

# **Describing the Canadian Post-Secondary Career Centre Landscape: An exploratory survey**

**by  
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## **Abstract**

Despite growing interest in post-graduate employment outcomes, limited empirical literature exists about how post-secondary career centres in Canada currently operate. Through a national survey, this study sought to describe the external conditions and the internal organizational factors that influence career centre operations, the philosophical orientations of career centres, the career services offered to various stakeholders, the measures of success that are collected and reported, and the human, financial, and space resources available to operate.

The Anglophone survey was designed using a Delphi panel of experts to ensure the comprehensiveness of the questions and tested using a pilot group of local career centre staff. Representatives from 63 career centres across Canada responded to the national survey from a variety of career centre types within university, college, or polytechnic institutional settings. The findings, which reveal the current landscape influencing career centre operations, are generally presented as descriptive statistics including means, medians, ranges, and frequencies.

Using Hackman's (1985) theory of power and centrality in resource allocations as the lens for analysis, the researcher hoped to identify relationships between resources available to career centres and the operational choices that they make. For each of the six themes, the differences in how career centres have responded operationally across geographic region, institutional type, and career centre type were identified using chi-square and analysis of variance methods, providing a rich description of the Canadian post-secondary career centre landscape. Another contribution made by this study includes a framework for determining the centrality of non-academic units using Hackman's (1985) theory.

The primary findings of this study are that career centres should rethink their focus on day-to-day differences and work together toward solutions for providing outstanding career development services for post-secondary students and that it is time to consider setting minimum qualifications for career development professionals in Canada.

**Keywords:** career centres; career services; Hackman's theory; Canadian post-secondary institutions

## **Dedication**

This work is dedicated to the many Canadian career practitioners who strive daily to improve the career outcomes of their students and alumni.

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## Glossary

Centrality	How closely a unit's purposes match those central to the organization (Hackman, 1985, p. 61).
Environmental power	The relative ability of a unit to bring in outside resources that are critically needed by the institution. A unit realizes this form of power when the rest of the institution recognizes both the organization's motivational investment in the resources that the unit can acquire (criticality) and the relative ability of the unit to bring in needed resources from the environment (substitutability; Hackman, 1985, p. 63).
Institutional power	The unit's relative influence within the institution, independent of its environmental power (Hackman, 1985, p. 62).
Metrics	Anything measured by the career centre either quantitatively or qualitatively to determine usage, quality, impact, or satisfaction.
Resources	The combination of the financial (total and operational budget dollars), human (professional staff, support staff, and student staff), and space (square footage and location) resources a career centre has at its disposal.
Resource allocation	The relative share of internal institutional resources acquired by a unit, especially money, space, and campus location (Hackman, 1985, p. 63).
Resource negotiation strategies	Strategies used by unit heads to acquire resource allocations, particularly in negotiating budgets (Hackman, 1985, p. 63).
Services	Any program, intervention, or resource provided to a stakeholder by the career centre.

# Chapter 1.

## Introduction

A 2017 national survey of more than 12,800 Canadian college and university students found that 75% of respondents reported that their primary interest in attending post-secondary education was to “get a good job” (Brainstorm Strategy Group, 2017, p. 14). This same survey found that students found their campus career centre one of the most valuable resources available to them in their job search process.

The motivation for individuals to seek out post-secondary education is not surprising. Several studies show the positive relationship between levels of education and lifetime income. Barrow and Malamud (2015) applied a conceptual economic framework to determine the value of investment in higher education and concluded that higher education is a worthwhile investment on average, but the actual value varies across institutional and demographic subgroups. They also discovered that 4-year degrees have almost double the net present value of 2-year degrees. Baum, Ma, and Payea (2013) found that, in the United States, “Over a 40 year working life time, the median earnings of bachelor’s degree holders without an advanced degree is 65% higher than the median of high school graduates” (p. 12). In their study, the median for associate degree holders was 27% higher than high school graduates. They also found that the earnings premium of Asians, Hispanics, and Blacks with a bachelor’s degree exceeded that of White bachelor’s degree holders. In Canada, researchers recently showed that a post-secondary degree provides a 30% earnings premium over high school graduates (Tal & Enejajor, 2013). Tal and Enejajor (2013) also revealed that the return on investment for education was higher for women than men.

Additionally, as found by Lemieux (2014), it is important to note that the field of study, such as engineering or accounting versus liberal arts, the choice of occupation, and the match between the two contribute to the variation of lifetime earnings of individuals. Researchers in a 2015 study investigated the role of gender in combination with field of study and found that while post-secondary education in all fields of study contributed to a higher increase in lifetime earnings for women than men, those in traditionally female fields such as education and health care saw particularly substantial gaps (Kim, Tamborini, & Sakamoto, 2015). Another recent study found that the return on investment in education to a bachelor degree level as represented by the present value of earnings over a lifetime for individuals who came from a low-income household was about half of those that did not; however, those from low-income households could expect 71% premium from a bachelor's degree compared to individuals without one (Bartik, Hershbein, & Lachowska, 2016). As these studies show, while specific effect varies by many factors, educational attainment positively impacts long-term financial benefits for most individuals.

Beyond the monetary benefits, Baum and colleagues (2013) discovered that higher levels of education correlated with lower levels of unemployment, a greater likelihood of receiving employer-paid benefits and pensions, increased opportunity for social mobility, and somewhat more job satisfaction. A similar 2015 study's findings showed that further education correlated with benefits in mental and physical health, life satisfaction, and reduced smoking rates (Weingarten, Hicks, Jonker, Smith, & Arnold, 2015).

While there is no doubt that degree attainment itself and the entire post-secondary experience influence employment success, at most post-secondary institutions, career centers have the institutional responsibility of preparing their graduates to enter the workforce and of reporting post-graduate employment outcomes (Choi et al., 2013; Schaub, 2012). Career centres play an important role

in helping students make career decisions because of their unique campus role in integrating the academic and corporate worlds (Herr, Rayman, & Garis, 1993). Rayman (1999) defined the position of career centres as “the most obvious and continuing link between corporate America and the academy” (p. 4). Because of this unique role, career centres are poised to have a greater role in helping institutions meet the career outcomes expectations of students, parents, and the general public.

As a career services practitioner with more than 20 years’ experience in both the United States and Canada, my sincere belief in the key role career centres play in student success is not new. Like many practitioners interested in improving their practice through research, my doctoral program provided an opportunity to investigate an issue that has been challenging me since I reached the director level several years ago: How do I increase the financial and human resources my unit has available so that my centre can provide more quality services to support students, alumni, and employers?

At this later stage of my career, I found that not only was I interested in answering this question for my own centre, but I wanted to provide evidence-based recommendations to my colleagues at other institutions facing similar challenges. In this way, I followed in the footsteps of John Dirkx (2006), who sought to understand how “practitioners ‘transform’ research-based information into knowledge they can use to guide their practice and at the same time potentially contribute to a broader knowledge base” (p. 275). As an insider researcher, I was able to use my knowledge of the issues and my experience, in addition to the existing body of literature around career services and higher education practice, to inform this study.

Thus, the purpose of this study was to understand how career centres currently operate, including the relationships between resources available to

career centres, the services they offer, and metrics, or measures of success, that are collected and reported. In this way, I hoped to identify specific actions Canadian post-secondary career centre leaders could take to expand and protect the financial and human resources needed to provide key services to their students, alumni, and employers. To explore these issues, a national survey was conducted of career center personnel regarding their current service offerings, centre resources, metric collection, and metric reporting and how these factors have changed over the past several years. Because the intention of this study is to improve practice, results from this study primarily inform practitioners and campus administrators on how they can better manage their career centres. The results also can be used to better describe the role that campus career centres play in a modern post-secondary context.

## **1.1. Background of the Problem**

In recent years, the value of post-secondary education and the career outcomes it can generate have been questioned in the popular press (Chiose, 2016; Schell, 2018; Vina, 2016; Weale, 2016), investigated by public think tanks (Carlson, 2013; Snowden, 2015), and studied by academics (Dadgar & Trimble, 2015; Fontaine & Mexal, 2014; Schneider, 2015). Perhaps it is not surprising, given the rising costs to attain post-secondary education in Canada, that students, parents, and the public are seeking more assurances that this investment will lead to enhanced career opportunities. In September 2016, *Global News* reported on the release of the latest Statistics Canada report on tuition fees, citing a 40% increase in tuition since 2006 (Cain, 2016). According to a report published by Statistics Canada, 50% of university graduates and 43% of college graduates had student debt averaging \$26,300 and \$14,900 CAD, respectively, at graduation (Ferguson & Wang, 2015). While a post-secondary degree continues to be associated with higher wages and increased full-time employment of Canadian-born youth ages 25–34, according to another 2015 Statistics Canada report, it is

not a guarantee. Only 82% of men and 65% of women with bachelor's degrees were found to be working full-year, full-time in the 25-34 year old age range (Frank, Frenette, & Morissette, 2015).

Education in Canada primarily falls within provincial jurisdiction. Federal support for post-secondary education is limited to three primary means outside of support for Indigenous and Aboriginal peoples: human capital formation, which includes education tax credits, savings plans, and student loan programs; the Canadian Social Transfer program to the provinces; and research grants (Cahill & Wodrich, 2016). The majority of funding to post-secondary institutions is consequently determined by how each province chooses to allocate their Canadian Social Transfer program funds, leaving them vulnerable to provincial politics and priorities.

Since 2005, provincial funding to higher education has declined in most provinces (Axelrod, 2014; Fisher, Rubenson, Jones, & Shanahan, 2009; Metcalfe, 2010). The Canadian Association of University Teachers (CAUT, 2014) *Almanac of Post-Secondary Education in Canada* showed that government funding, as a percentage of institutional operating budgets, has decreased in every province. Zumeta (2005) theorized that one reason the post-secondary sector is particularly vulnerable to budget cuts compared to other public-sector areas, such as health care, K-12 education, and infrastructure, is because post-secondary institutions have the ability to raise funds through other sources such as donations, grants, and student fees. This is particularly true in the United States, where donations are more prevalent and make up a larger proportion of institutional budgets.

Several provinces continue to enforce strict regulations on student tuition increases, thus compounding the fiscal issues institutions are facing (Statistics Canada, 2014). As a response to restrictions on increasing revenues, some institutions are reducing the operating budgets for non-academic units such as

student services (e.g., Simon Fraser University, 2016; University of Regina, 2015; Wilfrid Laurier University, 2015). This reduction in funding directly affects the available institutional funding for career centres (Brainstorm Strategy Group, 2013; Dey & Cruzvergara, 2014; Koc & Tsang, 2015).

These factors have combined to create an atmosphere of increasing accountability, where post-secondary institutions need to focus on their outcomes. The *Canadian Postsecondary Performance: IMPACT 2015* report listed “jobs for graduates” as one of the key performance indicators for any post-secondary institution (Weingarten et al., 2015). The Higher Education Quality Council of Ontario (HEQCO) put the onus on post-secondary institutions to “do a better job of collecting and reporting relevant, meaningful information about the state of Canadian higher education systems and institutions, their performance and their outcomes” (Weingarten et al., 2015, p. 3). As one example of institutions seeking to promote post-graduate employment more effectively, in 2014, BC’s research universities launched what has become an annual report entitled “Putting Degrees to Work” to highlight the successes of their graduates in the work force.

Most post-secondary institutions in Canada today have a unit of individuals or an individual on campus whose mandate is to support the career and employment goals of their students. While in this study I refer to this unit as a *career centre*, there is some debate as to whether *career* is the appropriate term. Sears (1982) defined career as “the totality of work one does in his/her lifetime” (p. 139). More recently, others have defined career as the “total constellation of life roles that we play” (Niles & Harris-Bowlsbey, 2005, p. 12). As will be detailed in Chapter 2, modern career centres evolved out of placement offices that focused on the post-graduate employment of their graduates. In the post-secondary context, there is debate as to whether career centres, in light of the focus on increased accountability and constrained resources, remain focused on placement despite the name change. In this study, the term *career centre* is used to signify any unit,

or individual, whose primary role is to assist students with their career development and/or their employment needs regardless of their philosophical orientation. As this work is focusing on the unit or departmental level, this definition of a *career centre* differs from recent work that defines *career influencers* as any individual on campus who students seek out for career related advice (Ho, 2017). Whereas Ho's definition of career influencers includes faculty and other support staff, this study differentiates career practitioners to those embedded within a unit with the mission to provide career services to be able to evaluate the relationship between services and resources available.

It is unclear if and how these two environmental factors—increasing demand for accountability and reduction of funding—are impacting the modern career centre. Are career centres experiencing constraints on resources? Are they experiencing more accountability pressure? If they are experiencing these phenomena, how are constrained resources and increasing accountabilities affecting the ability of career centres to provide quality career services for their graduates? How can career centre directors work within this context to protect the resources necessary to effectively do their jobs? A driving factor for conducting this study was to provide the necessary data to help answer these questions.

## **1.2. Problem Statement**

There is a perceived gap between the increasing expectations of post-secondary career centres to meet the career development needs of an increasing complex student population and the resources provided by Canadian institutions to provide those services. When I sought to determine if this gap truly exists, there was a void of data, not only about the relationship between accountability expectations and resources allocations in this context but also about how Canadian post-secondary career centres operate in general. This lack of information means that career centre leaders are making operational decisions



that potentially impact the career development of thousands of people without a comprehensive understanding of baseline post-secondary career services or trends in practice across the country.

This study was designed to address this problem by conducting a national survey of post-secondary career centres to describe the current landscape over six themes emergent from the literature: the external conditions impacting career centres; their organizational structures and internal challenges; the financial, human, and space resources available for them to operate; the services they provide to students, alumni, employers, and faculty; their philosophical orientations; and their measurements of success and metrics. It also addressed operational differences across geographic regions, institutional types, and career centre types.

After describing the current state of career centre operations for each of these themes, this study draws on Hackman's (1985) theory of power and centrality in resource allocations as an analytical framework for identifying possible operational choices that may be impacting resource allocations to determine if the perceived gap between accountability expectations and resources exists.

### **1.3. Research Questions**

My initial interest in this study originated from a challenge in my professional practice rather than from a theoretical perspective or even intellectual curiosity. In 2015, in addition to my role as a doctoral student, I became the executive director of a business career centre at a large, public comprehensive university reporting to an academic dean. The resources to support my office stem almost entirely from a senior leadership team composed of the dean and various associate/assistant deans who choose to divert funds from the academic budget to provide career services for our MBA and master's-level students. Like many

professional schools, when enrollment drops, so does available funding since we are heavily tuition reliant. During these times, pressure increases to prove that every program or service offered by my unit provides sufficient value to justify the cost.

During one of these periods of restricted budgets, I began to ponder if there was a “silver bullet” that would guarantee that my office would secure adequate funding going forward. This search led to questions about how my colleagues in other career centres were managing their own situations. Anecdotal conversations with my peers indicated a consensus that they were making changes to their operations as a result of perceived financial and accountability pressure, but decisions were being made based upon limited empirical information. Almost uniformly, peers expressed interest in knowing more about what other career centres in Canada were doing.

My desire to better understand if accountability expectations and operational decisions had any relationship with resource allocations led to the development of the primary research question for this study: How can the relationships between operational practices within Canadian career centres and the resources allocated to them be better understood?

To fully answer this question, a better understanding of how career centres currently operate was needed. Six primary themes emerged through a review of the literature, which then provided the impetus to include six sub-questions into this study:

- **Sub-question 1:** What are the current external factors influencing Canadian career centres today?
- **Sub-question 2:** What are the current organizational structural and internal challenges influencing Canadian career centres today?
- **Sub-question 3:** What are the financial, human, and space resources available to Canadian career centre leaders today?

- **Sub-question 4:** What are the services provided to students, alumni, and employers by Canadian career centers today?
- **Sub-question 5:** What are the prevalent philosophical orientations in Canadian career centres today?
- **Sub-question 6:** What metrics are collected and reported by Canadian career centres today?

These exploratory sub-questions provide a framework to describe the current landscape of Canadian career services practice and expose the existing differences between career centre operations. These differences in practice represent the variables that may influence the resources available to career centres overall and to specific career centres or institutional types. Once these differences were described, the primary question of how these differences in operational practices are related to resources was addressed.

Because these questions arose out of my years of experience in career services, the approach best suited to frame this study was a form of practitioner enquiry described by Richardson (1994) as *practical inquiry*. According to Oxford Dictionary online, the traditional difference between *enquire* and *inquire* is “that enquire is to be used for general senses of ‘ask,’ while inquire is reserved for uses meaning ‘make a formal investigation’” (“‘Enquire’ or ‘inquire’?,” n.d.). In this study, *practitioner-based enquiry* is used to refer to the broader category of any research conducted by practitioners, while *practical inquiry* refers to the specific form identified by Richardson.

Based on the six sub-questions guiding the investigation and the desire to inform best practices broadly, it was determined that the most appropriate method to investigate this question was through a national online survey, which will be detailed in Chapter 3. The next subsection provides additional discussion about practitioner-based enquiry—more specifically, practical inquiry—as a research approach.

### 1.3.1. Practitioner-Based Enquiry

The movement of practitioner-based enquiry arose out of the professionalization of the teaching profession through research in the 1980s. There was increasing dissatisfaction with the divide between educational theory and educational practice. Carr and Kemmiss's (1986) influential *Becoming Critical: Education, Knowledge and Action Research* provided a new way of conducting educational research that also contributed to the development of teachers and to the advancement of the field of education as a whole.

Since then, Louis Murray (1992) has defined practitioner-based enquiry as the process by which education professionals "systematically reflect on their own institutional practices" in order to achieve a degree or credential (p. 191). According to Murray, this establishes the idea that an individual's professional experience can be viewed as a resource that can provide direction for further research that uses other established methods. Richardson (1994) defined two types of research on practice: practical inquiry and formal research. Richardson stated that practical inquiry is conducted by practitioners to help them improve their own practice in their everyday lives by helping them better understand the context, practices, and stakeholders they are working with. On the other hand, Richardson defined formal research as the more traditional form of research—quantitative, qualitative, or mixed methods—designed to contribute to general knowledge of the field and knowledge base.

There are four characteristics that define practitioner-based enquiry: (a) the research problem derives from and informs the concerns of education professionals; (b) these enquiries arise out of dialogue with other educational professionals; (c) the researcher is familiar with methodological approaches in education; and (d) through the process, the goal is to acquire intellectual

knowledge, improve decision making, and generate more technical competency in practice (Murray, 1992).

In recent years, several researchers have expanded the use of practitioner-based enquiry beyond the K-12 classroom into the post-secondary setting. Most common are investigations into student learning and teaching methodologies, such as with Dirkx (2006), a long-time adult educator who applied these concepts to his work researching adult education in a post-secondary context, and investigations by instructors such as Kassam (2010), who used it to look at the structure and teaching methods of two international development courses.

However, Murray's (1992) criteria do not preclude using this approach for non-classroom-based educational settings. For example, Melville, Jones, and Campbell (2014) used this approach to investigate how a secondary science department was faring under a distributed leadership model, and Hulme, Cracknell, and Owens (2009) used it to explore how to overcome the challenges presented by multi-agency collaborations required to enact large-scale public policy initiatives such as *Every Child Matters*.

Dirkx's (2006) description of his approach particularly resonated with me. He suggested that a practical inquiry approach creates an "insider" orientation to formal research that ensures that data-driven recommendations are tempered by what is valued and desirable in the field of practice. Because I am formally trained in business and engineering, the objectivist, experimental approach—with rigor defined by internal and external validity but tempered with room for personal perspective and opinion—aligns with my personal beliefs. Dirkx wrote that he approached his work from an orientation toward practice-based research and the practitioner's desire to inform his own practice and potentially contribute toward a larger knowledge base. This is the formalized inquiry approach I sought to emulate

in my research rather than the more generalized practitioner enquiry described by other researchers.

### **1.3.2. My Interest in this Research**

My journey began at the Engineering Placement Office of a small, private research-based university in upstate New York in 1993, where after completing my master's degree in engineering, I accepted a part-time role as a career advisor and international student advisor. As created, my role was specifically to assist with the placement of our engineering students, who were mostly international, into co-op and post-graduate roles through one-on-one career advisement on application materials and referrals to employers. When I began to investigate what other schools were doing to support their students, I started to incorporate additional services into the placement office, including the first-ever career fair, a job board, and on-campus interviews.

After I had been in the role 2 years, the university made the decision to centralize the placement office by combining it with the Career and Counseling Centre. My duties shifted over to this new office, where, due to my lack of formal counseling training, I became the employer relations and program development specialist. In this role, I served as the university's representative to a consortium of 22 Rochester area schools that worked together to organize nine career fairs per year.

My work with the consortium opened up a new opportunity for me to move into a full-time role at a medium-sized, public, teaching-focused 4-year college as their employer relations specialist in the centralized Career Services Department. In this role, I implemented an online job board, developed a resume referral system, and created a new workshop series in collaboration with Alumni Relations,

“Passport to Career Leadership,” designed to connect students with alumni. My role primarily centered on networking and coordinating events.

After 3 years in this role and a brief detour into corporate recruiting, in 2000 I became a career advisor at an MBA-only career centre at a large, public, research-based institution in California working specifically with international students. I was able to bring my program development and employer relations experience into this role that focused on the technology sector. After a few years, my organizational and multitasking abilities provided me the opportunity to move into an associate director role managing the internal operations of the centre. My director and mentor was a master at institutional politics who was able to shield the career centre through difficult times and grow it when times were good. He aligned the centre’s philosophy with the institution’s aspiration to move up to the top 30 in multiple national ranking publications, built strategic alliances with faculty, and deliberately sought out diverse opinions and innovations to keep the career centre’s services fresh. In hindsight, I wish I had spent more time absorbing his wisdom on navigating institutional politics, which would certainly have kept me from making some of the mistakes I made along the way.

I moved into my first career centre director role in 2006 at a small, private, research-based institute that only offered master’s and doctoral degrees in the business of bioscience. It was a one-person career centre—me—and my role included everything from meeting one-on-one with students, developing employer connections, developing online materials, and maintaining the employer database. I reported to the provost and had my first experiences working with boards of directors and corporate advisory boards, developing and justifying my budget, and defending my department to faculty and other naysayers. After less than a year, I was asked to take on the role of assistant vice president of enrollment management, and admissions, recruitment, and student services were added to my portfolio. While I still worked with students directly in career development, my

self-identification as an administrator rather than a service provider was firmly established. Next, I returned to a role in a centralized career centre at a very large public university to manage the employer engagement portfolio. In 2010, I relocated to Vancouver, BC, and started as associate director at the business career centre, called the Career Management Centre, of a large, public, comprehensive university, where I am today.

As the evidence indicates, my experience in career centres is broad and encompasses both large and small institutions, decentralized and centralized career centres, and multiple geographic regions. This breadth of experience has exposed me to the operational, structural, and cultural differences across career centres and institutions. While I personally believe that career development is a critical component of post-secondary education, most of my institutional experience shows that in difficult financial times, student services—including career services—are often sacrificed to support the academic units providing direct instruction to students. Such practices have instilled my deep belief that, in general, career centres are not considered core units within post-secondary institutions.

At the centre where I currently work, my portfolio has shifted at least five times, including the shift to my current role as executive director in 2015. We have sought to keep up with the pace of change in institutional priorities, funding levels, leadership transitions, and enrollment shifts. My manager has a very transparent approach; even before I officially became director 2 years ago, he involved me in many of the operational issues of the centre. Following several years of good financial times, when I took over the centre, there had been 2 years of budget cuts that reduced the operational budget by 40% and the staff by two full-time positions as the institution shifted funds to support academic units. I was being held accountable for the post-graduate success of our alumni and asked to support the



institutional objective of placing in national or international rankings. Protecting and increasing our resources was a priority for me.

During this time, I embarked on the research phase of my EdD program. When looking for data to justify resource increases for my centre, I was unable to find any benchmarking information from other Canadian career centres. The opportunity to apply academic rigor to collecting information that would be valuable in practice was ideal. From this perspective, this project was developed and implemented.

The next section will review the delimitations built into this study.

## **1.4. Study Delimitations**

This study was delimited in several ways. First, in regard to the time frame under examination, a period of 5 years was selected as the measurement timeline for open-ended questions since many institutions work with a 5-year planning cycle (British Columbia Institute of Technology, 2015; Red Deer College, 2012; University of Toronto Libraries, 2013). The timeline delimitation of 5 years presented challenges to gathering accurate data in this study because staff turnover is high within career centres, which may have led to loss of institutional memory. A shorter timeline such as one year may have provided more accurate data from respondents but would have been less likely to capture the trends.

Another delimitation is that this study only looked at Canadian career centres within a public post-secondary context. Some career planning centres in secondary educational settings, private post-secondary institutions, and government agencies that may face many of the same or similar resource issues were excluded from this study. This delimitation allowed me to focus on the area of most interest—Canadian public post-secondary institutions. Additionally, private institutions that provide certificates in languages, technology, or other specialized

programs were excluded from this study. I only included participants from degree-granting institutions.

One other key delimitation is that the survey was exclusively in English. This excluded from participation any school whose staff members do not read sufficient English to complete the survey. This delimitation stemmed directly from my inability to read or write in French and a lack of budget for translation. Delimiting this study to English had an impact on the ability to describe the Canadian landscape in its entirety. Quebec is the only province that regulates and licences the practice of career counseling and is the only province to have the CEGEP category of post-secondary institutions. Delimiting the study to English exclusively likely means that the differences within this province are not captured fully.

While the removal of these delimitations would perhaps make the results of the study more broadly applicable to other settings that provide career-related services, the primary intent was to inform the practice of Canadian post-secondary career centres in the current era.

## **1.5. Chapter Summary**

In this chapter, I provided an overview of the need and purpose of this study in today's context. I outlined the research questions that were investigated, provided my background and interest in this study as a practitioner-researcher, and indicated the delimitations of the study.

The next chapter provides an in-depth review of the literature that provided a foundation for the research questions investigated and impacted the design of the survey instrument. The second half of Chapter 2 also provides the process I underwent to choose the theory I used as the analytical framework for the analysis—Hackman's (1985) theory of power and centrality in resource

applications. Chapter 3 then presents the rationale I used to determine the appropriate methodology to answer the questions. It details the methods I used to develop the survey and collect the data. It also includes an overview of how I used Hackman's theory in the analysis. In Chapter 4, I present the results of my study, focusing first on the data that describe the current state of career centres and the variables that impact their operations. In the second half of Chapter 4, I outline how I used Hackman's theory to determine if there are any current practices that impact the resource allocations to career centres. Finally, Chapter 5 outlines how my findings will contribute to the practice of career services and concludes with concrete recommendations for further study to better understand the role of post-secondary career centres in Canada.

## **Chapter 2.**

### **Literature Review**

This chapter is organized into four primary sections. The first section includes a brief overview of the historical role of career centres in the post-secondary context in Canada. For each era in career centre history, I delineate the external conditions that were influencing career centre operations at the time, the internal organization factors career centres were working within, the financial and human resources needed to operate a career centre of the day, the services provided, the philosophical orientations, and the measures of success.

The second section discusses in more detail the role of career centres on campus today. As in the first section, the external conditions, internal organizational factors, resources, services, philosophical orientations, and measures of success are delineated into subsections. This section also includes speculation as to how these factors may impact the role of career centres in the immediate future.

The third section of the chapter reviews the journey I took to reach the theoretical framework key to this study—Hackman’s (1985) theory of power and centrality. The section provides an overview of Hackman’s theory and why it was an appropriate framework for analysis. Continuing to use a practical inquiry lens, I end this section with examples of Hackman’s theory used in research.

Finally, Chapter 2 includes a review of the areas well covered by existing literature and identifies gaps that currently exist. This chapter ends with a brief introduction on how the literature informed the methodology described in Chapter 3.

## **2.1. Historical Role of Career Centres in Post-Secondary Education**

Over the last several decades, the role that career centres play on campus has changed dramatically. The history behind those changes bring context to their current mission, scope, and role within the sector. The evolution of career centres on Canadian campuses closely mirrored their U.S. counterparts and can be divided into five eras by following the timeline framework presented by Dey and Cruzvergara (2014). Table 1 provides the defining characteristics of the four most recent eras as outlined by Dey and Cruzvergara. Having begun my career in the early 1990s in an institution that was behind the times in many ways, my lived experience resonates with the most current three eras.

Dey and Cruzvergara's (2014) framework was used as a guide for the next section of this chapter. For each of the eras following the pre-1940 era, I present an overview of the key components of the day-to-day operations of the centres, including key external and internal organizational factors influencing centres, the resources available and staffing structure, the services provided, the philosophical orientation of the centre, and the measurements of success.

**Table 1: Evolution of career services in higher education**

	<b>1940–1970</b>	<b>1970–1990</b>	<b>1990–2010</b>	<b>2010–present</b>
<b>Paradigm</b>	Placement (Reactive)	Counseling (Proactive)	Networking (Interactive)	Connections (Hyperactive)
<b>Environmental factors</b>	GI Bill and manufacturing boom	Self-actualization movements, diversity of candidates and less jobs	Dot.com boom, technology, university funding, globalization, and generational changes	Economic downturn, less jobs, society's expectations, value of higher education, and social media
<b>Purpose</b>	Placement	Decision making & skill development	Preparing, educating & revenue generating	Building connections and communities
<b>Method</b>	Employment service	Counseling, workshops and print materials	Coaching, courses, career fairs, and web resources	Facilitating, relationship development and social media
<b>Name</b>	Placement center	Career development center	Career services	Career and professional development
<b>Stakeholders</b>	Students and employers	Students	Students, employers and parents	Community, students, alumni, employers, parents, faculty, administrators and government
<b>Theoretical orientation</b>	Tract factor (criteria matching)	Typology; matching based on personality, interests and skills	Eclectic, based upon counselor's theoretical orientation	Design thinking, strength based, chaos and happenstance
<b>Provider identity</b>	Job filler	Generalist counselor	Supportive coach, organizer, and educator	Customized connector, multifaceted, relationship developer and group facilitator
<b>Provider skills</b>	Processing	Counseling	Multitasking, coaching and coordinating	Facilitating, synthesizing, connecting and specialized expertise
<b>Director profile</b>	Placement director	Director; senior counselor, staff trainer and supervisor	Executive director; manager of operations, employer developer and fundraiser	Elevated role (AVP, VP, Dean): visionary, strategic and political leader, convener of stakeholders and change agent
<b>Reporting line</b>	Student affairs	Student affairs	Student affairs and academic affairs	Enrollment management, advancement and development, alumni relations, academic affairs and student affairs
<b>Location</b>	Placement office	Counseling office	Web, classroom, and event hall	Mobile, social media, and hot spots
<b>Employer recruiting strategy</b>	Demand	Selective	Experiential learning (early identification)	Branding and campus engagement
<b>Industry growth</b>	Manufacturing and mining	Retail and service	Technology, finance, real estate, and government	STEM, energy, social impact, health care, and media
<b>Measures of success</b>	Placement data	Appointments and attendance at programs	Learning outcomes, engagement, and generated revenues	Employability: first destinations, reputation, and engagement

Source: Reproduced from "Evolution of Career Services in Higher Education," by F. Dey and C. Cruzvergara, 2014, *New Directions for Student Services*, 148, pp. 12–13.

### **2.1.1. Pre-1940**

There is limited information about the earliest days of career centres on post-secondary campuses. Career counseling in Canada started as a social justice movement at the turn of the 20<sup>th</sup> century by social organizations such as the YMCA and the Salvation Army which focused on finding individuals housing, training and work (Bezanson, Hopkins, & Neault, 2016).

Career guidance in education as we now know it evolved out of the secondary system. Within the post-secondary system placement of students was not a priority since many students came from upper-class backgrounds and brought with them the family ties necessary to secure employment. Other students came from an agricultural background and harbored the intent of returning to the family farm (Powell & Kirts, 1980). In Canada, the lobbying of Etta St. John Wileman was responsible for the addition of career guidance and counseling in secondary schools, starting around 1920. She was also instrumental in providing the first labor market information specifically for Canadians (Van Norman, Shepard, & Mani, 2014). Her legacy continues to be recognized and honored by the Canadian Education and Research Institute for Counseling (CERIC) in an annual award for a significant and lifetime commitment to the career development field.

In the post-secondary sector, prior to World War II, post-secondary enrollment was limited to primarily highly qualified, privileged males, and career advisement was primarily provided by faculty mentors or sponsors (Herr et al., 1993; Kretovics, Honaker, & Kraning, 1999). The first specialized career development professionals began to appear when the post-WWI baby boom created a need for more qualified teachers and vocational guidance within primary and secondary schools to cope with the increased demand for literacy in the industrialized age (Pope, 2000). The Great Depression of the 1930s and the

increasing industrialization spurred by Franklin D. Roosevelt's New Deal inspired many individuals to seek additional education as a way to secure more lucrative employment (Nash & Romero, 2012). Dey and Cruzvergara (2014) characterized this era as "Vocational Guidance and Teacher Guidance."

Toward the end of this era, post-secondary institutions opened their doors to women and visible minorities. By 1940, the number of women participating in post-secondary education exceeded 600,000 in the United States (Nash & Romero, 2012). Women were encouraged to seek further education to make them better wives and mothers since they were expected to marry following their education. Social norms, particularly in the 1930s, dictated that jobs first went to men and only secondarily to women. For those women who had to seek employment out of necessity, they were paid less than men and were expected to stop working once married (Nash & Romero, 2012).

During this time, there was also an increase in demand from visible minorities for inclusion in post-secondary institutions. The National Association for the Advancement of Colored People in the United States won a series of desegregation cases against post-secondary institutions that opened the doors for many to the social advancement brought by higher education (Nash & Romero, 2012).

### **2.1.2. 1940–1970**

According to Dey and Cruzvergara's (2014) framework, the paradigm of the period between 1940 and 1970 was "placement," a reactive paradigm, and the primary role for staff in the placement office was to be a job filler. The next subsection will detail the environmental conditions, internal organizational factors, resources required, services provided, philosophical orientation and measures of success in this period. One of the seminal works in career services, cited often



throughout this section, was published in 1962. Teal and Herrick's (1962) *Fundamentals of College Placement* was the first book that provided practical guidelines and operations of post-secondary career centres.

### **2.1.2.1. External Conditions**

After WWII, the influx of returning veterans to colleges and to universities through the GI Bill in the United States and the post-war economic boom changed the landscape of higher education (Dey & Cruzvergara, 2014). In Canada, the federal government began funding vocational counseling for returning veterans in an attempt to fit the person to the job (Bezanson et al., 2016). Dozens of colleges were started across the United States and Canada in order to assist in the retraining of returning veterans, and as a place for women, who had increasingly entered the workforce during the war and were being displaced by returning males, to further develop their skills. In 1940, women represented 26% of all university students (Thelin, 2011).

A landmark legal decision in 1954 in the United States, *Brown v. Board of Education*, officially ended the policies of segregation at public institutions. However, desegregation did not come easily to campuses, and social unrest, protests, and even violence were seen on campus, as exemplified by when President Kennedy had to call the National Guard to remove Governor Wallace from blocking two black students from enrolling at the University of Alabama in 1963 (Elliot, 2003). By 1970, about 10% of the college population in the United States was African American (Thernstrom & Thernstrom, 1998).

In Canada, through the 1960s, most blacks were descendants of slaves who had come north from the United States during the Civil War through the Underground Railroad. Segregated schools had developed in rural areas of Ontario, although not in Toronto, and in the Atlantic states. Through the 1960s, Canada had an immigration policy in place that restricted most immigration to

those with European backgrounds. Scant data are available during this time about minority student academic achievement in Canada (Cummins, 1997).

