experience also felt they were highly successful in co-op (100%) as did students who had not participated in any on-campus or extra-curricular activities also reported very high perceptions of success (97%). Students interviewed who fit these profiles perceived immense value in any and all work experience, learning the Canadian workplace, and building their professional network. Compensation for co-op seemed to also play a role in how much value students perceived from their co-op and how successful they felt. Finances and the costs of education are a challenge for

international students as demonstrated by Calder et al. (2016). The students who were interviewed were very proud of earning a wage, and it seemed to bolster their confidence; whereas, students who did not receive any compensation had lower perceptions of success and the value of co-op. Lastly, all international students, irrespective of their age, background, or previous experiences, placed an immense amount of value on receiving permanent job offers from their co-op employers for after they graduate.

Student perceptions of success may be rooted in each individual student's definition of success. For example, a student without any previous employment experience or out-of-classroom participation may define success by simply completing a co-op and adding to their resume; whereas, a mature student seeking immigration and Canadian work experience may decide success for them means a more senior position during their co-op and which is related to their future career path. Ultimately, success is relative to students' personal goals, and as such, it becomes harder to disaggregate what contributes to international student success in co-op by only collecting feedback from students. Understanding the perspectives of employers and co-op staff may be needed to fully present the highest impact variables that contribute to international student successful in co-op.

Different Treatment, Discrimination, and Employer Supervision

Two-thirds of international students in this study expected to be treated differently or went into their co-op unsure if they would be treated differently because they are an international student. Even with this apprehension going into co-op, most of the students in this study believed they were not treated differently during their work-term (81%) and did not experience discrimination (75%). Of those who reported experiencing discrimination or different treatment, this negatively impacted their sense of success in co-op and limited their chances to be as

productive as Canadian students. These outlooks are aligned to the findings of Tran and Soejatminah (2017) and reinforced the argument that all students should be treated fairly and free from discriminatory treatment during co-op work-term experiences. How students feel during their work-term is influenced immensely by the relationship between student and their supervisor. It is important to also recognize that perceptions of discrimination or different treatment may or may not be actual discrimination. Understanding that some students perceive discrimination and the negative impact that has on their success should indicate to co-op departments how important it is to have accessible and safe processes for students to report discrimination.

When students felt comfortable asking for help or instructions, they experienced higher success and received more value from their co-op experience. This reinforces the critical role that supervisors and co-workers have on an international student's work-term experience. The connection, positive relationship, and involvement of supervisors with students completely and totally surprised international students interviewed. The casual nature of conversations, how often management would be engaging socially with employees, the relative comfort in interactions with leadership, and the small talk amongst colleagues was something special and appreciated. International students from this study expected a hierarchical power dynamic with management and did not expect a "symbiotic relationship where the employer wants something from you, and you from the employer" as stated by one of the participants in this study. Students anticipated that they were not to question authority and expected to follow direction without further conversation. In Canada, the laid-back nature and non-hierarchical workplace not only helped international students feel included and safe, but also served as a source of learning and education. Supervisors and co-workers helped students understand what to expect, how it works

in Canada, and raised their comfort and confidence in co-op. The diversity of cultures in the workplace and the openness about each person's backgrounds, beliefs, food, and preferences was important and meaningful for international students interviewed in this study.

Communication and Interpersonal Relationships During Co-op

Every single student who participated in this study believed that communication skills were important during their co-op work-term experience, with 82% strongly agreeing with the statement in the survey, which was strongly reinforced by students who were interviewed. Students ranked speaking as the most important communication skill by a significant margin, followed by writing and reading, with close results to each other and slightly ahead of casual conversation/small talk. Last in their rank order were understanding idioms and slang. How students ranked the importance of communications skills in this study was similar to that found by Brown and Ayres (2006). Their study included employer perspectives as well, and in contrast, they ranked small talk much higher in importance. The student perspective in this study corroborates the idea that international students consider idiomatic speech and ability to participate in small talk as lower importance than other forms of communications; however, this viewpoint may not be shared by employers as was found by Brown and Ayres (2006). This may identify a disconnect and gap in understanding between international students and employers. Further studies involving employers would be beneficial. Co-op offices should be wary of this potential disconnect and reinforce the importance of causal conversations and small talk in the workplace.

Professional communications and terminology required for their workplace duties are necessary during work-terms; however, informal workplace conversations may have a higher emotional or personal impact on international students interviewed in this study. Interactions,

relationships, and social situations significantly contributed to how the international students defined their co-op experiences in Canada. Successful integration and inclusion with Canadian workplace structures are about more than simply language skills, as Sachtleben (2002) argued. Conceptually, this is where culture and communication overlap. At this intersection, students find themselves in social discussions, small talk, and coffee chats on a range of topics such as sports, food, or holidays like Halloween or Christmas. During these conversations, students are learning about Canada, Canadian culture, and about appropriate topics for workplace conversations. Students immensely enjoyed having lunch with colleagues, taking a coffee break with a co-worker, or going out as a group drinks or food after work. The students were enthusiastic and smiling when sharing these stories during the interviews. International students may attribute more value to gaining employment experience in co-op, receiving financial compensation or a job offer for after graduation, but the small talk and relationships with co-workers may have impacted them more on the personal level. Like the findings of Mosneaga and Winther (2013), these encounters, relationships, and memories contributed to a student's decision to stay in Canada and seek permanent residency or immigration.

What can be Learned from International Students' Co-op Experiences?

The co-op work experiences that may be best for international students are those where supervisors and workplaces are inclusive, there is financial compensation, and it is within a climate that enables both social and professional interactions amongst colleagues. These environments lead to international students achieving success, feeling included in Canadian society, and high perceived value from their co-op work-term. Preparing international students for co-op may be improved by recognizing two critical concepts. First, students without any preparation activities such as previous employment or participation in on-campus activities

perceived success and value in their co-op as much as students who had previous experience; however, the students' perceptions of their success may be relative and not necessarily perceived the same way by employers. Employers tend to prefer employees with previous experience and extra-curricular involvement (Sattler & Peters, 2012; Tchibozo, 2007); therefore, motivating international students to gain experiences, both employment and voluntary, prior to co-op may help institutions maintain strong employer relations and position students to be successful by employer standards. Second, practice and mastery of English, conversational communications, and comfort interacting with others are universally important to international student success in co-op. Supporting students to develop their awareness of culture and communication in Canada could be a benefit to them.

From the data collected in this study, it is also clear that Canada has a unique opportunity to be leader and model of inclusive workplaces that enable international students to be successful in co-op. With that reputation, there is also a responsibility for co-op departments to protect their students and ensure that co-op opportunities they promote to students are inclusive and safe. International students interviewed in this study shared that they trusted their academic institutions and their co-op departments. They believe that all job postings on a school's co-op job board will be safe for them and should be places of work that are free from discrimination. While many international students are having incredible experiences in Canada, some are still perceiving discrimination and different treatment. It is incumbent on co-op departments to develop the appropriate verifications and mechanisms to ensure international co-op experiences are modelling the inclusive Canadian workplace to which Canada aspires. The findings of this study also support the claim that international students can have exceptional experiences in

Canada and, through co-op pursue a successful pathway into immigration (Desai-Trilokekar et al., 2016; Madgett & Belanger, 2008).

Co-op Departments and Co-op Curriculum

The third secondary research question was chosen in this study to learn what international students value from co-op departments and preparation courses. It was also established to investigate what co-op departments can do to support international students be successful in co-op. Highlights some of the key insights derived from this research are discussed further.

Modalities, Length, and Content of the Preparation Course

A preparation course that is mandatory in class education over seven weeks with two hours per week appears to be an appropriate model for most international students. International students from this study believed that the preparation course is valuable and do appreciate the course's role in preparing them for co-op. While some students would prefer the preparation course to be more hours and some prefer less hours, the standard 14 hours of instruction model seems to be the right compromise. The international students felt that this course should be mandatory; however, it could be supplemented with online learning and created as a blended learning course. Students most valued preparation and practice on their resumes, job search, and interview preparation, followed by communications/professionalism and what to expect in the Canadian workplace.

The students in the preparation courses are totally motivated to obtain employment and secure their co-op work-term. There is an attitude and belief that if they get the job first, then they will figure out how to do the work for their employer after, which was introduced by students in the interviews. It was not until after their co-op experience that the students came to understand and appreciate the value of the preparation course. International students who had

completed co-op stressed how important learning language, communication skills, small talk within the Canadian workplace, and business etiquette are to be successful in co-op; however, they reflected on how these topics mattered much less to them before their co-op work-term. This chicken-and-egg paradox that currently befuddles co-op staff and departments was verified within this study. Finding strategies and approaches to motivate students to participate in the preparation course and recognize its value during the course is a challenge that co-op departments will need to overcome.

Customized Classes, Workshops, and Advising for International Students

International students were clear in this study that they have different needs in preparing for co-op than domestic students. They believed that a tailored and specific preparation course designed for international students to practice Canadian workplace communications would be a valuable offering. Similarly, career services that provide resume critiques, mock interviews, and other job search support and on-campus services such as counselling are necessary for international students. In many cases, these services are available for all students; however, international students may not know they exist or may not know how to access them. In Fenton-Smith and Michael's (2013) study, they showed that through mandating that internationals students go to one on-campus services, they are more willing to take advantage of other services and return for more help. Leveraging this insight, perhaps co-op departments should build into the preparation course curriculum an assignment that students must visit their Career Services office or other on-campus services. Perhaps, through socialization of other on-campus provisions, students will be more inspired to take advantage of the supports that are available to them.

The key challenge for co-op departments is equitably balancing mandatory versus optional programming prior to the co-op work-term. One option would be to develop a different or more comprehensive preparation course specifically for international students, and it would likely be a benefit to many students. This is problematic because it may be perceived as discriminatory treatment or unnecessary. Another option is for co-op departments to maintain a single preparation course for both domestic and international students and then promote a series of customized workshops and advising specifically for international students. This is also problematic, as international students confessed that if it is optional, then they are not likely to attend, even if these additional supports would be in their best interests. The irony of this kind of a dilemma was not lost on international students in this study. When confronted with two options with these inherent challenges, they were apologetic and unable to explain or offer advice on how to inspire students who need these supports to attend optional programming. Motivating attendance aside, one thing that is clear and undeniable is that some, not all, international students desperately require additional preparatory support prior to co-op. The content and what services would be beneficial are also well documented and clear. Co-op departments need to begin collaborating with their academic partners, faculty, and all service providers on campus to develop solutions to this paradox and find ways to inspire international students who need the support to seek it where it is available.

Advice for Co-op Departments

Co-op departments and staff at each of the research sites were respected and valued by international students in this study. Participants communicated appreciation for the work co-op offices do and acknowledged how important this work is for international students in particular. Regardless of that appreciation, during work-terms students are more likely to ask for help from

their supervisor or co-workers before anyone else, including co-op offices. When asked why they would not reach out to their co-op staff for help, students claimed that their co-op staff might not fully understand their reality, challenges, or unique requirements in their discipline or as an international student. This was reported respectfully with a recognition that co-op staff teach different classes, many students, and can be responsible for more than one academic program at a time. The end result is that international students reach out for help or listen to others more than they do their co-op staff. When asked who would be better positioned to offer advice or counsel to international students, they recommended international student alumni or employers who have hired international students in the past. For co-op office, solutions to impart important information in a way that students are most receptive to may be to invite others into the classroom, develop promotional videos, or find alternative approaches to including alumni and employers in preparatory initiatives.