Much of Canada and some parts of the U.S. implemented policies to create residential school systems that required all Indigenous children to be educated in church-based residential schools away from their families. Residential schools began in the 1880s and continued until the last one closed in 1996. In the 1940s and 1950s, the government began to acknowledge the failure of these schools (White & Peters, 2009).

Recognizing the failure of these schools and hoping to take the moral high ground, the government began disbanding residential schools and encouraging enrollment of Indigenous students in provincial schools. The Indian Act of 1951 included tuition agreements to incorporate the education of Indigenous students in to provincial schools (White & Peters, 2009). However, the academic success of these students was poor, with more than 90% dropping out of school before the attainment of a high school degree and with very small numbers going on to post-secondary education (White & Peters, 2009).

During this time, in Canada, overall student enrollment in post-secondary institutions rose from just under 35,000 students in 1940 to more than 275,000 in 1970. To expand to meet this huge student demand, universities sought and received funding from both provincial and federal governments (Jones, 2014). Government spending on research and higher education caused the late 1950s and 1960s to be known as “Higher Education’s Golden Age” (Thelin, 2011, p. 33). Between 1960 and 1970, the number of Canadian universities doubled as new institutions such as Simon Fraser University, Brock University, the University of Windsor, University of Calgary, and Université de Sherbrooke opened their doors to accommodate the large number of students seeking post-secondary education.

Existing campuses saw massive physical campus expansion and a need to hire large numbers of faculty.

By the mid-1960s, this dual funding model from both the federal government and the provinces was causing constitutional concerns for the provinces and, in 1967, federal funding shifted away from directly funding institutions to unconditional transfers of funds to the provinces (Jones, 2014).

### **2.1.2.2. Internal Organizational Factors**

The external factors detailed earlier caused changes to university organizational structures. According to former University of Toronto President Claude Bissell, the big shift on Canadian campuses was the increasing interest of students in university matters (University of Toronto, 2017). Prior to this time, students were not active participants in decisions of the university and rarely questioned the status quo. However, in the 1960s, Canadian students began to take an interest in university matters ranging from social equality for minorities, women, and members of the LGTBQ community to affordable housing to protecting staff jobs (Jones, 2014; University of Toronto, 2017).

The 1966 Duff Berdahl Report recommended that universities seek to include more internal representation on their bicameral governance structures—the board and the senate. Within a decade, most Canadian institutions had shifted to include faculty on their governing boards and students on both their boards and senate. This transparency and inclusion expanded to other decision-making bodies within the institution at all levels (Jones, 2014). Administrative staff, such as career centre directors, were not generally included in these governmental bodies.

In regard to career centre services, from the beginning of this era in the 1940s, as employer demands for qualified candidates increased, institutions responded by creating placement centres focused on matching students with

employer needs (Wessel, 1998). While other student services units were focused on student development issues such as emotional support and academic remediation, placement centers were tasked with matching candidates with potential opportunities. With institutions focusing on employer demand, new job-related training programs began to emerge, particularly within professional schools such as teaching, law, medicine, and business, with the goal of providing placement for these graduates (Kretovics et al., 1999).

In the 1950s and early 1960s, as recruiting activity increased, career centres saw a shift toward centralization of services to an all-institution model. Arguments for this model included that it suggested that placement was central to the total institutional mission rather than a peripheral activity; that it provided efficiency in space, records, staffing, and time; and that it provided enhanced convenience to employer representatives (Teal & Herrick, 1962). However, many institutions continued to maintain decentralized offices for students in their professional schools.

What the unit providing career-related services on campus is called is also reflective of the mission of that unit and the value placed on it by senior administrators. In those early days, most career centres were called placement offices, which was reflective of their role and orientation (Herr et al., 1993).

### ***2.1.2.3. Career Centre Resources and Staffing***

Kretovics (2011) referred to two types of resources in the post-secondary context: (a) finances and funding, and (b) people and processes. According to Teal and Herrick (1962), "One of the most realistic ways of measuring the institutional stature of an office is to learn the amount of money the institution is willing to spend on it" (p. 32). Another scarce resource on many of today's campuses is space.

During the 1940s and 1950s, career centres moved away from fee-for-service models to the expectation that institutions would cover the cost of employment services for students since placement had become an integral part of the educational concept. At that time, the first budget recommendations were developed, with recommendations from the College Placement Council to look at both the average numbers of dollars spent per student and a measure of the quality and type of services provided to students. Teal and Herrick (1962) also argued that career centre budgets will “depend on how well the services emerge in the total educational process and on the success of the placement director in convincing others that a worthwhile and necessary job is being done” (p. 34).

In terms of staffing, the type and number of staff at career centres have varied according to the size of the institution, the kind and number of services offered, and the philosophy of the academic institution. Other than a director, who was almost exclusively male, offices might have had industry specialists, counselors, or other specialists such as someone specializing in part-time employment or someone for graduate students. Secretarial staff were also important due to the high volume of administrative tasks, including appointment scheduling, maintaining student records and credential files, answering the phone, and typing job descriptions and forms (Teal & Herrick, 1962). Professional placement centre staff tended to come from business backgrounds or were trained in vocational guidance through on-the-job training rather than from traditional counseling backgrounds (Niles & Harris-Bowlsbey, 2005). In 1962, The College Placement Council's *Fundamentals of College Placement* recommended that the qualifications for the career centre director were as follows: “In addition to organizational ability, his work calls for administrative skills and a wide knowledge of the world of business” (Teal & Herrick, 1962, p. 55). Bachelor's degrees, in any discipline, were expected, with some emphasis in psychology, education, or counseling indicated as being particularly useful for professional staff, while college graduates with secretarial training were preferred for administrative staff.

The *Fundamentals* also noted that, since placement directors are working with faculty and the administration, it would be beneficial to hold an advanced degree, particularly on campuses where the “academic atmosphere is especially strong” (Teal & Herrick, 1962, p. 60). In many cases, the placement director also had faculty status.

In this period, some of the first physical career centres were purposely built as placement offices. In planning these centres, selecting an office location for the convenience of company representatives recruiting on campus as well as in a location easy for students to access were considered key. Purpose-built centres of the time often included large records rooms, interview rooms, psychological testing labs, meeting rooms, a reception/library area, and bulletin boards for job postings and other materials (Teal & Herrick, 1962).

#### **2.1.2.4. Career Centre Services**

In 1962, the College Placement Council proposed that if all career services operations in the United States and Canada were to decide on an appropriate motto to their work, it would be the following: “Service to the student. Service to the employer. Service to the institution” (Teal & Herrick, 1962, p. 1).

During the 1960s, due to high employer demand to hire directly from campus, career centre services could primarily be grouped into three categories: distribution of information about employers and job opportunities, facilitating on-campus interviews for employers, and counseling (Teal & Herrick, 1962). Distribution of information included having job book or bulletin board and display cases of employer information for students to review. Facilitating campus interviews included job postings, resume referrals, providing information to students about the company, and introductions to other individuals on campus such as faculty. Counseling primarily referred to one-on-one appointments with students for self-assessment and career guidance.

It can be inferred by Teal and Herrick's (1962) exclusive use of the pronoun "he" when describing students that services were designed almost exclusively to help male students enter the workforce. The College Placement Council's 1962 *Fundamentals of College Placement* did include a chapter on placement of women students as a separate section that highlighted that because many women were likely to leave the workforce after a few years when they married, special consideration needed to be taken regarding where they were placed (Teal & Herrick, 1962).

#### **2.1.2.5. Philosophical Orientation**

Parsons' three-part trait and factor theory provided the underlying theoretical assumptions of the placement center of the 1950s from a counseling perspective. In this framework, to choose a vocation,

there are three broad factors: (1) a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations, and their causes; (2) a knowledge of the requirements and conditions for success, advantages and disadvantages, compensation, opportunities, and prospects in different lines of work; (3) true reasoning on the relations of these two groups of facts. (Parsons, 1909, p. 5)

This theoretical perspective led to the development of multiple assessment instruments to help individuals understand themselves to match them with appropriate careers. It set the tone for career development to be based on a logical, positivism framework (McMahon, 2014). It was during this period that John L. Holland first developed his personality inventory, which defined six different vocational personalities and corresponding occupational environments and proposed that people thrive in the occupational environment that best suits their personality (Holland, 1958, 1959). Holland's personality types are still in use today; advisors assist clients to identify congruence between the individual's three predominant Holland types and different career paths to explore (Niles &

Hutchison, 2009). The six personality types (known as the RIASEC model) as defined by Holland (1992) are described below:

- **The Realistic Type:** This personality type refers to people who are apt to be "Conforming, Frank, Genuine, Hard-headed, Persistent [...] Practical, Thrifty and Inflexible." Realistic type individuals prefer activities that include "the explicit, ordered, or systematic manipulation of objects, tools, machines, and animals." They also value "concrete things or tangible personal characteristics—money, power, and status" (p. 19).
- **The Investigative Type:** The Investigative personality type describes individuals who are "Analytical, Cautious, Curious, Intellectual, Introspective [...] Rational, Reserved and Pessimistic." The Investigative individual prefers activities that entail the "observational, symbolic, systematic, and creative investigation of physical, biological and cultural phenomena in order to understand and control such phenomena." They also perceive themselves as "scholarly, intellectual, having mathematical and scientific ability, and lacking in leadership ability" (pp. 19–20).
- **The Artistic Type:** The Artistic personality type refers to people who are "Complicated, Emotional, Expressive, Imaginative, Idealistic [...] Intuitive, Nonconforming, and Sensitive." Artistic individuals prefer "ambiguous, free, unsystematized activities that entail the manipulation of physical, verbal or human materials to create art forms or products." Artistic individuals value "esthetic qualities" and perceived themselves as "expressive, original [...] having artistic and musical ability and ability in acting, writing and speaking" (pp. 20–21).
- **The Social Type:** Individuals of this personality type prefer activities that "entail the manipulation of others to inform, develop, cure, or enlighten; and an aversion to explicit, ordered, systematic activities involving materials tools, or machines." Social individuals tend to be "Cooperative, Patient, Friendly, Empathetic, Persuasive [...] Tactful, Understanding and Warm." People of the Social type view themselves as "liking to help others, understanding others, having teaching ability, and lacking mechanical and scientific ability" and they value "social and ethical activities and problems" (p. 21).
- **The Enterprising Type:** Enterprising type individuals tend to be "Acquisitive, Adventurous, Domineering, Energetic, Excitement-Seeking [...] Optimistic, Self-Confident, and Talkative." These individuals prefer activities that include "the manipulation of others to attain organizational

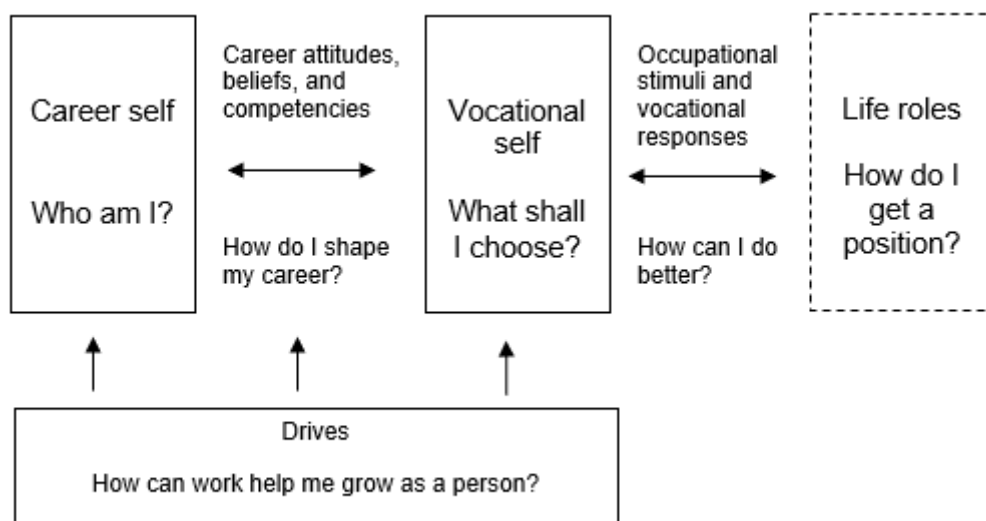


goals or economic gain; and an aversion to observational, symbolic, and systematic activities.” Enterprising individuals value “political and economic achievement” and see themselves as “aggressive, popular, social [...] possessing leadership and speaking abilities, and lacking scientific ability” (pp. 21–22).

- **The Conventional Type:** Conventional personality type people prefer activities that “entail the explicit, ordered and systematic manipulation of data, such as keeping records, filing materials, reproducing materials, organizing written and numerical data according to a prescribed plan and operating computers to attain organizational or economic goals.” These individuals tend to be “Careful, Conscientious, Efficient, Inflexible, Methodical [...] Obedient, Practical, and Orderly. Individuals of the Conventional type value “business and economic achievement” and perceive themselves as “conforming, orderly, and as having clerical and numerical ability” (pp. 22–23).

Many tools still in use today such as the Strong Interest Inventory, CHOICES, and Career Cruising are based upon Holland’s work (Neault, 2014).

Placement, while more an orientation than a theory, is the term used to describe an emphasis on *placing* students into particular jobs. It includes helping the student find relevant openings, conducting an effective job search, and helping students to present themselves effectively to employers (Lent & Brown, 2013). Savickas (1996) provided a framework for career assessment and intervention in practice, as shown in Figure 1. In his framework, placement falls in the “life roles” component of the framework because it is the way in which individuals who have made a career choice go about achieving the job in that occupation. Savickas suggested that many of the activities commonly found in post-secondary career centres, such as writing resumes, networking, job search, and interview preparation, are placement interventions. He also maintained that helping students apply for graduate school falls within the placement function.



**Figure 1: Savickas' framework for linking career theory and practice**

Source: Reproduced from "A Framework for Linking Career Theory and Practice," by M. Savickas, 1996, in M. L. Savickas & W. B. Walsh (Eds.), *Handbook of Career Counseling Theory and Practice* (p. 198), Palo Alto, CA. Copyright 1996 by Davies-Black.

The placement orientation of this time was in alignment with the philosophy *in loco parentis*, present through the early 1960s at many institutions, wherein the role of the institution was to provide for students in lieu of their parents (Kretovics et al., 1999). This orientation is still very prevalent in many career centres today.

#### **2.1.2.6. Measures of Success**

During the period up to the early 1970s, the primary measure of success for career centres was the placement rate of new graduates (Dey & Cruzvergara, 2014). Surveys tracking the types of jobs accepted by graduates, starting salaries, classification of fields, reasons for selecting different careers paths, numbers of interviews and offers, and the geographical distribution of graduates were recommended. Career centres also surveyed employers on their starting salaries, special requirements for different fields, organizational structures of the recruiting offices, and training programs offered by the company and tracked this information

to share with students. Best practices of the time for distributing placement information included providing talks at high schools, developing a report for public distribution, promoting successes in campus publications, posting bulletin board updates, and creating a placement newsletter for faculty and administration (Teal & Herrick, 1962).

It is worth noting that post-graduate placement is not necessarily a reflection of the quality of services offered by the career centre. There are many other factors that impact post-graduate placement rate, including the general reputation of the program/university, the opportunities available within the geographic region of the institution, the personal connections that students possess, and the motivation of individual students to seek employment following program completion within the time frame of data collection. Tracking placement rate as a success measure is, at best, an indication that the career centre values the post-graduate employment of its students as an important outcome.

### **2.1.3. 1970–1990**

The period from 1970 to 1990 was characterized by Dey and Cruzvergara (2014) as having “counseling” as its paradigm. They considered this to be a proactive paradigm; the career centre’s purpose was to help students make career decisions and develop career-related skills, and the primary role of the staff was to be a generalist counselor who would provide counseling, workshops, and print resources for students.

Two seminal books on career centre management were published during this era. The first one, *Career Services Today: A Dynamic College Profession*, was published in 1980 and authored by Powell and Kirts. The second was published just as this period was coming to an end: *Handbook for the College and University Career Center* by Herr et al., published in 1993. Both of these works sought to

provide comprehensive guidelines for career centre leaders on how to operate their centres in the United States.

The next subsection reviews each of the same six areas as for the prior era to provide more detail about the role of the career centre during this time period.

### ***2.1.3.1. External Conditions***

By the 1970s, each of the provinces had developed its own higher education system that generally consisted of two sectors—the university sector, which enjoyed high levels of autonomy, and the college sector, which, because it was considered an instrument of public policy, was much more tightly regulated and managed (Jones, 2014). The federal government’s role in providing support was primarily through the funding of research through specialized councils and through student loan programs.

The end of the baby boom lessened the demand for teachers, government hiring leveled off, and, while private sector hiring continued, the rate of growth slowed (Powell & Kirts, 1980). The worldwide recession of the 1970s reduced the tax base available to provinces and funding for higher education. Institutional leaders could no longer expect to receive the funding they requested and were expected to find their own solutions to their economic challenges. Provincial policy priorities were focused on access and funding, with governments encouraging institutions to increase enrollment while also limiting their funding growth. This era saw the rise of faculty associations who were concerned that institutions were looking to cut faculty salaries as a cost-saving measure. Faculty associations set guidelines for appointment, tenure, and promotion for faculty. According to Jones (2014), these structures and arrangements remained in place, with minor variations, until the 1990s.

The 1970s and 1980s also saw the worldwide rise of New Public Management (NPM), a movement to apply business practices to the public sector. According to Tolofari (2005), several reasons accounted for the widespread adoption of NPM. The first of these were economic drivers as governments sought ways to cut the costs of delivering public services. The second factor was political; there was a general ideological shift in many countries such as the United States and Britain toward smaller government and more reliance on market forces. The third factor was social. Tolofari noted that there were increasing demands from a better educated population for accountability and performance from their government officials. Intellectual drivers were also at work with the formal documentation of process and practice being done by scholars of the time on the private sector that, it was hoped, would bring effective solutions to the public-sector challenges. The final driver was technology and the rise of computer-based systems to collect and share information. The convergence of these factors brought about the age of NPM to Canada.

NPM in action consists of three broad components: (a) marketization of the public sector, (b) disaggregation of policy and administrative functions to increase efficiencies, and (c) linking incentives to performance (Bhatta, 2006; Peters, 2013).

- **Marketization:** When the public sector takes on some of the characteristics of private enterprise such as commercial revenue generation, contract competition for labor and other resources, courting new donors with return-on-investment mindsets, and social entrepreneurship that precludes unprofitable missions, these market-like behaviors are said to characterize “marketization” (Eikenberry & Kluver, 2004). According to Hood (1995), this includes creating cost-centre based departments that can be held accountable for cost containment in their unit. An example of this at work in the post-secondary system is the development of interdisciplinary “Centres of Excellence” which work collaboratively with industry partners with their own budgets outside the traditional university departmental structure (Mok, 1999).

- **Decentralization of policy and administrative functions:** A primary objective for organizations under NPM is the decentralization of decision making to achieve more flexible structures and less hierarchy, which leads to faster decision making, reduced compartmentalization, and the reduction of internal barriers (Diefenbach, 2009; Santiago & Carvalho, 2008). This creates more emphasis on hands-on top management who follow private sector practices such as goal creation, assignment of responsibility, and accountability measures (Hood, 1995). Additionally, it generates an environment with more contract-based workers who are hired to solve an immediate issue, allowing the institution the flexibility to shed these roles when they are no longer needed (Lorenz, 2012; Rhoades & Slaughter, 1997) or create an environment where some functions can be outsourced to a third party (Lombard & Morris, 2012).
- **Linking incentives to performance:** The third general characteristic of NPM is the linking of rewards structures and incentives to individual or departmental performance (Aoki, 2013). This includes not only creating formal performance measurement but also a greater emphasis on output controls, creating more pressure for results (Hood, 1995). In a higher education context, this could include rewarding departments with higher course enrollment with a more prominent space on campus or rewarding individual faculty members with higher pay for teaching more popular courses.

In addition, during this era, campuses were becoming increasingly diverse. By 1980, women made up 45% of the total undergraduate population, and by 1990, women surpassed men on campus. However, job opportunities for women through the 1960s were primarily in education and health care. The end of the baby boom and the recession of the 1970s saw a cut in these opportunities, which disproportionately impacted women in the job market. According to Rumberger (1984), the employment prospects for women college graduates in 1980 were significantly worse than the prospects for women were in 1960.

In 1971, only 3% of the adult Indigenous Canadian population had any post-secondary education. Responding to Aboriginal concerns over control of education, in the 1970s, the government started to turn over control of primary and secondary education to tribal bands (White & Peters, 2009). By 1991, the number

of Indigenous adults with some post-secondary education had risen to almost 19%. Despite this increase, this percentage was still less than half that of the general population who had post-secondary education (Cummins, 1997). In the 1980s, data showed that black Canadian high school students were significantly underrepresented in the advanced track leading to post-secondary education while they were significantly overrepresented in the vocational track compared to the general population (Cummins, 1997).

The overall job market for college graduates was shifting as well. In 1970, almost half of all college graduates in the United States were employed in the public sector. By 1980, that percentage had dropped to a quarter. More college graduates had to seek employment in the private sector, which generally had fewer high-level, high-paying opportunities for inexperienced college graduates. Additionally, because of the shift from higher paying public jobs to jobs in the private sector, relative earnings of college degree holders did not increase substantially except for black graduates compared to their white peers (Rumberger, 1984).

In Canada, a 1982 article catalyzed career development for youth by highlighting the number who were slipping through the cracks and leaving the educational system (Amundson & Borgen, 1982). This led to federal funding of a program called CAMCRY designed to fund projects between post-secondary institutions and community agencies to support at-risk youth. This project eventually became the Canadian Career Development Foundation, a grant-making organization supporting research in career development (Van Norman et al., 2014).

### **2.1.3.2. Internal Organizational Factors**

The external conditions outlined above led to changes within academic institutions that directly impacted the career centre's mission, structure, and

operations. As economic conditions changed and employers reduced their on-campus recruiting activities, the career planning functions that had been part of many counseling centres were combined with the placement services function to create “career development” centers (Niles & Harris-Bowlsbey, 2005). This shift led to the debate that raged in the late 1980s and early 1990s over the term *placement* (Wessel, 1998). Prior to this time, placement was used to indicate the transition of a student to a professional. With the inclusion of career planning and exploration activities, it became increasingly assumed that placement was the end result of a broader and more comprehensive process rather than a single incident. All of the activities making up this process were part of the career centre’s new scope (Herr et al., 1993).

Structurally, the trend to centralize career centres that started in the 1960s continued, with 80% of centres reporting being centralized in 1975 and that number rising to 87% in 1991 according to surveys by the College Placement Council (Herr et al., 1993). This era also saw the recognition of a variety of combined models where some elements of career services were centralized and others decentralized on the same campus.

Reporting structures were also shifting. In 1975, Herrick (as cited in Kroll & Rentz, 1988) found that about one-third of centralized career centre directors reported to the president of their institution, another one-third to the dean of students, and the remaining one-third to the chief academic officer. By 1993, almost 75% reported to the vice president of student affairs, while about 25% reported to the vice president academic/provost (Herr et al., 1993). Most decentralized career centres reported to the dean of the school that they served.

This was not the only change during this era. The rise of NPM led to the development of the *Standards and Guidelines* published in 1986 by the Council for the Advancement of Standards, a group of 21 professional associations in post-



secondary education in the U.S., to establish criteria for measuring and evaluating 16 components of student services, including career services. These standards defined the services to be offered, the organization and administration requirements of career services, skills needed by staff, the resources needed to provide career services on campus, and the ethical guidelines career centres should follow (Herr et al., 1993).

NPM, while impacting many areas of campus administration, was particularly predominant in career centre management. According to Herr et al. (1993), "The placement component of a university career center must be run very much like a business enterprise" (p. 96). Staff in this area of the career centre were expected to be very goal oriented, with attention to detail and follow-through and the ability to meet deadlines. In contrast, staff on the counseling side of the career centre were expected to be "process-oriented" to better facilitate quality relationships with students and provide a safe environment to explore their choices. The *Handbook for the College and University Career Center* outlined the need for the director to set an "office management philosophy" to become "effective" in his/her management and drive behavior expectations, goal setting, and policy (Herr et al., 1993, p. 97). A significant section of this resource book was dedicated to implementing performance appraisals of staff despite the primarily unionized environments that did not allow for merit-based pay.

### **2.1.3.3. Career Centre Resources and Staffing**

The financial situation of post-secondary institutions overall shifted from the Golden Era of the 1960s as governments shifted their resources to other priorities, as detailed in the section on external conditions. According to Herr et al. (1993), career centre budgets could be characterized by three things: (a) the majority of career centre budgets supported staff salaries; (b) operating budgets, at 10 to 15% of their total budget, were "meager" (p. 123); and (c) career centres were expected to raise a greater and greater proportion of their budgets by shifting the costs to

employers, other areas within the institution, or through fundraising. In 1991, average operating budgets for career centres in the United States that served more than 10,000 students ranged from \$30,000 to \$100,000 USD (Herr et al., 1993).

Career centres were encouraged to raise their own funds from their employer partners by encouraging them to advertise in career centre publications and manuals; shifting the cost of printing and mailing resume books to employers; seeking equipment grants to purchase copiers, computers, and other technology for their offices; charging specific fees for services like career fairs; and seeking corporate sponsorships in exchange for public recognition. After moving away from a fee-for-service model in previous decades, fees for students to use specific services such as assessments and advising became relatively common again, with about 33% of career centres reporting they charged these fees (Herr et al., 1993). Career centres also began to charge other departments for services such as access to employer mailing lists, materials to use in courses, and post-graduate placement reports. Fundraising and grant writing was encouraged to offset capital costs for career centre renovations.

During this era, there were six general types of staff members within large career centres: administrative managers who led the team; placement staff who worked with employers; counseling staff who provided counseling services; programming staff who delivered workshops, seminars, and other programming; graduate assistants interested in careers in career services; and support staff. These were supplemented by work-study students, interns, and volunteers on an as needed basis (Herr et al., 1993).

In looking at the qualifications of the staff, Powell and Kirts (1980) reported that by 1980 in the United States, “for assistant directors and placement counselors, nearly all institutions now require a master’s degree” (p. 221). They

further stated that it was not unusual for large institutions to require a doctoral degree of their directors. In terms of fields of study, they reported that decentralized career centres such as business or engineering tended to prefer those with a degree in that area, but for centralized career centres, degree areas varied widely.

In 1993, according to Dey and Cruzvergara (2014), the *Handbook for the College and University Career Center* laid out the basic credentials of the career centre director as academic training in counseling and career psychology to achieve credibility with the faculty, particularly in research institutions. The authors went on to state that having a management style that includes attention to metrics and outcomes, a result-based orientation, and strong communication skills will demonstrate to institutional leaders the significance of the career centre's contributions to student success and support for the institutional mission (Herr et al., 1993).

#### **2.1.3.4. Career Centre Services**

In the 1970s, 1980s, and 1990s, the first surveys of services offered by career centres in the United States were conducted. The College Placement Council ran longitudinal surveys in 1975, 1981, 1987, and 1991, and Table 2 shows the percentage of career centres offering various services noted in each of these surveys. While many of the service levels remained very similar over the years, a clear trend was the rise in cooperative education, internships, and experiential programs over this time period (Herr et al., 1993).

**Table 2: Percentage of career centres offering services**

	1975	1981	1987	1991
Career counseling	89	96	94	94
Occupational and employer information library	92	91	94	94
Placement of graduates into full-time employment	96	95	97	93
Campus interviewing	96	95	97	92
Placement of students into summer and part-time employment	81	83	87	83
Placement of alumni	87	90	89	83
Credential service	79	81	76	72
Resume referral	-	64	74	72
Cooperative education, intern, experiential programs	26	49	54	63
Resume booklets	-	62	56	56
Vocational testing	31	51	53	52
Computerized candidate database	-	-	-	48
Career planning or employment readiness course	-	30	32	32
Academic counseling	30	37	33	29
Dropout prevention or counseling	22	26	20	16

Note: Reproduced from *Handbook for the College and University Career Center*, by E. L. Herr, J. R. Rayman, & J. W. Garis, 1993, Greenwood Press, Westport, CT, p. 10.

Herr et al. (1993) categorized these services into four distinct areas that included workshops, courses, and seminars; group counseling services; individual counseling services; and placement programs that facilitate the student's transition to paid work. The widespread introduction of computers onto campuses brought with them new services such as computer guidance systems, online job boards, and online vocational assessments. It also provided the tools necessary to track and store more data on each individual student.

During this period, career centres began to tailor their programs and services to different student populations. Special services for non-traditional students were a primary focus of the time since many centres were taking a developmental approach (Herr et al., 1993). There were research studies on career development needs of other populations, such as Walter-Samli and Samli's (1979) investigation of international students, Cooper and Robinson's (1987)

comparison of male and female career needs in the non-traditionally female field of engineering, and Wilkes, Davis, and Dever's (1987) study of the career needs of college athletes. Herr et al. (1993) recommended tailoring small group career services to the following special populations: traditional-age college students, including undecided freshman and graduating seniors; returning adult students; African American students; Asian American students; academically at-risk students; Hispanic students; women; academically gifted-scholar students; international students; disabled students; veterans; and graduate students.

Career centres expanded their workshop and seminar topics to include career centre orientation, career planning issues, linkages between majors and careers, internship/summer job searches, job search skills, resume preparation, interview skills, orientation to on-campus recruiting, transition from school to work, graduate and professional school admission, time management, and stress management. Workshops outside the traditional 9:00–5:00 office hours were encouraged to provide options for non-traditional students and alumni (Herr et al., 1993).

Career courses for credit became popular, and experiential learning programs such as cooperative education programs, internships, externships, and summer job programs saw rapid expansion during this era. Career and job fairs, both in collaboration with student organizations or other groups on campus, became regular events on many campuses (Herr et al., 1993).

For many larger institutions, services for alumni were starting to emerge as a priority. At some institutions, alumni career services were incorporated into existing career centres, while at others a separate office was created, or it was embedded into the alumni relations function. Many institutions charged alumni for services as a way to offset the costs to provide the services (Herr et al., 1993).

Services for employers also changed during this time period. While on-campus interviews were still the primary service for employers, the first computer-based systems made scheduling easier. Computer-based resume books, networking tools, and referral systems were emerging. Both campus-based and public job boards proliferated through the use of technology. Career centres were encouraged to create special recruiting events for employers seeking to hire from specific populations such as liberal arts students or minority students.

### **2.1.3.5. *Philosophical Orientations***

As on-campus hiring slowed and employers changed their practices during this time period, to remain relevant many career centres shifted to a developmental focus that included the use of self-assessments to help students systematically engage in career planning and take ownership of their own career paths rather than rely on a matching process (Kretovics et al., 1999). Placement was viewed as the end of a career exploration process rather than the goal itself (Niles & Harris-Bowlsbey, 2005). The dominant career theory subscribed to by career centres transitioned from trait and factor theory to a more developmental emphasis on counseling and the application of career development theories (Kroll & Rentz, 1988).

Developmental career theories are used to describe the typical career progression of individuals and what happens when that career progression is interrupted. Donald Super proposed the most widely used career development theory in the 1980s. According to Super (1980), "A career is defined as the combination and sequence of roles played by a person during the course of a lifetime" (p. 282). In looking at careers in this way, he acknowledged that the importance of a particular role such as parent or worker may change over the course of an individual's life.

In a developmentally focused career centre, advisors start with an initial appointment or intake interview to determine the student's career needs. This is followed by further discussion of the individual's career roles, their career development experiences to date, their personal characteristics, and their self-vision of where they want to go with their career and life.

#### **2.1.3.6. Measures of Success**

The rise of NPM throughout the 1980s and 1990s brought with it an emphasis on strategic planning, evaluation, and outcomes. In comparing the two seminal books on the profession—*Career Services Today: A Dynamic College Profession* (Powell & Kirts, 1980) and *Handbook for the College and University Career Center* (Herr et al., 1993)—a key difference is evidenced in the tables of contents. While the 1980 book has a chapter on ethics, the 1993 book has a chapter on planning for a career centre, wherein ethics is a minor topic. Career centres that implemented the recommendations in the 1993 handbook created measurable overall goals for the centre that translated into measurable individual goals for each staff member. Committees were formed to develop specific plans around facilities, alumni services, and computer systems as business processes were brought into the institution.

By 1990, comprehensive surveys for each program and service offered by the career centre were common, as were summative surveys to evaluate the impact of career services as a whole. Suggestion boxes flourished. Due to their emphasis on counseling and development, career centers focused on measuring workshop and appointment numbers in addition to placement data as a way of evaluating their success and impact (Dey & Cruzvergara, 2014). The advances in technology allowed for more data to be analyzed, and career centre directors were encouraged to produce reports for senior administrators (Herr et al., 1993).

#### **2.1.4. 1990–2010**

Dey and Cruzvergara (2014) characterized this era as having an interactive paradigm of networking at its core. They defined the purpose of the career services office to be that of preparing and educating students while generating revenue to support its initiatives, and the role of the individual staff member was that of a coach, organizer, and educator. No new manuals were published during this era, or afterwards, regarding the management of career centre operations, so Herr et al.'s 1993 version remains the most current book. However, a multitude of journal articles provide a view into the more recent developments in career centre operations. The next subsection will review each of the same six areas previously discussed to provide more detail about the role of the career centre during this time.

##### **2.1.4.1. External Conditions**

By the 1990s, federal funding for education was provided to the provinces in a fiscal transfer as part of a bundle to cover expenditures on education, health, and other service programs. As the federal government sought to reduce its own deficits, these transfers were reduced. Throughout the 1990s, Canada reduced its public funding of higher education by about 1% of GDP—significantly more than any other industrialized nation in the world (Booth, 2000). These cuts left the provinces struggling to support post-secondary education, and each reacted in its own way. Some provinces significantly increased student tuition fees to cover the deficit and encouraged public-private partnerships (Jones, 2014). In Quebec, the philosophical belief in the public good of education prevailed, and colleges remained tuition-free while universities saw restrictions on tuition increases. Strategic plans around funding per student and loan and scholarship programs were put into place (Fisher et al., 2009).



In the years leading up to the 1990 to 2010 era, post-secondary institutions across Canada in response to budget cuts looked to the corporate sector to supplement their operational budgets, and there was a dramatic rise in partnerships between educational institutions and private companies. Research universities began to build centres to help faculty commercialize their research, such as The Institute for Space and Terrestrial Science located at York University, and encouraged them to spin off companies, with a portion of the profits returning to the institution. Universities also opened their doors to corporations to fund new departments and centres focusing on research of interest to that particular corporation, such as an arrangement by Dalhousie University to create a fiber optics department funded by Seimac (Buchbinder & Newson, 1990). This trend to partner with corporate entities continued through the 1990s.

By 2000, the federal government had eliminated its budget deficit and raised the transfer to provinces to support health care. However, it shifted its support for post-secondary education to providing financial assistance to help students meet the costs of rising tuition and creating a tax-free savings mechanism, the Registered Education Savings Program, to help parents set aside money for their children's education that would be bolstered by a government grant (Jones, 2014). The primary burden for paying for post-secondary education had permanently shifted away from the provinces to the individual student.

Because students and parents had to bear the rising costs of higher education, the interest in determining the return on their investment grew. In 1990, two major U.S.-based rankings were written for students considering post-secondary education choices—The *U.S. News and World Report's* reputational ranking and *Money Magazine's Money Guide: Your Best College Buys Now* (McDonough, Antonio, Walpole, & Pérez, 1998). In 1991, the first Canadian specific ranking, *Guide to Canadian Universities*, was published by *McLean's*. By 2010, reports had proliferated and expanded to include institutions outside the

United States, with *BusinessWeek*, *Financial Times*, *The Economist*, and *Forbes*, just to name a few, contributing their own assessments and rankings quantifying educational quality. Students were becoming savvy consumers of education, seeking to find the best value for their tuition dollars. For many students, the post-graduate employment prospects provided the best indicator of value.