In the classroom setting, international students from this study highly valued interactive activities, active learning, and experiential learning within the preparation course. For example, mock or practice interviews as well as workplace simulations were identified as the high-impact learning moments for international students. International students prefer experiential learning for co-op preparation and requested more opportunities to be introduced to what the workplace might be like and a chance to practice how to respond. Co-op departments and staff need to evolve their practices to align with student expectations. Embracing experiential learning as the primary in-class activity for preparation courses can be a very powerful solution. If all content is taught through exercises, role plays, and in-class group activities, co-op staff can cover the basic content of a traditional preparation course, but can do it in a relevant way for international students. These applied and practice-based exercises will also facilitate more practice

communicating, working with others, and role-playing Canadian workplace situations. By simply changing the approach to delivering preparation course from lecture to experiential, international students will receive more of the preparation and practice they require.

A final piece of advice from the international students interviewed is that they need to be told about other on-campus services. They may need help with work permits, finances, health, and counselling, and it is critical that co-op departments and staff promote the availability of these services. Co-op staff members need to be fluent with these services on campus, promote them widely, and facilitate referrals and connections when students need it.

What Can Co-op Departments Learn from International Students?

The international students believed strongly that they want more workshops, classes, and one-on-one advising that is tailored to their unique needs. Are co-op departments resourced appropriately to deliver on those desires? Regardless of each institution's answer to that question, co-op departments need to consider how they can, in part, meet the needs of international students. The findings of this research have shown that these requirements are not universal across this vastly heterogeneous group of students, which makes it difficult to deliver those services on scale and cost effectively. The issue is compounded by the reality that even if additional services and supports were available, it may be that international students would not use them unless they were made mandatory. At a minimum, the conversion of in-class lecture-style preparation courses to activity-based and experiential learning may have a significant impact in preparing international students for co-op. The students believed mock interviews are an invaluable exercise because it taught them what they needed to know, and it allowed them to practice it. Extending this concept to all aspects of a co-op preparation course enables more learning and simulation of the Canadian workplace as well as opportunities to practice

communication skill. For co-op policies, demonstrations of job boards, and content related to procedures and assignment can all be shared through hybrid learning available online for students. By advocating for students to read this information online and on their own time will allow co-op departments to maximize their time in class with all students.

Co-op departments focus much of their effort in the co-op preparation course and may not allocate as much time and energy to supporting students during the work-term. While students are completing co-op work-terms, they are more likely to ask for help from their supervisors or their co-workers. How can co-op staff influence or support these contributors to international student learning during work-term? What can be done to support supervisors and co-workers so they can better assist, educate, or refer international students back to on-campus services and supports?

The purpose of this study was to inform co-op departments so they can better support international students. Realistically, preparation for co-op exceeds the sphere of influence of co-op departments. Therefore, co-op staff and departments need to amplify their contribution to student success with precision and intentionality. By understanding and applying curricular interventions, embracing experiential learning, as well as leveraging relationships with faculty, on-campus services, and employers, co-op departments may be able to maximize their influence on the international student experience in co-op.

Recommendations for Co-op Departments

Five recommendations are put forward and intended for higher education professionals, faculty, administrators, and especially for co-op departments. They are derived from the findings and interpretation of these research data and partially informed by my lived experience as a manager and professional who administers co-op:

1. Evolve co-op preparation courses to include a blend of online learning while maximizing in-class experiential learning.
2. Leverage international student alumni and employers to inspire international students.
3. Provide workshops and one-on-one supports for international students.
4. Develop a self-assessment tool for international students.
5. Invest in co-op departments so they can better support international students and workplace supervisors.

Recommendation 1: Evolve Co-op Preparation Courses to include a Blend of Online Learning While Maximizing In-class Experiential Learning

Content currently taught to international students is mostly appropriate; however, the delivery of this education should be recalibrated. High-impact experiential learning activities will benefit all students, especially international students, and should be tailored to simulate workplace situations. These activities could enable international students to learn what to expect during their work-term. Ensure there are activities that introduce or remind students of Canadian workplace fundamentals, such as human resource practices, health and safety, employee rights, and the informal and social nature workplace cultures.

Recommendation 2: Leverage International Student Alumni and Employers to Inspire International Students

International students sometimes need to be motivated to seek additional support prior to co-op or to truly appreciate how serious some pieces of feedback and learning really are. Their likelihood of self-selecting optional workshops or on-campus services is lower if these are options introduced by co-op staff or faculty; however, if alumni or employer reinforce how critical it is to prepare for co-op, then students may be more motivated to participate. It may be

that key or critical messages that international students need to know can be delivered by alumni or employers in ways that are more relevant or credible than from faculty and staff. Recognizing this opportunity, co-op staff can strategically consider how best to involve alumni and employers.

Recommendation 3: Provide Workshops and One-On-One Supports for International Students

Some students want, or need, more than the co-op preparation courses can accommodate. Students need a setting where they can talk about their individual circumstance and feel safe to be vulnerable and ask for help. One-on-one advising and workshops can be immensely helpful for international students, and they desire more of this type of support. It is suggested that co-op departments, staff, and other on-campus services collaborate to ensure there is availability and access for international students to these transformative learning moments. In addition to building confidence and improving their ability to secure a co-op, international students gain the additional opportunities to learn about the Canadian workplace, practice communication, and build up their understanding of what to expect during their work-term. Workshops and one-on-one advising can have a critical role in supporting international students and positively impact their student experience.

Recommendation 4: Develop a Self-Assessment Tool for International Students

Making additional mandatory courses or requirements for international students may not be a realistic intervention. Students need to learn or understand how prepared they are for co-op. This insight would enlighten students and help them self-identify where they need more support. This may lead to higher attendance in optional supports and services. By including an intake survey for international students enrolled in co-op, students can identify their comfort with

language, understanding of workplace rules, regulations, and practices in Canada, and describe their previous work experience and readiness for co-op. This type of a tool can also provide information to co-op staff to inform their practice. Embedding a self-assessment tool as early in the curriculum as possible may enable international student to manage their academic and career preparation prior to beginning co-op.

Recommendation 5: Invest in Co-op Departments So They Can Better Support

International Students and Workplace Supervisors

Through experiential learning, involving international alumni and employers in programming, providing individualized workshops and one-on-one advising, and use of self-assessment tools, co-op departments could improve the international student experience in co-op. Similarly, the role of student supervision in the workplace and the relative impact on the student co-op experience when participating in welcoming, inclusive and supportive workplaces can improve the international student experience. Co-op departments may require resources, methods, and tools to better support and educate workplace supervisors on how to enable international students to be successful in co-op. However, the growth in co-op and international students has caused co-op departments to strategically administer their programming by leveraging economies of scale, which does not allow for customized and individualized supports. Investment in co-op departments may be necessary to ensure international students receive the education and support prior to co-op that they need. Since international students tend to pay higher fees for their education, it may be responsible to ensure co-op departments are resourced appropriately. Certainly, many international students can be successful in the existing model; however, it is likely that many international students are not successful, do not secure co-op opportunities, or for other reasons withdraw from co-op. To support the business case for

investing in co-op departments, it is important to recognize that co-op is an institutional value proposition for international student recruitment. Co-op builds international students' networks and resumes and enables seamless transitions into employment and citizenship after graduation. When this rationale is promoted to bolster enrolment, then it is an ethical and moral imperative that co-op departments are adequately resourced to play their role in enabling and facilitating exceptional student outcomes.

Limitations of the Research

The research sites and participants of this study had inherent limitations. For example, there is a disproportionately higher response rates of international students from India. The data from these respondents may be skewed to the cultural normalities and nuances of that geographic region that has history as a colonial economy and an English language educational system. Therefore, broader application of results should be interpreted by recognizing the demographic distribution of the dataset. Similarly, college-level student populations in Ontario may or may not experience similar phenomenon to university students or to international students studying in other Canadian provinces. In some ways, this can be perceived as a unique value proposition for conducting this research. Much of the literature related to co-op and international students was from the university context. Contrarily, it is possible that the phenomenon in Ontario, which has a very diverse population, may or may not be consistent with student populations, colleges, or universities from other locations.

Another limitation is related to the response rates and participants of the research, which may have an inherent bias within it. The incentives to participate in the online survey may attract respondents interested in the incentive rather than being motivated by the altruistic concept of supporting future international students through an expanded understanding of their realities and

how to better support their success. While it was anticipated that this bias would be minimal, it does warrant acknowledgement. Even with approximately a 20% response rate, the students who selected to participate in this research seem to represent a highly engaged and successful group of international students who had favourable co-op experiences. It is unclear if the students who did not participate in this research had similar experiences and perspectives to those that did.

Disaggregation of variables that influence participants' perceptions of their experiences were difficult to unpack and interpret. For example, an international student's experience in higher education may be influenced by factors such as their expectations prior to beginning post-secondary study, preferences, and learning styles, how individuals define success, and so on. This research attempts to find opportunities for co-op departments to influence students' experiences, rather than looking more broadly at all other factors of a student's entire life and academic career. Much of the student experience and academic impacts are out of the scope of influence for co-op departments, but may be reflective in the data. Similarly, as the research method captured subjective data and opinions from respondents, I am not able to validate that participants have answered honestly and truthfully. Participant response rates were minimal and limited statistical computations to descriptive statistics, cross-tabulations, and some variable correlations. These data may not be suitable for broader generalization across other country contexts other than Canada. I am unable to define the credibility and validation of the results empirically.

Lastly, there were some unanticipated limitations found within the instrumentation. After completing the data analysis, I realized that students were asked if they were comfortable communicating during co-op; however, the wording and position of that question limited my ability to measure how mastery of English impacted preparedness. Another lesson from the

instrumentation was around the definition of success. An important finding from the data demonstrated that all international students considered themselves successful, irrespective of many of the factors that might impact likelihood of success in co-op. The challenge in interpreting these data was that success was defined by the individual student and, therefore, many not be relative or comparable to other students. To verify these results, employers or co-op staff measuring international student success would be needed to then compare them to the data collected in this study. Multiple perspectives on success and the performance of international student in co-op would offer additional insights and support verification and credibility of the findings.

A Call for Future Research

First and consistent with calls for more research by Arthur and Flynn (2013), I believe that a large-scale multi-institution study is required to further the collective understanding of the international student transition into employment or WIL. A study could be conducted that ensures the perspectives of all international students are captured and not just the successful examples. In Canada, many international students are immensely successful, and that is a very positive outcome; however, there are students who are not successful in their academics or WIL and understanding their lived experiences may enable higher rates of retention, success, and transition into employment.

Second, more research should be done to learn from the experiences and perspectives of employer and supervisors of international students in co-op. Recent studies (Andrewson et al., 2016) have demonstrated the discriminatory viewpoints continue to exist in the Canadian workplace. There would be value in furthering the understanding of why and how co-op programs can motivate or support employers to be better supervisors for international students.