Provincial governments took notice of the public's increasing interest in quality education. In 2007, the BC government, which had been led by the New Democratic Party for 6 years, released a special report, *Campus 2020: Plan for British Columbia's Post-Secondary Education System*, that outlined lofty goals for BC's post-secondary sector focusing on access and excellence. Specific targets included achieving the same rate of Aboriginal participation in post-secondary education as the general population and equalization of participation and attainment rates across geographic regions and income levels by 2020 (Plant, 2007).

The biggest impact on the job market for new graduates during this era was the dot.com bubble. In the 1990s, there was increased demand for technology-savvy graduates, and employers were back on campus in force. The number of work visas for technically trained international students and workers was increased. However, when the bubble burst and the world entered into widespread recession, jobs disappeared, and hiring for even the most technical graduates dropped (Hira, 2003).

All of these external factors impacted the day-to-day operation of post-secondary institutions and created internal organizational factors that will be reviewed in the next subsection.

#### **2.1.4.2. Internal Organizational Factors**

The external factors of the time contributed to the way career centres were structured internally. By 2008, 86% of academic institutions in the United States reported having a separately budgeted career services office (Vinson, Reardon, & Bertoch, 2011). This same survey of student affairs leaders indicated that 86% of the responding schools operated with a centralized career services model, while 14% had a combined centralized and decentralized organizational structure.

At this time, the majority of centralized career centres, 71%, reported to student affairs offices. Decentralized offices were more likely to report to an academic dean. By 2010, no career centres were reported as part of the counseling centre. During this period, the first career centres reporting to development or advancement, the fundraising arm of the institution, were reported (Vinson, Reardon, & Bertoch, 2014). In the late 1990s, a survey by Wessel (1998) found that about half of career centres were calling themselves “career centres,” about 30% were using something similar to “Career Development Centre,” and the remaining 19% were still using a form of “Placement Office.”

In terms of funding (as examined briefly in the external conditions subsection of this era), significant funding was no longer generalized in nature but directed toward research initiatives. Many student services units, being outside of the academic and research mission of the institution, saw proportionately larger budget cuts that directly impacted the resources available to career centres. A study conducted by Vinson et al. (2014) included a SWOT analysis of career centres by the chief student services officer of 40 institutions; Vinson et al. found that while career centre staff were dedicated, professional, and caring, inadequate staffing and fiscal resources were the two biggest weaknesses of career centres at the time. Vinson et al. concluded that resource allocation directly impacts the service and delivery of career services on campus. While this is not a surprising

result, this study did provide a data-driven investigation into the relationship between resources and services.

In response to fiscal pressures, the costs to provide many academic support services, including career services, moved to a cost-unit model that provided services to other campus units on a fee-for-service basis. Reduced resources also led to an increase in NPM practices on campus because administrators needed to make tough decisions based upon financial criteria rather than academic mission (Newson, 2014).

During this time in Canada, performance indicators were introduced both on campus and into the three largest research funding agencies to help make effective decisions. According to Newson (2014), with this “new means of resolving decisions about how, and on what basis, to allocate resources, criteria such as ‘efficiency,’ ‘productivity,’ and ‘accountability’ are becoming embedded in the routine day-to-day decision-making that takes place in ‘local’ units throughout the university” (p. 4). The focus shifted from quantity of students utilizing career services to ensuring the quality and effectiveness of the services being offered.

The desire to measure effectiveness and quality was evident within career services around the world during this time. In 1995, the *Canadian Journal of Counselling and Psychotherapy* published a special issue devoted to the “Issues and Solutions for Evaluating Career Development Programs and Services.” In 2000, three marketing faculty members in the United States wrote that “faculty have an obligation to monitor the effectiveness of their campus career services unit as part of their teaching mission” (p. 236). They developed a scaled instrument to be provided to students and administrators to measure the quality of career services across 17 dimensions broadly categorized into five groups: tangibles, reliability, responsiveness, assurance, and empathy (Engelland, Workman, & Singh, 2000).

In 2007, the Career Industry Council of Australia developed the Guiding Principles for Career Development Services and Career Information Products as a way to standardize and benchmark career services quality. Around the same time, the Quality and Accreditation Committee of the Association of Graduate Careers Advisory Service in the UK developed a matrix evaluation process to introduce continuous quality improvement into career services. In the United States, the National Association of Colleges and Employers (NACE) appointed a task force to review and revise the Professional Standards for College and University Career Services and the Professional Standards Evaluation Workbook (McCowan & McKenzie, 2011). McCowan and McKenzie (2011) sought to develop a generic benchmarking instrument that combined all of these evaluations and could be used in other settings.

The 1990s and 2000s clearly showed an increase in the expectation of accountability for career centres. As will be further discussed in Section 2.1.4.6, career centres responded by collecting and tracking more data types to justify their services.

### ***2.1.4.3. Career Centre Resources and Staffing***

Career centres continued to receive most of their financial and staffing resources from institutional funds, and many saw the direct impact of the reduction in governmental support hit their budgets. According to the 2009–2010 NACE benchmarking survey, more than half of the career centres in the United States (57.5%) saw a decrease in their operating budget for 2009–2010, with nearly 11% of the respondents reporting declines in excess of 20%. Less than 10% reported seeing an increase in their budget, most of those less than 5% (NACE, 2010).

A 2008 survey of student affairs officers reported that approximately 6% of career centres had raised enough funds to be named and endowed (Vinson et al., 2014). Simultaneously, reductions in institutional funding led many career centres

to turn to their employer connections for revenue generation (Dey & Cruzvergara, 2014). In the early 2000s, career centres, particularly in the United States, started to develop corporate partnership programs where, for a substantial annual fee, the career centre would provide employers with early access to top student talent, introductions to student clubs, speaking opportunities, and other benefits to build their brand on campus (Davis & Binder, 2016).

Creating more programs to service employers meant a need to hire staff within the career centres who had corporate knowledge and sales skills rather than counseling backgrounds. Focusing primarily on maintaining and developing new relationships with employers, employer relations staff usually did not work directly with students and tended to be target driven. Based on my personal experience, the addition of these new roles changed the dynamic within many career centres and created tension between the advising teams and the employer relations teams concerning the services provided and resource allocation.

A 1998 survey of U.S. career centre directors indicated that 71% of them had master's degrees, 16% had doctorates or other advanced degrees, and 13% had achieved only a bachelor's degree (Wessel, 1998). Career centre staff were starting to see themselves as organizers and facilitators rather than counselors, and when asked what they looked for when hiring staff, directors no longer sought employment specialists or skilled clinicians but generalists who had flexible skill sets (Wessel, 1998). Skills that were in demand did not require an advanced degree but required instead more personality traits such as relationship building, responsiveness, and communication skills (Dey & Cruzvergara, 2014; Wessel, 1998). Quebec was the only province that required a provincial career counseling certification for advising staff (Shea, 2010).

In terms of space, at the turn of the century, the average square footage a career centre occupied was 2,349, with a median of 1,200 sq ft, an indication that

a few very large career centres were skewing the average and that most career centres were quite small. Career centres averaged two non-dedicated interview rooms in each centre (NACE, 2012).

#### **2.1.4.4. Career Centre Services**

Services provided to students by career centres expanded during this time. In Herr et al.'s (1993) *Handbook for the College and University Career Center*, services were divided into four areas: counseling services; placement and on-campus recruiting services; career information; and programming and outreach. Most of their emphasis was on counseling services and on-campus recruiting, with the other services playing a supporting role. However, through 1990–2010, service types expanded rapidly. According to Vinson et al. (2011), more than 75% of career centres in 2008 offered career counseling/advising, career testing/assessment, classroom presentations, individual career information, interview preparation, job fairs, mock interviews, online job banks, on-campus recruiting, and resume preparation. Less common services were academic advising, assertiveness training, faculty training, high school visitation, job simulation, mini-career courses, and study skills training.

The rise of technology in the 1980s also brought new tools such as electronic job boards and databases to the career centre in the 1990s (Herr, 2003). Social media, learning management systems, and increasingly sophisticated software designed with career centre needs in mind changed how post-secondary students interacted with career centre staff and employers (Dey & Cruzvergara, 2014). By 2009, almost 80% of career centres reported having a system in place to track students' resumes, online job boards, and recruitment scheduling (NACE, 2010). However, the dot.com bust and the recession that followed drove unemployed alumni back to campus to seek out assistance to find new opportunities. Career centres responded, and by 2009, more than 67% of career centres were offering career services for alumni (NACE, 2010).

The trend toward specialized services continued—programs for single parents, Aboriginal students, and new immigrant students (as opposed to students on study visas) began to emerge. There was an emphasis on building partnerships with faculty to help students connect interests with careers (Shea, 2010). These partnerships paid off according to a replication study by Vinson et al. (2011) that showed that by 2008, about 80% of faculty viewed the career centre as a positive or very positive resource for students compared to only 63% in 1979. The theme of specialized services that emerged between the 1990s and 2000s was increased responsiveness to the varied needs of diverse student and alumni populations. Career centres responded to this theme by increasing their flexibility of service offerings, which led to heightened complexity of the career centres themselves.

#### ***2.1.4.5. Philosophical Orientations***

In the 1990s, the concept of career networking was defined by Donald A. Casella as an approach that helped students develop job search skills and learn how to connect with employers through linking, networking, and communicating (Casella, 1990). According to Casella, the programmatic changes implemented by career centres during this time amounted to a paradigm shift in approach from the prior approaches of placement, where the career centre finds a job for students, and planning, where the role of the career centre was to help students gather information, explore options, and make career decisions (Casella, 1990). This shift was reflected in a 1994 survey of career centre professionals on the overall purpose of their office, which showed that 65% of respondents said that their office existed to “help students explore options and learn job-search skills.” Of the remaining respondents, 19% reported that the office existed to “help students learn how to obtain information and interact with employers,” and 16% reported that the purpose was to “find jobs for graduates” (Wessel, 1998, p. 168-171).

Another new career development theory emerged out of the 1990s. John D. Krumboltz introduced the concept of planned happenstance into career theory



by suggesting that indecision is desirable in some cases and that individuals can benefit from unplanned chance events (Browne & Russell, 2014). Planned happenstance, as proposed by Krumboltz (2009), presented four propositions for career counselors: (a) the goal of career counseling is to help clients achieve more satisfying long-term careers—not make a singular decision; (b) assessments are used to help clients learn more about themselves—not match them with a particular career or path; (c) clients are encouraged to explore as a way to learn from and capitalize on unplanned events; and (d) the success of the counseling intervention comes from the results that the client achieves outside of the session.

In a centre oriented toward planned happenstance, “Career counselors should teach their clients the importance of engaging in a variety of interesting and beneficial activities, ascertaining their reactions, remaining alert to alternative opportunities, and learning skills for succeeding in each new activity” (Krumboltz, 2009, p. 135). Career centres that follow this orientation are expected to create opportunities for students to interact with potential employers through experiential opportunities such as co-op and internships, mentoring programs, and job shadowing programs. At the time of this writing, there was no data to suggest a broad movement by career centres to align services with their philosophical orientations, which suggests the possibility of future research into this area.

#### **2.1.4.6. Measures of Success**

One of the respondents to Wessel’s (1998) survey indicated, “Career centers of the 1990s must be accountable and add value (p. 173)” and another stated, “We would like to be counselors and connectors. Students, parents, and administrators who control purse strings count ‘placements.’ A ‘self-aware’ unemployed graduate is not good in today’s college market (p. 173)” By 2008, 82% of career centres reported collecting post-graduate employment data (Vinson et al., 2011).

However, success measures had moved beyond just post-graduate employment data. In keeping with the NPM influences of the time, in 2008, NACE published a series of articles on how career centres could better tell their stories to stakeholders using assessment methodologies. Methodologies for assessing the quality of services, student satisfaction with services, efficiency and effectiveness, outcomes other than post-graduate employment, and how career centre activities aligned with institutional goals were developed.

In 2007, the Canadian Research Working Group for Evidence-Based Practice in Career Development was formed to design a framework for measuring efficacy in career development practice. Their framework was built on a three-element approach: inputs—which include things such as resources available and career centre mandates; processes—which include measurement of the services offered in terms of both usage and quality; and outcomes—which measure how the individual changed as a result of the services offered (Baudouin et al., 2007). This framework served as the backbone for a 2010 publication by CERIC entitled *Career Centre Evaluation: A Practitioner's Guide* (Benzinger et al., 2011). This guide provided practical tools for career centres to use to measure their impact and tell their story.

Another way career centres started to assess their success was through the development of competencies and learning outcomes. Competencies are the skills that the student or client should achieve through the intervention. The concept of a learning outcomes approach started in the classroom, where “faculty think first about what is essential that students know or be able to do after the course or program” (Battersby, 1999, p. 3). Learning outcomes go beyond competencies in that they are the integration of the knowledge, skills, and abilities as put into practice. For example, in a career centre context, a learning outcome might be defined as the ability to build, maintain, and utilize one’s network in the career exploration and job search processes. Competencies that demonstrate that

learning objective may include the ability to effectively introduce oneself at a networking event, the ability to research individuals and connect with them on LinkedIn, and the knowledge of techniques used to follow up with connections after an event.

Despite the best practice recommendations of professional associations to move beyond usage statistics and placement rates, most career centres did not embrace these methodologies into their practice. Lalande and Magnusson (2007) found that career practitioners in post-secondary settings considered measuring the impact of their services on constituents less important than their counterparts in government or not-for-profit settings. Perhaps it is not surprising then that a 2016 survey of centralized career centre directors in Canada found that half of the respondents had never heard of CERIC's *Career Centre Evaluation: A Practitioner's Guide* and two-thirds had never used it (Dietsche & Lees, 2017).

### **2.1.5. Summary**

While the fundamental purpose of post-secondary career centres—to help students find fulfilling employment following their post-secondary degree—has not shifted drastically over the past 80 years, the external and internal influences, the resources available, the services provided, the approaches to the work, and the measures of success have evolved through several eras of career development on campus. With this historical perspective as context, the next section of this chapter details the role of career centres on campus today.

## **2.2. Career Centre Role Today**

In the last few years, predictions about what the scope and mission of career centres will be in this time of increasing accountability and limited resources have proliferated. Common trends include the need for staff with new collaborative

and entrepreneurial skill sets; partnerships and alliances with other units across campus; heavy use of data and analytics to make decisions; engagement with parents, faculty, and other significant influencers; increasing emphasis on creating customized connections and communities; and continued use of technology to enhance services and improve client access (Chan & Derry, 2013; Contomanolis, Cruzvergara, Dey, & Steinfeld, 2015; Devlin & Helbig, 2013; Dey & Cruzvergara, 2014; Jennings, 2013). Schaub (2012) suggested that as technology has provided students and employers with a myriad of other ways to connect, relationship management with both internal and external constituents to provide value-added services to both students and employers is key to the career centre's survival.

Dey and Cruzvergara (2014), both career centre practitioners, proposed that the career centres of today are “one-stop shops” with a comprehensive list of services for career planning and development in addition to connections with potential employers supported by a backbone of technology. They suggested that the “hyperactive” career centres of today seek to build communities, facilitate relationship development, and go beyond traditional notions of career development into the broader definition of professional development. Success measures for career centres will need to go beyond student employability and their first destination and encompass institutional reputation and engagement with potential employers. If this is the future of modern career centres, the reality is that unless budgets and staffing levels increase, they will need to redirect resources away from traditional coaching, advising, and counseling activities to support more programs and services designed to connect students with employers.

Contomanolis et al. (2015) posited that there are four themes that will dictate the future of career services in the United States. The first is the changing role of staff from being the organizers of programs and services of the past to being educators whose work complements that of the faculty. This requires a different skill set than in the recent past, including an understanding of education

pedagogy and theory as well as job skill training and career development practice-based knowledge.

The second theme that was identified was the need to build more meaningful collaborations across campus. As Contomanolis et al. (2015) stated, “Elevating career services work demands that key stakeholders benefit from any collaborative efforts and that there is great confidence in the ability of the career services organization to deliver outstanding service and deliverables” (p. 26). The authors argued that collaborations provide an opportunity for career centre professionals to demonstrate their ability to have impact on campus through their practice and measurement of outcomes, which better positions them for resources in the future.

The third theme Contomanolis et al. (2015) identified was that there will be better use of data and analytical tools to make decisions, allowing staff to look at measures such as key performance indicators, reputational measures, and predictive analytics as we incorporate more tools to collect and analyze data within our centres. The final theme that they identified was increasingly innovative, integrated, and enhanced use of technology within our centers. Both of these last two trends require staff comfortable with analytical tools and technologies that were not traditionally required of career counselors.

In Canada, a somewhat different picture may be emerging from the research. In April 2017, at the Canadian Career Development Summit, representatives from Academica, a Canadian-based research and consulting company, presented their research on career services operations needed to undergo a three-part paradigm shift. The first part of this paradigm was that career centres need to see themselves and career development as a whole within the context of the academic mission. The second part was that there needs to be a theoretical and pedagogical framework to guide institutional strategy and program

development around careers and that career centres should lead the charge. The third part was that career centres need to be able to demonstrate how their career development interventions contribute to student learning, engagement, persistence, and career success (Skinkle & Glennie, 2017). This “outsider” view of the future of career centres led to intense discussion about current practices, integrating career development within academics at the classroom level, and the frustration on the part of career centre staff of being excluded from career development conversations at the institutional level.

Some of these messages were echoed in a 2016 study funded by CERIC and conducted by a higher education consulting firm, PSE Information Systems, which highlighted several themes that career centre practitioners identified as anticipated changes over the next 5 years (Dietsche & Lees, 2017). The most commonly identified theme, mentioned by more than 25% of respondents, was increased collaboration with institutional partners, including faculty, to provide more career development opportunities for more students. Mentioned by almost 13% of respondents were shifts in staff roles to direct more complex student career development issues to professionally trained staff and triaging less complex student career issues to support staff or student staff. Only about 7% of responding practitioners indicated an expectation to align more closely with institutional strategic plans, improve research and data collection, and develop learning outcomes for their programs and services.

Both of these Canadian sources only partially align with the visions of Contomanolis et al. (2015) or Dey and Cruzvergara (2014). In the Canadian context, the focus on internal collaboration to align more closely with institutional mission and academics was evident. However, the changing environment around technology usage, the importance of effective data collection, and connections to the employer community were much less prominent in Canada. This may be

partially explained by the fact that both Canadian studies were conducted by non-practitioners who do not have practitioner-based knowledge of the field.

The next six subsections highlight some of the key factors and conditions career centres operate under today using the same subsections as for each of the historical eras described earlier in this chapter.

### **2.2.1. External Conditions**

There are unique external conditions impacting the role and work of the career centre today. The recession of 2008–2009 impacted post-secondary institutions in a number of ways. According to the Parliamentary Budget Office (as cited in Cahill & Wodrich, 2016), federal spending on post-secondary education reached an all-time high of \$2.8 billion in 2010–2011 as part of the federal stimulus package enacted in response to the recession. By 2013–2014, the total federal government spending was about \$2.3 billion, a reduction of more than 17%. According to the same report, the percentage of total revenues for post-secondary institutions decreased from 54.2% in 2004–2005 to 48.9% in 2013–2015 (Cahill & Wodrich, 2016).

These financial challenges have led many universities to continue to search for ways to increase their revenue. One of these ways has been to deliberately increase the number of international students on campus because many international students pay a significant tuition differential and are more likely to take advantage of on-campus auxiliary services such as housing and dining services. According to a report by the Canadian Bureau for International Education (2016), Canada is the world's sixth most popular destination for students studying abroad. From 2008 to 2016, there was a 92% increase in the number of international students studying in Canada (Canadian Bureau for International Education, 2016). International undergraduate students paid an average tuition of

\$23,677 CAD compared to \$6,375 CAD for domestic students, which equates to more than a 270% higher price (Statistics Canada, 2017). The total revenue from international student tuition has risen from \$620 million in 2011–2012 to \$1.28 billion in 2015–2016 (Crawley, 2017). While it was considered nice to have international students on campus 20 years ago, international students are now critical to many institutions' survival.

Canada's goal of increasing international students on campus is being assisted by world events. A 2016 study found that almost one-third of students from around the world considering studying abroad were less likely to consider the UK following the Brexit vote to leave the European Union, and the most popular alternative destination of choice was Canada (Ali, 2016). While the IIE Centre for Academic Mobility Research and Impact did not report substantial drops in the numbers of international students attending U.S. post-secondary institutions following the presidential election of Donald Trump, Canadian institutions are seeing large increases in the number of student inquiries, applications, and attendees since the election (Chiose, 2017a; Farrugia & Andrejko, 2017). The University of Toronto reported that on election day, the number of visits from the United States to their recruitment website spiked to 10,000—up from an average of 1,000 a day (Najar & Saul, 2016).

Another external condition impacting the post-secondary sector in this decade has been the increasing recognition of the need to reconcile historical wrongs perpetuated against the Aboriginal peoples of Canada. In 1999, the Truth and Reconciliation Commission was formed to provide a venue for the survivors of residential schools and their families to begin the healing process. Open dialogue about the impact and injustices created by the residential schools led to new ideas concerning Aboriginal education. There was a growing consensus for Aboriginal self-governance with regards to education. This movement led to the emergence of several institutions with an explicit mandate to serve the needs of Aboriginal



populations, including First Nations University in Saskatchewan, the University of Northern British Columbia, the University College of the North in Manitoba, and Algoma University in Ontario (Jones, 2014).

In 2015, the Truth and Reconciliation Committee made several recommendations to the Federal government concerning education. In particular, recommendation seven calls for the development of a strategy, in partnership with Aboriginal groups, to eliminate the educational and employment gaps between Aboriginal and non-Aboriginal Canadians. This has led to comprehensive review of current federal programs that support Indigenous students who wish to pursue post-secondary education designed to ensure that these programs are delivering the resources and support needed for Indigenous students to attend and complete post-secondary studies (“Delivering on Truth and Reconciliation Commission Calls to Action”, <https://www.aadnc-aandc.gc.ca/eng/1524495412051/1524495479084>)

There is also a growing recognition of the need to be inclusive of non-visible minorities within the student population, such as students with learning disabilities and LGBTQX students. While legal protections for these students have been in place for many years, the idea of intentional inclusion is relatively new. With regards to students with learning disabilities, Alyward and Bruce (2014) argued that the need to maintain rigorous academic standards is not contradictory to inclusiveness and provided examples from around Canada of inclusive programs and practices. Canadian campuses made news in 2016 with the addition of all-gender washrooms touted as a sign of inclusiveness (Graham, 2016). However, studies show that LGBTQX content on counseling centre websites is significantly lacking, especially compared to other minority groups (Kennedy & Baker, 2014; McKinley, Luo, Wright, & Kraus, 2015).

Another external trend is the changing world of work. According to a national study by Deloitte (Harrington, Moir, & Allinson, 2017, p. 4), “The gig

economy, turns the traditional one job/one employee/one employer model on its head. Since 1997, Canada's contingent workforce has grown from 4.8 million to 6.1 million." In the "gig economy", rather than hold a traditional job for one employer, an individual assembles a variety of short or long-term contracts or projects for multiple employers to create their own "job." According to a 2017 report by The Brookfield Institute:

Freelancing can provide more flexibility and job experience to highly skilled workers, which can, in some cases, help youth transition into full-time employment, if they so choose. It also means increased uncertainty and working without some employment benefits that have yet to catch up to this new reality. (Lamb & Doyle, 2017, p. 10)

Artificial intelligence is rapidly expanding, and expert estimates range from 35% to 41.9% of Canadian jobs are highly susceptible to automation (Harrington et al., 2017). According to Lamb and Doyle (2017), "More than triple the number of youth were employed in high-risk occupations, compared to low-risk occupations" (p. 6). These experts suggested that this is, in part, because entry-level positions are more routinized and therefore more susceptible to automation.

Because jobs are likely to be reconfigured and continuously evolving as tasks that can be automated are removed from roles, lifelong learning as a necessity to remain employable and taking personal responsibility for managing one's career are echoing themes in today's job market (Conway, Campbell, Hardt, Loat, & Sood, 2016). According to Lamb and Doyle (2017):

The pace of change will also increase the value of those who are able to take risks, manage uncertainty and adjust rapidly. In other words, entrepreneurial skills will grow in importance, not just for startups but for all Canadian firms. Successful entrepreneurs have many of the skills necessary for the future of work. (p. 14)

A key recommendation from Lamb and Doyle that speaks to post-secondary career centres is to "provide timely labour market data, career planning and

mentorship support for youth entering the labour force” (p. 18). Career centres also need to provide supports for students seeking entrepreneurial paths.

Along with these changes is the need to provide opportunities for students to get hands-on experience while they are still in school. More than 50% of employers indicate that insufficient experience was the reason that their job postings went unfilled (Refling & Borwein, 2014). In Ontario, the Premier’s Highly Skilled Workforce Expert Panel recommends that all students have at least one experiential opportunity during the pursuit of their post-secondary degree (Conway et al., 2016). Lamb and Doyle (2017) recommended that new work-integrated learning models that are applicable across multiple sectors, small and medium-sized enterprises, the not-for-profit sector, and for a broader base of students should be developed as the role of work-integrated learning expands.

These are some of the external conditions impacting the post-secondary sector in Canada today that have implications for campus career centres. Budget pressures remain a concern for career centres, requiring them to be as efficient and cost-conscious as possible. At the same time, the growing number of international students, Aboriginal students, and students with non-visible disabilities will require career centres to provide specialized programs and services and will require career counselors to have more specialized training to appropriately serve them. The pressure to provide expanded and specialized services with fewer resources may define many of the career centre decisions over the next decade.

The next section will review some of the internal organizational issues that play a role in career centre operations.

## 2.2.2. Internal Organizational Factors

Within career centres, reporting lines continue to evolve. Findings from NACE's (2015) 2014–2015 benchmarking report confirm that the largest percentage of career centres still report to student services (followed by academic services), but they also report to enrollment management, advancement/development, and other areas on campus. The administrative branch that a unit reports to can be an important indicator of the value placed on it by the institution and of how closely it aligns to the institutional mission (Fatzinger, 2016). In Canada, a 2016 survey conducted by CERIC during the same time as this study found that 68% of respondents had a centralized model at their institution, while 22% reported a hybrid model—with one primary central centre for most students and other centres located in professional schools as the most common structure (Dietsche & Lees, 2017).

In the United States, NACE (2015) found that “Career Services” was the most common office title, with “Career Center” and “Career Development” as the next most common. However, some units included “Professional Development” in the title, perhaps reflecting an increased scope beyond traditional career-related issues. A few still include “Placement” in their names, emphasizing the traditional role of matching students with jobs. In Canada, Career Services is by far the most common name for the department, but there has been an emergence of student success centres that combine career services with other student service units related to student retention (Dietsche & Lees, 2017).

In Canada, an important distinction of career centre structures is whether cooperative education (co-op) is embedded within a broader career services office or if it is a stand-alone unit. Co-op has formally existed in Canada since 1957 and combines classroom experience with practical work experience (Browne & Russell, 2014). Some institutions structure co-op to be a unique, independent function

because of its academic nature and government requirements, while others view co-op as part of the overall career services mission.

Additional mention should be made of the career services offered by dedicated individuals, whether they are faculty or staff, who are housed within departments that have a different or broader mandate, such as health and counseling, alumni services, or within individual faculty units. While not strictly career centres, at many smaller institutions in Canada they serve as the primary source of career development on campus.

A 2016 survey conducted by CERIC sought to identify impressive models of post-secondary career centres in Canada (Dietsche & Lees, 2017). The researchers asked respondents to rate the utility of 18 metrics that could potentially characterize the “impressiveness” of career centres. The seven criteria that they reported as being most important to practitioners were the following: services are evaluated; student satisfaction measures are used to improve services; outcomes for students and other clients are measured; degree of collaboration with campus stakeholders; practices that promote student-faculty dialogue on career topics; career-focused curriculum embedded in programs; and collection of student use statistics for face-to-face services. The “outsider” approach may very well have influenced the results of this analysis since the 18 metrics the respondents had to choose from did not include choices such as number or quality of connections with potential employers; post-graduate employment success; offering of quality career coaching, counseling, or advising; measuring any programs or services to connect students with employers; or other career centre attributes that practitioners may have identified.

### **2.2.3. Career Centre Resources and Staffing**

There are three types of resources available to career centres: career centre budgets (more specifically, operational budgets), staffing levels, and space allocation. While staff salaries and benefits make up the vast majority of career center budgets (Contomanolis, 2013), in this case, it is useful to look at staff as a resource. Because most career centre services are heavily people dependent, the number of staff available to provide these services is a clear limitation for these centres. In regard to budgets, career centre leadership generally has more autonomy on how to allocate operational budgets than personnel budgets and therefore is more reflective of actual decisions and responses (Contomanolis, 2013). Additionally, how much space a career centre is allocated and where it is located on campus are indicators of how much institutional value is placed upon the centre.

For career centres, institutional support remains the most important source of career centre funding. NACE (2015) reported that institutional support ranged from 50.3% to 100% of career center budgets. In addition to institutional support, many institutions charge mandatory student services fees to students, a portion of which provides support to the career centre (Levy, 1995). In Canada, 56% of career centres reported charging some fees for services, with 39% reporting that at least 90% of their budgets come from student fees (Dietsche & Lees, 2017). A 2012 survey of 70 career centres across Canada by Brainstorm Strategy Group showed that approximately 30% of career centres reported a budget decrease (30%) over the prior 3 years, 29% reported a budget increase, and 41% reported a static budget (Hampshire & Donald, 2012).

Institutional funding can also come in the form of donations or gifts. It is becoming more common for fundraising initiatives to have a specific focus, such as student services, to engage alumni who had a positive experience with that service

(Levy, 1995). Many career centres, such as the engineering career centre at the University of Calgary, which received a \$1 million donation in 2014, have been the recipients of targeted donations to support their services, and staff even take an active part in soliciting those donations (Hassanali, 2014; Rayman, 2013).

While exploring current career centre staffing trends found in the literature, Brainstorm Strategy Group ran a survey that asked whether the career centre had experienced staffing changes in the past 3 years and found that half reported that their numbers stayed the same, 43% saw an increase, and 7% saw a decrease in the number of staff (Hampshire & Donald, 2012).

Common non-personnel related expenses include technology, such as a customer relationship management (CRM) system, career library resources, costs for events and workshops, assessment tools, professional development of staff, and travel and entertainment expenses related to building employer relationships. Scheduled staff salary increases, increases in benefits costs, and general inflation imply that the costs to run a career centre will increase year over year even without the addition of new staff or services.

Despite the rising costs associated with running career centres, many are seeing a decline in financial resources provided by their institutions. According to Kretovcis (2011), university administrators need to remember that actual costs of doing business will continue to rise. He suggested that institutions instead will need to come to terms with doing less but doing it better or differently. In Canada, a benchmarking survey from Brainstorm Strategy Group revealed that 71% of Canadian career centres reported either a budget cut or no increase the prior 3 years (Brainstorm Strategy Group, *2013 Career Services Benchmark Report*, 2013). This is consistent with a 2016 survey that reported that one-third of career centres saw a budget decrease and one-third saw no changes to their budgets in the previous 5 years (Dietsche & Lees, 2017).

To help make up for these shortfalls, career centres are turning to external funding sources to provide support for their initiatives (Adjepong & Albert, 2011; NACE, 2015). Uniquely positioned at the intersection between the university and the corporate sector, career centres have the potential to generate their own revenue as an alternative to reducing costs (Dey & Cruzvergara, 2014; Seifert, Perozzi, & Li, 2015). One of the most common sources of external funding is from employers that work with the career centre. Many career centres charge employers for services such as job postings, career fair attendance, advertising in publications and on websites, on-campus recruiting activities, email blasts, and resume books. Some career centres also have corporate partnership programs where employers pay a substantial fee for access to administrators and faculty, early scheduling of campus recruiting activities, branding on campus, or other services (Adjepong & Albert, 2011; Davis & Binder, 2016).

Alternative funding sources include student and alumni fee-for-service models where career centres will charge a fee for a specific service or program provided by their offices. For example, NACE (2015) reported that most commonly fees are assessed for career assessments. In Canada, many career centers that include co-op programs charge students a fee for co-op participation that includes their preparation program, advising services, and course credit (Canadian Association for Co-operative Education, 2005). The frequency and amount of fundraising among Canadian career centres is unknown. The lack of concrete information that could be found in the literature about the prevalence of external funds generation was one of the drivers for this study.

Because career centre services are very people dependent, staff themselves have historically been treated as a resource measured primarily by the student to professional staff ratio (NACE, 2015). NACE (2015) reported that the mean student to professional staff ratio was 2,672 to 1, with the highest ratios in the 2-year colleges and the lowest in special focus institutions.



Additionally, NACE (2015) looked at how staff are allocated within the career center (Table 3). While specific information such as how many staff provide student advisement versus how many focus on employer relations within Canadian career centres is not currently available in the literature, Brainstorm Strategy Group (Hampshire & Donald, 2012) looked at total staffing levels and reported that Canadian career centres had an average of 7.7 full-time equivalent (FTE) staff, 2.7 of whom on average provided student appointments (Brainstorm Strategy Group, 2013). This same report indicated that at 57% of Canadian centres, staffing levels remained either the same or decreased over the prior 3 years (Brainstorm Strategy Group, 2013). A more recent Canadian survey showed that almost half (46%) of career centres reported an increase in the number of staff and a mean of 8.5 FTE staff (Dietsche & Lees, 2017). Because this survey was sponsored by CERIC, an organization that primarily focuses on the counseling and career development component of career centre operations, it did not investigate the percentage of staff that primarily were involved in employer relations.

**Table 3: Percentage of each type of staff within U.S. career centres today**

Type of role	Percentage
Director/manager	91.20%
Student employees	82.20%
Administrative staff	67.80%
Dedicated career counselors	52.70%
Graduate assistants/interns	38.90%
Employer relations coordinators	36.90%
Experiential learning/internship coordinators	26.40%
Marketing staff	15.50%
Technology staff	13.60%
Career information staff	6.50%

Source: NACE (2015).

In looking at the prerequisite qualifications to work in career centres today, Contomanolis et al. (2015) urged career centre leaders to “hire for attitude and train for skills” (p. 25). In 2013, NACE published a guide called *Professional Competencies for College and University Career Services Practitioners* that listed competencies in several key areas for career services professionals. These areas included career coaching, advising, and counseling; brokering, connecting, and linking; information management; marketing, promoting, and performing outreach; program and event administration; research, assessment, and evaluation; teaching, training, and educating; and management and administration. Nowhere in this guide is formal education indicated as a requirement for career services practitioners.

The prevalence of continuing study certificates for career practitioners highlights a desire to add legitimacy to the on-the-job training most career centres are providing. In Canada, the charge for career development standards and competencies was led by the Canadian Career Development Foundation, which published the *Canadian Standards and Guidelines for Career Development Practitioners* in 2004 (Van Norman et al., 2014). Most recently revised in 2012, the core competencies do not require any particular level of education for career practitioners. However, according to these standards, those wishing to specialize as career counselors need to hold a master’s level degree in a related field (Canadian Research Working Group, 2012). These guidelines were written to apply to all types of career practitioners, not just those within a post-secondary setting.