Third, amalgamating or generalizing international students in a single group is undoubtedly flawed logic. Perhaps there are characteristics or student personas of different student types within the international student category. For example, students educated in the United States coming to Canada as an international student may have a very different student profile than an international student from China. Identifying or categorizing international student personas and then researching how to best support those student groups is suggested. With this information, co-op departments will better understand each group's unique needs and be able to adapt educational approaches and supports.

For consideration prior to additional studies, I stated that a conceptual framework should remain fluid and open to change and interpretation. Over the course of this research I did not adapt my original conceptual framework because it was used to inform the research questions and method I selected as well as how I structured the data collection instrumentation. I presented it for transparency in how the study was originally conceptualized. Reflecting back on the conceptual framework after completing the data analysis, I would suggest that the findings of this study in many ways support and reinforce the presented conceptual framework; however, I do think there is merit in exploring other factors that impact the student experience in addition to the variables I listed in the framework as examples. Also, I think there is value in specifically demonstrating the weight value or impact of those variables as they relate to Student Preparedness and the Co-op Work-Term as well as the overall student experience in co-op. For example, previous work experience certainly impacted student preparedness for co-op; however, compared to the relative impact of a student experiencing discrimination during their co-op, clearly one variable had much more impact than the other. That weighted value or distinction between variables is not reflected in the conceptual framework I provided nor are the variables

presented an exhaustive list of all factors that impact international student experiences. Further research studies could use this foundation and modify the conceptual framework and or explore individual factors in greater detail to expand our collective understanding of the experiences of international student in co-op.

Lastly, I also learned from conducting this research that the integration of data between the quantitative and qualitative phases certainly supplemented and reinforced each other; however, independently, there are opportunities for improvement. In the quantitative phase, I believe a much larger sample set is required, as many of the response patterns across the questions were consistent and with minimal variance. Additionally, it may be valuable to capture some relative context such as a comparison to domestic students to offer more insights to comparative scores across the questions. In the qualitative phase, I believe academically strong, successful, and motivated international students altruistically volunteered to help other international students and provided a biased perspective from a satisfied and successful point of view. Learning from and engaging dissatisfied and less successful students may offer alternative experiences from which to learn. While the mixed-method approach may have been more labour intensive, I do believe it was an enriching process for me as the researcher and substantively improved and supported my understanding of the experiences of international students in co-op.

Final Reflections

The past six years of my career I have been professionally focused on administering co-op and work-integrated learning. Concurrently, over the course of five years, I have been studying, learning, and ultimately researching best practice in supporting international students in co-op. These past years have been the most rewarding, enriching, and professionally fulfilling years of my life. Over this same period, I was able to travel abroad and meet international

students in their home country prior to traveling to Canada for post-secondary education. I am perpetually inspired and in awe of the courage and resilience of international students, especially those who leave their homes and family to study in another country. It has been a privilege to bringing together my professional experiences, academic learning, and the data of this study to ultimately share my interpretations and recommendations. My hope is that readers of this dissertation and other passionate champions of international students find the information provided useful and informative.

It also strikes me that Canada is such a wonderful country and absolutely an ideal place for international student to pursue education, co-op, and employment. From the experiences of international students in this study, their articulation of the Canadian workplace as one that is inclusive and culturally accepting is inspiring. For anyone who works within co-op departments or hires international students for co-op, I believe we have a collective responsibility to invest ourselves in these students. They are the workforce of tomorrow and future Canadian citizens. We as Canadians, employers, co-op departments, co-workers, and others can all contribute to this critically important aspect of the Canadian co-op ecosystem. We must all find ways to invest in and enable our international students achieve success.

Summary

Chapter Five is the concluding chapter of this dissertation. The chapter has included a critical commentary and discussion on topics related to the primary and secondary research questions. This narrative began with insights and implications in respect to preparedness for co-op, followed by two other sections focused on international student experience and co-op departments. Each section provided a summary of what can be learned from international students and the data presented in this study. The chapter concludes recommendations for co-op

offices, limitations of the study, a call for future research, and some final reflections having completed this research project.

References

- Academica Group. (2016). *Taking the pulse of work-integrated learning in Canada*. Prepared for Business/Higher Education Roundtable. Retrieved from <http://bher.ca/publications/taking-the-pulse-of-work-integrated-learning-in-canada-full-report>
- Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of studies in international education*, 11(3-4), 290–305.
<https://doi.org/10.1177/1028315307303542>
- Anakwe, U., & Greenhaus, J. (2000). Prior work experience and socialization experiences of college graduates. *International Journal of Manpower*, 21(2), 95–111.
<https://doi.org/10.1108/01437720010331035>
- Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International education*, 5(2), 131–154.
<https://doi.org/10.1177/1475240906065589>
- Andrews, G., & Russell, M. (2012). Employability skills development: Strategy, evaluation and impact. *Higher Education, Skills and Work - Based Learning*, 2(1), 33–44.
<https://doi.org/10.1108/20423891211197721>
- Andrewson, E., Eftenaru, C., Iles, L., Johnston, N., McRae, N., Ramji, K., & Sator, A., (2016). Perspectives of British Columbia cooperative education employers who hire students that come to post-secondary institutions from international pathways: An examination using Q methodology. *World Association for Cooperative Education*, 7(1), 7–12.

- Arthur, N. (2013). International students and career development: Human capital in the global skills race. *Journal of the National Institute for Career Education and Counselling*, 31(1), 43–50.
- Arthur, N., & Flynn, S. (2013). International students' views of transition to employment and immigration. *The Canadian Journal of Career Development/Revue canadienne de développement de carrière*, 12(1), 28–37.
- Barton, G., & Hartwig, K. (2017). The importance of positive intercultural exchanges for international students on work placements in higher education. In *Professional learning in the work place for international students* (pp. 3–12). Springer International Publishing. https://doi.org/10.1007/978-3-319-60058-1_1
- Barton, G., Hartwig, K., Bennett, D., Cain, M., Campbell, M., Ferns, S., ... Westerveld, M. (2017). Work placement for international student programmes (WISP): A model of effective practice. In G. Barton & K. Hartwig (Eds.), *Professional learning in the work place for international students* (pp. 13–34). Springer International Publishing. https://doi.org/10.1007/978-3-319-60058-1_2
- Barton, G., Hartwig, K., & Cain, M. (2017). *Improving work placement for international students, their supervisors and other stakeholders*. Report prepared for Office for Learning & Teaching, Australian Government. https://wisp-project.weebly.com/uploads/5/8/6/8/58686813/final_wisp_project_report_for_olt_19-8.pdf
- Behrisch, T. (2016). Cost and the craving for novelty: Exploring motivations and barriers for cooperative education and exchange students to go abroad. *Asia-Pacific Journal of Cooperative Education*, 17(3), 279–294.

- Bergen-Cico, D., & Viscomi, J. (2012). Exploring the association between campus co-curricular involvement and academic achievement. *Journal of college student retention: Research, Theory & Practice, 14*(3), 329–343. <https://doi.org/10.2190/CS.14.3.c>
- Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations, 29*(6), 698–712. <https://doi.org/10.1016/j.ijintrel.2005.07.013>
- Billett, S. (2009). Realising the educational worth of integrating work experiences in higher education. *Studies in Higher Education, 34*(7), 827–843.
<https://doi.org/10.1080/03075070802706561>
- Blair, B. F., Millea, M., & Hammer, J. (2004). The impact of cooperative education on academic performance and compensation of engineering majors. *Journal of Engineering Education, 93*(4), 333–338. <https://doi.org/10.1002/j.2168-9830.2004.tb00822.x>
- Bloomberg, L. D., & Volpe, M. (2012). *Completing your qualitative dissertation: A roadmap from beginning to end* (2nd ed.). Thousand Oaks, CA: Sage.
- Bond, S., Areepattamannil, S., Brathwaite-Sturgeon, G., Hayle, E., & Malekan, M. (2007). *Northern lights: International graduates of Canadian institutions and the national workforce*. Ottawa, Ontario, Canada: Canadian Bureau for International Education.
- Bosnjak, M., & Tuten, T. L. (2003). Prepaid and promised incentives in web surveys an experiment. *Social Science Computer Review, 21*(2), 208–217.
<https://doi.org/10.1177/0894439303021002006>
- Brooks, S., Lichtenberg, A., McIlveen, P., Smith, M., Torjul, P., & Tyler, J. (2009). Career development practice: Facilitating work-integrated learning in higher education. *Australian Journal of Career Development, 18*(2), 60–64.
<https://doi.org/10.1177/103841620901800210>

- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6(1), 97–113. <https://doi.org/10.1177/1468794106058877>
- Brown, T. P., & Ayres, R. (2006). Migrant students' and employers' perspectives on cooperative education in New Zealand: Implications for English language teaching. *Asia-Pacific Journal of Cooperative Education*, 7(2), 16–23.
- Calder, J. (1998). Survey research methods. *Medical Education*, 32(6), 636–652.
<https://doi.org/10.1046/j.1365-2923.1998.00227.x>
- Calder, M. J., Richter, S., Mao, Y., Burns, K. K., Mogale, R. S., & Danko, M. (2016). International students attending Canadian universities: Their experiences with housing, finances, and other issues. *The Canadian Journal of Higher Education*, 46(2), 92–110.
Retrieved from <https://journals.sfu.ca/cjhe/index.php/cjhe/article/view/184585/pdf>
- Canadian Association for Co-operative Education. (2005). *Co-operative education manual: A guide to planning and implementing co-operative education programs in post-secondary institutions*. Retrieved from http://www.cafce.ca/_Library/_documents/coopmanual.pdf
- Canadian Bureau for International Education. (2015). *A World of Learning. Canada's performance and potential in International Education 2015*. Retrieved from <https://cbie.ca/wp-content/uploads/2019/01/A-World-of-Learning-HI-RES-2015.pdf>
- Canadian Bureau for International Education. (2016). *Canada's performance and potential in international education. international student in Canada 2016*. Retrieved from http://cbie.ca/wp-content/uploads/2016/11/Infographic-Inbound_EN.pdf
- Canadian Bureau for International Education. (2018). *International students in Canada*. Retrieved from <https://cbie.ca/wp-content/uploads/2018/09/International-Students-in-Canada-ENG.pdf>

- Canadian Council on Learning. (2008). *Lessons in learning: The benefits of experiential learning*. Retrieved from www.ccl-cca.ca/pdfs/LessonsInLearning/Feb-21-08-Benefit-of-exper.pdf
- Caracelli, V. J., & Green, J. C. (1993). Data analysis strategies for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis, 15*(2), 195–207.
<https://doi.org/10.3102/01623737015002195>
- Carruthers, J. (2007). A rationale for the use of semi-structured interviews. *Journal of Educational Administration, 28*(1), 63–68. <https://doi.org/10.1108/09578239010006046>
- Chankseliani, M. (2018). Four rationales of HE internationalization: Perspectives of UK universities on attracting students from former Soviet countries. *Journal of Studies in International Education, 22*(1), 53–70. <https://doi.org/10.1177/1028315317725806>
- Childress, L. K. (2009). Internationalization plans for higher education institutions. *Journal of Studies in International Education, 13*(3), 289–309.
<https://doi.org/10.1177/1028315308329804>
- Christians, C. G. (2011). Ethics and politics in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (4th ed., pp. 61–80). Thousand Oaks, CA: Sage.
- Coll, R. K. (2004). Employers' views on the internationalization of cooperative education. *Journal of Cooperative Education, 38*(1), 35–44.
- Coll, R. K., & Chapman, R. (2000). Advantages and disadvantages of international co-op placements: The students' perspective. *Journal of Cooperative Education, 35*(2/3), 95–105.

- Colleges Ontario. (2016). *Student and graduate profiles 16. Environmental scan 2016*. Retrieved from http://www.collegesontario.org/research/2016_environmental-scan.html
- Conference Board of Canada. (2000). *Employability skills 2000+*. Retrieved from <http://www.conferenceboard.ca/topics/education/learning-tools/employability-skills.aspx>
- Coll, R., & Chapman, R. (2000). Evaluating service quality for cooperative education programs. *Asia-Pacific Journal of Cooperative Education, 1*(2), 1–12.
- Co-operative Education and Work-Integrated Learning Canada. (n.d.). Retrieved August 6, 2020, from <https://www.cewilcanada.ca/advantages-accreditation.html>
- Council of Ontario Universities. (2014). *Bringing life to learning at Ontario universities*. Retrieved from <http://cou.on.ca/reports/bringing-life-to-learning/>
- Crawford, I., Wang, Z., & Andrews, G. (2016). Exploring the influence of individual and academic differences on the placement participation rate among international students: A UK case study. *Education+ Training, 58*(4), 342–357. <https://doi.org/10.1108/ET-04-2015-0029>
- Creswell, J. W. (2012a). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson Education.
- Creswell, J. W. (2012b). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2015). *A concise introduction to mixed methods research*. Thousand Oaks, CA: Sage.
- Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.

- Crockett, S. A., & Hays, D. G. (2011). Understanding and responding to the career counseling needs of international college students on US campuses. *Journal of College Counseling, 14*(1), 65–79. <https://doi.org/10.1002/j.2161-1882.2011.tb00064.x>
- Czaja, R., & Blair, J. (2005). *Designing surveys*. SAGE Publications.
<https://dx.doi.org/10.4135/9781412983877>
- Drolet, D. (2010). Documenting and decoding the undergrad experience. *University Affairs, 51*(7), 10–15.
- Decock, H., McCloy, U., Steffler, M., & Dicaire, J. (2016). *International students at Ontario colleges: A profile*. Retrieved from <https://cbie.ca/wp-content/uploads/2016/11/FINAL-CBIE-Research-in-Brief-N6.pdf>
- Desai-Trilokekar, R., Thomson, K., & Masri, A. (2016). *International students as “ideal” immigrants: Ontario employers’ perspective*. <https://doi.org/10.13140/RG.2.1.1478.6164>
- Dewey, J. (1938). *Experience and education*. New York, NY: Simon and Schuster.
- Drewery, D., Nevison, C., & Pretti, T. J. (2016). The influence of cooperative education and reflection upon previous work experiences on university graduates’ vocational self-concept. *Education+ Training, 58*(2), 179–192. <https://doi.org/10.1108/ET-06-2015-0042>
- Drewery, D., Nevison, C., Pretti, T. J., Cormier, L., Barclay, S., & Pennaforte, A. (2016). Examining the influence of selected factors on perceived co-op work-term quality from a student perspective. *Asia-Pacific Journal of Cooperative Education, 17*(3), 265–277.
- Drewery, D., Pretti, T. J., & Barclay, S. (2016). Examining the effects of perceived relevance and work-related subjective well-being on individual performance for co-op students. *Asia-Pacific Journal of Cooperative Education, 17*(2), 119–134

- Drysdale, M., & McBeath, M. (2012). Self-concept and tacit knowledge: Differences between cooperative and non-cooperative education students. *Asia-Pacific Journal of Cooperative Education, 13*(3), 169–180.
- Education at Work Ontario. (n.d.). *What is co-op?* Retrieved August 2, 2020, from <http://www.ewo.ca/site/about>
- Elias, K. (2014). *Employer perceptions of co-curricular engagement and the co-curricular record in the hiring process* (Master's thesis). Retrieved from <https://pdfs.semanticscholar.org/b725/ce9ba7297d634373d025c5234d505f6aceee.pdf>
- Elias, K., & Drea, C. (2013). The co-curricular record: Enhancing a postsecondary education. *College Quarterly, 16*(1), n1.
- Feldman, R. (2003). *Epistemology*. New Jersey, NJ: Prentice Hall.
- Fenton-Smith, B., & Michael, R. (2013). Mandatory trialling of support services by international students: What they choose and how they reflect. *Teaching in Higher Education, 18*(8), 933-949. <https://doi.org/10.1080/13562517.2013.827644>
- Ferns, S., & Zegwaard, K. (2014). Critical assessment issues in work-integrated learning. *Asia-Pacific Journal of Cooperative Education, 15*(3), 179–188.
- Fink, A. (2017). *How to conduct surveys. A step-by step guide* (6th ed.). Los Angeles, CA: Sage.
- Fleming, J., & Eames, C. (2005). Student learning in relation to the structure of the cooperative experience. *Asia-Pacific Journal of Cooperative Education, 6*(2), 26–31.
- Fletcher, J. K. (1988). The correlation of grade point average to co-op work performance of business undergraduates. *Journal of Cooperative Education, 25*(1), 44–52.
- Garson, K. (2016). Reframing internationalization. *The Canadian Journal of Higher Education, 46*(2), 19.

- Gibbs, P., & Armsby, P. (2010). Higher Education quality and work-based learning: Two concepts not yet fully integrated. *Quality in Higher Education*, 16(2), 185–187.
<https://doi.org/10.1080/13538322.2010.485729>
- Government of Canada. (2014). *Canada's International Education Strategy*. Retrieved from <http://international.gc.ca/global-markets-marches-mondiaux/assets/pdfs/overview-apercu-eng.pdf>
- Green, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274. <https://doi.org/10.3102/01623737011003255>
- Gribble, C., Blackmore, J., & Rahimi, M. (2015). Challenges to providing work integrated learning to international business students at Australian universities. *Higher Education, Skills and Work-Based Learning*, 5(4), 401–416. <https://doi.org/10.1108/HESWBL-04-2015-0015>
- Gribble, N., Dender, A., Lawrence, E., Manning, K., & Falkmer, T. (2014). International WIL Placements: Their Influence on Student Professional Development, Personal Growth and Cultural Competence. *Asia-Pacific Journal of Cooperative Education*, 15(2), 107–117.
- Gu, Q., Schweisfurth, M., & Day, C. (2010). Learning and growing in a 'foreign' context: intercultural experiences of international students. *Compare*, 40(1), 7–23.
<https://doi.org/10.1080/03057920903115983>
- Haan, M. (2013). *An introduction to statistics for Canadian social scientists* (2nd ed.). Don Mills, ON, Canada: Oxford University Press.
- Haddara, M., & Skanes, H. (2007). A reflection on cooperative education: From experience to experiential learning. *Asia-Pacific Journal of Cooperative Education*, 8(1), 67–76.

- Hagens, V., Dobrow, M. J., & Chafe, R. (2009). Interviewee transcript review: Assessing the impact on qualitative research. *BMC medical research methodology*, 9(1), 47.
<https://doi.org/10.1186/1471-2288-9-47>
- Harvey, M., Coulson, D., Mackaway, J., & Winchester-Seeto, T. (2010). Aligning reflection in the cooperative education curriculum. *Asia-Pacific Journal of Cooperative Education*, 11(3), 137–152.
- Hays, J., & Helmling, L. (2017). Applied practice: Theoretical and pedagogical foundations. *Unitec ePress Monograph Series (1)*. Retrieved from
<http://www.unitec.ac.nz/eypress/index.php/applied-practice-theoretical-and-pedagogical-foundations/>
- Hernández-March, J., Martín del Peso, M., & Leguey, S. (2009). Graduates' Skills and Higher Education: The employers' perspective. *Tertiary Education and Management*, 15(1), 1–16. <https://doi.org/10.1080/13583880802699978>
- Higher Education Quality Council of Ontario. (2016). *A practical guide for work-integrated learning: Effective practices to enhance the educational quality of structured work experiences offered through college and universities*. Toronto, ON: Queen's Printer for Ontario.
- Huang, R., Turner, R., & Chen, Q. (2014). Chinese international students' perspective and strategies in preparing for their future employability. *Journal of Vocational Education & Training*, 66(2), 175–193. <https://doi.org/10.1080/13636820.2014.894933>
- Immigration, Refugees, and Citizenship Canada. (2018). *Studying and working in Canada*. Retrieved from <https://www.canada.ca/en/immigration-refugees-citizenship/services/study-canada/work.html>

- Ingram, S., & Ens, A. H. (2011). The co-operative education work term: A comparison of expectations and outcomes for international engineering graduates in Canada. *41st ASEE/IEEE Frontiers in Education Conference (T2H-7)*. Rapid City, SD.
<https://doi.org/10.1109/FIE.2011.6142749>
- Jackson, D. (2014). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education, 40*(2), 350–367.
<https://doi.org/10.1080/03075079.2013.842221>
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14–26.
<https://doi.org/10.3102/0013189X033007014>
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112–133.
<https://doi.org/10.1177/1558689806298224>
- Johnston, N. (2007). What aren't we teaching our students: Critical pedagogy and co-operative education curriculum. *Journal of Cooperative Education and Internships, 41*(2), 23–29.
- Jones, J., & Quick, D. (2007). Co-operative education: An educational strategy with links to experiential and connected learning. *Journal of Cooperative Education and Internships, 41*(2), 30–36.
- Kehm, B. M., & Teichler, U. (2007). Research on internationalisation in higher education. *Journal of Studies in International Education, 11*(3-4), 260–273.
<https://doi.org/10.1177/1028315307303534>

- Khawaja, N. G., & Stallmann, H. M. (2011). Understanding the coping strategies of international students: A qualitative approach. *Journal of Psychologists and Counsellors in Schools*, 21(2), 203-224. <https://doi.org/10.1375/ajgc.21.2.203>
- Kilbride, K. M., & D'Arcangelo, L. (2002). Meeting immigrant community college students' needs on one Greater Toronto area college campus. *Canadian Journal of Higher Education*, 32(2), 1–26.
- Knight, J. (2003). Updating the definition of internationalization. *International Higher Education*, 33(6), 2–3.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice Hall.
- Kolb, D. A. (2015). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Upper Saddle River, NJ: Person Education.
- Kramer, M., & Usher, A. (2011). *Work-integrated learning and career-ready students: Examining the evidence*. Toronto, Ontario, Canada: Higher Education Strategy Associates
- Lapadat, J. C., & Lindsay, A. C. (1999). Transcription in research and practice: From standardization of technique to interpretive positionings. *Qualitative inquiry*, 5(1), 64–86. <https://doi.org/10.1177/107780049900500104>
- Larsen, M. A. (2015). Internationalization in Canadian higher education: A case study of the gap between official discourses and on-the-ground realities. *The Canadian Journal of Higher Education*, 45(4), 101.