A 2016 survey of career practitioners in post-secondary career centres in Canada showed that bachelor’s degrees were the most common minimum level of requirement for most student-facing roles. Approximately 43% responded that a bachelor’s degree was the highest degree attained, followed by masters at 42%.

Five percent attained doctorate degrees, and 9% had only a certificate (Dietsche & Lees, 2017).

In general, career centres have gotten larger in the last 10 years. NACE's (2015) 2014–2015 benchmarking survey indicated the average centre square footage was 2,573, with four interview rooms. Overall space of career centres in Canada has remained the same over the past 5 years for the majority (54%) of career centres (Dietsche & Lees, 2017). With regards to space usage, the large shelving units recommended by Teal and Herrick (1962) have been widely replaced by computer stations for students to access employer information and other resources online.

Dey and Cruzvergara (2014) suggested that today's career centres also need to manage their online space, including internet access, websites, and social media platforms. In 2012, 96% of career centres reported using one or more social media sites for service delivery (Osborn & LoFrisco, 2012). In 2016, a survey of post-secondary students in Canada ranked their campus career centre's website as the second most useful website for their career search, just behind the massive search engine Indeed. In this same survey, one-third of MBA students in Canada reported that one of their preferred methods of communication with the career centre was through their LinkedIn account (Brainstorm Strategy Group, 2017).

#### **2.2.4. Career Centre Services**

Career centres are service-oriented units. Services are frequently categorized by the stakeholder to whom they are offered and, in this study, I adopted the definition of *service* used by both Garis (2014) and Shea (2010) to include any program, intervention, or resource provided to a stakeholder. In most post-secondary career centres, students are considered to be the primary stakeholder, with other important groups being alumni, employers, and faculty. In

the next subsection, I will outline the services offered to each of these constituent groups to illustrate the range of services provided by career centres in Canada. Additionally, in recognition of the changing landscape described by Dey and Cruzvergara (2014), a brief discussion of the services provided to the wider community is presented.

#### **2.2.4.1. Services for Students and Alumni**

At the heart of the services that any academic institution provides are the students that it serves, and career centres are no exception to that rule. Teal and Herrick (1962) suggested that the campus career centre should become “such a vital part of the students’ lives that they turn to it automatically for guidance on problems of employment and career planning, however important or unimportant they are” (p. 2). While the technologies and methodologies have changed in the last 55 years, the ways Teal and Herrick suggested that career centers can help students still ring true today:

- By providing counsel and guidance to help them with their career decisions, as well as with the less important questions that arise along the way;
- By furnishing materials with which to carry on employer contacts;
- By maintaining an ample supply of reading materials on careers and employing organizations;
- By stimulating and encouraging each one to attach his own individual goals;
- By having a full and complete knowledge of any supplementary or other advisory services on the campus which could complement the placement program; and
- By creating a warm and friendly atmosphere that will stimulate them to continue their relationships with the placement office after they have become alumni. (p. 3)

In today's career centres, support services for students and alumni are generally organized into three broad categories: (a) self-assessment and reflection; (b) educational and occupational exploration; and (c) career skill development. However, the emphasis placed on each of these areas varies depending upon the career centre model, institution and career centre size, and the mission and mandate of the career centre (Niles & Harris-Bowlsbey, 2005).

Self-assessment has long been an integral part of career centre activity. One type of assessment is a standardized instrument that assesses internal attributes such as personality type, values, and skills. While historically these types of instruments were used to match people with specific careers, a more current approach is for career centre advisors to use these assessments to help students learn about themselves and use them as a foundation to start conversations about careers that might be a fit for them (Krumboltz, 2009). Many campus career centres in Canada offer either online or pen/paper career and personality assessments for their students. Common ones include the Myers-Briggs Type Indicator (MBTI), the Strong Interest Inventory (SII), StrengthsQuest, and CareerLeader.

In addition to formal assessment instruments, career centre advisors use other techniques with students to help them explore their interests and values. Kronholz (2015) described a case where an advisor skilled in Holland's (1992) RIASEC theory used observation skills to assess the student's career readiness, questioning techniques to find out more about hobbies and interests, and a visualization of the RIASEC model to help the student clarify career interests. Other career centres use narrative techniques, journaling, and reflection exercises such as life mapping.

As part of the self-assessment function, career centres provide advising and counseling services for their students and alumni. Powell and Kirts (1980)

suggested that despite it being one of the most time-consuming activities within a career centre, career counseling is an essential service that must be budgeted into the operational costs. They also differentiated between career counseling and placement counseling, suggesting that placement counseling is what turns career counseling into action. Both career counseling and placement counseling continue to be offered in many career centres today. Most centres offer one-on-one advisement using a combination of one-on-one appointments, drop-in advisement, online or web-based advisement, or group advisement activities.

To help students explore different academic and occupational directions, career centres often maintain a library of resources either in hardcopy or online; offer workshops and panels on major and career options; and provide experiential learning opportunities such as volunteer opportunities, service learning, internships, work/study programs, and co-op (Garis, 2014). While there is little literature that describes the alternative programs and services offered by career centres today, my practitioner knowledge of key services includes mentorship programs that pair students with working professionals, job shadowing programs, and other programs offered by career centres to support exploration. Additionally, providing access and introductions to alumni and potential employers who are willing to provide informational interviews about various career paths is an important service offered by many career centres.

Finally, to help students develop career and job search skills, career centres provide workshops on a variety of career development topics; provide one-on-one resume, cover letter, LinkedIn profile, and other application material review; provide mock interviews; run job-finding clubs; manage job boards and job-alert notification systems; and offer career fairs and other networking events to introduce students to potential employers (Garis, 2014; Shea, 2010). Some centres run special programs for specific student populations, such as international students or Indigenous students, academically at-risk students, students who have

children, or students from particular academic disciplines (Browne & Russell, 2014).

While at most post-secondary institutions the use of career services is optional for students, some have developed required career courses, for credit or not-for-credit, to provide students with extended opportunities for self-reflection, career exploration, and skill development (Powell & Kirts, 1980). For example, Simon Fraser University’s Beedie School of Business requires all of its undergraduate students to take a series of six career skills workshops as a graduation requirement.

In the United States, NACE annually surveys career centre directors about the types of services offered through their centres for students and has reported that there has been virtually no change in services over the past several years (NACE, 2015). A smaller scale survey of career centres in Canada run by Brainstorm Strategy Group in 2013 found that the top services offered by Canadian career centres had some slight differences from those offered in the United States, which are outlined in Table 4.

**Table 4: Percentage of U.S. and Canadian career centres offering specific services**

Services type	CA career centres	U.S. career centres
Online job postings	91%	N/A
Counseling services by appointment	85%	98.30%
Career resource library	85%	87.70%
Career workshops	81%	92.60%
Assessment tools	56%	91.50%
Work/study student employment	47%	93.30%
Career class or certificate	8.5%	33.50%
Credential file service	N/A	15.90%

Sources: NACE (2015) and Brainstorm Strategy Group (2013).

Neither the NACE (2015) nor the Brainstorm Strategy Group (2013) survey asked about plans to instigate new services or end specific services or about the priority of services to the centre. Many of the emerging services, such as mentoring and job shadowing programs, currently offered by career centres were not referenced in these surveys, while credential file services continue to be included. Both surveys leave significant room for refinement in order to develop a true picture of student services provided today.

Many institutions continue to offer the same or a subset of the same services to alumni as they do to students. In 2013, Brainstorm found that up to 40% of career centres in Canada offer lifetime access to their services to alumni (Hampshire & Donald, 2012). Providing career development services for alumni is increasingly part of the scope of career centres, whether in partnership with the alumni association or as stand-alone (Garis, 2014).

An expanding role of career services is to engage alumni on campus to help re-establish their connections to their alma maters while providing an invaluable resource for students—their wisdom. According to Moss (2018), career centres are positioned at a unique intersection point to provide opportunities for alumni to assist current students through authentic mentoring opportunities and by assisting alumni relations with creating programming more relevant to alumni in the workforce, such as guest lecturing opportunities and networking events.

An offshoot of services for students that arose in the United States in the mid-1990s were specific services for the parents of current students. A few career centres created materials specifically targeted to parents on how to help their student with his/her career development. In the past 20 years, some career centres have created parent orientation programs, workshops, newsletters, websites, and special mailings to provide parents with information on how to assist their student offspring. Some career centres also encourage parents to post jobs



and internships exclusively for students at their child's institution (Harris & Jones, 1999). This phenomenon continues in Canada, where Stelmach and von Wolff (2010) analyzed the websites and marketing materials of eight Western universities and found increasing evidence of engagement with parents by institutions.

#### **2.2.4.2. Services for Employers**

Teal and Herrick (1962) outlined the foundational ways career centres can assist employers:

- By making their needs and operations known to the students and alumni;
- By enabling them to visit and interview qualified applicants and to make contact with the professors and other college personnel;
- By serving as a channel for considerations of a special nature, such as scholarships, equipment needs, speaker services, consultant and research contacts, etc.;
- By keeping them informed of changes in educational programs or in student preparation for degrees; and
- By helping them to gain a deeper insight into the areas of mutual professional organization that draw the employer and the placement organization together. (p. 5)

Ultimately, these services were designed to make it easy for employers to hire the institution's students and alumni into internships, co-op positions, and post-graduate employment (Steinfeld, 2013).

Services for employers have traditionally included the coordination of job fairs and recruiting events; on-campus job postings, interviews, and recruitment coordination; and the administration of internship and co-op programs (Shea, 2010). Other common employer services include hosting company information sessions, developing employer social media campaigns, inviting employers to

participate in student development programs such as mock interviews or resume critiques, providing introductions to faculty and student clubs, and hosting office hours (Artim & Black, 2013). How much staff time and resources are dedicated to supporting employer specific initiatives varies widely by size, mission, and mandate of the career services office (Teal & Herrick, 1962). While this is a dated reference, the observation still applies today.

Dey and Cruzvergara (2014) acknowledged the rise of employer requests to help with their branding on campus. Beyond hiring, employers hope to instill interest and trust with students on campus who are not only potential employees but also potential customers. Employers want to engage on campus even when they are not hiring students by participating in student programming and experiences that will get their company's name on campus. Career centres are often seen as the experts in recruiting young talent, which has led to some centres developing educational and training programs for their corporate connections on best recruiting practices (Artim & Black, 2013).

#### ***2.2.4.3. Services for the Institution and the Faculty***

According to Teal and Herrick (1962), the primary way that career centres can serve their institutions is through the knowledge accumulated through their connections with employers on the value of the programs and degrees. They sum up the ways that career centres can be of service to their institutions as follows:

- By establishing [itself] as a source of accurate and timely information on economic and industrial market trends;
- By having an intimate knowledge of campus personnel and services for obtaining and distributing important and helpful information;
- By encouraging and expanding contacts that contribute to the advancement or enlightenment of staff;
- By making certain that the employers are acquainted with all of the several areas of academic specialization;

- By keeping alert to any additional areas of services that might be helpful to the school; and
- By participating actively in on- or off-campus activities that will further the recognition of the service. (p. 7)

Through cooperation and collaboration, career centres can position themselves for success within their organization. To that end, some career centres provide services designed specifically to support faculty as they pursue experiential educational endeavors in the classroom or in partnering with potential corporate research partners (Hayden & Ledwith, 2014; Hearin, 2013). Others work with faculty to provide specific career days for students within a department or maintain the systems for managing e-portfolios for academic units (Garis, 2014). Winer (2001) argued that career centres can increase their influence on campus by providing human resource development opportunities such as career development services for faculty and staff. This might also include career coaching, arranging professional development activities, or resume or cover letter coaching for faculty or staff.

In addition to supporting faculty in the classroom, career centres typically maintain a CRM system or database of corporate connections on behalf of the institution (Garis, 2014). Knowing the history of corporate involvement on campus is key to corporate fundraising efforts and can assist in determining potential donors.

Additionally, career centres are frequently responsible for collecting the post-graduate employment outcomes of new graduates (Garis, 2014). This information is valuable to admissions and marketing in attracting new students, to the alumni relations office for maintaining on-going relationships with alumni, and to accreditation and institutional research offices responsible for reporting to funding agencies, accreditation bodies, and governmental offices. Partnerships with academic advising units are also beneficial because career path information

can help these professionals provide more valuable information to the students they are advising (Hayden & Ledwith, 2014).

#### **2.2.4.4. Services for the Community**

Dey and Cruzvergara (2014) described the purpose of the current paradigm for career services as “building connections and communities” (p. 16). To that end, many career centres post volunteer opportunities for students to get involved in community-based initiatives and service learning projects. Others offer a job board open to the general public for babysitting, tutoring, and other odd jobs. Other career centres offer career development services to the community in which they reside as part of their institutional civic engagement strategies (Hayden & Ledwith, 2014). At this point, there is very little empirical evidence of how common or not these services are within a Canadian post-secondary context.

#### **2.2.5. Philosophical Orientations**

Many career centres across Canada today continue to utilize various theories and models that have been in use for many years, either explicitly or implicitly, depending upon their departmental and institutional missions. Many of these have been described in detail in earlier sections of this study, but it is helpful to reiterate those that are most prevalent today.

Placement orientations are still very common in career centres today despite reluctance to use the term *placement*. However, based on Lent and Brown’s (2013) conception of placement as helping the student find relevant openings, conducting an effective job search, and presenting themselves effectively to employers, it is clear that many career centres still focus on placement.

As for other theories at work within career centres, Neault (2014) proposed organizing career development theories into three general categories:

1. Career matching theories that focus on placing individuals into jobs.
2. Career development theories that align with human development stages recognizing differences in career issues and needs at each stage.
3. Career responsiveness theories that recognize the interaction between the individual seeking work and the global economy.

Career matching theories date back to the trait and factor theories based upon the work of Parsons and Holland from the mid-century. According to Neault (2014), this framework is still the basis for many career assessment tools, employee screening assessments, job development programs, and work placement initiatives. The National Occupation Classification System currently used to classify jobs into categories for national workplace statistical analysis and skilled worker identification for immigration purposes was developed to align with the career-matching process.

Career development theories came into practice in the late 1960s and 1970s based upon the work of Donald Super and others. Current assessments such as the Work Values Inventory may be used in conjunction with career advising to help clarify the individual's career narrative and development plan (Neault, 2014).

The notion of *career responsiveness* has emerged over the last several years as a term to incorporate the career theories and models that acknowledge the interaction between individuals and their environment (Neault, 2014). Many career centres have embraced these theories as their framework for working with student clientele. One of these is planned happenstance, derived from the work of John Krumboltz in the 1990s.

Two newer career responsiveness theories that are emerging to shape career centre practice are the chaos theory of careers and constructivist theory. Borrowing the concept from the natural sciences, Pryor and Bright (2014) proposed the chaos theory of careers, where “an individual’s career development is the interaction of one complex dynamical system (the person) with a series of more or less generalized other complex dynamical systems including other individuals, organizations, cultures, legislations and social contexts” (p. 5). This theory includes the notion of chance as a pivotal element in career development and encourages people to adapt and maximize the value of unplanned elements in their lives and careers while not discounting the value of planning and decision making when possible.

The constructivist theory evolved from the notion that young people were not lacking information about careers, but they did not feel empowered or motivated to put that knowledge to work. This counseling orientation is designed to help clients take a proactive, mindful approach to their career (Hoskins, 1995). This theory uses the individual’s personal narrative to help the student make meaning out of his/her career choices and define the goals that the individual will attempt in his/her career (McMahon, 2014). Career centres with this orientation will focus on one-on-one advisement as well as activities that help students identify their values, beliefs, and assumptions in order to make career decisions that align.

The choice of theoretical orientation may directly impact the services offered by career centres. Career centres that are aligned more with career-matching theories may be more likely to offer personality or other career-matching assessments such as the MBTI or SII, and the advising teams will need to be trained as facilitators of these instruments. Career centres with a placement orientation may focus their resources on providing workshops and services designed to build job search skills such as resume writing, interview skills, and job

search techniques. They may be more likely to report post-graduate employment outcomes as a measure of their impact.

Career centres with a development focus will likely focus their resources on one-on-one advising either in person or online. They may create specific programming for subgroups of students such as non-traditional students or first-generation students. They may develop tools such as Queens University Career Services' (2015) Major Maps, which outline by academic major the academic and career steps students should be taking in each year of their post-secondary career.

Career centres that have embraced career responsiveness theories are likely to focus on experiential learning and work-integrated learning activities to provide students with the opportunity to deliberately try on different careers and reflect upon the experience and how it aligns with their values and interests. They may provide opportunities for students to build their professional network and create opportunities for chance connections through mentoring, job shadowing, and networking events.

### **2.2.6. Measures of Success**

Over the past 10 years, institutions have been held to accountability standards by the governments who fund them and by students who pay tuition fees (Hazelkorn, 2015; Weingarten et al., 2015). In response, much has been written about quality evaluation models for institutions and departments (Massy, 2003). This trend has not escaped campus career centres.

One common accountability measure that is still being tied to outcomes is the post-graduate employment rate (Axelrod, 2014; Carretta & Ratcliffe, 2013). Students, parents, governments, funding agencies, and accreditation bodies all want to know that students are getting sufficient return on their investment in post-secondary education (Makela & Rooney, 2014). One of the key findings of a 2012

report by the University Leadership Council at Winthrop University on trends in U.S. universities stated, “Graduating more students faster, and placing them in degree-worthy jobs, will be a critical competitive advantage for higher education institutions in the future” (*Next-Generation Advising: Elevating Practice for Degree Completion and Career Success*, 2012, p. x).

Many career centres still primarily focus on usage statistics rather than impact. Several authors urged the need for student services units and career centres to move beyond reporting usage measures such as number of attendees or hours spent in appointments and report on the outcomes of that service and how it contributed to the overall mission of the institution as a way to justify their budget allocations (Dey & Cruzvergara, 2014; Ratcliffe, 2015; Sullivan, 2010). Hiebert and Magnusson (2014) argued that those who control the budget are most interested in the outcomes programs and services have for individual participants, so it is in the best interest of the career centre to find a way to measure these outcomes. Hoping to help carer centres measure their services, CERIC, in partnership with the University Career Centre Metrics Working Group, published *Career Centre Evaluation: A Practitioner’s Guide*, which included examples of measurement tools and suggestions of the types of programs to measure (Benzinger et al., 2011).

As stated by Contomanolis et al. (2015), “Data is the new bacon” (p. 26). It is the currency that career centres need to make good decisions about their programs and services (Carretta & Ratcliffe, 2013), manage operational issues and understand student needs (Makela & Rooney, 2014), and, perhaps most importantly, influence institutional leaders to invest in their areas (Ratcliffe, 2015). Thus, the variety of metrics career centres are collecting and reporting has increased significantly in recent years.



The types of metrics collected by career centres have changed over time to reflect the services and resources of the centre. In looking at career services centres across the United States, Makela and Rooney (2014) suggested that metrics collected can be divided into four categories: (a) needs assessment of entire population to be served; (b) participation statistics in centre activities; (c) satisfaction with services; and (d) outcomes of services, including post-graduate employment and learning outcomes of specific programs or services. Table 5 illustrates the wide variety of metrics that can be collected on a single career centre service based on Makela and Rooney's categorization and illustrates the multiple types of metrics that might be collected for scheduled student appointments.

**Table 5: Examples of metrics for scheduled student appointments**

<b>Data Collected</b>	<b>Category of metric</b>
Number of students needing appointments	Needs assessment
Types of appointments needed	Needs assessment
Total scheduled appointments per year	Participation/Usage
Average number appointments per student	Participation/Usage
Unique students with appointments	Participation/Usage
Unique students without appointments	Participation/Usage
Number of appointments by appointment type	Participation/Usage
Number of appointments by appointment provider	Participation/Usage
Total number of unfilled appointments	Participation/Usage
Unfilled appointments by appointment provider	Participation/Usage
Total appointment utilization	Participation/Usage
Appointment utilization by provider	Participation/Usage
Post-appointment satisfaction information	Participation/Usage
Pre-/Post-appointment learning outcomes assessment	Outcomes

Although employer relations has been a key component of career centres for decades, there is surprisingly scant literature that addresses metrics around

employer relations activities. A review of several annual reports by career centres in the United States and Canada found that many career centres collect and report the following metrics: (a) number of employer recruiting events; (b) co-op work terms; (c) job postings; (d) employer partnership creation; (e) student usage of online systems; (f) employer contacts; (g) campus interviews; (h) career fair participation; (i) employer meetings; and (j) percentage of employers that would hire another one of their students (*Career Resource Center Annual Report 2014-2015*, 2015, *Career Services at Princeton Annual Report 2014*, 2014, *Sauder Talent 2015-2016*, 2015, *Student Life Programs & Services: Annual Report & Operating Plan*, 2015). These metrics illustrate that career centres themselves find this information relevant to collect and report publicly.

In addition to employer-focused metrics, co-op programs in Canada conduct work term evaluations from employers each term to evaluate the quality of the work performed by students (Canadian Association for Co-operative Education, 2005). This provides valuable data to academic programs about the preparation of students.

Literature documenting the outcomes of various career centre services, how career centre interventions impact students served, and how they can be improved through best practices was also extremely limited. There remains much work to be done to document the impact career services are having on campus.

### **2.2.7. Summary**

The previous sections outlined the evolution of career services on campus in Canada. Using this framework and echoing Dey and Cruzvergara's (2014) work, I provide in Table 6 a summary of the themes that have influenced career services in post-secondary institutions in Canada.

**Table 6: Evolution of career services in Canadian post-secondary institutions**

	1940–1970	1970–1990	1990–2010	2010–present
<b>External conditions</b>	<ul style="list-style-type: none"> <li>Public policies limiting non-white immigration</li> <li>Beginning of disbanding of Residential schools</li> <li>Extensive government investment in post-secondary education</li> </ul>	<ul style="list-style-type: none"> <li>Worldwide recession slowed new graduate hiring</li> <li>Rise of New Public Management on campus</li> <li>Increasing diversity on campus</li> </ul>	<ul style="list-style-type: none"> <li>Budget cuts to higher education in most provinces</li> <li>Rise of the rankings as measure of quality</li> <li>Technology becomes pervasive</li> <li>Dot.com boom and bust</li> </ul>	<ul style="list-style-type: none"> <li>Increase in international students to increase tuition revenue</li> <li>Increased interest in Indigenous and non-visible minority issues on campus</li> <li>Rise of the gig economy and artificial intelligence</li> <li>Need for expanded definition of work-integrated learning</li> </ul>
<b>Internal organizational factors</b>	<ul style="list-style-type: none"> <li>Students seek representation in campus governance</li> <li>Emergence of “placement offices”</li> <li>Institutional preference for centralized career services except for professional schools</li> </ul>	<ul style="list-style-type: none"> <li>Shift from “placement” to “career development” centres</li> <li>Trend toward centralization of career centres under student affairs umbrella</li> </ul>	<ul style="list-style-type: none"> <li>Student affairs units take larger percentage of budget cuts on campus</li> <li>NPM techniques introduce quality and performance metrics to career centres</li> </ul>	<ul style="list-style-type: none"> <li>Emergence of combined “student success” units integrating career, counseling, and academic advising</li> <li>Co-op programs integrated with career</li> <li>Expanding use of technology</li> </ul>
	1940–1970	1970–1990	1990–2010	2010–present
<b>Resources</b>	<ul style="list-style-type: none"> <li>Movement away from fee-for-service model to budgeted model</li> <li>Staff generally had business background</li> <li>Director frequently held faculty status</li> </ul>	<ul style="list-style-type: none"> <li>Fundraising through advertising and fees for service encouraged</li> <li>Distinct counseling and employer relations roles</li> <li>Master’s degrees required for counselors and directors</li> </ul>	<ul style="list-style-type: none"> <li>Widespread budget cuts to career offices</li> <li>Rise of corporate partner programs and employer fee-for-service to supplement budgets</li> <li>Skills for staff shifted to sales, relationship building, and event planning and away from formal credentials</li> </ul>	<ul style="list-style-type: none"> <li>Donor funding for career services becoming more common</li> <li>Many centres continue to see budget and staff cuts</li> <li>Formal education programs not mentioned as criteria for hiring staff in either CERIC or NACE recommendations</li> <li>Space, as a resource, now includes online presence</li> </ul>
<b>Services</b>	<ul style="list-style-type: none"> <li>Three primary services provided: distribution of jobs and employer information, facilitating on-campus interviews, and counseling</li> <li>Services almost exclusively for male students</li> </ul>	<ul style="list-style-type: none"> <li>Four distinct service categories described: workshops, group counseling services, individual counseling services, and placement programs</li> <li>Rise of co-op, internship, and experiential learning programs on campus</li> <li>Introduction of technology on campus, including</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of programming and outreach as distinct function in career centre</li> <li>Increase in technology tools for career, including social media, specialized CRM systems, and career preparation tools</li> <li>Increase in specialized programs for different student populations</li> </ul>	<ul style="list-style-type: none"> <li>Increase in experiential education programs such as mentoring, job shadowing, co-op, and internship programs.</li> <li>Increase in employer engagement programs to provide branding opportunities</li> <li>Increase in programs to provide networking opportunities for students</li> <li>Emerging services to engage parents in the career development process</li> </ul>

		<ul style="list-style-type: none"> <li>online job boards and referral services</li> <li>• First differentiated services for different student populations</li> <li>• First career courses for credit</li> <li>• Introduction of alumni career services</li> </ul>	<ul style="list-style-type: none"> <li>• Increased use of services by alumni</li> </ul>	<ul style="list-style-type: none"> <li>• Long-term access to career services for alumni</li> <li>• Increased alumni engagement activities to build connections for students and encourage affiliation</li> </ul>
<b>Theoretical orientations</b>	<ul style="list-style-type: none"> <li>• Parson's trait and factor</li> <li>• Holland's personality types</li> </ul>	<ul style="list-style-type: none"> <li>• Super's developmental theory</li> </ul>	<ul style="list-style-type: none"> <li>• Casella's networking theory</li> <li>• Krumboltz's planned happenstance</li> </ul>	<ul style="list-style-type: none"> <li>• Bright and Pryor's chaos theory of careers</li> <li>• Constructivist career theory</li> </ul>
<b>Measures of success</b>	<ul style="list-style-type: none"> <li>• Post-graduate placement rate</li> <li>• Post-graduate salary data</li> </ul>	<ul style="list-style-type: none"> <li>• Workshop attendance and appointment numbers</li> <li>• Satisfaction surveys</li> </ul>	<ul style="list-style-type: none"> <li>• NACE and CERIC publish assessment guides for career centres</li> <li>• Introduction of competencies</li> <li>• Still heavy reliance on usage metrics</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of learning outcomes</li> <li>• Addition of employer metrics and surveys</li> </ul>

Because many factors influence how career centres currently operate, the final section of this chapter provides a theoretical framework for analyzing these various factors to determine which have the greatest impact on how career centres are resourced.

### 2.3. Decision Making in Canadian Post-Secondary Institutions

Understanding the current role of career centres on campus and how their day-do-day operations are impacted by external and internal factors, their current levels of resources, the services they offer, their philosophical approach, and measures of success provides insights into differences that can impact career centres' directors' priorities and responsibilities. However, to determine whether there is anything that career centre directors can do protect and enhance their resources, further understanding of how decisions around resources are made within a post-secondary institution is required.

I did not start out with a theoretical framework when I began this study. It was not until I collected an overwhelming amount of data that I realized I needed a way to make sense of it all. At that point, I started my quest to find a framework that would help me find the meaning in the vast amount of information I had collected.

In reflecting on my own experiences attempting to influence the decision makers in order to protect and enhance my career centre's budget, I recalled that I had, at times, jokingly referred to my approach as a bit Machiavellian. My extremely limited background in the classics drove me to investigate how *Machiavellianism* within organizations is defined today. Kessler et al. (2010) provided this definition: "the use of manipulation, as necessary, to achieve one's desired ends in the context of the work environment" (p. 1871). Kessler et al. explained that individuals with this approach were comfortable with deception, manipulation, and exploitation as a means to achieve their ends. Machiavellian individuals represent a type of narcissistic personality, and the benefit derived by these tactics are generally for the individual employing them. While from the outside this might resemble my own motivations in some contexts, my true goal has always been to enhance the resources of my office to benefit the students we serve—not to increase my own standing. I believe that most career centre directors are motivated by the same intrinsic sense of purpose, which is why we work in the post-secondary context. Abandoning Machiavellianism as a theoretical approach, I embarked on an exploratory journey through public administration theory to institutional theory to decision theory—described in the next section—before selecting Hackman's (1985) theory of power and centrality in resource allocations as the framework for this study.

### **2.3.1. From Public Administration Theory to Institutional Theory to Decision Theory**

The assumption that most career centres directors, like myself, chose to work in post-secondary education because we believe that we are working in organizations that contribute to society provided a starting point in public administration theory. Frederickson, Smith, Larimer, and Licari 's (2012) *The Public Administration Theory Primer* provided an excellent launching point to explore the multitude of theories in this area. As the authors' noted, the purpose of this reference was to provide an overview of the theories and perspectives available to scholars, students, and practitioners in public administration, which was perfect for a practitioner with no formal training in public administration.

Starting with general organizational theory, I quickly narrowed my focus to institutional theory as the most relevant to my study. According to Frederickson et al. (2012), institutions are bounded social constructs with rules, roles, norms, and expectations that dictate the behavior of individuals and groups within them. Scott (2001) noted in his conceptualization of institutions that they are resilient and connote stability to society while operating at multiple levels of jurisdiction. Institutional theory, unlike traditional organizational theory, considers the special relationship between public organizations and the people that they serve. Institutions contribute toward the public interest and, therefore, have increased legitimacy compared to other types of organizations.

It has long been known that universities, in addition to providing benefits to the individual student participating in education, contribute toward the public good. In 1973, the Carnegie Commission on Higher Education was unable to quantify the societal benefits of literacy, citizenship, social mobility, and cohesion from post-secondary education but did not doubt the existence of these benefits. Since then, other researchers have developed methods to start to quantify these societal benefits. Baum et al. (2013), in their report for The College Board, investigated

several ways society benefits from increased levels of education in the United States. Among their findings were the following:

- Reduced reliance on public subsidy programs such as school lunch programs.
- Adults with higher education levels are more active citizens than those with high school degrees, finding that 42% of those with a 4-year degree volunteer compared to 17% of high school graduates.
- College education leads to healthier choices about smoking and diet, generating reduced healthcare costs.
- College-educated mothers spend more time with their children and adjust their activities more easily to the children's developmental needs.

There is also a long-recognized correlation between a society's level of education and its pace and growth of economic development (Carnegie Commission on Higher Education, 1973; Chambers & Gopaul, 2008; Zumeta, 2005). Post-secondary institutions attract global talent in the form of international students and scholars and bring prestigious recognition to a society through international rankings (Weingarten et al., 2015).

Digging further into institutional theory led me to explore the work of Henry Mintzberg. Mintzberg (1983) described universities as professional bureaucracies, organizations of experts that work independently while sharing common administrative supports. Types of work, such as teaching and research, are relatively standardized, allowing organizations to function under a common set of rules but autonomously. In a professional bureaucracy, the experts themselves are concentrated at the operating core, with unskilled workers as support staff. The experts select representatives from among their ranks to make decisions about strategy and direction, such as in academic senates. According to Mintzberg, power flows to those with the technical skills needed by the organization.

When discussing how decisions were made within professional bureaucracies, Mintzberg (1983) referred to the work of Herbert A. Simon (1997) and James G. March and Johan P. Olsen (1979, 1984, 2009), which led me to further explore their work on decision making in organizations. Simon's contribution to the understanding of how individuals in organizations make decisions is significant. Simon asserted that the role of the organization is to set goals that can then be translated into means for individuals within the organization to make decisions through a hierarchal chain of goals and sub-goals, each with their own means to achieve them. In this hierarchy, the higher-level decision makers make decisions based more on values while lower-level decision makers make decisions based more on facts. Simon proposed that individuals within an organization behave rationally and, since individuals are generally only aware of some decision alternatives, they are willing to settle for an adequate decision rather than search for an ideal one. His theory provides the basis for how many individuals can work together to achieve organizational goals particularly applicable to a public-sector setting.

Among other contributions to the field of organizational science and decision making, March and Olsen (1979) developed the "garbage can" theory of organizational decision making. They envisioned a bucket with a mixed group of problems that need to be solved, a multitude of potential solutions, and different individuals within the organization who come together randomly to generate decisions. They proposed that this type of decision making was particularly prevalent in higher education institutions because of the foundation of collegiality, the lack of clear goals, and transient participants in leadership roles.

Additionally, March and Olsen (2009) coined the term *logic of appropriateness* to describe decision making biased toward what social norms consider to be right rather than what cost-benefit calculations would determine to be the best solution. This viewpoint presumes that individuals will act according to



the rules of their role and has been associated with inefficiency and rigidity as individuals conform to the norms of their role, but it provides opportunities for political behavior for individuals who understand the rules (Balsiger, 2015).

While these scholars, along with many others who built upon their work, provide an excellent foundation for understanding individual and organizational-level decision making, they did not quite answer the question I was hoping to answer. I considered diving deeper into how, in a climate that primarily follows a logic of appropriateness model, an individual could bend the rules to protect his/her resources within the institutional setting but felt that this approach would assume that all institutions made decisions according to the logic of appropriateness. It also assumed that most career centre directors would be willing to bend the rules.

This set me on a search for a theoretical model more specific to the question of decision making revolving around resources for subunits within an institution. Subsequently, I discovered Hackman's (1985) theory of power and centrality in resource allocations.

### **2.3.2. Hackman's Theory of Power and Centrality in Resource Allocations**

In 1985, Judith D. Hackman developed a research-based theory on how post-secondary institutions allocate their resources in difficult economic times. Her study sought to answer three questions: (a) What factors most strongly impact the amount of money and resources allocated to a particular department? (b) How does the allocation of resources differ between units that are core to the institutional mission and those that are peripheral to it? (c) What budget negotiation strategies are most effective for department leaders to increase their share of available resources?

Since the current study seeks to answer the question of how resource allocations to an individual unit within an institution, career centres, were impacted by the services offered and metrics collected, Hackman's (1985) work provided an extremely relevant framework from which to approach this study.

### ***2.3.2.1. Overview of Hackman's Theory***

In developing her theory, Hackman (1985) drew heavily on the work of prior researchers, including Pfeffer and Salancik's (1978) work on resource dependency theory, the notion that organizations are open systems that need to interact with their environment to get the resources they need to function. She also drew from Hickson, Hinings, Lee, Schneck, and Pennings (1971) theory that the more a subunit within an organization copes with uncertainty, provides non-substitutable services, and establishes workflow more central to the organization, the more power a subunit has. Another influence on Hackman's work was Katz and Kahn's (1966) conceptualization of an organization as an open system with inputs, throughputs, outputs, and feedback.

There are five key concepts that lay the foundation for Hackman's (1985) work:

- **Centrality:** Hackman (1985) defined centrality as how closely the purpose of a unit aligns with the institutional mission. She characterized departments as either "core" or "peripheral." Academic departments providing teaching and research are generally defined as core units, while student services units, including career centres, the physical plant, and technology support are generally considered peripheral since they are not directly related to the academic mission. Ashar and Shapiro (1988) further refined this definition by developing an objective method for establishing which academic departments are "core" and "peripheral" within an institution, but no such objective measurement has yet been developed for non-academic departments.
- **Resource allocation:** Resource allocations refer to the relative share of an institution's resources, particularly money, space, and campus location, that a unit receives. In Hackman's (1985) study, she assumed

that resource allocation methods would vary for core versus peripheral unit types. She also focused on the incremental change to a budget, that is, if a unit saw a small increase or large increase rather than the specific dollar amount allocated.