- Lazarus, F. C., Oloroso, H. C., & Howison, S. (2012). Administering cooperative education programs. In R. K. Coll & K. Zegwaard (Eds.), *International handbook for cooperative education* (pp. 180–191). Lowell, MA: World Association for Cooperative Education.
- Leech, N.L. & Onwuegbuzie, A.J. (2009). A typology of mixed methods research designs. *Quality & quantity*, 43(2), 265–275. <https://doi.org/10.1007/s11135-007-9105-3>
- Li, G., Chen, W., & Duanmu, J. L. (2010). Determinants of international students' academic performance: A comparison between Chinese and other international students. *Journal of Studies in International Education*, 14(4), 389–405.
<https://doi.org/10.1177/1028315309331490>
- Linn, P. (2004). Theories about learning and development in cooperative education and internships. In P. Linn, A. Howard, & E. Miller (Eds.), *Handbook for research in cooperative education and internships* (pp. 11–29). Mahwah, NJ: Lawrence Erlbaum Associates.
- Linn, P. (2015). A lifespan perspective on cooperative education learning: A grounded theory. *Asia Pacific Journal of Cooperative Education*, 16(4), 301–326.
- Linn, P., Howard, A., & Miller, E. (2004). *Handbook for research in cooperative education and internships*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Little, B., & Harvey, L. (2006). *Learning through work placements and beyond*. Retrieved from Manchester: Higher Education Careers Services Unit and the Higher Education Academy's Work Placements Organisation website:
http://www.hecsu.ac.uk/assets/assets/documents/Learning_through_work_placements_and_beyond.pdf

- Lumsden, B., & Rowe, P. (2008). *Academic credit for work terms*. Retrieved from University of Waterloo, Centre for the Advancement of Co-operative Education website:
<https://uwaterloo.ca/centre-advancement-co-operative-education/publications-0/research-publications/academic-credit-work-terms>
- Madgett, P. & Belanger, C. (2008). International students: the Canadian experience. *Tertiary Education and Management*, 14(3), 191–207.
<https://doi.org/10.1080/13583880802228182>
- McRae, N., Ramji, K., Lu, L., & Lesperance, M. (2016). Developing Global-Ready Graduates: The CANEU-COOP Experience. *Asia-Pacific Journal of Cooperative Education*, 17(4), 377–386.
- Mero-Jaffe, I. (2011). ‘Is that what I said?’ Interview transcript approval by participants: An aspect of ethics in qualitative research. *International Journal of Qualitative Methods*, 10(3), 231–247. <https://doi.org/10.1177/160940691101000304>
- Mezirow, J. (2009). Transformative learning theory. In J. Mezirow & E. W. Taylor (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 18–32). Hoboken, NJ: John Wiley & Sons.
- Morgan, D. L. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research*, 8(3), 362–376.
<https://doi.org/10.1177/104973239800800307>
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained. Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, 1(1), 48–76. <https://doi.org/10.1177/2345678906292462>

- Morse, J.M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research* 40(2), 120–123.
- Mosneaga, A., & Winther, L. (2013). Emerging talents? International students before and after their career start in Denmark. *Population, Space and Place*, 19(2), 181–195.
<https://doi.org/10.1002/psp.1750>
- Nevison, C., Drewery, D., Pretti, J., & Cormier, L. (2017). Using learning environments to create meaningful work for co-op students. *Higher Education Research & Development*, 36(4), 807–822. <https://doi.org/10.1080/07294360.2016.1229268>
- Niculescu, L. & Galalae, C. (2013). A systematic literature review on students' international mobility and cultural adjustment. *Management & Marketing*, 8(2), 261–282.
- Nunes, S., & Arthur, N. (2013). International students' experiences of integrating into the workforce. *Journal of Employment Counseling*, 50(1), 34–45.
<https://doi.org/10.1002/j.2161-1920.2013.00023.x>
- Office of the Premier. (2016, June 23). *Premier's Highly skilled workforce expert panel releases final report: Will help prepare workers for the jobs of today and tomorrow* [Press release]. Toronto, ON, Canada: Government of Ontario. Retrieved from <https://news.ontario.ca/opo/en/2016/06/premiers-highly-skilled-workforce-expert-panel-releases-final-report.html>
- Ontario College Application Service. (n.d.). *Applying to college as an international student*. Retrieved August 2, 2020, from <https://www.ontariocolleges.ca/en/apply/international-applicants>
- Onwuegbuzie, A. J., & Collins, C. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12(2), 281–316.

- Onwuegbuzie, A. J., Johnson, R. B., & Collins, K. M. T. (2011). Assessing legitimation in mixed research: A new framework. *Quality and Quantity*, 45(6), 1253–1271.
<https://doi.org/10.1007/s11135-009-9289-9>
- Onwuegbuzie, A. J. & Teddlie, C. (2003). A framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 351–383). San Francisco, CA: Sage.
- Page, N., Geck, S., & Wiseman, R. L. (1999). College/university coordinators' perceptions of quality indicators for co-op/internship sites. *Journal of Cooperative Education and Internships*, 34(1), 43–53.
- Paku, L., & Coll, R. K. (1999). Perceptions of the co-op experience for international full fee-paying students. *Asia-Pacific Journal of Cooperative education*, 1, 105.
- Patrick, C.-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study*. Brisbane, QLD: Queensland University of Technology.
- Peach, D., Moore, K., & Campbell, M. (2015). *Building institutional capacity to enhance access participation and progression in work integrated learning (WIL)*. Report prepared for Office for Learning & Teaching, Australian Government. Retrieved from <http://acen.edu.au/access-participation-progression/>
- Peters, J. (2012). *Faculty experiences with and perceptions of Work-Integrated Learning (WIL) in the Ontario postsecondary sector*. Toronto, ON, Canada: Higher Education Quality Council of Ontario.

- Picot, G. (2013). *Economic and social objectives of immigration: The evidence that informs immigration levels and education mix*. Report prepared for Citizenship and Immigration Canada. Retrieved from <http://www.cic.gc.ca/english/resources/research/econ-social.asp>
- Pilote, A., & Benabdeljalil, A. (2007). Supporting the success of international students in Canadian universities. *Higher Education Perspectives*, 3(2).
- Popadiuk, N. E., & Arthur, N. M. (2014). Key relationships for international student university-to-work transitions. *Journal of Career Development*, 41(2), 122–140.
<https://doi.org/10.1177/0894845313481851>
- Premier's Highly Skilled Workforce Expert Panel, The. (2016). *Building the workforce of tomorrow: A shared responsibility*. Retrieved from https://files.ontario.ca/hsw_rev_engaoda_webfinal_july6.pdf
- Rabionet, S. E. (2009). How I learned to design and conduct semi-structured interviews: An ongoing and continuous journey. *The Weekly Qualitative Report*, 35(2), 203–206.
- Reddan, G. (2008). The benefits of job-search seminars and mock interviews in a work experience course. *Asia-Pacific Journal of Cooperative Education*, 9(2), 113–127.
- Reynolds, A. L., & Constantine, M. G. (2007). Cultural adjustment difficulties and career development of international college students. *Journal of Career Assessment*, 15(3), 338–350. <https://doi.org/10.1177/1069072707301218>
- Ricks, F. (1996). Principles for structuring cooperative education programs. *Journal of Cooperative Education*, 31(3), 8–22.
- Rodriguez, C., Zhao, J., & Ferguson, S.J. (2016). Insights on Canadian society: Co-op participation of college and bachelor's graduates. Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/75-006-x/2016001/article/14692-eng.htm>

- Ross, K. M. (2017, February 24). Canadian co-op programs blend classroom, work experience. *U.S. News & World Report*. Retrieved from <https://www.usnews.com/education/best-global-universities/articles/2017-02-24/canadian-co-op-programs-blend-classroom-work-experience>
- Rowe, P., M. (1988). The nature of work experience. *Canadian Psychology/Psychologie canadienne*, 29(1), 109–115. <https://doi.org/10.1037/h0079759>
- Sachtleben, A. (2002). Cooperative work placement: Educating monolingual gatekeepers. *Asia-Pacific Journal of Cooperative Education*, 3(1), 18–21.
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.), Thousand Oaks, CA: Sage.
- Sangganjanavanich, V. F., Lenz, A. S., & Cavazos, J. (2011). International students' employment search in the United States: A phenomenological study. *Journal of Employment Counseling*, 48(1), 17–26. <https://doi.org/10.1002/j.2161-1920.2011.tb00107.x>
- Sattler, P. (2011). *Work-integrated learning in Ontario's postsecondary sector*. Toronto, ON, Canada: Higher Education Quality Council of Ontario.
- Sattler, P., & Peters, J. (2012). *Work-integrated learning and postsecondary graduates: The perspective of Ontario employers*: Toronto, ON, Canada: Higher Education Quality Council of Ontario.
- Sattler, P., & Peters, J. (2013). *Work-integrated learning in Ontario's postsecondary sector: The experience of Ontario graduates*. Toronto, ON, Canada: Higher Education Quality Council of Ontario.

- Schatz, E. (2012). Rationale and procedures for nesting semi-structured interviews in surveys or censuses. *Population Studies*, 66(2), 183–195.
<https://doi.org/10.1080/00324728.2012.658851>
- Schön, D. A. (1987). *Jossey-Bass higher education series. Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. Available from
<https://psycnet.apa.org/record/1987-97655-000>
- Schulte, S., & Choudaha, R. (2014). Improving the experiences of international students. *Change: The Magazine of Higher Learning*, 46(6), 52–58.
<https://doi.org/10.1080/00091383.2014.969184>
- Smith, C. (2011). Evaluating the quality of work-integrated learning curricula: A comprehensive framework. *Higher Education Research & Development*, 31(2), 247–262.
<https://doi.org/10.1080/07294360.2011.558072>
- Smith, C. (2016). International student success. *Strategic Enrollment Management Quarterly*, 4(2), 61–73. <https://doi.org/10.1002/sem3.20084>
- Smith, C., & Worsfold, K. (2013). Unpacking the learning–work nexus: ‘priming’ as lever for high-quality learning outcomes in work-integrated learning curricula. *Studies in Higher Education*, 40(1), 22–42. <https://doi.org/10.1080/03075079.2013.806456>
- Smith, R. A. & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699–713.
<https://doi.org/10.1016/j.ijintrel.2011.08.004>

- Spencer-Rodgers, J. (2000). The vocational situation and country of orientation of international students. *Journal of Multicultural Counseling and Development*, 28(1), 32–50.
<https://doi.org/10.1002/j.2161-1912.2000.tb00226.x>
- Statistics Canada. (2015). *Labour force survey: July 2015*. Retrieved from
<http://www.statcan.gc.ca/daily-quotidien/150807/dq150807a-eng.htm?HPA>
- Stein, S. & de Andreotti, V.O. (2016). Cash, competition, or charity: international students and the global imaginary. *The International Journal of Higher Education*, 72(2), 225–239.
<https://doi.org/10.1007/s10734-015-9949-8>
- Stowe, K., & Clinebell, S. (2015). An examination of learning preferences of US and international students. *Journal of Teaching in International Business*, 26(4), 258–272.
<https://doi.org/10.1080/08975930.2015.1127796>
- Stull, W.A., Loken, M.K., Bartkus, K. R., & Bratton, G. (1994). Critical elements in cooperative education programs: A comparison of U.S. and Canadian perspectives. *Journal of Cooperative Education*, 29(3), 47–58.
- Sultana, N. (2014). Soft skills for employability. *International Journal of Organizational Behaviour & Management Perspectives*, 3(1), 745.
- Take, H., & Shoraku, A. (2018). Universities' expectations for study-abroad programs fostering internationalization: educational policies. *Journal of Studies in International Education*, 22(1), 37–52. <https://doi.org/10.1177/1028315317724557>
- Taylor, S. (2003). The Roles of a Director, Cooperative Education: Leading, Managing and Administration. *Asia-Pacific Journal of Cooperative Education*, 4(1), 19-23.