- **Environmental power:** Hackman (1985) based her definition of environmental power on Pfeffer and Salancik's (1978) finding that units that are more successful in bringing in necessary external resources accumulate more power. In her words:

Environmental power is the relative ability of a unit to bring in outside resources that are critically needed by the institution. A unit realizes this form of power when the rest of the institution recognizes both the organization's motivational investment in the resources that the unit can acquire (criticality) and the relative ability of the unit to bring in needed resources from the environment (substitutability). (Hackman, 1985, p. 63)

Examples of external resources a career centre could bring into an institution to increase its environmental power include business and industry support, alumni connections, positive impacts on student recruitment and retention, general community support, and prestige.

- **Institutional power:** The other type of power Hackman (1985) investigated was institutional power. She defined it as a unit's relative influence within the institution independent of its ability to bring in external resources. Examples of factors determining institutional power that apply to a career centre include visibility inside and outside the institution, numbers of students served, relationships between the unit head and institutional leaders, and historical role on campus.
- **Resource negotiation strategies:** The final key concept in Hackman's (1985) work is the strategies used by the department head or director to negotiate with budgetary decision makers. Her study looked at the effectiveness of several different techniques, including:
  - Focusing on needs of institution as a whole.
  - Focusing on needs of the individual unit.
  - Focusing on the needs of the members of the individual unit.
  - Overstating budget needs.
  - Presenting lowest feasible budget.
  - Including proposals for innovative programs and services.

Hackman's (1985) methodology included an initial grounded-theory methodology using literature review, interviews, and document collection that she

refined using a secondary methodology of surveys and case investigations to test her conclusions. Her resulting theory consists of five propositions regarding how budgets are allocated.

- **Proposition 1:** A unit's centrality to the institutional mission substantially affects how resources are allocated. According to Hackman (1985), peripheral units, such as career centres, are more likely to gain internal resources when they contribute to the institutional mission. In applying this proposition to career centres, this implies that how much the institution values the career development preparation and job placement of its students as part of its core mission will directly impact the resource allocation of the career centre.
- **Proposition 2:** A unit's environmental power interacts with its centrality to affect the resource allocation. In this case, peripheral units gain when the resources they can attract are needed by the institution as a whole, particularly in difficult financial times (Hackman, 1985). Examples of how career centres might gain environmental power is by demonstrating how post-graduate employment outcomes impact new student recruitment and how deep relationships with corporate partners not only can generate revenue for the career centre but potential research partnerships and student scholarships.
- **Proposition 3:** A unit's institutional power also impacts resource allocation (Hackman, 1985). Thus, in career centres, key responsibilities of the director need to be establishing relationships with senior administrators, increasing internal and external visibility, and demonstrating student usage and need for career centre services.
- **Proposition 4:** Resource negotiation techniques are related to the centrality of the unit to the institutional mission. Peripheral units, such as the career centre, are more successful in negotiating when their strategies emphasize institutional needs rather than unit needs (Hackman, 1985).
- **Proposition 5:** Hackman (1985) also found that environmental power and institutional power were independent of one another and not highly correlated.

Other researchers have expressed similar recommendations for career centres to retain and gain resources. Shea (2010) argued that it was necessary for career centres "to establish their own unique identities based upon the four pillars

of a post-secondary institution—culture, politics, environment and power” (p. 148). Others have argued for providing career centre staff with training on how to secure external resources, such as through fundraising and in-kind donations, that would increase a centre’s environmental power (Levy, 1995; McCarthy, 2015). While not referencing Hackman’s (1985) theory, these recommendations align with the spirit of the theory.

### ***2.3.2.2. Hackman’s Theory in Research***

Several other studies have drawn from Hackman’s (1985) theory when investigating decision making based on resource allocations. For example, an Australian study sought to determine why funding at large, reputable research institutions were inadequate to provide support for international student services (Forbes-Mewett & Nyland, 2013) and showcased a business school’s successful attempt to garner more financial resources by highlighting its ability to bring in external resources and partner with professional associations. A study of two institutions in the UK also found that used Hackman’s theory as a framework found that power accrued in academic departments that brought in external resources and were considered to be more central to the university mission (Thomas, 2000).

In another couple of examples, Hackman’s (1985) theory did not provide the expected results. Coy and Pratt (1998) presented a case study of how political influences were impacting the annual reporting of a New Zealand university. In their case study, they found that many of the problems with resource allocation as outlined by Hackman held true in their study. However, the ability to generate external resources, environmental power, did not translate into additional resources for their subunit of study, although the authors acknowledged that the unit’s lack of research production, which was central to the institutional mission, may have had more substantial influence. Another study by Crawford (1998) looked at the relationship between power and substitutability of a subunit’s services, specifically the services the library could provide with enhanced

technology, and its resource allocation. Crawford assumed that library services were “core,” to use Hackman’s term, and found that following the negotiation tactics recommended for core services was not successful. In both studies, the assumption that the units being studied were core may have been erroneous and supports Hackman’s conclusion that determination of centrality is the first priority, which reiterates Ashar and Shapiro’s (1988) recommendation that an objective measurement of centrality be adopted.

Hackman’s (1985) theory, as it was focused on the resource allocation at the unit level within a post-secondary context, provides an appropriate analytical framework to organize, analyze and think about the data related to the research questions in this study.

### ***2.3.2.3. Implications of Hackman’s Theory in Practice***

In applying Hackman’s (1985) theory to this study of career centres, the first assumption I made was that career centres are peripheral units, not core units. Because teaching and research are the heart of most academic institutions, this seemed the most appropriate assumption despite the one of the key motivations expressed by students to achieve post-secondary education – to find a good job (Brainstorm Strategy Group, 2017). To test this assumption, I developed a framework that can be used for non-academic units to determine their level of centrality as outlined in Section 3.6.1 within Chapter 3.

For three of Hackman’s (1985) propositions, centrality has a direct impact on the way resources are allocated. According to the first proposition, peripheral units will benefit when their work contributes to the institution. As noted in Chapter 1, students’ primary motivation to achieve post-secondary education is to get a good job. Institutions that recognize this and want to attract and retain students are more likely to see the career centre’s work as contributing to institutional goals. Another example is the trend to increase the number of

international students attending post-secondary institutions as a way to increase revenue due to the tuition differential. For institutions with a large international student population, career centres who provide services to support them could be considered more aligned with institutional goals. A final example is that institutions seeking to increase their reputation may choose to participate in international or national rankings, and career centres that support their institutional participation are contributing directly to their institutional mission.

According to Hackman's (1985) second proposition, peripheral units gain resources when they can obtain external resources that other units on campus cannot provide. In the case of career centres, there are several external resources that they bring into the institution, such as jobs, co-op roles, and internships for their students and graduates; expertise of corporate connections as speakers, mentors, and research partners; sponsors of projects and donors toward programs and centres; and information about what skills and knowledge the corporate community is seeking from new graduates. Because many campuses have multiple career centres on campus, with some focusing on providing a breadth of services to all students and others focusing their attention on the students within their faculty, some of these external resources may be available through alternative departments on campus, increasing the substitutability of a single centre's services.

Hackman's (1985) fourth proposition is that peripheral units fare better when their unit head uses negotiation strategies that emphasize institutional needs rather than departmental level needs. According to this proposition, if an institution seeks to raise its reputation and increase its prestige to attract more or better students, career centres requesting resources to support institutional participation in national and international rankings by focusing services on factors that influence standings, such as post-graduate employment outcomes, would be more successful than those seeking resources to expand counseling services.

Hackman's (1985) other two propositions apply equally to all units on campus whether they are core or peripheral. According to the third proposition, a unit's institutional power impacts its resource allocation. The level and departmental area a career centre reports to, the usage rate of its student population, and the perception of leadership of the career centre all play a role in how the career centre is funded. The fifth proposition, that the combined effect of these propositions on resource allocations is greater than any of the concepts considered alone, means that career centre directors need to understand each of these concepts and how to apply them.

## **2.4. Overview of Literature Review**

In the first two sections of this chapter, I provided an overview of the almost 100-year history of career centres on campus, with special attention to the Canadian context. I provided insights into the external environmental factors and the internal organizational structures that impact the day-to-day operation of the career centre. I detailed the resources—financial, human, and space—available to career centres and the services provided by career centres to different constituent groups over time. Finally, I reviewed the philosophical orientations and measures of success used by career centres of each era.

### **2.4.1. Gaps in the Literature**

In regard to literature concerning career centres on campus, the existing literature was sparse in several areas. For example, while there was some information about various services offered by career centres, I was unable to find much that spoke to the changes in services over time other than from a counseling perspective. For example, career workshops have been part of the career centre repertoire for decades, but how the topics have changed, including those that have disappeared or emerged, is not documented.





2009)(Diefenbach, 2009)(Diefenbach, 2009)(Dietsche & Lees, 2017). This study did look at several operational aspects of career centres but, as noted earlier, this study limited its investigation to centralized career centres at universities and did not investigate any of the career centre aspects related to employer relations.

### **2.4.2. Impact of Literature Review on Study**

The literature reviewed for this study provided a rich background from which to draw the survey questions necessary to answer the primary research question. The six subsections used to describe the current and historical role of career centres on campus are tied to many of the questions in the survey. For example, the review of the changes to services over time, in conjunction with the overview of the external conditions, prompted questions about services provided to specific populations of students.

Additionally, several questions can be tied to Hackman's (1985) theory to help determine the levels of environmental and institutional power levels and negotiation strategies used by the director. Examples include questions about the reporting units and reporting levels of career centres on various campuses. In Appendix A, I have included a list of questions in the final survey used for this study that includes a nod to the primary area of literature reviewed for this study that influenced the inclusion of that particular question.

In the next chapter, I describe the methodology of this study, including the strategy for inquiry, with a focus on the strengths and weaknesses as well as limitations to this strategy. It includes individual sections for each phase of the study outlining the research design, the participant selection process, data collection timelines and process, and data analysis techniques for each phase.

## Chapter 3.

### Methodology

This chapter reviews the primary research question and sub-questions first presented in Chapter 1 that were investigated. Then, I describe my orientation as a researcher and how this orientation impacted the overall study design. Next, I detail the overall methodological approach taken in this study and the rationale for choosing it. Following that, I provide individual subsections for each of the methods used in the study outlining the research design, the participant selection process, the data collection timelines and process, and the data analysis techniques for each method. This chapter ends with the study limitations using this design.

#### 3.1. Research Questions

As noted in Chapter 1, the purpose of this study was to answer a single primary research question: How can the relationships between operational practices within Canadian career centres and the resources allocated to them be better understood? While my own experience in career services is extensive, to fully answer this question, I knew I needed a better understanding of how career centres currently operate in Canada. Using the six key factors influencing and describing career centre operations identified in the literature review as a guide, I incorporated six sub-questions (SQs) into this study:

- **SQ 1:** What are the current external factors influencing Canadian career centres?
- **SQ 2:** What are the current organizational structure and internal challenges influencing Canadian career centres?
- **SQ 3:** What are the financial, human and space resources available to Canadian career centre leaders today?

- **SQ 4:** What are the services provided to students, alumni, and employers by Canadian career centres today?
- **SQ 5:** What are the prevalent philosophical orientations within Canadian career centres today?
- **SQ 6:** What are metrics measured and reported by Canadian career centres today?

There are many lenses and approaches that could be used to answer these questions. The next section will discuss the lens I used to approach this study.

### **3.2. My Orientation as a Researcher**

Even though methodological choice is primarily dependent upon the research questions to be answered, the orientation of the researcher affects choices made and interpretation, so it is important to clearly state the lens through which this study was designed (Creswell, 2014; Nenty, 2009). In my case, I lean heavily toward a pragmatic worldview described by Johnson and Onwuegbuzie (2004), where when considering ideas, it's necessary to look at the empirical and practical consequences. Creswell (2014) described pragmatism as a worldview that "arises out of actions, situations and consequences rather than antecedent conditions" (p. 10). In many ways, my training as an engineer, with its emphasis on experimentation and data collection to drive solutions to problems, continues to define how I approach the world.

Creswell's (2014) interpretation of pragmatism as a worldview resonates with me because it provides the freedom of choice to use the best methods to approach the problem. In my case, I strongly believe in the value of career centres in a post-secondary context. I was also concerned about what appeared to me to be an erosion of resources for career centres coupled with a simultaneous increase in the expectations of accountability. Given what I knew about how

effective these services were, I wanted to better understand the relationships between operational decisions and the resources available to career centres in order to better inform decision makers. By better understanding these relationships, my hope was to provide recommendations to enhance the argument for the provision of adequate resources. This pragmatic approach sets the stage for my methodological choice, mixed methods, as outlined in the next subsection.

### **3.3. Strategies for Inquiry**

Morgan (2014) expanded the scope of pragmatism beyond just solving the problem and indicated that it is important to look at why we choose to do research in one way versus another. In this subsection, I review the methodological approach taken in the survey, the specific methods used, and discuss the limitations of each.

#### **3.3.1. Mixed Methods as a Methodological Approach**

Creswell (2014) provided an outline of the criteria that should be considered when choosing a methodological approach. The first and most important consideration is the research questions to be answered. In this case, I sought to understand the relationships between career centre operations and resources available to them across a large population of career centres. Many of the factors increasing career centre operations were easily measurable and objective, such as how many services a career centre offers; the operational budget available; and to whom the career centre reports. Since this type of data is easily quantifiable, it lends itself to a quantitative approach.

However, realizing my own experiences and knowledge were not complete and knowing there were important considerations that I was not fully cognizant of, I wanted to utilize a method that would allow me to capitalize on the wisdom and

experience of others in the field. In this case, a qualitative approach would be more appropriate. Because both methods would contribute toward a more complete understanding of the research questions, a mixed-methods approach based on a review of this criterion seemed most appropriate.

Creswell (2014) also cited the personal experience of the researcher when considering other criteria when choosing a methodological approach. In my case, my technical training created a leaning toward a quantitative method. However, I also have years of experience working in team settings and recognize the value of soliciting feedback and ideas from others through conversations and open discussions, which is suggestive of a qualitative approach. Again, these criteria suggested a mixed-methods approach. Creswell's final consideration was the audience for the research. In this case, my primary audience were the decision makers in Canadian post-secondary education, career centre personnel, and those interested in career services in a post-secondary context. This audience was assumed to be comfortable with quantitative results such as descriptive statistics representing the frequencies of services offered and means of total budget. All these criteria, in addition to my pragmatic worldview, provided the foundation for selecting a mixed-methods approach to the research design for this study.

In general, mixed-methods design has the advantage of being able to capitalize on the strengths of both quantitative and qualitative methods, allowing the researcher to use narrative to add meaning to numbers while using numbers to add precision to text. Mixed-methods research has been defined as "where the researcher combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study" (Johnson & Onwuegbuzie, 2004). According to Creswell and Plano Clark (2011), "The formative period of mixed methods began in the 1950s and continued up until the 1980s" (p. 25) and continued to expand throughout the 1990s.

Many researchers suggest that the primary reasons for choosing a mixed-methods approach are to increase the breadth of understanding of the problem and for corroboration of findings from one method with others to increase the validity of the conclusions (Johnson & Onwuegbuzie, 2004; Lund, 2012; Östlund, Kidd, Wengström, & Rowa-Dewar, 2011). Doyle, Brady, and Byrne (2009) included the ability for each method to offset the other to neutralize the weaknesses of each and the ability to tackle different problems as other reasons to utilize a mixed-methods approach.

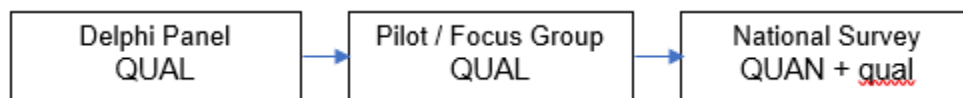
The two primary challenges to mixed-methods research stem from the practical and philosophical. The practical challenge some authors speak to are the complications of carrying out and understanding multiple types of methodologies by one researcher or teams of researchers (Lund, 2012; Luyt, 2012). The philosophical challenge brought forward by some researchers is that some mixed method studies combine multiple paradigms which they believe should not co-exist in the same study. While not every mixed method study includes multiple paradigms, depending upon how paradigms are defined, these researchers are concerned about the integrity of studies with multiple paradigms when not all of the details have been explained about how they interact (Johnson & Onwuegbuzie, 2004). However, in the case of this study, based on my pragmatic viewpoint, the advantages of being able to use the methods that would best answer the research question outweighed the philosophical argument over paradigm conflict.

After recognizing that I wanted to take a mixed-methods approach to this study, the next step was to identify the specific methods to be used to address the research questions.

### 3.3.2. Choice of Methods

As noted earlier, I was primarily seeking to identify the factors that influence an outcome, which suggested a quantitative approach. I also wanted to be able to generalize the results for all post-secondary career centres across Canada, which would require sufficient data from a large sample spread across a large geographic region. This indicated that a survey was likely to be the primary method needed to answer these research questions. Because I was hoping to describe the Canadian landscape as a whole and provide applicable recommendations to as broad a contingent as possible, I needed to ensure that this study was comprehensive and informative as possible. To achieve the goal of having a well-designed survey that represented all types of career centres in many different post-secondary institutions, I knew I needed to solicit the expertise of others in the career services field. Since the expertise I was seeking was not clearly defined, I knew I needed to take a qualitative approach and gather their advice to use in the survey design. This tactic to creating the survey followed what Denzin (2012) characterized as “an iterative approach to inquiry” (p. 82).

After reviewing various qualitative methods, I decided that a Delphi panel, a method developed in the 1950s to solicit the advice of experts, and a focus group were appropriate methods to gather the qualitative data I needed to design an effective survey. Based on Leech’s and Onuquebuzie’s (2009) typology, the research design for this study is represented in Figure 2.



**Figure 2: Research typology for this study**

I used a Delphi panel and a focus group to provide qualitative feedback on the survey design to ensure that the quantitative survey was well-formulated to get



appropriate answers to the research questions. The purpose of the Delphi panel was to solicit information from a panel of experts on the comprehensiveness of the survey instrument, its questions, and the responses to the closed-ended questions. The focus group following the survey pilot was used to solicit qualitative feedback about the ease of use of the survey as well as the survey instrument itself. Both of these methods are explained in greater detail later in this chapter. Since the primary method used in this study was a survey, the next section provides a background to the advantages and challenges of using surveys in research.

### **3.3.3. Surveys**

A survey allows for the quantitative analysis of trends, attitudes, or opinions of a population by studying a sample of that population (Creswell, 2014). Although they are one of most widely used research methodologies in practice, Fowler (1988) suggested that surveys be used when no other method will allow researchers to collect the data necessary to answer the question and when standardized measurement is needed across the population to analyze the results.

The construction of a survey and choice of questions is critical to obtaining quality results from the survey (Brewerton & Millward, 2012). The type of question to be asked, the exact wording of each question, and the order of the questions can influence responses (Schaeffer & Dykema, 2011). A key step in the survey design process is to determine how the participants will be selected, how many are necessary to be able to generalize the findings across the whole population, and how it will be ensured that the sample is representative of the results (Brewerton & Millward, 2012; Fowler, 1988).

Another important step in the survey design process is to pilot the survey with a subgroup of potential respondents. This allows the researcher to remove redundant questions, rewrite confusing questions, and provide an early indication

of the reproducibility of responses (Passmore, Dobbie, Parchman, & Tysinger, 2002). Once the survey has been piloted, deployment to the selected participants can take place so that data can be collected and analyzed.

Orlich (1978) identified multiple advantages to survey research that hold true today. These include the ability to contact multiple people across distances with the same questions in an efficient, cost-effective way; the ability for respondents to answer in an honest way without fear of the potential embarrassment of an interviewer's reaction; and the benefits of not having to train interviewers or account for their biases. Many other researchers echo his perspective on the advantages to using surveys (Brewerton & Millward, 2012; Creswell, 2014; Fowler, 1988; Passmore et al., 2002).

### **3.3.3.1. Online Surveys**

There have been rapid advances in web-based survey technologies that allow researchers to custom design surveys easily. Email provides cost-effective, rapid distribution of an online survey across broad geographic regions (Couper, Traugott, & Lamias, 2001). Since I was seeking to reach as broad a cross-section of career centres as possible over a specific time frame and at as low a cost as possible, developing the survey using an online platform was the best approach. This method provided the ability to contact multiple people across distances with the same questions in an efficient, cost-effective way. SFU provided students with an acceptable online survey platform, FluidSurveys, for use in their research.

### **3.3.3.2. Other Surveys in the Career Centre Context**

Surveying is not new to campus career centres. There have been several other surveys within the field of career services seeking to provide insight into campus career centres' operations. For more than 15 years, NACE has conducted an annual benchmarking survey of career centre staffing, budgets, and services of its members. In 2012, Brainstorm Consulting, a private Canadian-based firm

providing consulting services to campus career centres and employers who recruit directly from campuses, conducted a Canadian-based benchmarking survey of institutions participating in its 2013 Career Summit (Hampshire & Donald, 2012).

Other associations and institutions regularly survey career centre staff about the job market on their campuses. For example, MBA Career Services and Employer Alliance (MBACSEA) survey their career centre members every spring and fall about recruiting activity on campus. GMAC sends a corporate recruiter survey to career centres to distribute to their employer base about recruiting trends. Most recently, CERIC launched a survey in October 2016 to investigate career centre models, counseling staff preparation, and the uptake of CERIC's resources within the post-secondary context. All of these examples illustrate the wide acceptance of surveys within the career centre context.

However, the survey for this study was unique and provided new insights into the field in several ways. First, other than the Brainstorm survey in 2013 and the 2016 CERIC survey, the remaining surveys are heavily U.S.-centric and results are not reported specifically for the Canadian context. Second, many of the past surveys were seeking information about specific areas within the career centre context, such as employer activity on campus or counseling staff preparation. This survey looked at all aspects of career centre operations. Finally, this survey was run from a practical inquiry-based approach, unlike the other Canadian surveys. As a current director of a career centre, my insider knowledge provided a unique perspective on the questions that needed to be answered.

### ***3.3.3.3. Limitations to Surveys***

All studies, no matter how careful their design, have limitations. Surveys rely on the participants' memory, honesty, and willingness to complete it independently to be effective (Passmore et al., 2002). In the case of this survey, while I could think of no reason participants would report with deception or

dishonesty, it did require self-reporting of data going back a period of several years. This made it extremely reliant upon the memory of the participants, which may or may not have been fully accurate. In the case of some key questions, I attempted to mitigate this limitation by asking for trends rather than specific information. For example, I asked participants if their budgets had increased or decreased in the last several years rather than requesting specific numbers for the past several years.

Additionally, surveys can be difficult to design without potential bias in the question design or other wording issues that skew the results (Orlich, 1978). As I detail later in this chapter, I attempted to mitigate this limitation through the use of a Delphi panel, pilot study, and focus group to review all questions before deployment.

Other disadvantages with surveys can be low response rates or incomplete data, and they do not allow follow-up questions from the researcher to improve the understanding of responses (Ecker, Rae, & Bassi, 2015). To attempt to mitigate the low response rate, I sought out a partner organization, the Canadian Association of Career Educators and Employers (CACEE), to help promote and distribute the survey. More details about this partnership can be found in Section 3.4.2.1 of this chapter. I also attempted to mitigate the challenge of unclear or incomplete responses by asking consent from respondents to follow up and clarify responses, if needed, after the survey. In this case, the respondents were not anonymous, making it easier to follow up.

Some researchers have lamented that the rise of online software tools has reduced researchers' reflections on the theories behind the questions and has led to poorer survey design despite the increases in technology designed to improve survey techniques (Lauer, McLeod, & Blythe, 2013). Since this survey was

completed as part of doctoral research project, this limitation was addressed through the survey design process by reviewing the available literature.

The next subsection will look at the design of this study in particular, including the qualitative methods used in the design process to improve the overall quality of the survey instrument.

### **3.4. Study Design and Instrument Development**

The first step in the process was to develop a draft version of the survey based upon what I found in the literature and my practitioner experience. Following that, two other methods were incorporated within the design phase to increase the validity of the instrument. First, a variation of a Delphi panel was used to solicit expert opinion and mitigate my limitation regarding a lack of knowledge of the Canadian context. Next, a pilot study that included a focus group of practitioners was also utilized to check for survey understandability and user friendliness.

This next subsection details the steps in developing the survey instrument from start to finish, including a review of the methodologies used, participant selection and recruitment in the design phase methodologies, timing and steps in the design phase, ethical considerations, data collection, and data analysis of the methodologies used in the survey design.

#### **3.4.1. Survey Design Process**

I had significant knowledge of many of the areas I was hoping to investigate that provided a starting point to start drafting the survey. Taking a practitioner-based approach does have its limitations because the practitioner's knowledge and experience of the field brings inherent biases to the work. Researchers may have blind spots or experience gaps that are key to ensuring that the results are generalizable beyond the specific context of the researcher.

Recognizing my own experience within the Canadian context was relatively limited, I attempted to overcome my lack of knowledge and experience in this context through two primary ways. One way was through the use of a Delphi panel of experts from across Canada, as described in Subsection 3.4.2 of this chapter. The other way I attempted to mitigate this effect was through a partnership with CACEE to expand the distribution and promotion of the survey. Before moving into a detailed description of the survey design process, it is important to provide the background to the partnership with CACEE.

### ***3.4.1.1. Collaboration with Canadian Association of Career Educators and Employers***

In Canada, there are five professional associations that represent the individuals working to support the career development needs of students: (a) CACEE; (b) the Student Affairs and Services Association and (c) the Canadian University and College Counseling Association, which are both affiliates of the Canadian Association of College and University Student Services (CACUSS); (d) CERIC; and (e) the Canadian Association for Co-operative Education (Shea, 2010).

As a former member of CACEE's National Board, an instructor in their Career Educator Certificate program, and a multi-year association member, my ties with CACEE are substantial. Additionally, CACEE has grown to represent the broadest and largest membership of career professionals in post-secondary education, with "members representing almost every Canadian university, many colleges, and employers across Canada" (CACEE, n.d., para. 6).

Because of these connections, I reached out to the Research/Communications Committee of CACEE, through the executive director, about a partnership for the implementation of the online national survey. The committee recommended that the partnership move forward, and it was approved

by their National Board on March 21, 2016. Appendix B includes the one-page proposal approved by the national board.

This partnership had several important implications for the design and methodology of this study. Through this partnership, CACEE distributed and endorsed the survey to its membership base of more than 200 career centre professionals. As noted earlier, this helped to mitigate the potential for a low response rate. Approximately 50% of the survey respondents were CACEE membership institutions. In exchange for their assistance with promotion and distribution, members of the Research/Communications Committee were invited to participate in the Delphi panel. As experienced practitioners with an interest in research, they were natural choices to participate in the panel. More details about how the complete panel was selected follow later in this chapter.

Additionally, I offered to let CACEE include questions in the survey. These additional questions, determined by the Research/Communication Committee, were outside of the scope of this study but were of interest to their organization. These questions were incorporated into the survey during the Delphi Round 2 and were included in the final survey. These questions were specifically designed for participants to self-identify innovative practices in services for students, alumni, and employers. The results of these questions have been excluded from these findings but have been reported to CACEE in other work. The table in Appendix A identifies which questions were included for CACEE.

Finally, I committed to provide CACEE with a detailed summary report of the findings, including statistics that they can incorporate into their training programs, and to present the research findings at their National Conference in June 2017.

### **3.4.1.2. Developing the Survey Draft**

In addition to tapping into my practitioner experience, I also drew heavily on the literature from career and student services and decision theory in post-secondary institutions. I reviewed questions from several other similar studies described earlier (in Section 3.3.3.2), such as the NACE (2015) Career Services Benchmark Survey and Brainstorm Strategy Group's (2013) Canadian survey, and incorporated some of these questions into the survey draft. Each question in the survey was designed to provide input into my research questions. Appendix A provides a correlation between the survey questions and the research questions to be answered.

The online survey was designed with four sections. Part 1 of the survey was exclusively open-ended questions designed to elicit trends currently facing career centres. These open-ended questions were deliberately placed at the beginning of the survey to encourage more detailed responses at the onset of completing the survey when the participants were likely to be enthusiastic. Part 2 led with questions about the institution and career centre of the individual taking the survey and about the individual him/herself. It also included questions about staffing, financial resources, and space available to the career centre. Part 3 asked about career centre services for students, alumni, employers, and other stakeholders. Part 4 of the survey included questions about success and accountability measures, data collection, and metrics reported.

Once a draft version of the online survey was constructed, I moved into the next phase of the survey design process—the Delphi method.

### **3.4.2. The Delphi Method**

The Delphi method describes the gathering of opinion from experts in their field to gain their perspectives about a topic (Pill, 1971; Skulmoski & Hartman,



2007). Originally developed in the 1950s to gather consensus of military experts on the issue of an atomic bomb attack, the Delphi method has since been used for a wide variety of situations in which expert opinion is believed to be the most reliable source of information about a topic area (Boberg & Morris-Khoo, 1992; Linstone & Turoff, 1975).

The Delphi method is “an iterative process used to collect and distill the judgments of experts using a series of questionnaires interspersed with feedback” (Skulmoski & Hartman, 2007, p. 2). A classical Delphi has four key features: anonymity of the expert panelists from one another so that they cannot be influenced by each other; use of iterative rounds to allow participants to hone their responses; controlled feedback returned to the participants so that they can clarify their own views; and statistical aggregation of the results (Rowe & Wright, 1999).

The Delphi method has been used extensively in educational management because it fits the culture of participative planning found within post-secondary institutions (Linstone & Turoff, 1975). Moreover, relevant to this study, several authors commented on its value in creating an effective survey in a clinical context when input from a variety of experts is desirable (Biondo, Nekolaichuk, Stiles, Fainsinger, & Hagen, 2008; Ehrlich et al., 2006).

Steinert (2009) spoke of the value of the Delphi in expanding the conversation using a “dissensus” based approach. He argued that when a hypothesis is based on secondary sources, the results are “prematurely confined by the knowledge base it is building upon” (p. 291). He further proposed that the Delphi technique can be applied as an efficient methodology to brainstorm with experts about complex and new scenarios. In their 2007 study of web-based education at public institutions, Franklin and Hart (2007) also suggested that the Delphi method provides an effective tool for investigating emerging trends when extant literature is limited.

In the case of career centre resources, services, and metrics, there is very limited information in the literature about what is important to survey within the Canadian context. New initiatives and innovations of practice are not yet captured by existing sources. The use of a Delphi panel of experts provided broader input into the survey design that could not be achieved through a review of the literature alone.

One of the key strengths of the Delphi method is its face validity as a methodology based upon peer review (Biondo et al., 2008). Some of the other advantages of the Delphi method are that ideas from geographically diverse individuals can be brought together and, since participants do not know who made suggestions in future rounds, group dynamics are avoided (Ehrlich et al., 2006). In addition to bringing others' expertise to the design of the survey, the Delphi method provides the added benefit of building support for the research project (Geist, 2010). These advantages made it an ideal choice for the current study.

Keeney, Hasson, and McKenna (2006) pointed out some of the challenges of the Delphi method: (a) participants can lose interest or change roles over the course of the multiple rounds, so maintaining the representative quotas can be an issue; (b) determining the right level of consensus can be complicated if there is extensive disparity in the responses; (c) in many Delphi studies, participants are not fully anonymous to the researcher, which can cause participants to fear judgment by the researcher; and (d) a Delphi study may take longer to implement than the traditional survey design with a pilot group because each round has to be distributed, collected, and analyzed. Other researchers also point out that expert bias, due to the similar training and experiences of the panelists, could skew the results (Judd, 1972).

In this study, these challenges did not arise. The timeline between rounds was relatively short, and the participants were long-time professionals in their

fields, so they did not change jobs or lose interest. Determining consensus was not necessary in this particular study since I was seeking to broaden the design using a dissensus approach. While the process took longer than a single survey would have to implement, speed was less of a consideration in this study than thoroughness.

However, it is worth noting that the participants were not anonymous to me, so the potential exists that they had unexpressed concerns about my judgment of their answers. This risk was minimal because all participants were very experienced professionals whose knowledge and wisdom I clearly acknowledged was greater than mine—which is why I asked them to participate. Additionally, the question topics were not controversial.

#### ***3.4.2.1. Participant Selection and Recruitment***

The first step in creating a good Delphi panel is to determine the criteria for expert selection (Cole, Donohoe, & Stellefson, 2013). There are no standard specifications around how many experts should make up a Delphi panel, but, rather, panel size seems to be determined by logistics and common sense (Keeney et al., 2006). In this case, to ensure that the panel was as representative as possible of career centre types, institutional types, and geographic areas but not too big to be unmanageable, I determined 10–12 participants would be ideal.

As described in the prior section detailing the collaboration with CACEE, the members of the Research Committee were sent the first invitations to participate on the Delphi panel. They were sent the email invitation in Appendix D detailing the commitment and timeline. Of these members, four out of five agreed to participate on the panel. Although there was geographic region variation in the four members, all members of the Research Committee represented universities and were from centralized career centres.

After accessing the CACEE directory, I then used a variation on quota sampling methodology (Mack, Woodsong, MacQueen, Guest, & Namey, 2011) to select representatives from community colleges, polytechnic institutions, and decentralized career centres to invite to participate. I sent out eight invitations, and six of these individuals agreed to participate, giving me a total of 10 Delphi panelists. Table 7 shows the career centre type, institutional type, and geographic breakdown of the panel participants. Career centre and institutional type were based on where the individual worked at the time of the Delphi panel, although several participants reported past employment at other types of career centres and institution types. Geographic region of the participant's institution is defined by the CACEE region where the institution is located.

**Table 7: Delphi panel participants**

Career centre type		Institution type		Geographic location	
Centralized with co-op	4	University	5	Atlantic	2
Centralized without co-op	2	College	4	Ontario	3
Centralized—co-op exclusive	1	Polytechnic	0	Quebec	1
Decentralized with co-op	1	Other	1	Canada West	4
Decentralized without co-op	2				
Decentralized—co-op exclusive	0				

### **3.4.2.2. Delphi Round 1**

In the first round of the Delphi panel, the participants were sent an online survey that included only the questions from the draft national survey that were intended to be closed-ended questions in the final version. However, in the Delphi Round 1 survey, the questions were formatted as open-ended, and the panel were asked to provide text answers for each of these questions. For example, one

question in this survey was “What type(s) of students does your career centre serve?” All of the responses generated by the panel were then incorporated as choices in the closed-ended questions. For a complete list of questions posed in the first round of the Delphi panel, please see Appendix E.

The purpose of this round, which took a dissensus approach (Steinert, 2009), was to gather as many choices for each of the closed-ended questions as needed to ensure that there were appropriate responses for all career centre types, institution types, and geographic regions. The first survey round of the Delphi panel took place between April 18 and June 12, 2016, and 100% of the participants who agreed to participate completed the round.

When the responses were complete, I went through each of the questions in the Delphi Round 1 survey and added any new text responses from any participant that were not represented in my original national survey draft. In particular, Delphi panel participants identified several co-op and geographically based answer selections that I had not included in my draft. Examples include Quebec-specific answers such as the institution type “Cegep system” and specific certifications such as the “Ordre des conseillers en Ressources Humaines et en Relations Industrielles Agréés du Québec (CHRA).”

### ***3.4.2.3. Delphi Round 2***

On June 13, 2016, I sent an email invitation to all 10 Round 1 Delphi panel participants to participate in Round 2. Attached to this invitation was an MS Word version of the entire draft national survey, and panelists were given the instruction to comment or edit the Word document with the track-changes feature in place. The purpose of this round was for the panelists to provide feedback on the survey as a whole and on each individual question. Panelists provided feedback on question wording and order. They were also asked to identify any questions that

they thought were missing from the survey. Eight out of 10 of the Round 1 participants continued and completed Round 2.

Feedback from each of the participants was reviewed individually, and four feedback themes were identified and incorporated into the national survey draft as follows:

- **Additional questions:** Additional questions suggested by the panelists were added to accommodate CACEE interests as per our agreement noted earlier. Thirteen new questions were added to the survey from the panelists.
- **Wording changes:** Wording changes to questions were made to increase clarity when panelists indicated confusion or when panelists identified more than one element being addressed in a single question. Twenty-two questions were modified based upon the feedback from the panelists.
- **Answer additions:** In some cases, additional answer choices were suggested, even after the addition of the choices from Round 1. Five questions were modified with additional answers.
- **Errors:** Spelling, grammar, and other errors were corrected.

Because there are no specific rules about how many rounds a Delphi study should have, Keeney et al. (2006) cautioned that response exhaustion must be considered in the design of a Delphi panel. Since the recommendations provided by the panel in the second round were not substantive, I was confident that the survey represented both the theoretical perspective found in the literature and the applied perspective from the Delphi panel experts. This methodology provided both face validity and content validity to the instrument, ensuring it was ready for the pilot stage.

#### **3.4.2.4. Ethical Considerations**

The following section outlines the ethical considerations and care taken to protect the participants in the Delphi phase of the research. This study was

categorized as minimal risk and undertaken with the approval of the Office of Research Ethics (ORE) at Simon Fraser University on behalf of the Research Ethics Board in accordance with University Policy R20.01 (Simon Fraser University, 2014). Approval was obtained by complying with the ORE's principles of research involving human subjects. The following documents were approved by the ORE for this phase of the study:

- Recruitment Email for CACEE Research Committee—Appendix G.
- Recruitment Email for other participants—Appendix D.
- Round 1 Online Survey—Appendix E.
- Delphi Panel Consent Form—Appendix H.
- Delphi Panel Study Protocol—Appendix I.

In accordance with Simon Fraser University (2014) Policy R20.01, the study was explained to each participant in the recruitment email and on the front page of the online survey. Consent to participate was expressed by completing the Round 1 survey. The online survey was implemented through Fluid Survey and housed on SFU servers. Survey responses were downloaded for analysis onto an SFU-owned, password-protected laptop housed within a locked office. Round 2 surveys were distributed via SFU email servers and returned via the same method. Responses were downloaded to the same SFU-owned, password-protected laptop. All Delphi panel data will be destroyed at the completion of this study.

This study would not have been possible without the panel participants. In addition to thanking the participants individually for participating, an incentive of a chance to win a Kindle eReader through a random drawing for participants who completed either phase of the Delphi was offered.

#### **3.4.2.5. Limitations of the Delphi Panel**

A key limitation of this Delphi panel was that it only considered the feedback from the participating experts. With no representation from the polytechnic sector, I may have missed important considerations unique to that sector.

I will now detail the methodology of the next phase of the study, the pilot study, and focus group.

#### **3.4.3. Pilot Study and Focus Group**

An important step in the survey design process is to pilot the survey with a subgroup of potential respondents. A pilot study allows the researcher to remove redundant questions and rewrite confusing questions, and it provides an early indication of the reproducibility of responses (Passmore et al., 2002).

After the second Delphi panel feedback was incorporated into the survey, the survey was piloted with a small group of volunteers working within career centres from my personal network. There was no overlap between Delphi panel participants and pilot study participants. Five invitations were sent to participate in the pilot survey and focus group on July 19, 2016, and four people chose to participate. See Appendix J for the invitation to participate. The four participating individuals represented both centralized and decentralized career centres from both the university and college sectors. No polytechnic institutions were represented in this study.

The volunteers were sent the survey via email and asked to complete it online as if they were future participants via the same methodology as future national survey participants. The pilot participants then all participated in a focus group, held about one week later, to get their feedback on the survey experience.



### **3.4.3.1. Ethical Considerations for the Pilot Survey and Focus Group**

The following section outlines the ethical considerations and care taken to protect the participants in the pilot study and focus group. This study was categorized as minimal risk and undertaken with the approval of the ORE at Simon Fraser University on behalf of the Research Ethics Board in accordance with University Policy R20.01 (Simon Fraser University, 2014). Approval was obtained by complying with the ORE's principles of research involving human subjects. The following documents were approved by the ORE for this phase of the study:

- Recruitment Email for Pilot and Focus Group—Appendix J.
- Pilot Group Survey—Appendix K.
- Pilot Group Consent Form—Appendix L.
- Pilot Group Study Protocol—Appendix M.
- Focus Group Script—Appendix N.

In accordance with Simon Fraser University (2014) Policy R20.01, the study was explained to each participant in the recruitment email, on the front page of the online survey and in person at the start of the focus group. Consent to participate was expressed by completing the pilot survey and again via verbal consent at the beginning of the focus group. The online survey was implemented through Fluid Survey and housed on SFU servers. Survey responses were not downloaded to any other computer, and the printed versions of participants' survey responses were returned to them. The digital recording of the focus group is stored on an SFU-owned, password-protected laptop that is kept in a locked office. No one other than the researcher and the paid research assistant has listened to the recording. The recording will be destroyed at the completion of the study.

This study would not have been possible without the pilot group participants. I thanked the participants at the end of the focus group, and participants received a token gift for their participation.

### ***3.4.3.2. Pilot Study and Focus Group Data Collection***

The focus group met at an SFU location in a private conference room and the focus group lasted about 2 hours. As the lead researcher, I led the focus group myself. Participants were provided with a printed copy of their own responses to the pilot survey to use while discussing the survey. The focus group was recorded, and a paid undergraduate research assistant was present to assist with note-taking throughout the focus group. The questions asked within the focus group can be found in Appendix N.

### ***3.4.3.3. Pilot Study and Focus Group Data Analysis***

Because this was the first group to go through the online survey from start to finish, much of the feedback from the focus group was on the survey mechanics to make sure that the survey was user-friendly and working correctly. In addition to the comments on the mechanics, the focus group had a few suggestions about survey content and wording, including ensuring that the language regarding co-op versus internships was clear and that there were options for people for whom questions may not apply. Overall, feedback from the pilot group was that it was comprehensive and easy to follow. This feedback was incorporated into the final draft of the national survey.

There were a few limitations to the pilot and focus group that need to be addressed. Since the participants were all from the Vancouver area, there is the potential that geographic differences may not have been identified. Additionally, the majority of the participants were personally known to the researcher and might have been less comfortable providing critical feedback, particularly in an in-person, group setting, than individuals who were unknown and able to provide feedback remotely. However, I felt that these limitations were outweighed by the benefits of conducting a focus group in person, such as having a robust discussion of the questions and eliminating challenges to completing the survey.

At this point, the final instrument was developed and ready for deployment. I will now move on to the next phase of the study—the national survey.

### **3.5. Primary Data Collection**

Once the final instrument was developed, the next phase was to determine the participant selection and recruitment, review the ethical considerations, and develop a data collection timeline. The next section details these steps as well as provides an overview of the demographics of survey participants.

#### **3.5.1. Participant Selection and Recruitment**

A key step in the survey design process is to determine how the participants will be selected, how many are necessary to be able to generalize the findings across the whole population, and how to ensure that the sample is representative of the results (Creswell, 2014; Fowler, 1988). Unlike other studies (Dietsche & Lees, 2017), I did not want to limit participation in the survey by institution type or by career centre type. My hope was to be as inclusive as possible within the post-secondary degree-granting landscape.

Survey participants were identified in two ways. Through partnering with CACEE, I utilized a population sampling method to survey the entire membership of CACEE. Invitations were sent by the CACEE president to the CACEE membership list, which had approximately 200 individuals on it. Additionally, since a review of the CACEE membership directory showed that a disproportionate number of university members compared to college members existed, I sought out the list of post-secondary institutions that report information to the Centre for Education Statistics at Statistics Canada (Appendix O). A paid research assistant then reviewed each institution's website to find career centre contacts at that institution. This search generated a list of 290 contacts, some of which were

duplicates from the CACEE membership list, which became Group A. In reviewing the list provided by the research assistant, I realized that she had not successfully found contacts at many of the institutions, so I undertook a web-based search of my own and identified an additional group of 40 contacts at schools on this list, Group B. I deliberately did not limit survey participation to CACEE members.

A recruitment notice was also posted on the CACEE LinkedIn group and, as I learned after the fact, the link to the survey was circulated by one of the participants to the Accountability Council of Co-operative Education, an independent group of directors of co-op centres across Canada.

### **3.5.2. Ethical Considerations**

The following section outlines the ethical considerations and care taken to protect the participants. This study was categorized as minimal risk and undertaken with the approval of the ORE at Simon Fraser University on behalf of the Research Ethics Board in accordance with University Policy R20.01 (Simon Fraser University, 2014). Approval was obtained by complying with the ORE's principles of research involving human subjects. The following documents were approved by the ORE for this phase of the study:

- Survey Instrument—Appendix C.
- One-pager for CACEE—Appendix B.
- Recruitment Email for CACEE Members—Appendix P.
- Recruitment Email for other Participants—Appendix Q.
- LinkedIn Recruitment Post—Appendix R.
- National Survey Consent Form—Appendix S.
- National Survey Study Protocol—Appendix T.

In accordance with Simon Fraser University (2014) Policy R20.01, the study was explained to each participant in the recruitment email and on the front page of the online survey. Consent to participate was expressed by completing the online survey. The online survey was implemented through Fluid Survey and housed on SFU servers. Survey responses were downloaded for analysis onto an SFU-owned, password-protected laptop housed within a locked office. All survey data will be destroyed within 2 years of the completion of this study.

### 3.5.3. Data Collection and Timeline

Survey invitations went out in stages, with initial invitations emailed on August 8, 2016, to the first group of more than 290 individuals representing 154 institutions (Group A). As additional individuals were identified, a second set of initial invitations was emailed on September 2 to an additional 40 individuals at an additional 21 institutions (Group B). CACEE sent the initial invitation to its members on August 9 (Group C). There was some overlap in the mailing lists between Groups A and Group C; however, the extent of the overlap is not known. Table 8 indicates the reminder schedule for each group. The first response came in on August 8 and the survey closed on December 16, 2016.

**Table 8: Survey reminder schedule**

Group	Number	Initial invitation	First reminder	Second reminder	Final reminder
A	292	August 8	October 4	October 29	November 6
B	40	September 2	October 16		November 6
C	~ 200	August 9	October 26		November 8

Data were collected through an SFU-supported Fluid Survey platform and downloaded into Excel for initial analysis. Once downloaded, the data were reviewed for missing data and obvious errors, such as mislocating an institution in

the wrong geographic area. Since the dataset was so large, separate Excel data sheets were created to analyze data by question. Many of the statistical tests were conducted using R, an open-source statistical analysis tool. For these tests, the data sheets were saved as .csv files before uploading into R for analysis.

### 3.5.4. Demographics of National Survey Participants

There were a total of 65 complete individual responses to the survey. However, because the data unit to be compared was at the career centre level, not the individual level, the responses had to be evaluated to prevent oversampling from multiple individuals at the same career centre. Additionally, due to the long collection period, some individuals started and/or completed the survey multiple times, leading to multiple responses for the same career centre. Once the duplicates were removed, it left 63 complete responses to the survey. Table 9 indicates the decision criteria used to eliminate the duplicate responses.

**Table 9: Rationale for excluding responses to national survey**

Career centre	Number of responses	Decision criteria on response
Career centre 1	2	Respondent A was director of centre, had been with the centre more than 5 years, and was able to complete all of the questions including budget and resourcing; Respondent B was unable to complete all of the questions. Respondent A's survey was used as representative of the centre and Respondent B's results were excluded from the quantitative analysis.
Career centre 2	2	The same respondent completed the survey twice on behalf of the centre. The first survey was used as representative of the centre because the respondent took significantly longer to complete it the first time and the answers were more complete.

Table 10 details the institutional type and geographic locations of the responding career centres. The vast majority (61, 95%) of the responding career centres are at institutions where English is the primary language spoken.

**Table 10: Demographic statistics of career centre respondents to national survey (*n* = 63)**

Institution type		Geographic location	
University	49	Atlantic	10
College	8	Ontario	26
Polytechnic	4	Quebec	4
Other	2	Canada West	23

Of the 63 respondents, 47 (75%) held the most senior role in their career centre, with titles of director, manager, or chairperson of their career centre, and two (3%) were either associate or assistant directors. Nine (14%) indicated a coordinator, officer, or program manager title, and five (8%) indicated their primary role was a career advisor or counselor.

Respondents averaged 8.4 years with their current career centre and more than 13 years' experience in the career development field. Most respondents had completed significant post-secondary education themselves with more than 95% (*n* = 61) of respondents reporting a minimum of a bachelor's degree, 57% (*n* = 36) reporting having a master's degree, and 11% reporting having completed or in progress to complete a doctorate degree (*n* = 7). Only 12 respondents (19%) reported completing a certificate program, designation, or degree in career development.

The next subsection will review the data analysis techniques used to analyze the survey responses.

### **3.6. Primary Data Analysis**

As noted earlier, there was one primary research question that this study sought to answer: How might the relationships between operational practices within Canadian career centres and the resources allocated to them be better understood? Using Hackman's (1985) theory and propositions as the framework for analysis, I provide in this section the specific analysis techniques used to answer this question and the sub-questions it generated.

This subsection is divided into five parts that correspond with the four different findings sections in Chapter 4. First, in order to use Hackman's (1985) propositions as a lens, I had to determine the centrality of career centres, according to Hackman's definition, to identify if career centres were core or peripheral units. The first subsection details the propositions and framework I developed to determine the centrality of career centres using Hackman's concept of centrality as the lens.

Next, as noted in Chapter 1, before I could start to answer the primary question about how career centre operations were impacting resource allocations, I needed more information about how career centres currently operate. Thus, the next step in the data analysis process was to answer the six sub-questions previously detailed using Hackman's (1985) propositions as the analytical lens to identify the operational practices that would serve as the predictor variables to be used to answer the primary research question.

To get a more comprehensive view of the Canadian post-secondary career centre landscape, I also investigated if there were variations in how those programs and services were implemented across three demographic characteristics of career centres: geographic region, institutional type, and career centre type. This process is outlined in the third subsection.



Once the predictor variables were identified from the analysis of the research sub-questions, I began to conduct the analysis needed to answer the primary research question. The fourth subsection details the data analysis used in that process and the challenges that I faced in completing the analyses.

Finally, the last subsection of the data analysis section of this chapter provides some observations on the survey responses themselves to provide context for the initial findings. The actual results of the analyses will be detailed in Chapter 4, followed by a discussion of these results and implications for theory and practice in Chapter 5.

### **3.6.1. Determining Centrality of Career Centers**

The determination of whether a unit is core to the institutional mission or peripheral is the essential first step to applying Hackman's (1985) theory. Hackman defined centrality as how closely the purpose of a unit aligns with the institutional mission. Therefore, the first step was to confirm my initial assumption that career centres as a group could be considered peripheral units for resource allocation purposes when applying Hackman's theory.

Ashar and Shapiro (1988) developed an objective framework for measuring an academic unit's centrality. However, no such objective measurement exists for non-academic units. In order to apply Hackman's (1985) propositions to a non-academic unit, I wanted to develop a framework to objectively determine if career centres should be considered core or peripheral. To do this, I first needed to outline the assumptions around centrality that I made based upon the review of the available literature and my practitioner experience. After detailing my assumptions, I developed a way to measure each of the criteria associated with these assumptions and assigned points to each career centre based upon that criteria. The next subsection explains this process in detail.

### **3.6.1.1. Underlying Assumptions of Centrality**

Drawing from my practitioner knowledge and the internal organizational challenges, services and metrics, and philosophical orientation differences identified in the literature review in Chapter 2, I suggest the following propositions about centrality for a non-academic unit using Hackman's (1985) concept of centrality as a framework:

- **Proposition 1:** When a non-academic unit reports to a non-academic parent unit, such as student affairs, it is less likely to be considered to be core to the academic mission of the institution. When a non-academic unit reports to an academic parent unit, it is more likely to be core to the academic mission. Rhoades (1998) emphasized the need to differentiate between administrative (non-academic) costs from centralized units compared to those administrative costs in decentralized units. Grunig (1995) found that academic departments chose to add non-academic services such as advancement/development because departmental leaders believed they would gain additional value over centralized services.
- **Proposition 2:** The higher the level of the individual to whom the career centre reports, the more likely it is considered to be central to the institutional mission. If the president, vice president, and deans represent the central governing power of the institution, the fewer layers between the career centre manager and these levels, the more central the career centre is. This proposition is supported by Glasper's (1995) work on the distance between the unit and the budgetary decision maker within the post-secondary context, which found that the greater the distance, the fewer resource increases received.
- **Proposition 3:** Career centres with words that reflect the institutional mission to provide education such as "learning," "academic," or "education" are more central to the institutional mission than those that do not include these terms. Brassie and Razor (1989) looked at how names of units, in their study physical education, dance, and recreation, were related to perceptions of their units by academics and concluded that names were influential.
- **Proposition 4:** If an institution requires that its students take a career course as part of their academic requirements to complete their program, it is an indication that the career centre function is considered more central to the institutional mission than it is at institutions that do

not have this requirement. Credit-bearing courses, because they count toward the academic units required for graduation, are considered to be more related to institutional missions than non-credit-bearing courses. This proposition is supported by the work of Rojewski (2002) who found that with regards to career education, curriculum reflects what is important at an institution.

- **Proposition 5:** Based upon the idea that employability is central to all post-secondary institutional missions, the more integrated career services are within classroom activities, the closer the career centre is to the institutional mission. In recent years, there has been “an accelerating pace of engagement with employability within the academy” (Harvey, 2005, p. 23). According to Harvey (2005), the differentiation between institutions in how integrated employability is within the classroom is not a function of different institutional missions, and “embedding and integrating employability development initiatives has moved to center stage for all institutions” (p. 24). Instead, he posited that these differences derive from how experienced the institution is in integrating this concept.
- **Proposition 6:** As most career centre services are not required for students, the percentage of students who voluntarily use a career centre’s services is directly related to the centrality of the unit. This proposition is derived from the work of Ashar and Shapiro (1988) who used the number of non-major students voluntarily enrolled in an academic unit’s courses as a measure of centrality of that academic unit.
- **Proposition 7:** The number of cross-departmental collaborations a career centre was involved in is an indicator of how central the career centre is to the institutional mission. This parallels Ashar and Shapiro’s (1988) framework for measuring centrality which identified the number of research and teaching collaborations an academic unit had as a measure for how central to the institutional mission that unit was.

### ***3.6.1.2. Measuring the Centrality Criteria***

After clarifying the assumptions outlined above, I then developed ways to measure each of the criteria associated with these assumptions to determine the centrality of career centres within its institutional structure and created a framework for analysis. The measurement method for each assumption is outlined below.

- **Proposition 1: Reporting unit:** Career centre respondents who indicated that their centre's reported to an academic parent unit received one point. Career centres that reported to a non-academic unit received 0 points.
- **Proposition 2: Reporting level:** To measure this factor, I coded the career centre's reporting level as noted below:
  - **President:** 3 points.
  - **Vice President, Provost, or Dean:** 2 points.
  - **Associate VP/Associate Provost/Associate Dean/Registrar:** 1 point.
  - **Director/Associate Director:** 0 points.
- **Proposition 3: Career centre name:** Career centres with the terms "learning," "academic," or "education" or a variation of them in their names received 1 point while career centres lacking those terms received 0 points for this criterion.
- **Proposition 4: Career courses:** Career centres with required credit-bearing courses for all students received 4 points for this criterion; those with required non-credit-bearing courses for all students received 3 points; those with required credit-bearing courses for some students received 2 points; and those with required non-credit-bearing courses for some students received 1 point. Those without required courses received 0 points for this criterion.
- **Proposition 5: Integration with classroom activities:** Career centres received 1 point for each of the integrated services (assistance with career-related assignments, online and/or pen and paper assessments, and assistance with reflection exercises) for a maximum of 4 points for this category. Descriptions of integrated and non-integrated services can be found in Section 4.2.2.2.
- **Proposition 6: Percentage of population served:** In this study, respondents were asked what percentage of the students they were tasked with servicing actually utilized their services. The mean reported utilization rate was 34.6%. The standard deviation was 28%, so career centres within one standard deviation above the mean received 1 point, those within 2 standard deviations received 2 points, and so on. Those with utilization rates of below the mean received 0 points. A maximum of 3 points could be accumulated in this category.
- **Proposition 7: Collaborations on campus:** In this study, I asked respondents to report if their centre participated in any collaborations with 20 different units on campus and whether that collaboration only

happened once per year or on a regular basis. Because the average number of other units career centres reported collaborations with was 10 with a standard deviation of 5, career centres with nine or fewer collaborations received 0 points (since they were below the mean); those with 10–14 collaborations (or one standard deviation above the mean) received 1 point; those with 15–19 collaborations received 2 points (or two standard deviations above the mean); and centers with 20 collaborations received 3 points, the maximum points for this criteria. Similar to Ashar and Shapiro (1988), no differentiation was made between types or frequency of collaboration.

Using this scale, the maximum total score a career centre could receive was 19 points, with 19 points indicating very central and 0 points indicating very peripheral. The detailed results of this analysis of centrality of career centres are presented in Chapter 4 (Section 4.1) using descriptive statistics, including the mean, the range, and a frequency histogram of the centrality points scores.

### **3.6.2. Answering the Sub-questions**

Once the centrality of career centres was established using Hackman's (1985) terminology, the next step in the data analysis was to answer the six sub-questions because these findings were necessary to describe the current landscape and answer the primary research question. These six sub-questions, aligned with the literature review structure from Chapter 2, investigate the external factors that influence career centre operations; the internal structures and organizational challenges; services offered to students, alumni, faculty, and employers; resources available to career centres; philosophical orientations of career centres; and the success measures and metrics collected.

#### **3.6.2.1. Descriptive Statistics**

To describe the findings for each of the six themes identified in the literature review, the same analysis tools were used to evaluate the findings from the survey questions regardless of which sub-question the survey question was

designed to answer. For open-ended questions that generated qualitative data, the responses were short, none were longer than 600 words and they averaged 142 words per response, which allowed for manual coding of the data. The first step was to extract all of the key words or phrases from each answer such as “diversity of students,” “customized support,” labour market demands,” and “experiential learning.” After each answer had been distilled into key phrases, all of the phrases identified were manually grouped into themes. For example, in answering the survey question about current external factors influencing Canadian career centres, the key words and phrases “social media,” “online resources,” and “technology” were all grouped into the theme of technology usage.

Then each individual response was then reviewed again for the key words and phrases. Each response was coded with all of the themes represented by its key words or phrases. The number of respondents indicating a particular theme was counted to determine which themes were the most prevalent. Themes were reported by frequency, and representative examples of responses illustrating each theme were provided.

For survey questions that generated quantitative data, such as “Please indicate the services your career centre offers to STUDENTS,” the findings related to each sub-question were presented using descriptive statistics, including frequencies of use and the mean, median, and range of the total services used by career centres. The complete list of survey questions associated with the research question it was designed to contribute to as well as the variable type generated can be found in Appendix A.

### ***3.6.2.2. Identifying the Predictor Variables***

For all the sub-questions except SQ 3, the descriptive statistics represented potential predictor variables that might impact the resource allocation response variables. The next step of the analysis was to use Hackman’s (1985)

propositions to identify which of the variables found in the analysis of the sub-questions should be included in the final analysis.

While discussed in detail in Chapter 2, a brief summary of the four propositions that were used as a framework for analysis in this study follows:

- **Proposition 1:** A unit's centrality to the institutional mission substantially effects how resources are allocated. According to Hackman (1985), peripheral units are more likely to gain internal resources when they contribute to the institutional mission.
- **Proposition 2:** A unit's environmental power interacts with its centrality to affect the resource allocation. Peripheral units gain when the resources they can attract are needed by the institution as a whole, particularly in difficult financial times (Hackman, 1985).
- **Proposition 3:** A unit's institutional power also positively impacts resource allocation (Hackman, 1985).
- **Proposition 4:** Resource negotiation techniques are related to the centrality of the unit to the institutional mission. Peripheral units, such as the career centre, are more successful in negotiating when their strategies emphasize institutional needs rather than unit needs (Hackman, 1985).

Using Hackman's (1985) four propositions as the analytical lens through which to view the findings provided a way to determine which variables to include in the final analysis. When a particular finding, such as a specific external theme variable like offering of specialized services for international students, or a collected metric, such as post-graduate outcomes data, was identified as being related to one of Hackman's key concepts, the finding was identified as a possible predictor variable.

Most of the predictor variables were dichotomous, such as "career centre offers employer office hours" or "career centre does not offer office hours," or "career centre offers academic advising" or "career centre does not offer academic advising." A few predictor variables, specifically the number of student services

offered and the number of individual services for faculty, were continuous. The predictor variable identified in SQ 5, theoretical orientation, was categorical. A list of the predictor variables that were identified is provided for most of the subsections.

### **3.6.2.3. *Identifying the Response Variables***

The analysis of SQ 3—What are the resources available to Canadian career centre leaders today?—provided the three response variables that described the resources that were to be investigated in this study: operational budget, total staffing levels, and professional staffing levels. All response variables were continuous variables. These findings were presented using descriptive statistics, including frequencies of use and the mean, median, and range of the total services used by career centres.

### **3.6.3. Investigating Differences by Demographic Criteria**

The demographic criteria variable used in this study were three categorical variables: geographic region, institutional type, and career centre type. Most of the predictor variables were dichotomous, categorical variables. This meant that Chi Square analysis was the most appropriate statistical test to use to test for significant differences between predictor variables and each of the three demographic criteria variables. For the variables that were continuous, in order to identify significant differences in the variances across the categorical response variables, one-way analysis of variance (ANOVA) was used to compare predictor variables with the three response variables. All significant findings were reported.

For predictor and response variables where a significant difference in the frequency it was offered across a demographic criterion, tables were presented that showed the frequency differences for that demographic criterion. For each of



the six sub-questions, a summary of all of the differences by each of the demographic criterion was presented to show the operational impact.

### **3.6.4. Answering the Primary Research Question**

The first step in answering the primary research question was to build a multiple regression model for each of the five sub-questions to identify which predictor variables related to that sub-question were responsible for the variance in the three dependent resource variables in this study: operational budget, total staffing, and professional staffing levels. Then, the significant variables from each of the themes were combined into a final multiple regression model to identify the predictor variables across all of the data collected that were significantly related to resources to answer the primary question.

As the findings from four of the five sub-questions identified a large number of possible predictor variables, a bidirectional stepwise regression model was used for each theme group to first reduce the number of variables in the multiple regression model. However, as detailed in Chapter 4, the stepwise regression did not eliminate enough predictor variables for the multiple regression analysis to be completed with confidence. In order for multiple regression to be used appropriately, as noted by McDonald (2017, p. 7), “A common rule of thumb is that you should have at least 10 to 20 times as many observations as you have independent variables.” As my response rate was 63 for the response variables related to staffing and 34 for the budget response variable, the maximum number of predictor variables that would be appropriate to use in my model was six for staffing and three for budgets. Stepwise regression indicated that there were many more than six predictor variables making a contribution to the variance so I was unable to use multiple regression in this case.

### **3.6.5. Observations on Survey Responses**

In order to evaluate the quality of the responses, it was necessary to look at how the respondents answered the questions. For the six primary qualitative questions in the study, I first looked to see how many respondents answered the question at all. Next, I checked to see if the response was actually an answer to the question or if the respondent was indicating that he/she did not know how to answer it. Following that, I reviewed the content of each response to see if the answer provided actually answered the question that was being asked or if it did not demonstrate an understanding of the question. The percentages of responses in each category are presented.

For the quantitative questions, as I used both a Delphi panel and a pilot survey to test the wording of the questions, I believe I took the steps necessary to increase the likelihood that the respondents understood the questions. With this in mind, for optional questions, I assumed that if they provided a response, the respondent felt they had some understanding of the question. When given the option to select “I don’t know” as the answer, I took their response at face value. The percentages of responses in each category are presented in Chapter 4.

### **3.7. Study Limitations**

All studies, no matter how careful their design, have limitations. The extent to which the findings of any study can be generalized is dependent upon how closely the sample represents the total population. The likelihood that the sample will be representative of the total population generally increases with larger sample sizes. In this case, while the actual total number of career centres in Canada is unknown, since about 200 post-secondary institutions were surveyed, 63 complete responses seemed to provide sufficient data for the results to be generalizable across most post-secondary career centres. However, since there were smaller

numbers of respondents from some subgroups, such as the polytechnic sector, from some geographic regions, and from some types of career centres, such as decentralized non-business career centres, it must be acknowledged that the results may not be reflective of all post-secondary sectors.

Additionally, the collected data were limited by those willing to complete it and their accuracy in answering the questions. Utilizing another method, such as website analysis, would have decreased the reliance on individual willingness to participate but would have limited the amount of data collected to that which was publicly available. Since much of the information needed to answer the research questions posed in this study was not public, the best approach to collect it was to ask respondents directly despite these limitations.

I also received feedback that survey fatigue may have been a factor in response rates. Another long survey was introduced into the field by CERIC after this investigation was started, and some respondents indicated a lack of clarity as to which survey they had completed. Fall semester is also when NACE and MBACSC release their annual surveys. If this survey is repeated, adjusting the timeline to collect data in the spring may lead to a larger response rate.

There were also substantial differences in the tenure of the respondents and in the level of their role. These differences could have influenced the responses and skewed the results. This suggests that a survey completed by the director or other leadership team member, such as is the process for the annual benchmarking survey by NACE, would provide more accurate longitudinal data.

### **3.8. Summary**

This chapter described the methodological considerations, the research design, methods, and analysis methods used to conduct this study. In the following chapter, the results of the analysis are presented in the four sections outlined:

determining the centrality of career centres, the sub-question findings, the primary research question findings, and observations on the survey responses. Chapter 5 provides a detailed discussion of those results, including implications for practice and for future research.

## Chapter 4.

### Key Findings

Based on the outline provided in the data analysis section of Chapter 3, I organized this chapter into five specific subsections. The first subsection presents the results of the analysis of whether career centres can be treated, using Hackman's (1985) concept of centrality, as peripheral units and thus as one group for further analysis.

In the second section, I present the results, viewed through Hackman's (1985) theory of power and centrality in resource allocations, for each of the sub-questions to provide a detailed overview of the current state of career services in Canada. It includes variations found in the operationalization of career centre programs and services for each theme by geographic region, institutional type, and career centre type. As part of that analysis, I articulate the predictor variables that were used in the analysis to answer the primary research question: How can the relationships between operational practices within Canadian career centres and the resources allocated to them be better understood?

In the next subsection, I present the variations found in the operationalization of career centre programs and services for each theme by geographic region, institutional type and career centre type.

The fourth subsection presents the analysis that determined that it was not possible to fully answer the primary research question at this time in a statistically significant way due to the low response rate and the large number of predictor variables. It does include frequency statistics in response to survey questions related to how operational decisions regarding services provided by the career centre were made.

The final subsection provides some high-level observations about the actual survey responses that may have implications for research and practice. This chapter provides the foundation for the discussion of the key findings and recommendations for practice and research discussed in Chapter 5.

To provide context to the findings, a brief review of the demographics of survey respondents is required. Representatives from 63 career centres across Canada participated in the survey, with the largest geographic response rate of 26 career centres (41%) from Ontario, followed by 23 career centres (37%) from western Canada, 10 career centres (16%) from the Atlantic region, and 4 (6%) from Quebec. The large majority (49, 77%) of the survey respondents were from university-based career centres, followed by college-based centres (8, 13%) and polytechnics (4, 6%). The two remaining career centres were based in other post-secondary institution types (e.g., CEGEPS, university colleges or private, religious-affiliated institutions). Respondents represented three major types of career centres: centralized, business, and decentralized (non-business). Four respondents represented other types of career centres, and those responses were combined for analysis as an “other” category.

Of the 63 respondents, 47 (75%) held the most senior role in their career centre—with titles of director, manager, or chairperson of their career centre—and two (3%) were either associate or assistant directors. Nine (14%) indicated a coordinator, officer, or program manager title, and five (8%) indicated their primary role was a career advisor or counselor. Respondents averaged 8.4 years (*Mdn* = 6) with their current career centre and more than 13 years experience in the career development field (*Mdn* = 12). The range of tenure in their own centre ranged from 0.25 years to 41 years (*SD* = 7.9), and the range of tenure in the field was 0.67 years to 41 years (*SD* = 8.5 years). This level of experience both within the field of career services and within their own career centre provided a general confidence

that the respondents had the knowledge to respond accurately to the questions in the survey.

## 4.1. Determining the Centrality of Career Centres

The determination of whether a unit is core to the institutional mission or peripheral is the essential first step to applying Hackman's (1985) theory. Hackman defined centrality as how closely the purpose of a unit aligns with the institutional mission. As discussed in Chapter 2, previous studies that may have included incorrect assumptions that the units being studied were central when, in fact, they may have been peripheral, led to uncertain results (Coy & Pratt, 1998; Crawford, 1998).

In this survey, when asked "In your opinion, how is your career centre perceived by your senior leadership?" 34 respondents commented on the importance of their career centre. Of those, 59% (20) indicated that they believed that career services were viewed as important to their institution. One Ontario, college-based, central career centre participant remarked that career services are "increasingly more and more important as we look at our KPI numbers, retention numbers and student feedback." The other 40% (14) indicated that at their institution their senior leadership sees career services as peripheral and outside the academic mission. An example that illustrates this includes this comment from a Western, university-based, central career centre respondent:

Senior leadership has been slow to understand the importance of what we do because they view education through a 19th and 20th century philosophy of what universities should be. We field *[sic]* that career and education go hand in hand and are not mutually exclusive of one another.

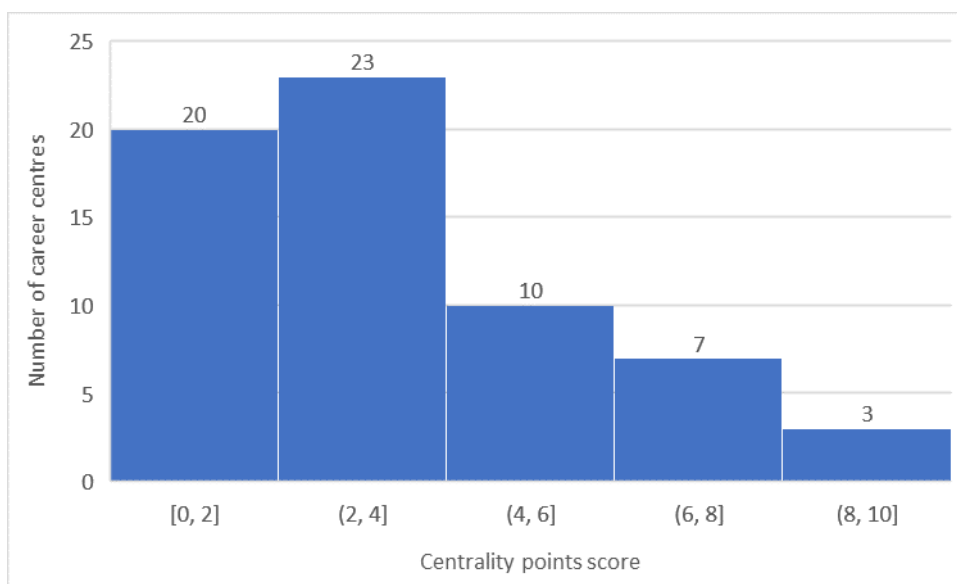
However, "important" to their institution does not necessarily equal centrality using Hackman's (1985) definition of centrality as being how closely the purpose of a unit aligns with the institutional mission. Based upon my own

experience, my assumption was that while senior leadership found career centres to be important units on campus, they were peripheral units rather than core units in terms of resource allocations on post-secondary campuses. Ashar and Shapiro (1988) developed an objective framework for measuring an academic unit's centrality. However, no such objective measurement existed for non-academic units. Therefore, before applying Hackman's concepts, I wanted to develop a way to objectively determine if the majority of career centres would be considered core or peripheral using data-driven analysis.