- Tchibozo, G. (2007). Extra-curricular activity and the transition from higher education to work: A survey of graduates in the United Kingdom. *Higher Education Quarterly*, 61(1), 37-56. <https://doi.org/10.1111/j.1468-2273.2006.00337.x>
- Teddlie, C. & Tashakkor, A. (2006). A general typology of research designs featuring mixed methods. *Research in the Schools* 13(1), 12–28.
- Tran, L. T., & Soejatminah, S. (2016). ‘Get foot in the door’: international students’ perceptions of work-integrated learning. *British Journal of Educational Studies*, 64(3), 337–355. <https://doi.org/10.1080/00071005.2015.1128526>
- Tran, L. T., & Soejatminah, S. (2017). Integration of work experience and learning for international students: From harmony to inequality. *Journal of Studies in International Education*, 1028315316687012. <https://doi.org/10.1177/1028315316687012>
- Turner, D., III. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15(3), 754–760.
- University of Waterloo. (n.d.). *About co-operative education*. Retrieved August 4, 2020, from <https://uwaterloo.ca/about/who-we-are/facts>
- Van Mol, C. (2017). Do employers value international study and internships? A comparative analysis of 31 countries. *Geoforum*, 78, 52–60. <https://doi.org/10.1016/j.geoforum.2016.11.014>
- Van Slem, M., & Jankowski, N. W. (2006). Conducting online surveys. *Quality & Quantity*, 30(3), 435–456. <https://doi.org/10.1007/s11135-005-8081-8>
- Viggiano, T., López Damián, A. I., Morales Vázquez, E., & Levin, J. S. (2018). The Others: Equitable Access, International Students, and the Community College. *Journal of Studies in International Education*, 22(1), 71–85. <https://doi.org/10.1177/1028315317725883>

- Wall, T., Tran, L. T., & Soejatminah, S. (2017). Inequalities and agencies in workplace learning experiences: international student perspectives. *Vocations and Learning, 10*(2), 141–156. <https://doi.org/10.1007/s12186-016-9167-2>
- Ward, N. I., Frost, R., & Yonge, L. (2004). International cooperative education: The European experience for students in chemistry. *Asia-Pacific Journal of Cooperative Education, 5*(1), 27–34.
- Ward, N. I., & Laslett, R. (2004). International cooperative education student exchange program: Lessons from the chemistry experience. *Asia-Pacific Journal of Cooperative Education, 5*(1), 19–26.
- Weighart, S. (2009). *Learning from experience: A resource book by and for co-op/internship professionals*. Brookline, MA: Mosaic Eye Publishing.
- Wiseman, R. L., & Page, N. (2001). Site Supervisors' and students' perceptions of quality indicators of cooperative learning. *Journal of Cooperative Education and Internships, 36*(1), 61–75.

Appendix A: Key Characteristics of Co-Op in Ontario

Compiled from Sattler (2011, pp. 33–39)

Theme	Characteristics
Main educational purposes	Integration of theory and practice Career exploration and development Progressive skill acquisition Professional socialization Workplace literacy Workforce readiness
Modes of delivery	Block placement (alternating with academic program) Structured work-study sequence must end with academic semester
Common programs/ sector	<ul style="list-style-type: none"> • Business • IT • Engineering • Computer science • Health sciences • Hospitality/tourism • Applied/physical sciences • Math • Arts • Social sciences
Host/worksites selection	Employers contact institution, or are recruited by co-op staff May be recruited by students
Duration	Work-terms are typically one semester (4 months) but may be consecutive Minimum 3-6 work terms required for coop designation Work-terms must make up at least 30% of program
Timing	After completion of at least one academic semester
Payment/ costs to student	Paid Higher tuition fees for co-op programs May be relocation, transportation costs to students
Compulsory/ optional	Usually optional to select co-op stream Compulsory once in coop stream

Theme	Characteristics
Job description & expectations	<p>Work-terms are directly related to program of study</p> <p>Job descriptions set by employer</p> <p>Competitive application and selection process</p> <p>Students consult with employer to set own learning outcomes</p>
Role of student	Full-time employee engaged in productive work
Role of employer/host	Supervision, evaluation
Role of institution	<p>Set learning objectives and approve host sites (co-op staff)</p> <p>Assist with student selection (co-op staff)</p> <p>Monitoring and assessment (co-op staff)</p>
Supervision	<p>Supervised by industry/business</p> <p>Co-op coordinator site visits</p> <p>Communication with student, employer through email, telephone</p>
Evaluation & assessment	<p>Formative and summative</p> <p>Faculty/co-op staff assess student portfolio, written work term report, structured reflections, class presentations</p> <p>Student is evaluated by employer</p> <p>Employer reviews student work-term report</p>

**Appendix B: A Comparison of Critical Success Elements for Co-op and Perceptions of
Quality Indicators**

Critical Elements for Successful Co-op	<ol style="list-style-type: none"> 1) Employers are willing to provide challenging, career related (paid) work experiences 2) Co-op has funding to operate quality program 3) Employers are committed as partners 4) Co-op viewed by senior admin as effective and critical to educational strategy 5) Admin, faculty, and staff have training and effective leadership 6) Co-op students receive adequate orientation prior to placement
College/University Coordinators' Perceptions of Quality for Co-op	<ol style="list-style-type: none"> 1) Student Professional Development; 2) Student professionalism On Site; 3) Student thinking and communication; 4) Challenging learning experiences; 5) Student demeanor of pride and competence
Employers/site supervisors' Perceptions of Quality for Co-op	<ol style="list-style-type: none"> 1) Constructive Learning climate; 2) Professional Development; 3) Internship Academic integrity; 4) Problem solving skills; 5) Student's independent work
Students' perceptions of co-op quality	<ol style="list-style-type: none"> 1) Career Development; 2) Student Professionalism; 3) Occupational Skill Building; 4) Academic Standards; 5) Student Critical Thinking Skills
Combination (employers, students, coordinators) indicators of co-op quality	<ol style="list-style-type: none"> 1) Provide the student with professional development 2) Promote a challenging learning climate 3) Use educational standards to generate student pride and competence 4) Provide opportunity for students to practice their professionalism

	<ul style="list-style-type: none">5) Help students develop occupational work ethic6) Expose students to practical problem solving7) Allow students a degree of independence8) Allow students to maintain an academic approach9) Encourage students to think critically
--	--

Note. Data for critical elements for successful co-op from Stull, Loken, Bartkus, & Bratton (1994), coordinators perceptions of quality from Page, Geck, & Wiseman (1999), employers' perceptions of quality from Wiseman & Page (2001), student perceptions from Wiseman & Page (2001), and the combination of employers, students, and coordinators from Wiseman & Page (2001).

Appendix C: Survey Questions

(Final) Understanding the experiences of international students in co-op

Survey Flow

Standard: Welcome and consent (1 Question)

Standard: Consent Form (1 Question)

Standard: Section A: Introduction and demographics (10 Questions)

Standard: Section B: Preparedness for Co-op (3 Questions)

Standard: Section C: Co-op work-term experience (5 Questions)

Standard: Section D: The value of Co-op and supporting students (8 Questions)

Standard: Before you finish: Thank you and invitation for a follow-up interview (5 Questions)

Page

Break

Start of Block: Welcome and consent

Q1 Before you start: Welcome and consent Thank you for your interest in this research study. The research aims to learn from the experiences of international students who have completed Cooperative Education (Co-op) work-terms and your contribution to this study is valued and appreciated. The survey consists of 34 questions that will ask you to rate and respond to experiences you had throughout your Co-op program ranging from how prepared you felt before Co-op, to your experiences during the job search, co-op work-term, and thoughts after completing your Co-op. Your participation in this study is voluntary and not for any credit (academic or otherwise). After completing this questionnaire, you will receive a \$5.00 online gift voucher to Starbucks sent to your email account. On the following page you will be asked to give your consent to participate in this study. If you do not wish to continue, please close your browser now.

I am ready to proceed (1)

End of Block: Welcome and consent

Start of Block: Consent Form

Q2 **Consent Form Title of Project:** Understanding the experience of international students in Co-operative Education

Name of Researcher: Matthew Rempel, Doctoral Candidate, University of Calgary & Associate Dean, Sheridan College [email address]; [phone #]

Supervisor: Dr. Colleen Kawalilak, Werklund School of Education, University of Calgary, [email address]; [phone #].

Sponsor: Cooperative Education and Work-Integrated Learning (CEWIL) Canada -- This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information. The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study. Participation in this study is completely voluntary. In this survey you can participate anonymously by not providing your name or contact information; however, if you would like to be eligible for a \$5.00 voucher for Starbucks upon completion of the survey you will be required to provide your student email

account. Your responses to the survey will remain confidential and only available to the researcher and the researcher's supervisor.

Purpose of the Study The research aims to learn from the experiences of international students who have completed Cooperative Education (Co-op) work-terms. The information collected will be used in a report that may help others understand the perspectives and experiences of international students. This data may help inform schools and staff on how they can evolve Co-op programs to better support other international students.

What Will I Be Asked To Do? You will be asked to complete the following 34 questions in this online survey which may take approximately 15-20 minutes. The survey will ask you to rate and respond to experiences you had throughout your program ranging from how prepared you felt before Co-op, to your experiences during the job search, co-op work-term, and thoughts after completing your Co-op. At the end of the survey you will be asked if you would like to participate to volunteer for the second phase of this study which would involve a one hour in person interview. Participation in this entire research study is voluntary and you may refuse to participate now by exiting this browser. You may also refuse to participate in parts of the study, may decline to answer any and all questions, and may withdraw from the study at any time without any penalty whatsoever.

What Type of Personal Information Will Be Collected? In the survey you will be asked to provide your age (e.g. 17-19, 20-24, etc), gender, program type (e.g. diploma, degree, etc), ethnicity, and number of years in Canada (1-2, 3-4 years, etc), and range of your Grade Point Average (GPA), as well as share opinions about your co-op experiences. Your identify will be keep confidential and you do not need to share your name or contact information if you do not want to. If you would like to receive the \$5.00 gift card at the conclusion of this survey, you will be required to provide your student email account with the purpose of validating that you completed the survey and so you can be provided with the online gift card. If you do not wish to receive the gift, then you will not be required to provide your email and can participate anonymously (e.g. not provide your name, contact information, or any other information that would identify you specifically).

Are there Risks or Benefits if I Participate? There are very limited/no risks to participation in this research. The primary benefits of this research are related to the general increase in knowledge, awareness, and ability for Co-op departments to better support future cohorts of international students in co-op programs. The immediate benefits will be realized at the sites of this research, as well as other colleges and universities in Canada may also benefit from the findings of this research. After completing this online survey, you will be eligible for a \$5.00 gift voucher to Starbucks. You will need to provide your student email address. If you

decide to withdraw partial through completing the online survey then you will not be eligible to receive the gift voucher.

What Happens to the Information I Provide? No one except the researcher and his supervisor will be allowed to see any of the answers to the questionnaire. Data collected through this online survey will be reviewed and compiled using software that supports statistical calculations and development of chart/graphs and other summarizations of the data. All data will be password protected and encrypted (where available) and stored by the researcher. Responses from individual participants will not be published. Only group information will be summarized for any presentation or publication of results. Anonymous data will be stored indefinitely by the Researcher for possible future use. Should you wish to withdraw from the research, you may do so at any time by contacting the researcher and your responses will be removed from this research. If you have completed the online survey anonymously and did not provide your email address, then your data will be included in the research as it may not be possible to remove your responses.

Signatures Your signature on this form indicates that 1) you understand to your satisfaction the information provided to you about your participation in this research project, and 2) you agree to participate in the research project. In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Questions/Concerns If you have any further questions or want clarification regarding this research and/or your participation, please contact: Mr. Matthew Rempel, Doctoral Candidate, Werklund School of Education, University of Calgary, [phone #], [email address] and Dr. Colleen Kawalilak, Werklund School of Education, University of Calgary, [phone #], [email address]

If you have any concerns about the way you've been treated as a participant, please contact the Conjoint Faculties Research Ethics Board, University of Calgary at (403) 220-4283 or (403) 220-6289; or email cfreb@ucalgary.ca. A copy of this consent form can be given to you to keep for your records and reference. The investigator has kept a copy of the consent form.

- Yes, I consent to participate in this research study (1)
- No, I do not wish to participate in this research study (2)

Skip To: End of Survey If Consent = No, I do not wish to participate in this research study

End of Block: Consent Form

Start of Block: Section A: Introduction and demographics

Q3 Select the school where you completed Co-op

- Seneca (1)
 - Sheridan (2)
-

Q4 Select the type of program you were in when you completed Co-op

- Degree (1)
 - Advanced Diploma (2)
 - Diploma (3)
 - Graduate Certificate (4)
-

Q5 What is your current Grade Point Average?

- 4.0 (A+) (1)
 - 3.5 – 3.9 (A) (2)
 - 3.0 – 3.4 (B) (3)
 - 2.5 – 2.9 (C) (4)
 - 2.0 – 2.4 (D) (5)
 - Below 2.0 or on academic probation (6)
 - Prefer not to answer (7)
-

Q6 Did you receive payment/ financial compensation for a Co-op work-term?

- Yes (1)
 - No (2)
 - Honourarium (3)
-

Page _____
Break

Q7 Gender

- Male (1)
 - Female (2)
 - Neither male nor female, or gender fluid or diverse (3)
 - Other cultural gender identity (e.g. Indigenous two-spirit) (4)
-

Q8 Age

- 17 – 19 years (1)
 - 20 – 24 years (2)
 - 25 – 29 years (3)
 - 30+ years (4)
-

Q9

Ethnicity (Select the category that best represents you)

- Arab (1)
- Black (for example African, Haitian, Jamaican, Somali, etc) (2)
- Caucasian / White (3)
- Chinese (4)
- Filipino (5)
- First Nations, Metis or Inuit (6)
- Korean (7)
- Japanese (8)
- Latin American (9)
- South Asian (for example, East Indian, Pakistani, Punjabi, Sri Lankan, etc) (10)
- Southeast Asian (for example, Vietnamese, Cambodian, Indonesian, Laotian, etc) (11)
- West Asian (for example, Afghan, Iranian, Turk, etc) (12)
- Other (13)

Page _____

Break

Q10 Before your first Co-op work-term, did you have employment experience?
(Select all that apply)

- Full-time employment in Canada (1)
 - Part-time employment in Canada (2)
 - Full-time employment in my home country (3)
 - Part-time employment in my home country (4)
 - On-campus employment (5)
 - Other work experience (6)
 - None (7)
-

Q11

Before your first Co-op work-term, in which of the following on campus activities had you participated? (Select all that apply)

- Extra-curricular (clubs, sports, or on campus events) (1)
 - Co-curricular Record (CCR) Activities (2)
 - Research projects (3)
 - Student Union (Board of directors, management, event organization, etc) (4)
 - Tutoring or Mentoring (5)
 - Volunteering (6)
 - Other (7)
 - None (8)
-

Q12 Before your first Co-op work-term, how long had you lived in Canada?

- Less than a year (1)
- 1 – 2 years (2)
- 3 – 4 years (3)
- 4 – 6 years (4)
- 7+ years (5)

End of Block: Section A: Introduction and demographics

Start of Block: Section B: Preparedness for Co-op

Q13 Section B: Preparedness for Co-op The following section and its questions are designed to help us understand a bit more about how prepared you felt before Co-op. Please consider what you felt, believed, and thought before you started your Co-op work-term even if your opinions have changed since completing Co-op. **How prepared did you feel for your first Co-op work-term?**

- Very Prepared (1)
 - Prepared (2)
 - Unsure / Neutral (3)
 - Unprepared (4)
 - Very Unprepared (5)
-

Q14 Before I started my Co-op work-term ...

	strongly agree (1)	agree (2)	uncertain/ not applicable (3)	disagree (4)	strongly disagree (5)
I felt comfortable living in Canada and interacting with Canadians (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believed I would be treated differently because I am an international student (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought the Co-op preparation course helped me feel prepared to begin Co-op (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt my academic classes and classroom learning helped me feel prepared to begin Co-op (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 I believe that international students have different needs than Canadian students when preparing for Co-op.

- Strongly agree (1)
- Agree (2)
- Unsure / Neutral (3)
- Disagree (4)
- Strongly disagree (5)

End of Block: Section B: Preparedness for Co-op

Start of Block: Section C: Co-op work-term experience

Q16 Section C: Co-op work-term experience The following section and its questions are designed to help us understand a bit more about your experience during your Co-op work-terms. Please consider how you felt, what you learned, your supervision, and other experiences while working for your Co-op employer. **I was successful in my Co-op work-term(s)?**

- strongly agree (1)
 - agree (2)
 - uncertain/ not applicable (3)
 - disagree (4)
 - strongly disagree (5)
-

Q17 During the Co-op work-term experience ...

	strongly agree (1)	agree (2)	uncertain/ not applicable (3)	disagree (4)	strongly disagree (5)
I was able to apply what I have learned from my education (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I gained relevant work experience for my future (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I experienced discrimination because I am an international student (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had the opportunity to be as productive a Co-op student as Canadian Co-op students (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt comfortable asking for help or instructions (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe my supervisor treated me differently because I was an international student (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18 How comfortable were you at communicating in English during your Co-op work-term?

- Very comfortable (1)
 - Comfortable (2)
 - Unsure / Neutral (3)
 - Uncomfortable (4)
 - Very uncomfortable (5)
-

Q19 How important are communication skills during a Co-op work-term?

- Very Important (1)
 - Important (2)
 - Unsure / Neutral (3)
 - Unimportant (4)
 - Very unimportant (5)
-

Q20

Please rank the importance of the following communication skills in Co-op

(Drag and drop in order where the first [1] is most important and the last [5] is the least important)

_____ Making casual conversation or “small talk” (e.g. polite conversation about unimportant matters) in Canada (1)

_____ Reading English (2)

_____ Speaking English (3)

_____ Writing or emailing in English (4)

_____ Understanding of Canadian phrases, slang, idioms (for example, “it cost an arm and a leg” or “that was a piece of cake”) (5)

End of Block: Section C: Co-op work-term experience

Start of Block: Section D: The value of Co-op and supporting students

Q21 Section D: The value of Co-op and supporting students The following section and its questions are designed to help us understand a bit more about how much you value Co-op, your preferred way of learning, and where you would go for help if you were experiencing challenges with Co-op. **My experiences in Co-op are valuable to me**

- Strongly agree (1)
 - Agree (2)
 - Unsure / Neutral (3)
 - Disagree (4)
 - Strongly disagree (5)
-

Q22 A preparation course before a Co-op work-term is valuable

- Strongly agree (1)
 - Agree (2)
 - Unsure / Neutral (3)
 - Disagree (4)
 - Strongly disagree (5)
-

Q23

What is your preferred way to learn or participate in a Co-op Preparation Course? (Select one)

- Mandatory course scheduled in a classroom (1)
 - Mandatory online or self-study course (2)
 - Mandatory hybrid (mix of in class and online learning) (3)
 - Optional online or self-study course (4)
 - Optional hybrid (mix of in class and online learning) (5)
 - None – a preparation course is not required (6)
-



Q24

If you have questions or experience difficulty during Co-op, where do you go for help?

(Drag and drop in order where [1] is where you would go for help first and [9] is where you would go last)

- _____ Co-op office or staff (1)
- _____ Co-workers at my Co-op workplace (2)
- _____ Faculty or instructors (3)
- _____ Friends and family (4)
- _____ Previous course notes or preparation course materials (5)
- _____ Search the internet (YouTube, google searches, etc) (6)
- _____ Workplace supervisor (7)
- _____ I won't ask for help (8)
- _____ Other (9)

 Page _____

Break



Q25 As an international student who has completed Co-op, please answer the following questions as if you were giving advice to college Co-op offices on how to best support other international students be successful in Co-op. **Please rank the importance of the following Co-op preparation course topics**

(Drag and drop in order where the first [1] is most important and the last [5] is the least important)

- _____ Canadian workplace culture and what to expect during Co-op (1)
- _____ Communication and professionalism in the workplace (2)
- _____ Co-op policies and procedures (3)
- _____ Interview strategies and practicing interviewing (4)
- _____ Resumes, networking and job search strategies (5)
- _____ Other (6)

 Page _____

Break

Q26 How much instruction/class-time in total do you think is required to prepare international students for Co-op?

- None (1)
 - 1 to 5 hours (2)
 - 6 to 9 hours (3)
 - 10 to 13 hours (4)
 - 14 (approximately 1 hour per week for a typical 14-week academic term) (5)
 - 15 to 27 hours (6)
 - 28+ hours (2+ hours per week for a typical 14-week academic term) (7)
-

Q27 Do you think international students would benefit from an optional Co-op preparation course designed specifically for international students?

- Yes (1)
 - No (2)
 - Maybe, I am not sure (3)
-

Q28 Do you think international students would benefit from attending optional workshops, training, or one-on-one advising designed specifically for international students that would allow them to practice Canadian workplace communications?