As outlined in Chapter 3, I developed assumptions regarding the criteria that contribute to centrality of career centres. I then used the scoring method outlined in Chapter 3 to assign points to each career centre. The maximum total score a career centre could receive on the scale of centrality was 18 points, with 18 points indicating very central and 0 points indicating very peripheral. The midpoint of the scale was 10 points.

Once all of the points were assigned to individual career centres using the developed scale, the range of scores was 0 to 10 points with a mean of 3.8 and a median of 3 points on the 0- to 19-point scale. The complete distribution is shown in the histogram in Figure 3. Using the midpoint of the scale, 10 points, as the cut off, all career centres scored at or below the midpoint indicating low centrality. This analysis supports the assertion that all career centres, regardless of institutional type, geographic region, or career centre type, can be considered peripheral units when applying Hackman's (1985) theory of power and centrality to resource allocations.





**Figure 3: Frequency of centrality scores out of maximum of 19 points**

Thus, using Hackman’s (1985) definition of centrality, I established that career centres are peripheral units. The next section discusses my use of Hackman’s propositions for peripheral units as the analytical framework to answer the sub-questions to describe the current operational landscape in Canadian post-secondary career centres.

## **4.2. Describing the National Career Centre Landscape**

Because the initial research problem was to gain a better understanding of the Canadian post-secondary career centre landscape, the most critical step in this study was to provide a description of the current state of career centre operations using the data collected from the respondents. Each of the sub-questions used in this study were aligned with a theme found in the literature review. The subsections that follow provide the analyses used to answer each of the six sub-questions and provide descriptive statistics portraying the current trends for career centres as a whole. Whenever possible, I have synthesized the analysis of the

responses to questions from throughout the survey that are related to the sub-question I was seeking to answer. Additionally, using Hackman's (1985) propositions as a framework, I identified the specific issues or services within each theme that may be impacting resource allocations as possible predictor variables for the multiple regression analysis that was intended to answer the primary research question. Operational differences in how these issues or services were being addressed by geographic region, institutional type, and career centre type are also presented. Each of the six themed subsections includes a summary of the major trends and operational differences by demographic characteristics.

#### **4.2.1. External Trends Influencing Career Centres**

In order to understand how current environmental factors are influencing career centre operations and resource allocations, the first sub-question that needed to be addressed was "What are the current external factors influencing Canadian career centres?" Two open-ended questions in the survey specifically solicited respondents' thoughts on the external trends facing career centres today.

The first open-ended question related to external factors that the participants were asked to respond to was "In your opinion, what changes have career centres in Canada experienced in the last 5 years?" The second one was "What career services issues are you reading about or talking about with your colleagues?"

Responses to these open-ended questions ranged in length from five words to a maximum of 119 words. The short length of these answers made it possible to review them manually to identify themes. For both of these questions, the responses were coded and organized into themes. For example, phrases like "greater demand for 'customized' support," and "drift away from face-to-face services to on-line support" fell into the theme "changes to student demand." Some

phrases, such as “drift away from face-to-face services to on-line support” were also coded with a secondary theme—for example, “use of technology.” There was no limit to the number of themes each respondent could include, and they were not asked to prioritize the different changes they cataloged.

After analysis, 11 primary themes emerged as significant trends impacting career centre operations. As shown in Table 11, of these 11 trends, four were a direct result of an external trend, while three others could be characterized as both internal and external. In this analysis, the term *external* refers to trends where the majority of control is external to the career centre, which could include influences by the institution or employers, whereas *internal* refers to trends that career centre staff have the majority of control over, such as programming. The determination of control was based upon my professional judgement and experience.

The following subsections will look at each of these external trends separately in order of frequency mentioned by the survey respondents.

**Table 11: Trends impacting career centre operations**

Trends impacting career center operations	Frequency mentioned
<b>Externally controlled trends</b>	
Changes to student demographics	31
Increased expectations from institutional leaders, provincial governments, students, and parents	30
Emerging careers and employment types	26
Changes to employer expectations/recruiting patterns	15
<b>Dual external and internal controlled trends</b>	
Experiential learning/work-integrated learning	28
Use of technology	26
Budget/resource constraints	18
<b>Internally controlled trends</b>	
Integrating career and academics	36
Philosophical changes in career centre orientation	28
Changes to student demand	19
Collaborations and partnerships within units	12

#### ***4.2.1.1. Meeting the Needs of Diverse Student Populations***

As Table 11 illustrates, how to help different populations of students was the external trend at the forefront of respondents' minds. While the most referenced population of students was international students, other key groups were students with disabilities, Aboriginal students, students living in rural areas, and non-traditional and returning students. As concisely stated by one Ontario-based, decentralized career centre respondent, career centres are asking themselves, "What students are we not reaching? Are we addressing the needs of diverse students and ensuring students from groups who are underrepresented are being serviced?"

Regarding specific services offered for diverse student populations, 57% (36) of career centre respondents reported offering specialized services for international students, and 41% (26) reported having specialized services for students with disabilities. While 61% of career centres (38) reported offering

workshops on the Canadian work environment for international students, only one career centre each reported offering specialized services for Indigenous students or LGBTQ students.

Almost half of all career centres (29, 46%) reported providing professional development for their staff on how to work with specific populations of students. When asked which populations, career centres reported that working with English as an additional language/international students (10, 33%) and working with Aboriginal/Indigenous students (7, 25%) were the most common, followed by students with disabilities (5, 17%), students with mental health issues (4, 14%), general diversity/equity students (2, 8%), and first-generation students (1, 3%).

Given the trend identified in the literature review in Chapter 2 of the growing international student population becoming the key to many institution's financial survival, it is not surprising that career centres are adapting to meet the needs of their growing international student populations. Additionally, with increased awareness of Indigenous students on campus, it makes sense that career centres would choose to invest in ensuring staff are appropriately trained in meeting Indigenous students' needs. Investing staff resources into supporting these groups may represent a desire to align with the institutional mission and federal governmental priorities.

According to Hackman's (1985) first proposition, peripheral units such as career centres are more likely to gain internal resources when they contribute to the institutional mission. Supporting international and Indigenous students' retention and post-graduate success may be directly aligned with the institutional mission to increase institutional revenue by attracting future students from these groups. Based on these factors, I identified whether or not a career centre provided specialized services for international students or provided staff with training on how to work with Indigenous or international students as potential

predictor variables that might be impacting resource allocations to career centres. As only one career centre reported providing specialized services for Indigenous students, there was not sufficient information to determine if this service might be impacting resource allocations.

#### ***4.2.1.2. Increased Expectations***

As outlined in Chapter 2, students, parents, and the general public have high expectations for the return on investment that students receive from their investment in the post-secondary system. These increasing expectations of accountability, specifically outcomes measurement and evaluation, were foremost in the minds of respondents when asked to provide their thoughts on changes to and current issues in career centre operations. One Ontario-based career centre respondent noted seeing “further focus/pressure from within and outside the University on what is career education, how it should be offered and by whom.”

Approximately 50% (32) of career centres reported either slightly or significantly increased interest in their accountability metrics over the past 5 years. Senior administration expressed the most interest, with 86% (54) of career centres indicating that their institutional leadership had asked for some metrics. Faculty expressed interest at approximately 50% (32) of the career centres, and about a third (21) of career centres reported interest in their metrics from students and employers. Other stakeholders who expressed interest on some campuses included accreditation bodies, alumni, parents, the media, and donors.

Despite the increasing interest in career centre metrics, the impact of these increased accountability measures in the day-to-day operations is less clear. Only one career centre each reported investing in training their staff on learning outcomes or career centre metrics collection. While more than 60% (38) of career centres reported that the number of metrics that they are collecting has increased slightly or significantly in the past 5 years, only 33% (21) of career centres are

actually reporting any metrics for external use. Chi-square tests did not reveal any significant differences by institution type, career centre type, or geographic region for either the changes in interest level or the number of metrics being collected.

Several respondents touched on the increased perception of value that their career centre was seeing as a result of increasing expectations around employability. However, as noted by one Western-region centralized career centre respondent, it has not necessarily corresponded to increased resources: “There is positive rhetoric from Government and Senior PSE administrators—however it seems this has been accompanied with decreasing or stagnation within career departments.”

This finding indicates that satisfying external stakeholder interest is not the primary driver for collecting this information and suggests that while there is awareness of increasing expectations from stakeholders, it has not influenced the day-to-day operations in a way that may be impacting resource allocations. Because of this, no predictor variables were identified from the increased expectations trend.

#### ***4.2.1.3. Experiential Learning/Work-Integrated Learning***

Changes to experiential learning were characterized as both internal and external factors since these changes could come from either internal or external pressure. In Ontario, the Premier’s Highly Skilled Workforce Expert Panel recommends that all students have at least one experiential opportunity during the pursuit of their post-secondary degree (Conway et al., 2016). As noted by one Ontario-based university respondent, “[We’ve seen] higher priority placed on experiential learning (employment outcomes) based on government mandates and response to student and parent demands.” At institutions in other provinces, the increased recognition of the value of experiential learning has led to institutional mandates to increase these kinds of opportunities for students. Similarly, federal

funding through MITACS has also increased to support these kinds of experiences at the graduate level.

Whether driven by internal pedagogical shifts or external pressures, it seems that on many campuses, career centres are shifting to provide more experiential education opportunities. When viewed through the lens of Hackman's (1985) first proposition, this may be seen as an attempt by career centres to gain internal resources by contributing to the institutional mission to expand experiential services. One Western-region respondent noted a "shift [in] the role of Career Services in the campus community—more centered and stronger responsibility in students' success and experiential learning." Because of the potential impact on resource allocation, whether a career centre offers co-op programs, internships, mentoring programs, or job shadowing programs were all defined as predictor variables for the analysis of the primary research question.

In this survey, 28 career centres (44%) indicated that they expected to see the addition of more experiential learning opportunities for students. In many cases, this was a general focus "on experiential learning and related supports provided to the university community," as a Quebec-based career centre respondent explained. In other cases, it was more co-op specific; an Ontario-based centre respondent said they "expected growth with new co-op programs and significant expansion of current co-op programs." Career centres are also reporting significant growth in other experiential programs such as internships, mentoring, internships, and job shadowing programs. Many respondents reported currently offering internships (40, 67%), a mentoring program (23, 37%), or job shadowing (seven, 11%) programs. Another 5% (three), 21% (13), and 17% (11), respectively, expect to add these programs in the next two years.



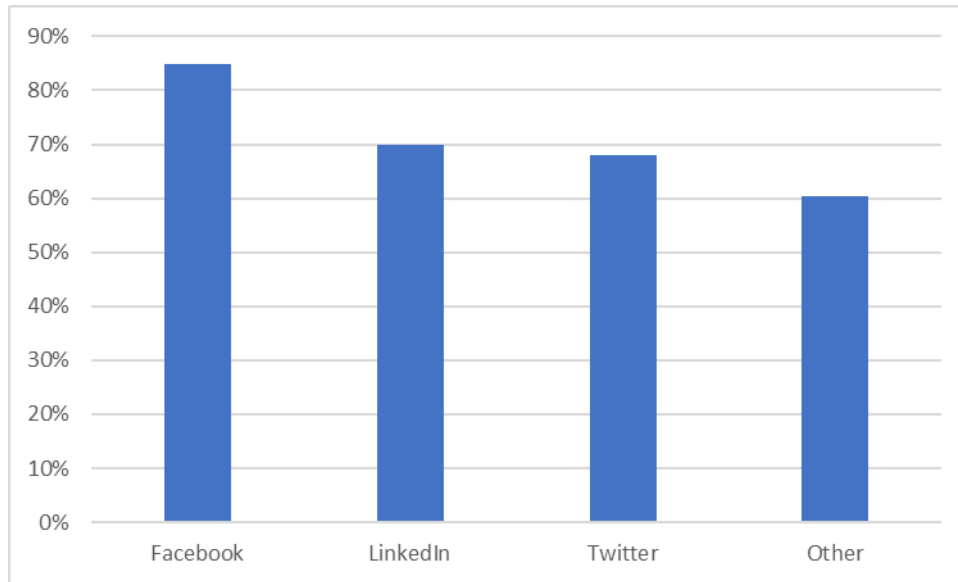
#### **4.2.1.4. Use of Technology**

One of the most often noted changes was the increased use of technology within career centres. Career centres are striving to meet an increased demand for online resources and services and to more effectively communicate with students and employers through social media. Some respondents noted staff must learn new technology platforms and adapt to the ways students are connecting. The impact of the ubiquitous use of technology in everyday life is certainly manifesting itself within career centres. The survey included several closed-ended questions about technology usage that support this trend. On average, career centres reported utilizing 7.8 different online resources (*Mdn* = 7) within their centre, with a range of 1 to 17 different types of technologies.

In general, most technologies used by career centres fall into eight different categories. Each of these categories are discussed below and include any significant differences by geographic region, institutional type, or career centre type. Those that are likely to impact resource allocation, per Hackman's (1985) theory, were identified as possible predictor variables.

#### **Social Media Tools**

Social media tools are the most common tool within career centers, with 88% (55) reporting that they use at least one social media channel, and an average of 2.8 channels, to communicate with students and alumni. Figure 4 highlights the popularity of each of the major channels within career centres.



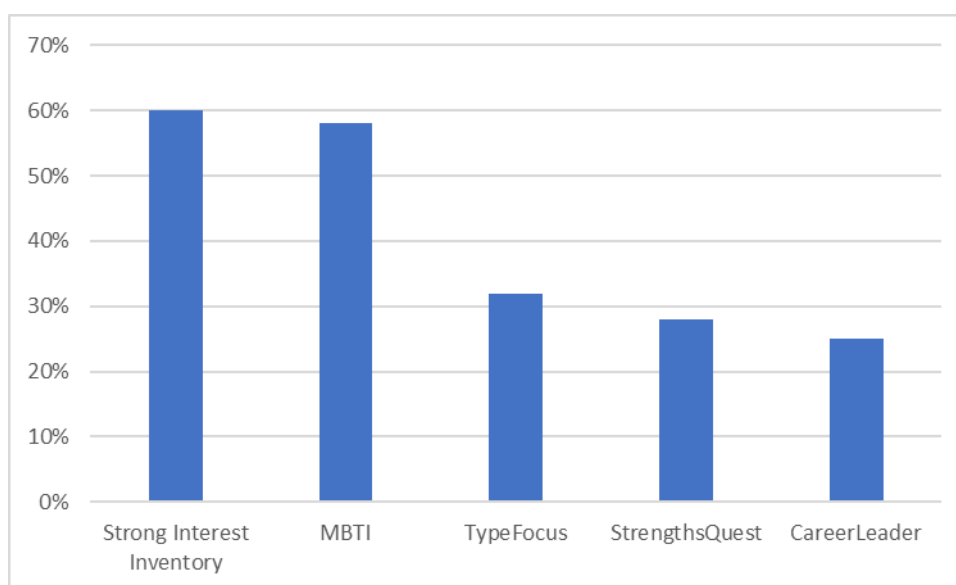
**Figure 4: Use of social media channels by percentage of career centres utilizing them**

### **Career Exploration Tools**

Another technology type widely in use are tools for career exploration and information. These include platforms such as the Vault Insider guides, WetFeet, Navigator, and Career Cruising. Most career centres (70%, 44) reported providing at least one platform for career exploration and information. While most centres only offer one platform, a few offer two or even three different career exploration platforms. By far, the most popular platform is Career Cruising, reported as being used in 86% (38) of the career centers who have any type of platform. Career Cruising is a platform, also widely used in the K-12 system, that includes self-assessment tools on interests, skills, preferences, and aspirations; resources about different career and educational options; a tool to create career action plans; and tools to help student secure employment. The next most common is Career Insider/Vault Guides, with 33% (15) of career centres using them. Other platforms reported in less than five career centres each include Bridges, Navigator (Government of Canada), and WetFeet.

## Online Assessments

Most career centres (67%, 42) also provide at least one type of online assessment for students, with an average of two per centre. This category includes a variety of assessment tools, including the MBTI, StrengthsQuest, TypeFocus, SII, and CareerLeader. Both the SII and the MBTI require staff with specialized training, including at least a bachelor's degree, to administer them. In addition to the most common ones shown in Figure 5, career centres reported using SkillScan, which reveals transferable skills and preferences; Luck Readiness Index, which measures an individual's ability to capitalize on opportunities generated by chance; and OneLifeTools, a narrative-based career assessment.



**Figure 5: Use of online assessments by percentage of career centres utilizing them**

## Job Platforms

Another popular type of technology are platforms that connect students to jobs and internships. Many of these are resources that can be linked to a career centre's website without additional work for career centre staff, making them an

easy tool to incorporate. About 60% (38) of centres reported using one or more, averaging 1.5 different platforms per centre. Of those that offer these, jobpostings.ca is the most common at 72% (27), followed by TalentEgg (61%, 23), WhoPlusYou (Magnet) (19%, seven), and HandShake (8%, three).

### **International Opportunities Directories**

About 46% (29) of career centres provide resources for students looking to work internationally. There are three main resources utilized in career centres: My World Abroad (43%, 13), Going Global (41%, 12), and the Big Guide to Working Abroad (16%, five). Most centres only provide one of these to their students, while a few offer two. Two additional schools reported plans to implement GoingGlobal in the next 2 years.

### **Customer Relationship Management Systems**

Many career centres use some sort of CRM system to manage their employer relationships and contacts. Of the 34 centres that reported using a CRM system, 59% (20) reported using Orbis, 35% (12) use Symplicity, and 6% (two) use Salesforce. Another four schools reported planning to implement Orbis in the next 2 years.

### **Application Preparation Software**

Only 45% (28) of career centres reported using any type of online tool for resume, cover letter, or interview preparation. The majority of these use InterviewStream (83%, 23), which can be compared directly to Optimal Interview (16%, five), and is a video tool for students to record their interview performance and get feedback from whomever they choose to have view it. Another three schools indicated plans to add InterviewStream in the next two years. Resume and cover letter tools were less common, including Optimal Letter (28%, eight), Optimal Resume (22%, six), and VMOCK (11%, three).

## **Networking Platforms**

Confirming Dey and Cruzvergara's (2014) predictions, the fastest growing technology in terms of usage were technology tools that help students network and make connections. While only 33% (21) of career centres currently use either 10,000 Coffees (65%, 14) or FirstHand/Evisors (35%, seven), another 10% (six) plan to implement one or the other in the next 2 years. This trend also corresponds with the shift to planned happenstance theoretical orientations within post-secondary career centres.

## **Technology Changes in Service Delivery**

In addition to these types of technology tools used internally, an Ontario, business school-based respondent noted, "Students want resources but aren't necessarily attending events/workshops etc. in person—[we] need to find other ways to deliver information." While in-person workshop delivery is still the most prevalent delivery method, with 87% of the workshops being presented in person, 7% are now presented in recorded video/online format and 5% as webinars. Additionally, in the last few years, 22% (14) of career centres have added online counseling/advising to their portfolio of services, thereby increasing the percentage offering online counseling/advisement to 65% (41) of all career centres.

## **Summarizing the Use of Technology**

Regarding the use of these technologies using Hackman's (1985) theory as an analytical lens, Hackman's second proposition was that peripheral units can increase their resource allocation when the external resources that they can attract are needed by the institution. Social media platforms have the potential to influence institutional reputation and brand, which tie into the external resources a unit can bring to the institution. Job boards that provide opportunities for students are another example of external resources.

Hackman's (1985) third proposition is that a unit's institutional power impacts resource allocation. While the number of contacts a career centre has might be an example of environmental power, the use of a CRM system to track employers' connections can provide the ability for career centres to internally influence other areas that might be interested in connecting with the corporate community, such as advancement/development, research centres, alumni relations, and others.

Using Hackman's (1985) theory as the lens, three potential predictor variables were identified from the technology trend that might be impacting resource allocations. They were the use of a CRM system, the use of job platforms, and the use of social media.

#### ***4.2.1.5. Emerging Employment Types***

Changing employment types was the next most common external theme that emerged from the data. Many respondents brought forward concerns about the labor market and challenges in finding co-op and full-time opportunities for students. A couple of respondents also brought up the skills gap and concerns about their own role in ensuring graduates meet the needs of employers. Others mentioned related trends in new career paths and employment types, such as changes to the "labour market, the gig economy and the trend towards entrepreneurialism," according to one participant from a Western-region, polytechnic institute.

While many of these issues were unexplored in the survey, respondents were asked a general question about the preparation they provide to student entrepreneurs. Despite widespread institutional missions that emphasize entrepreneurship across Canada (Csorba & Termuende, 2015), for the most part, most career centres have yet to respond in a meaningful way. Currently, only 44% (28) of career centers provide services specific to developing entrepreneurs (Table

12), and in most cases those services are quite limited. The mean number of services provided by those that offer any is 2.9, with a median of 2 services per centre. The range was 1 to 7 different services offered.

**Table 12: Frequency of entrepreneurship services provided to students (n = 28)**

Resource	Percentage	Number
Access to online resources	68%	19
Career speakers/panels on entrepreneurship	57%	16
Fairs with start-up companies	32%	9
Support student entrepreneurship clubs	32%	9
Workshops on starting your own business	25%	7
Workshops on business plan writing	18%	5
Entrepreneur in Residence program	14%	4

According to Hackman's (1985) first proposition, peripheral units such as career centres are more likely to gain internal resources when they contribute to the institutional mission. Assuming that this trend of entrepreneurialism is aligned with most institutional missions, how many entrepreneurial services a career centre offers may influence its ability to gain resources. Therefore, the number of entrepreneurial services a career centres offers was identified as a possible predictor variable to answer the primary question about what the relationships are between various services and resource allocations.

#### **4.2.1.6. Budget Changes**

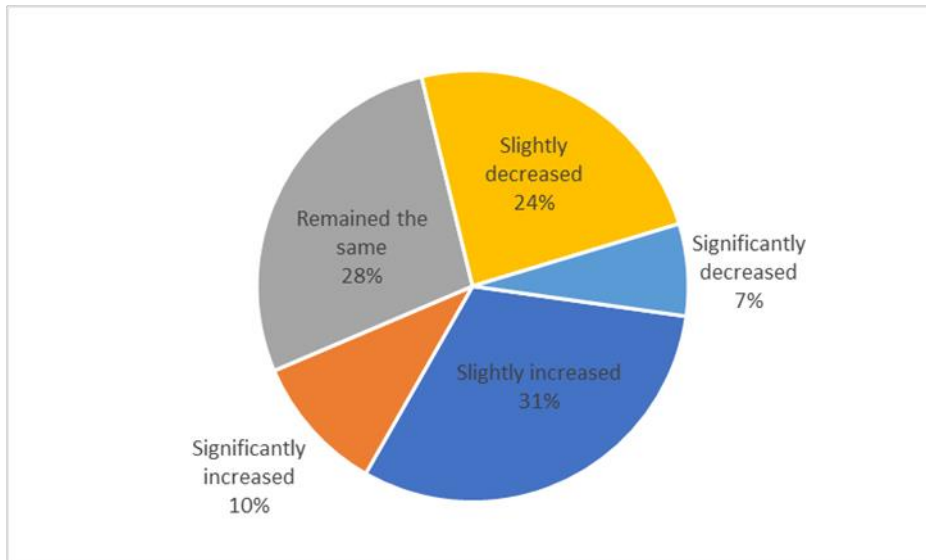
Several respondents indicated that they had experienced budget and staffing reductions that impact their ability to provide services. A complete discussion of the resources available to career centres is presented in Section 4.2.3 in answer to the sub-question about the resources available to career centres. This section focuses specifically on budgetary changes as an external driver of change for career centres. It is worth noting that respondents indicated budgetary changes are a substantial concern for them at this time. As expressed

by one Western-region, university-based career centre respondent, “We continue to receive requests to expand in areas on campus, but budgetary restrictions prevent us from acting on many of these initiatives.”

Of the total 58 respondents, 31% (18) reported that their budgets had decreased either significantly or slightly over the past 3 years. By far, the most frequent reason cited for career centres seeing a reduction in funding was overall institutional budget changes due to reductions in student enrollment and provincial budget cuts. On the other hand, 41% (24) of career centres saw either significant or slight budget increases in the last 3 years. The most frequently reported rationale for budget increases was the ability to demonstrate an increase in number of services and student usage. This corresponds directly to Hackman’s (1985) third proposition, where institutional power, in this case increased student usage, leads to increased resource allocations.

Other cited reasons for budget increases were increases in student fees for career services and increased enrollment. One centre indicated a directed donation to increase experiential education among students. As can be seen in Figure 6, the remaining 28% (16) reported that their budgets have “remained about the same” for the past 3 years. Depending upon if the respondent took into account modest inflationary increases in their answer, “remained the same” may not reflect the increasing costs of doing business which makes a static budget effectively a budget cut.





**Figure 6: Budget changes from 2011–2016**

Only 43 of the 63 (68%) participating respondents knew the source of their career centre funding. Of those, 60% (26) reported that at least half of their funding was through an institutional budget allocation. When this allocation is determined, the majority of career centres (15, 58%) reported that they have to formally submit a budget for approval each year, while 35% (nine) reported that they receive a predetermined percentage of a larger budget, such as a student services departmental budget. The next most common (12, 28%) source of funding was from mandatory student fees charged by the institution and passed onto career centres. About 28% (eight) of career centres reported that at least half of their funding comes from student fees charged by the institution.

Several respondents noted that they had noticed a shift away from allocated budgets to increasing use of fees or revenue generation methods. “Decreased budgets have resulted in more responsibility to fund department initiatives through revenue generation (i.e., career fair profits),” noted a participant from an Atlantic-region, centralized career centre. Eleven of the 43 career centres (26%) reported generating a portion of their operating budget through employer

fees, comprising between 2% to 50% of their total operating budget. Chi-square tests showed the way a career centre gets the majority of its funding is independent of whether or not the career centre saw a specific type of budget change.

Hackman's (1985) second proposition was that peripheral units can increase their resource allocation when the external resources that they can attract are needed by the institution. While career centres bring in a small amount of external funding as a resource, the external resources may not meet the "substitutability" test. Other units on campus have the ability to bring in substantially more external funding that feed into the overall institutional budget rather than just the departmental budget. Thus, applying Hackman's proposition is unlikely to help explain why career centres are seeking external funding. Therefore, no predictor variables were included from the budget changes trend.

#### ***4.2.1.7. Changes to Employer Expectations***

Many participants indicated that they were seeing "greater demand from employers to find 'outside the box' ways to connect with students vs. traditional on-campus methods," as stated by one Ontario university-based respondent. In keeping with Dey and Cruzvergara's (2014) findings, employers were seeking ways to increase their branding and campus engagement with students.

In response, career centers have expanded their services beyond just providing recruiting tools to create other ways for employers to engage on campus. In this survey, 90% (57) of career centres reported providing at least one service designed to increase employer branding and engagement on campus. Table 13 provides an overview of the employer engagement strategies used by career centres. Career centres that reported employer engagement activities offer an average of six services for employer engagement ( $Mdn = 5$ ), with a range of 1 to 16 services offered by each career centre.

**Table 13: Employer engagement activities (n = 57)**

<b>Employer engagement services</b>	<b>Percentage offering</b>	<b>Number offering</b>
Career panelists	82%	47
Mock interviewers	65%	37
Guest lecturers in class	56%	32
Special event invitations	53%	30
Provide resume critiques	44%	25
Take students on company tours	42%	24
Mentors for students	39%	22
Case competition coaches/judges	26%	15
Capstone project sponsors/judges	26%	15
Provide skills development workshops	26%	15
Take career centre staff on company tours	26%	15
Applied research project sponsors	25%	14
Provide career advising appointments	19%	11
Corporate/program advisory boards	16%	9
Dining etiquette workshop guests	16%	9
Recruiters/employers in residence	11%	6

Hackman's (1985) second proposition was that peripheral units can increase their resource allocation when the external resources that they can attract are needed by the institution. The expertise provided by employers who engage on campus represents a unique external resource that career centres are positioned to bring into the institution. Because each of these services may represent a different type of expertise, each service was identified as a separate predictor variable.

#### ***4.2.1.8. Summary of External Trends Influencing Career Centres***

This subsection provides the results of the analysis of the survey questions needed to describe the external trends influencing the post-secondary career centre landscape in Canada. Many of the themes that emerged from the survey results regarding career centre operations echoed the external themes found in the literature reviewed. The increasing number of international and Indigenous students on campus have given rise to more service to support these students. The increasing demand for experiential learning is driving the creation of new programming. The pervasive use of technology is impacting service delivery and providing new tools for students in their career development. Budget pressures and rising expectations from students, their parents, and the general public weigh heavily on the minds of career centre leaders. The changing world of work requires an emphasis on competencies and entrepreneurship to adapt to the rise of the gig economy. One trend emerged from the data that had not been explicitly outlined in the literature reviewed in Chapter 2 related to career centres—specifically, emerging employment trends, such as the changing expectations of employers to demand more branding opportunities. Perhaps these issues are too new to be addressed in published literature.

Overall, as support for my initial interest in investigating the operational issues that were impacting resource allocations for career centres, Hackman's (1985) theory on power and centrality in resource allocations provided a framework to identify 28 variables that may be impacting resources from the survey results (see Table 14).

**Table 14: Summary of possible predictor variables from external trends**

<b>Variable description</b>	<b>Type</b>
Offers specialized services for international students	Dichotomous
Offers training for staff supporting Indigenous students	Dichotomous
Offers training for staff supporting international students	Dichotomous
Offers co-op program	Dichotomous
Offers internship program	Dichotomous
Offers mentorship program	Dichotomous
Offers job shadowing program	Dichotomous
Uses social medial platforms	Dichotomous
Provides access to external job boards	Dichotomous
Uses a CRM system	Dichotomous
Offers number of entrepreneurial services	Continuous
Utilizes employers as career panelists	Dichotomous
Utilizes employers as mock interviewers	Dichotomous
Utilizes employers as guest lecturers in class	Dichotomous
Provides special event invitations to employers	Dichotomous
Utilizes employers to provide resume critiques	Dichotomous
Utilizes employers to take students on company tours	Dichotomous
Utilizes employers as mentors for students	Dichotomous
Utilizes employers as case competition coaches/judges	Dichotomous
Utilizes employers as capstone project sponsors/judges	Dichotomous
Utilizes employers to provide workshops	Dichotomous
Utilizes employers to take staff on company tours	Dichotomous
Utilizes employers as applied research project sponsors	Dichotomous
Utilizes employers to provide advising appointments	Dichotomous
Utilizes employers for corporate advisory boards	Dichotomous
Utilizes employers as dining etiquette workshop guests	Dichotomous
Utilizes employers as recruiters/employers in residence	Dichotomous
Offers number of employer engagement activities	Continuous

This subsection has outlined the results from the survey that describe the way career centres are responding to external trends across Canada. The next subsection provides the analyses of the current organizational structures and the internal challenges faced by career centres today.

## **4.2.2. Internal Organizational Challenges**

The second sub-question was the following: What are the current organizational structure and internal challenges facing career centre leaders today? Since this question had two parts, this subsection is organized into two halves: current organizational structure and internal challenges.

To answer this question, 19 questions were included within the survey. To identify the current organizational structure, respondents were asked about their reporting structures, unit names, and services included in the career centre.

### ***4.2.2.1. Current Organizational Structure***

Across North America, one of the most important distinctions between career centres is whether a centre is centralized or decentralized. “Centralized” does not equate with “centrality” as used in Hackman’s theoretical framework. This question of centrality, as Hackman defined it, was explored more fully earlier in this chapter.

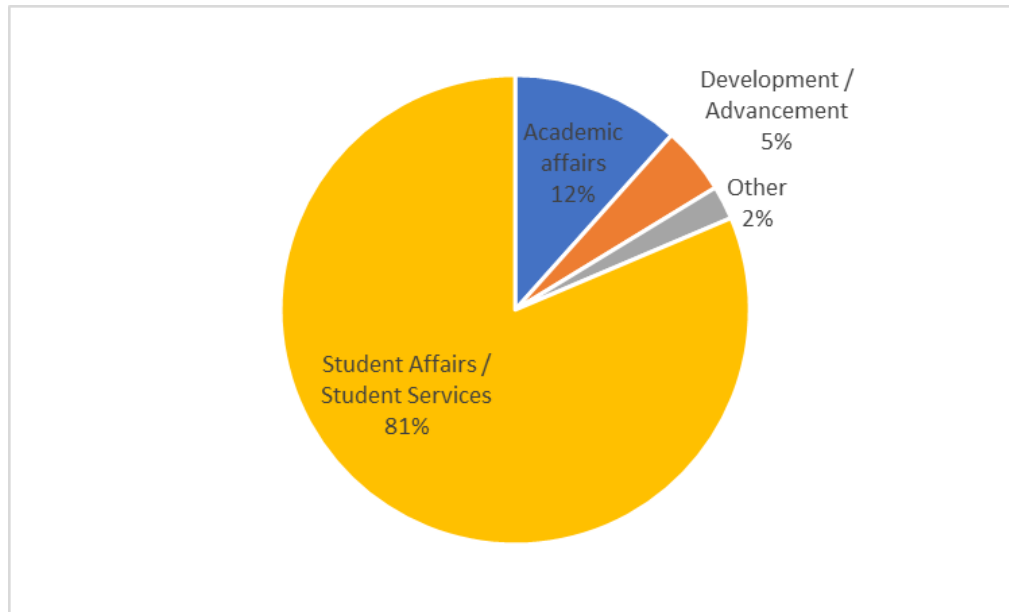
In practitioner usage, centralized career centres provide service to the entire institution and report up through a central university leader such as the VP of Student Affairs. In a decentralized centre, the career centre generally works with specific populations of students, such as business or law students, and reports up through an academic unit.

As can be seen in Table 15, in this study, 62% (39) of the responding career centres were centralized, 32% (20) were decentralized, and another 6% (four) were either one person providing career services within another unit (such as a counseling centre) or, in the case of one respondent, a non-profit entity distinct from the institution.