- Yes (1)
- No (2)
- Maybe, I am not sure (3)

End of Block: Section D: The value of Co-op and supporting students

Start of Block: Before you finish: Thank you and invitation for a follow-up interview

Q29 Thank you for sharing your answers to this survey. Your participation will help support understanding the perspectives and experiences of international students in Co-op. In the second phase of this study, we are seeking to interview ten (10) students who completed the online survey. This design allows you to further explain and elaborate on your experiences to complement the online survey results. To show our appreciation for your time, **you will be provided with a \$10 gift card.** The interview should take approximately one hour and can be held on campus at a convenient time for you. **Would you be interested in volunteering for a one hour in interview?**

- Yes (1)
- No (2)
- Maybe, I am not sure (3)

Q30 Please provide your student email address should you wish to be contacted:

Q31 As a reminder, participation in this study is voluntary and not for academic or any other form of credit at your school. Should you choose to participate, your comments from the interviews will be recorded and then transcribed to text and used in this research. Your name will not be used and all reasonable efforts will be made to maintain your confidentiality. Please note that a maximum of ten (10) volunteers will be selected for a follow up interview. A diversity of candidates will be selected so a broad range of perspectives can be shared in the interviews. By volunteering to participate, you are not necessarily guaranteed to be selected. This phase of the study has also been reviewed and approved by the Research and Ethics Board at the University of Calgary.

Page _____

Break

Q32

Before you finish:

Thank you again for your participation in this online survey. To show our appreciation for your time, **please provide your student email address and you will be emailed a \$5.00 gift voucher to Starbucks.** My student email address is:

Q33

If you have any further questions or want clarification regarding this research and/or your participation, please contact: Mr. Matthew Rempel, Doctoral Candidate, Werklund School of Education, University of Calgary, 905-845-9430 x 2934, matthew.rempel@ucalgary.ca or Dr. Colleen Kawalilak, Werklund School of Education, University of Calgary, 403-225-2570, ckawalil@ucalgary.ca

Complete Survey (1)

End of Block: Before you finish: Thank you and invitation for a follow-up interview

Appendix D: Interview Questions

Understanding the Experience of International Students in Cooperative Education

Before we Start: Welcome and Consent

[Read aloud]: Thank you for volunteering to participate in this interview as a follow-up to the online survey you completed.

The research aims to learn from the experiences of international students who have completed Cooperative Education (Co-op) work-terms and your contribution to this study is valued and appreciated. As a small token of our appreciation for sharing this time with us you will receive a \$10.00 gift card at the conclusion of this interview.

This interview consists of 12 open-ended questions that are designed in a way that allows you to share your experiences, stories, and advice for other international students in Co-op. You are welcome to share as much or as little as you would like on each question and we should be no longer than an hour for this interview.

As part of informed consent, I would like to draw your attention to this Consent Form.

Actions required before starting the interview:

1. The interviewer will walk the participant through each section of the consent form covering all sections and content within and addressing any questions the participant may have;
2. The interviewer will collect a signed copy of the consent form from the participant

[Read aloud]:

Do you have any other questions before we start?

Are you ready to begin?

Introduction and demographics

[*Read aloud*]: The following section and its questions are designed to help us understand a bit more about you, your academics, and background. Please share as much or as little as you would like.

Theme: Introduction and demographics	
Questions	Probing Follow-up Questions (if required)
Q1 - Would you please introduce yourself to me?	<ul style="list-style-type: none"> • What is your program of study? • How long have you been in Canada? • Where is your home country? • Why did you agree to come share your experience with me?
Q2 – Why did you take Co-op?	<ul style="list-style-type: none"> • Is Co-op mandatory or optional in your program? • How many work-terms did you have?

Preparedness for Co-op

[Read aloud]: The following section and its questions are designed to help us understand a bit more about how prepared you felt before Co-op. Please share as much or as little as you would like.

Theme: Preparedness for Co-op	
Questions	Probing Follow-up Questions (if required)
<p>Q3 - Thinking back to before you started Co-op, how prepared did you feel going into your Co-op work term?</p>	<ul style="list-style-type: none"> • What did you expect your Co-op work-term would be like before you started? • How did you feel before Co-op started? (e.g. excited, stressed, or anything?) • Can you tell me about any employment or volunteer experiences you had prior to Co-op and did that help you feel prepared for Co-op and why? • How comfortable were you socializing or communicating with Canadians prior to Co-op – and did that impact how you felt going into Co-op?
<p>Q4 - What did you do to prepare for Co-op?</p>	<ul style="list-style-type: none"> • Were your friends or family helpful or involved in your preparation for Co-op? • How did your classroom learning help you feel prepared for Co-op? • How did the Co-op preparation course help you feel prepared for Co-op?

Co-op Work-term Experience

[*Read aloud*]: The following section and its questions are designed to help us understand a bit more about your experience during your Co-op work-terms. Please share as little or as much as you would like.

Theme: Co-op Experience	
Questions	Probing Follow-up Questions (if required)
Q4 – Can you please tell me about your Co-op work term?	<ul style="list-style-type: none"> • What was your favourite part of Co-op? • What was the most difficult part of Co-op? • What differences do you think there are between working in your home country versus Canada? • How would you describe the workplace culture in Canada?
Q6 - Can you please share a bit about your supervisor and co-workers?	<ul style="list-style-type: none"> • What was your relationship with your supervisor like? • What is it like working with Canadian co-workers? • How did you find communicating with others in Co-op?
Q7 - Did being an international student impact your experience in Co-op?	<ul style="list-style-type: none"> • If so, how? If not, why do you think that is? • Did anything surprise you about working in Canada?

Value of Co-op and Supporting Students

[Read aloud]: The following section and its questions are designed to help us understand a bit more about how much you value Co-op, the impact of preparation courses and resources available for international students. Please share as little or as much as you would like.

Theme: Co-op Departments	
Questions	Probing Follow-up Questions (if required)
Q8 – Having completed Co-op, are you happy to you did Co-op and why?	<ul style="list-style-type: none"> • What was the most valuable part of Co-op to you? • Would you recommend Co-op to other international students and why?
Q9 – Can you please tell me about your Co-op preparation course?	<ul style="list-style-type: none"> • What helped the most and why? • What topics do you think are the most important to teach international students and why? • How would you prefer to learn in a Co-op preparation course (e.g. online, in person, a hybrid of in person and online, etc) and why?
Q10 – What do you think would work best to prepare international students for Co-op?	<ul style="list-style-type: none"> • What advice do you have for Co-op departments that might be helpful for future international students? • Do you think that international students require additional or different preparation or support than Canadian students – and why?

Final comments and suggestions

[Read aloud]: This is the final two questions and your opportunity to share anything else that may be helpful to this study. Please share as little or as much as you would like.

Theme: General	
Questions	Probing Follow-up Questions (if required)
Q11 - What advice would you give to future international students so they can be prepared for and successful in Co-op?	
Q12 - The purpose of this research is to learn from international students so Co-op departments and staff can be better at preparing and supporting international students for Co-op in the future. Is there anything else you would like to share?	

Thank you

[read aloud]: On behalf of the researcher team and myself, thank you very much for sharing your time, perspective, and experiences in this study. To show our appreciation, please accept this \$10.00 gift card.

If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Mr. Matthew Rempel

Doctoral Candidate, Werklund School of Education, University of Calgary
905-845-9430 x 2934, matthew.rempel@ucalgary.ca

or

Dr. Colleen Kawalilak,

Werklund School of Education, University of Calgary

[phone #], [email address]

Appendix E: Correlation Matrix: Preparedness for Co-op

	1	2	3	4	5	6
1. How prepared did you feel for your first Co-op work-term?	1	0.19	-0.063	.241*	0.166	-0.009
		0.08	0.564	0.026	0.127	0.937
N	86	86	86	86	86	86
2. I felt comfortable living in Canada and interacting with Canadians	0.19	1	-0.188	.271*	.242*	-.272*
	0.08		0.084	0.012	0.025	0.011
N	86	86	86	86	86	86
3. I believed I would be treated differently because I am an international student	-0.063	-0.188	1	-0.095	-0.07	.360**
	0.564	0.084		0.383	0.524	0.001
N	86	86	86	86	86	86
4. I thought the Co-op preparation course helped me feel prepared to begin Co-op	.241*	.271*	-0.095	1	.544**	-0.105
	0.026	0.012	0.383		0	0.337
N	86	86	86	86	86	86
5. I felt my academic classes and classroom learning helped me feel prepared to begin Co-op	0.166	.242*	-0.07	.544**	1	-0.121
	0.127	0.025	0.524	0		0.265
N	86	86	86	86	86	86
6. I believe that international students have different needs than Canadian students when preparing for Co-op.	-0.009	-.272*	.360**	-0.105	-0.121	1
	0.937	0.011	0.001	0.337	0.265	
N	86	86	86	86	86	86

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix F: Correlation Matrix: Experiences in Co-op

	1	2	3	4	5	6	7	8	9
(1) I was successful in my Co-op work-term	1	.594**	.344	.508**	-.351**	.517**	.253	-.236	0.162
		0.000	0.001	0.000	0.001	0.000	0.020	0.031	0.144
	84	83	84	84	84	84	84	84	83
(2) My experiences in Co-op are valuable to me	.594**	1	.479**	.676**	-.316**	.415**	.450**	-.263	.249*
	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.016	0.023
	83	83	83	83	83	83	83	83	83
(3) I was able to apply what I have learned from my education	.344	.479**	1	.520**	-.0174	.343	.255	-.0138	.261
	0.001	0.000	0.000	0.000	0.113	0.001	0.019	0.210	0.017
	84	83	84	84	84	84	84	84	83
(4) I gained relevant work experience for my future	.508**	.676**	.520**	1	-.288**	.439**	.425**	-.0169	.276*
	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.124	0.012
	84	83	84	84	84	84	84	84	83
(5) I experienced discrimination because I am an international student	-.351**	-.316**	-.0174	-.288**	1	-.624**	-.475**	.616**	-.0210
	0.001	0.004	0.113	0.008	0.000	0.000	0.000	0.000	0.056
	84	83	84	84	84	84	84	84	83
(6) I had the opportunity to be as productive a Co-op student as Canadian Co-op students	.517	.415*	.343	.439**	-.624**	1	.446**	-.371**	0.211
	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.055
	84	83	84	84	84	84	84	84	83
(7) I felt comfortable asking for help or instructions	.253	.450**	.255	.425**	-.475**	.446**	1	-.237	.256*
	0.020	0.000	0.019	0.000	0.000	0.000	0.000	0.030	0.019
	84	83	84	84	84	84	84	84	83
(8) I believe my supervisor treated me differently because I was an international student	-.236	-.263	-.0138	-.0169	.616**	-.371**	-.237**	1	-.0152
	0.031	0.016	0.210	0.124	0.000	0.001	0.030	0.000	0.170
	84	83	84	84	84	84	84	84	83
(9) How comfortable were you at communicating in English during your Co-op work-term?	0.162	.249*	.261	.276*	-.0210	0.211	.256*	-.0152	1
	0.144	0.023	0.017	0.012	0.056	0.055	0.019	0.170	0.000
	83	83	83	83	83	83	83	83	83

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).