**Table 15: Career centre types (*n* = 63)**

<b>Career centre type</b>	<b>Number</b>	<b>Percentage</b>
Centralized with co-op	14	22%
Centralized without co-op	23	37%
Centralized—co-op exclusive	2	3%
Total centralized	39	62%
Decentralized with co-op—business	7	11%
Decentralized with co-op—non-business	5	8%
Decentralized without co-op—business	7	11%
Decentralized without co-op—non-business	1	2%
Total decentralized	20	32%
Individual career specialist working in another unit	3	4%
Non-profit entity	1	2%
Total other	4	6%

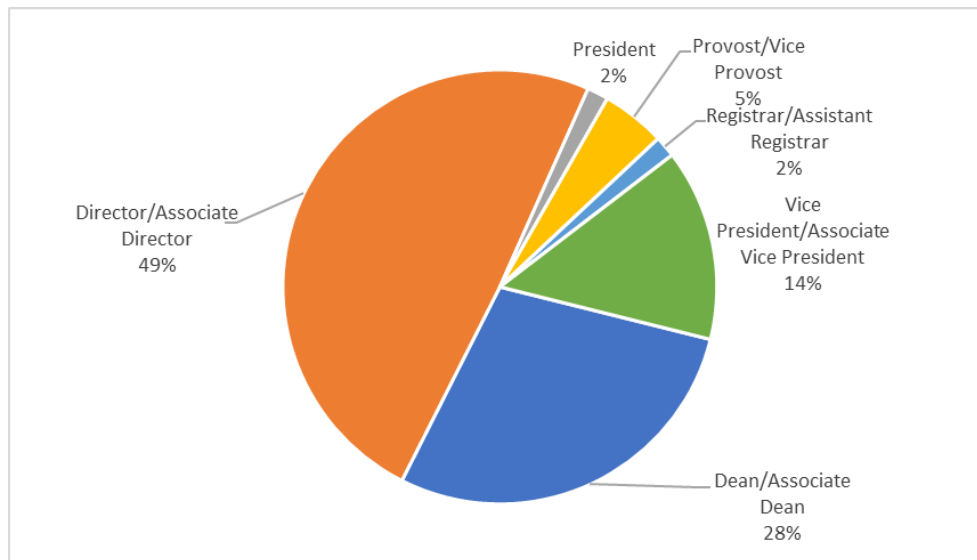
An internal consideration is the unit to which the career centre reports. Generally, decentralized career centres report to the school or faculty they support. In this survey, 75% (15) of the decentralized career centres reported to the senior academic leaders, usually the dean, while 25% (five) were part of a student affairs unit within the faculty. For centralized career centres, as seen in Figure 7, 81% (32) reported to student affairs, with a much smaller percentage reporting to an academic or other unit.



**Figure 7: Reporting structures of centralized career centres**

There was additional variation in the level/title of the individual who the career centre reported to, with about half (31, 49%) of career centres reporting to an executive director, director, or associate director. Only one career centre was positioned to report directly to the president, as shown in Figure 8. Chi-square analysis did not find any significant differences between reporting levels by geographic region, institution type, or career centre type.





**Figure 8: Reporting levels of career centres**

When asked about the perceived strengths of their current structure/model, centralized career centre respondents expressed the value of a holistic approach for all students, the ability to share resources, and the ability to build strong internal connections with faculty, which was similar to the findings expressed in Chapter 2. In the words of a respondent at one Western, university-based, centralized career centre:

[Our model enables us] to do the following: Share our management system; Share best practices; Confer with one another on employer leads; Share workload responsibilities as needed; Develop a cohesive brand that does not compete with one another; Create a one stop shop for students, thus eliminating confusion on where they need to go for career counselling and assistance.

As expected, respondents from decentralized career centres felt that their model allowed them to better get to know their students and provided their staff more specialized skills to meet the unique needs of their students. One participant from a Quebec, university-based decentralized career centre stated:

We are the exclusive provider of career-related services to business students and alumni. We have in-house expertise on specific industries and relationships with the business community. We are proactive in our business development efforts to ensure that [our business school] is a top of mind talent destination for our recruitment partners. Our current model also allows us to maintain regular dialog with our peer business school career centres who share the same challenges and breakthroughs.

About 60% (38) of career centres reported that they had not seen a structural change in the last few years. Of those that had experienced a change, it was almost evenly divided into career centres that merged with another unit (10 centres); career centres that split from another unit (nine centres); and new centres that were created to provide services that did not exist in the past (eight centres). Clearly, there is no consensus in Canada on the best way to structure career centres or where to place them within the organizational chart.

Another indication of how central a career centre is to the institutional mission is the name of the career centre. In Canada, 90% (57) of career centres use the word “career” in their unit name. “Career services” was the most common name, with a variation of it used in almost one-third of career centres (18). The next common term was just “career,” as in “career centre” or “career hub,” with 23% (13) choosing this option. Seven (11%) career centres used the term “career development”; five (8%) used “career management”; and two (3%) used “career education.” Only one each used “career planning” or “career action.” Ten career centres explicitly listed “co-op” or “experiential learning” in the name of their unit. Three included “employment,” two had “counseling,” two had “leadership,” and only one used “volunteer” or “engagement.” Only four centres (6%) had either “academic” or “learning” in their unit names.

As noted earlier, based on Hackman’s (1985) conception of centrality, the naming of career centres may be an indication of their centrality. The next subsection will review the internal challenges faced by career centres.

#### **4.2.2.2. Internal Challenges Faced by Career Centres**

In spite of the diversity in internal structural models, many career centres face similar challenges. As noted in the prior section describing external challenges, I asked two open-ended questions in the survey about trends. The first open-ended question related to trends was “In your opinion, what changes have career centres in Canada experienced in the last 5 years?” The second one was “What career services issues are you reading about or talking about with your colleagues?” Responses were then coded into external and internal trends career centres were facing.

As was seen earlier in Table 11, four primary internal trends emerged from the open-ended questions, and two could be described as internal or external. The internal/external themes— the trend in experiential learning and technology and budget changes—were discussed earlier; the remaining four will be discussed in this subsection in the order of the frequency they were mentioned.

#### **Integrating Career and Academics**

The internal theme that emerged most often was the trend toward integrating career and academics. This integration took on several forms, including providing academic advising within the career centre itself, offering a career course, and working with faculty to support what students learn in the classroom.

Although only 13% (eight) of respondents indicated that their career centre currently offered academic advising in addition to career advising, it came up as a future trend in the open-ended questions 36 times. An Ontario-based polytechnic respondent stated:

We are likely moving to a “hybrid” model in which our career advisors will also take on the role of student success advisors—meaning we will combine the student advisor and career advisor position to demonstrate the link between program choice, personal strengths and interest with career. Career advisors believe they are doing this work anyway, and our student

success advisors feel they could benefit from more career training. This also allows us to then pair one advisor with each of our academic schools.

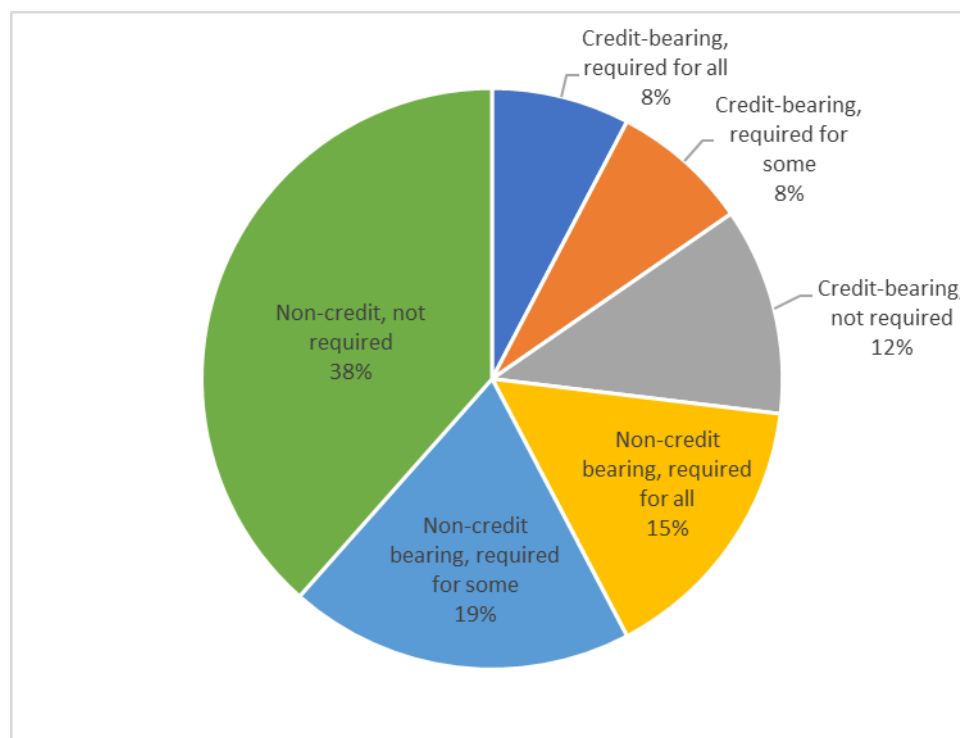
Career centres that integrate academic advising and career advising may be seen as more central to the academic mission than those that exclusively focus on career. In many institutions, the academic advising unit itself, when it is a separate unit, is not considered to be a core function but rather a support service, so whether a career centre offers academic advisement will not be used to determine whether career centres are central units. However, offering academic advisement does represent an alignment with institutional mission, which makes it relevant to Hackman's (1985) first proposition and makes whether a career centre offers it or not a possible predictor variable of whether or not the unit receives resources as a result of providing this service.

When asked if their career centre had a career course or series, 40% (25) indicated that they currently had one, 16% (10) indicated that they had one in development, and 44% (28) indicated that they did not plan to implement one. Of the career centres that had them, only 8% (two) reported that they were credit-bearing and required for all students that they served, with another 8% (two) indicating that they had a credit-bearing course required for some of their students. Another nine centres had a required non-credit-bearing course for all or some of their students.

As shown in Figure 9, the large majority (18, 72%) of the career courses offered by career centres, whether they were required or not, were non-credit-bearing. To add a credit-bearing course in most academic institutions, there is a formal process by which the proposed course needs to be approved by several levels of committees primarily made up of faculty before it can be added to the curriculum.

As discussed earlier in this chapter when determining the centrality of career centres as units, because of the formal approval process necessary to

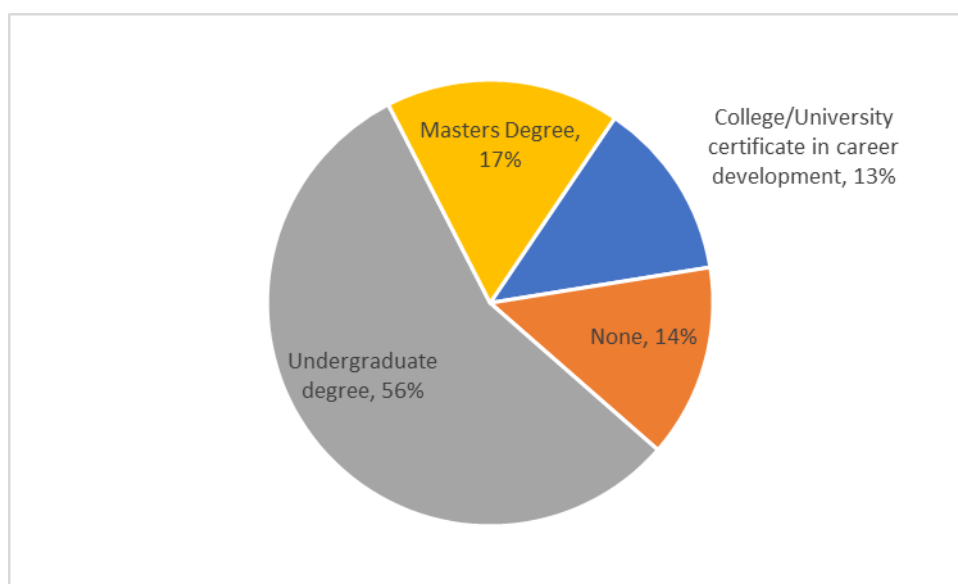
embed requirements into an academic program, having a career course that is required for students to complete their academic program, whether credit-bearing or non-credit-bearing, may be an indication that an institution believes that the career development function is more central to its mission than those institutions that do not have a required course.



**Figure 9: Types of career courses by percentage of total courses ( $n = 25$ )**

Most credit-bearing courses in post-secondary institutions are taught by faculty rather than staff. Only two (3%) career centres reported that all of the professional staff held faculty appointments, while five (8%) others indicated that some of the professional staff held faculty designations. Therefore, 89% (56) of career centres had no staff who held faculty appointments. Faculty generally have a minimal educational requirement of a PhD in most research-based post-secondary institutions and a master's degree in almost all others.

Bearing this in mind, in this study I also looked at the educational and certification requirements to work in a post-secondary career centre. Almost all post-secondary career centres, 86% (54), reported that they had a minimum level of education for most of their staff positions. As Figure 10 illustrates, only 17% (nine) required a master's degree, while the majority required a bachelor's degree or lower (43, 69%). About a quarter of respondents (17, 27%) indicated that a higher level of education was necessary for director or manager roles within the career centre. No centres reported requiring a doctoral degree.



**Figure 10: Minimal level of education required by career centres ( $n = 63$ )**

Other evidence that career services were blending with academics was seen in the services provided to faculty in the classroom. Eighty-four percent (53) of career centres reported working with faculty to provide support for their work in the classroom. On average, career centres provided four different services to support classroom activities. The median was also four services, with a range from one to nine different services provided. The types of services career centres provided to faculty varies.

Most of these services do not appear to be a true integration of career and academic content, with a few exceptions. About one-quarter of respondents (13) indicated that they provide support for career-related assignments in class. Another 24% (13) and 16% (eight) reported providing online or paper-based self-assessments, respectively, for use in the classroom. Along with pre- or post-experiential learning experience reflection assignment assistance, provided by about 18% (10) of respondents, these most likely represent the most integrative approach to career and academics and were, therefore, identified as possible predictor variables on resource allocation. Although the other services provided by career centres provide resources to support the academic goals of a particular class, they represent stand-alone or support services rather than an integrative approach.

According to Hackman's (1985) first proposition, peripheral units, such as career centres, are more likely to gain internal resources when they contribute to the institutional mission. This proposition, applied to classroom support services, implies that the more services that the career centre offers that support academics, the more positive impact on the resource allocation to the career centre.

### **Philosophical Changes to Career Centres**

Another trend that was frequently mentioned were changes to the philosophical orientation of the career centre itself. In many cases, this was expressed as a change to a more holistic approach to career services, as these survey responses indicate:

[Career centres] are becoming less "placement centres" and more educational—helping students understand the career planning process and developing tools and skills to manage a career for a life-time (at least some are). —Western-region, centralized-centre, university-based respondent

Moving from job shops (resume critique, mock interviews) to a holistic approach that works with students from Day 1 to graduation and beyond --- Ontario region, centralized-centre, college-based respondent

How to move from more transactional touch points with students (resume/cover letter views) to more transformational interactions (self-discovery, empowering own job search, personal values in deciding career direction). —Western-region, decentralized-centre, university-based respondent

Other respondents cited a shift in the opposite direction, as exemplified by these responses:

Move towards short term interventions with increasingly clear “documentable” outcomes expectations traditionally associated with longer term “coaching” or interventions. —Western-region, centralized-centre, university-based respondent

Moving towards a coaching role rather than counselling. —Ontario-region, centralized, polytechnic-based respondent

Students seek quick solutions/flexible services/on demand. —Quebec-based, decentralized, university career centre respondent

While these shifts are clearly on the minds of career centre staff, a clear trend toward one philosophical orientation or another did not emerge from the qualitative data after coding it for themes. Thus, there does not appear to be a connection between these discussions of changing philosophies and resource allocation, so no predictor variables from this theme were identified.

### **Changes in Student Demand**

The theme of changes in student demand encompassed a variety of comments on increased demand for services from some student groups, changes to what services students were interested in, and, in some cases, challenges with how to engage students with their services. Representative comments included the following:

A greater demand for "customized" support from students (i.e., wanting resources that directly relate to their area of focus). —Ontario-based, decentralized, university-based career centre respondent



Increased volume of students accessing services with little resource increases. —Ontario-based, centralized, college-based respondent

Drift away from face-to-face services to on-line support. —Western-based, college-based respondent

Increased difficulty in capturing students' attention—they don't seem to be aware of or take advantage of our services until they're in crisis, even though we promote our services through multiple channels. —Western-based, centralized, university career centre respondent

In looking at how student demand might influence career centre resource allocation, student usage could be a factor in determining centrality or institutional power. Ashar and Shapiro (1988) used the number of non-majors choosing to take an academic unit's courses as a measure of centrality. As discussed earlier in this chapter, the number of students choosing to take advantage of career centre services might be correlated to perceived centrality. In this study, career centres of all types reported that they worked with an average of 32% of the student population (median of 25%) their centres were designed to service. This represented a range of 5% to 100% with a standard deviation of 27.2%.

### **Internal Collaboration and Partnerships**

Another trend frequently mentioned was increased collaboration across campus, including with academic areas, to better integrate with the curriculum and academics and to work with other student services units to increase student success. As a general rule, career centres are collaborative, with 60 out of 63 (95%) career centres reporting that they collaborate with one or more internal groups on campus. The average number of units collaborated with was 10, with a standard deviation of five. The frequency of collaborations varies widely across internal units, from ad hoc to weekly (see Table 16).

**Table 16: Partnerships with internal units (n = 60)**

Internal units	Percent reporting Collaborations	Number reporting collaborations
Academic departments	87%	54
Alumni relations	84%	50
International student office	80%	48
Admissions/student recruitment	74%	44
Indigenous student office	70%	42
Students with disabilities office	66%	40
Advancement/development	62%	37
Other student services units on campus	61%	36

#### **4.2.2.3. Summary of Internal Trends**

This subsection provides the results of the analysis of the survey questions needed to describe the current organizational structures and internal trends influencing the post-secondary career centre landscape in Canada. Many of the themes that emerged from the survey results regarding career centre operations echoed the internal organizational factors found in the literature reviewed in Chapter 2. Career centres in Canada remain predominantly centralized—reporting up through the student affairs unit—with the word “career” in their name, with the exception of decentralized professional school-based centres. The emergence of the “outreach” function of career centres was echoed by the survey respondents as a response to changes in student demand. In addition to the trends found in the literature, respondents identified philosophical changes within the career centre, the integration of career and academics, and the increases in internal collaboration as trends that are influencing their operations.

Hackman’s (1985) theory on power and centrality in resource allocations provided a framework to identify some of the factors that may be impacting resources from the survey results on internal trends (see Table 17).

**Table 17: Summary of possible predictor variables from internal challenges trends**

<b>Variable description</b>	<b>Type</b>
Provides academic advisement within career centre	Dichotomous
Offers a required career course	Dichotomous
Career centre has staff with faculty status	Dichotomous
Provides support for career-related assignments in class	Dichotomous
Provides self-assessments for classroom use	Dichotomous
Assists with experiential learning reflection assignments	Dichotomous
Number of classroom support services	Continuous
Usage rate of career centre	Continuous

This subsection outlined the results from the survey that describe how career centres are responding to internal organizational structures and trends in internal challenges faced by career centres across Canada. The next subsection provides the analyses of the resources available to career centres across Canada.

### **4.2.3. Resources Available to Career Centres**

The third sub-question that was key to answering the primary research question was the following: What are the resources available to Canadian career centre leaders today? As noted in Chapter 2, there are three distinct types of resources available to career centres: financial, human, and space. This subsection details the results of the analysis for each of these different types of resources separately. The first type discussed is financial resources.

#### **4.2.3.1. Financial Resources**

A key indicator of the financial resources available to a career centre is its annual budget. For the 2015–2016 academic year, the mean operational budget for all career centres was reported at \$110,841 (*Mdn* = \$70,050); the average total budget was reported at \$ 1,031,710 (*Mdn* = \$954,430). The range for operational budgets was \$3,600 to \$700,000, with a standard deviation of \$152,101. The range for total budget was \$20,600 to \$4 million, with a standard deviation of

\$811,838. The large standard deviations are an indication that the responses are spread throughout the range rather than clustered near the mean. While no statistically significant differences were found between total budget per student and career centre types,  $F(2,30) = 2.73$ ,  $p = .061$ , for illustrative purposes, Table 18 shows the mean, median and ranges for the operational and total budget by career centre type.

**Table 18: Budget data by career centre type ( $n = 59$ )**

	Total budget			Operational budget		
	Mean	Median	Range	Mean	Median	Range
Centralized	1,070,436	950,000	20,600– 4,000,000	96,440	65,411	3,600– 700,000
Business	910,736	923,430	370,000– 1,501,000	160,611	73,000	20,000– 580,000
Decentralized	560,000	*	*	52,500	52,500	30,000– 75,000

Because total budgets vary widely from centre to centre, a more telling statistic is to look at budget per student. Table 19 shows the mean, median, and ranges for the operational and total per student budget by career centre types.

**Table 19: Budget per student by career centre type**

	Operational budget				Total budget			
	Mean	Median	Range	Std. dev.	Mean	Median	Range	Std. Dev.
Centralized	4.53	2.23	0.51– 20.00	5.16	52.70	36.80	2.90– 253.50	56.91
Business	54.80	48.00	13.90– 166.70	42.95	588.00	268.00	111– 3083	855.75
Decentralized	10.80	10.80	9.09– 12.50	1.70	93.33	*	*	*

Respondents were also asked in the survey to rate which factors were important at their institution when determining the career center budget. Table 20 summarizes the importance of each factor as rated by the respondents. In looking

at their responses, it is unclear if the respondents truly understand the factors that go into their budget determination. Only 70% of respondents identified anything as the primary consideration. Between the lack of knowledge about where their budgets came from in the first place, as noted earlier, and the lack of certainty about considerations used in determining their budgets, it is evident that career centre staff are not particularly well-informed about this important issue.

**Table 20: Importance of criteria in budget determination (n = 50)**

	Primary consideration	Important consideration	Consideration	Not a consideration	Unknown
Impact of external factors (i.e., increased student population, inflation, etc.)	12% (6)	16% (8)	28% (14)	10% (5)	6% (3)
Proposed new career centre programs/services	12% (6)	22% (11)	24% (12)	14% (7)	6% (3)
Usage rates of students, alumni, and employers	6% (3)	14% (7)	28% (14)	14% (7)	10% (5)
Quality measures of career centre programs/services	2% (1)	18% (9)	20% (10)	18% (9)	12% (6)
Impact of budget cut on services	10% (5)	20% (10)	22% (11)	10% (5)	12% (6)
Expectation of generation of external funds	6% (3)	8% (4)	22% (11)	20% (10)	16% (8)

In this subsection, I have reviewed the results of the questions related to the financial resources available to career centres. The next section will review the largest line item for most career centres as a separate resource—staffing levels.

#### **4.2.3.2. Human Resources**

Career centres across Canada vary widely in terms of number of staff working within them (see Table 21). The average number of professional staff across all career centres was nine FTEs, and the median was 10.6 FTEs. The average number of total staff (professional and administrative) per centre was

11.5, with a median of 13.7 FTEs. The range of reported professional staff was from 1 to 47 FTEs, and the reported range for total staff was 1 to 61 FTEs.

**Table 21: Staff totals by career centre type (*n* = 63)**

	Total staff			Professional staff		
	Mean	Median	Range	Mean	Median	Range
Centralized career centre	11.42	8.50	1–61	9.32	9	1–47
Business	11.48	10.50	3–33	10.27	9	3–30
Decentralized	5.71	4.5	1–15	5.33	4	1–15
Other	8	8.5	3–12	7.19	7.5	3–11

Because the total number of students each centre is responsible for also varies widely, it is difficult to directly compare staff numbers across career centre types. What is more relevant for comparison, as noted in Chapter 2, is the student-to-staff ratio because these ratios can be directly compared across institutions. Overall, survey respondents had an average ratio of professional staff to students of 1:2,315 and total staff of 1:1,841 (*n* = 58). However, the range of ratios varied widely, with professional staff to student ratios ranging from 1:24 to 1:13,191. Total staff ratios ranged from 1:22 to 1:10,000.

Another difference among career centre staffing was how roles within centres are defined. Table 22 summarizes the overall percentages reported for roles of professional staff across all career centres. As the table shows, traditional counseling/coaching roles make up the largest percentage of roles within today’s career centres. Dual roles are slightly more common in career centres that have co-op embedded within them—at 25% of total staff—compared to career centres without co-op—at 11% of total staff.

**Table 22: Percentage of total professional staff by role across all career centres ( $n = 565.5$ )**

<b>Role type</b>	<b>Percentage</b>	<b>Number</b>
Advisors/coaches/counselors (either co-op or career)	42%	237.5
Dual advising/coaching roles and employer relations (either co-op or career)	20%	113.0
Directors/managers	15%	84.8
Employer relations specialists (either co-op or career)	10%	56.6
Marketing specialists	2%	11
Event specialists	2%	11
Other	7%	39.6

In this subsection, I presented the results of the analysis of the differences between staffing levels and types across career centres in Canada. In addition to financial resources and staffing, space on campus is an indication of a career centre's value on campus. The next section includes the results of the analysis of space available to career centres as a resource.

#### **4.2.3.3. Space**

Another measure of career centre resources worth considering is space allocation on campus. In general, career centres across Canada reported an average of 2,321 sq ft of dedicated space to their centres with a range from 60 to 17,000 sq ft. This is only slightly smaller than their U.S. counterparts, which average 2,573 sq ft (NACE, 2015).

Space usage is also an interesting aspect of career centre operations. As seen in Table 23, only about one-third of career centres have private offices for all of their advising staff, and only about one-half report having private offices for all professional staff. Less than 10% have a board or conference room, while only 35% report having their own classroom space for workshops.

**Table 23: Space usage within career centres (n = 63)**

Type of space	Percentage	Number
Private offices for counseling/advising team	67%	42
Interview rooms	54%	34
Resource/library area	54%	34
Private offices for all professional staff	52%	33
Student work spaces	52%	33
Workshop/classroom space	35%	16
Boardroom/conference room	8%	6

Only 10 career centres (16%) reported that they specifically anticipated a change to the career centre footprint over the next few years, and another four (6%) indicated that there might be a change depending upon what happened with other units at the institution. Anticipated changes cited most frequently were combining career centres with other student support units and moving to higher visibility areas on campus to attract more students. Other changes included annexing a nearby classroom as a workshop space and creating dedicated recruiter spaces. Several respondents indicated a push for additional financial resources to support the new space.

#### **4.2.3.4. Summary of Resources Available**

This subsection detailed the results of the survey questions and analysis designed to answer the third sub-question: What are the resources available to Canadian career centre leaders today? It covered three areas of resources—financial support, staffing, and space. Most of the themes related to resources that emerged from literature reviewed in Chapter 2 were also found in the survey results. For example, many career centres have experienced budget cuts and stagnation and formal training is not a prerequisite for employment in many career centres.

This subsection reviewed the findings of SQ 3, describing the financial, human, and space resources that career centres have available today. The next



subsection provides the findings that answer SQ 4 concerning what services career centres provide to their stakeholders.

#### **4.2.4. Services Offered by Career Centres**

This subsection provides analysis of SQ 4: What are the services provided to students, alumni, and employers by Canadian career centres today? As outlined in Chapter 2, career centres provide different types of services to their various constituent groups; this subsection is organized into smaller subsections by constituent group. In this subsection, I first review the findings describing the services currently offered for students and then review the findings describing the services for alumni, employers, and faculty.

##### **4.2.4.1. Services for Students**

Students are the primary stakeholders for most career centres in a post-secondary context, and 100% (63) of career centres reported offering services for their students. This makes student-directed services the best starting point from which to talk about the services offered by career centres. As noted earlier, participating career centres reported through this survey that they actually only work with an average of 32% of the student population (median of 25%) their centres were designed to service.

##### **General Services for Students**

Based on services currently offered to students suggested by the literature, 44 distinct services were identified and specifically asked about in this survey. Table 24 shows the frequency in which each of the services is asked about in the survey.

**Table 24: Top services and percentage of career centres offering them (n = 63)**

Services for students	Percentage	Number
Resume/cover letter critiques	98%	62
Interview preparation	98%	62
Counseling/advising—in person	97%	61
Mock interviews with staff	97%	61
Online resources	95%	60
Job board	94%	59
Counseling/advising—drop-in	92%	58
Workshops on career topics	84%	53
Networking events	83%	52
LinkedIn profile reviews	78%	49
Guest speakers	76%	48
Career fair—general	73%	46
Career panels	71%	45
Self-assessments—online	65%	41
Job alerts/ subscriptions	65%	41
Career information library (physical space)	63%	40
Counseling/advising advisement—online	59%	37
Informational interview referrals	59%	37
Specialized services for international students	57%	36
Small group skills sessions	56%	35
Corporate mock interviews	54%	34
Mock networking opportunities	52%	33
Career fair—faculty/major specific	51%	32
Graduate school information	49%	31
Student newsletter/blog	48%	30
Specialized services for students with disabilities	41%	26
Self-assessments—pen/paper	40%	25
Career fair—summer jobs	40%	25
Mentoring program with alumni/employers	37%	23
Company tours—local	37%	23
Mock interviews with peers/students	35%	22
Advisor to student clubs	35%	22
Peer advising program	33%	21
Career conferences/days	33%	21
Consulting/case interviewing preparation	30%	19
Job club/small group job search sessions	30%	19
Co-curricular record	29%	18
Peer mentoring program	17%	11
Company tours—non-local, in Canada	17%	11
Academic advising	13%	8
Job shadowing	10%	6
Career fair—virtual	10%	6
Company tours—non-local, international	6%	4

Externships	6%	4
Credential file service	5%	3

Each career centre offers an average 24 different types of student services (*Mdn* = 24), with a range of 8–37 different types of services. Respondents were also given the opportunity to add services offered that were not listed. Additional services offered but not listed included the following:

- Roaming drop-in career lounges (basically drop-in services pop up around campus).
- Opportunities for students to "win" a career-oriented activity (i.e., CEO for a day program).
- Train the trainer programs for teaching assistants.
- Specialized programming by industry area (consulting preparation, investment banking, etc.).
- CV reviews, academic careers planning advisement, and access to research opportunities.
- Volunteer programs for community service.
- Federal work-study program oversight.
- Helping student organizations find sponsors and promoting their initiatives to employers.

Additionally, career centres specified which of the identified services that they only began offering in the last 2 years and which services they do not currently offer that they plan to begin offering in the next 2 years (see Table 25 and Table 26).

**Table 25: Services added in the last 2 years (n = 63)**

	Currently % offering overall	Number offering	% who added service in last 2 years	Number added
Mock interviews—staff	97%	61	13%	8
Online resources	95%	60	13%	8
Counseling/advising—drop in	92%	58	22%	13
Networking events	83%	52	17%	9
LinkedIn profile reviews	78%	49	29%	14
Counseling/advising—online	65%	41	22%	9
Services for international students	57%	36	22%	8

**Table 26: Services planned to be added in next 2 years (n = 63)**

	Currently % offering overall	Number offering	% who plan to add	Planning to add
Counseling/advising—online	65%	41	16%	10
Services for international students	57%	36	14%	9
Student newsletter	48%	30	16%	10
Services for students with disabilities	41%	26	14%	9
Mentoring program	37%	23	21%	13
Mock interviews—peers	35%	22	14%	9
Job shadow program	11%	7	17%	11

Career centres seem to be taking advantage of advances in technology to add capacity through online advising and additional online resources for students. Interestingly, several of the new programs, such as job shadowing, mentoring programs, and networking events, are focused on connecting students with potential employers in an intentional way. These strategies align with Dey and Cruzvergara's (2014) proposal that there is a paradigm shift in career centres' toward the purpose of creating connections.

Career centres reported cutting very few services for students, with only career fairs and libraries being cut from 6% of career centres. The other services

cut from 3% of career centres were specialized job fairs, serving as club advisors, and student newsletters. Despite adding many new services, career centres rarely eliminate services they are currently providing.

This subsection has shown the various services provided to students, the primary stakeholder for most career centres. Next, I will present details on the analysis of one of those key services—workshops for students.

### **Workshops for Students**

The majority (88%, 56) of career centres offer workshops to students and alumni on career topics. For those that offer workshops, respondents were asked to indicate which workshops they currently offer to students and alumni. Table 27 showcases the workshops offered at career centres in Canada.

**Table 27: Workshops by topic offered by career centres (n = 56)**

<b>Workshop Topic</b>	<b>Percentage offering</b>	<b>Number offering</b>
Resume writing	100%	56
Interviews	98%	55
Job search	98%	55
Cover letters	96%	54
LinkedIn profiles	91%	51
Networking	89%	50
Hidden job market	84%	47
Academic careers/CV prep	80%	45
Informational interviews	80%	45
Career fair preparation	80%	45
Personal branding	75%	42
Online job search/application tracking systems	70%	39
Careers in.....major specific	64%	36
Canadian work environment	61%	34
MBTI or other specific assessment	61%	34
Self-assessment	61%	34
Company research	57%	32
Salary/offer negotiation	52%	29
Professional/business etiquette	52%	29
Social job search	52%	29
Finding internships	46%	26
Portfolio development	43%	24
Preparing for co-op	43%	24
Presentation skills	41%	23
Applying for graduate school	41%	23
Working on campus	41%	23
Post-graduate success	39%	22
Government/public service applications	39%	22
Dining etiquette	37%	21
Career planning by academic year (1st, 2nd, etc.)	37%	21
Choosing a major/concentration	37%	21
Case interviewing	30%	17
Professional school (law, medicine) preparation	25%	14
Time management	21%	12

This subsection covered the general services offered for students as well as provided an in-depth look at workshops provided. The next section details the results of the analyses on services for another key stakeholder group—alumni.

#### **4.2.4.2. Services for Alumni**

Another important stakeholder group for most career centres is their alumni. The promise of access to career services post-graduation is frequently an implied if not explicit promise institutions make to prospective students. This subsection looks at services provided to alumni job seekers as well as reviews the ways career centres connect with alumni as a resource for their current students.

#### **Career Services for Alumni**

The vast majority (92%,  $n = 58$ ) of career centres provide services for alumni, and Table 63 summarizes the frequency of each of the alumni services offered. On average, career centres that offer career services for alumni provide 12 different services for alumni, with a range of 1–22 services per career centre. The median was also 12 services. As can be seen from Table 28, at least two-thirds of career centres provide long-term access to alumni for the majority of their services.

**Table 28: Career centre services for alumni by length of post-graduation services are accessible (*n* = 58)**

Service for Alumni	Overall percentage offering	Number offering	Alumni 1–2 years out only	Number offering to young alumni	Long-term access for all alumni	Number offering to all alumni
Career advisement appointments	93%	59	28%	17	72%	42
Resume/cover letter critiques	91%	57	28%	16	72%	41
Interview preparation	89%	56	29%	16	71%	40
Career information resources—online	88%	55	24%	13	76%	42
Access to student job board	81%	51	24%	12	76%	39
Career advisement—online (email, IM, webinar)	76%	48	23%	11	77%	37
Career advisement—drop in	66%	42	29%	12	71%	30
Career fair (all job types)	64%	41	32%	13	68%	28
Workshops on career topics	59%	37	32%	12	68%	25
Networking events (not company sponsored)	57%	36	27%	9	73%	27
Job alerts/ subscriptions	57%	36	27%	9	73%	27
Career information library (physical space)	57%	36	24%	8	76%	28
Informational interview referrals	50%	31	24%	7	76%	24
Online self-assessments	46%	27	23%	9	77%	18
Career fair—major specific	38%	22	32%	7	68%	15
Guest speakers	36%	21	29%	6	71%	15
Paper-based self-assessments	28%	16	38%	6	62%	10
Small group skill sessions	22%	13	23%	3	77%	10
Career conferences/days	21%	12	33%	4	67%	8
Alumni newsletter	21%	12	17%	2	83%	10
Services for international students	21%	12	50%	6	50%	6
Alumni-only job board	19%	11	18%	2	82%	8
Services for alumni with disabilities	19%	11	55%	6	45%	5
Job Club	16%	9	22%	2	78%	7
Career fair—virtual	10%	6	33%	2	67%	4
Credential files	2%	1	0%	0	100%	1

When asked about interest in providing services to alumni, the majority of career centres (45, 71%) reported an increase in interest to engage with alumni both on campus and from alumni themselves, particularly in one-to-one advising services. Another 24% (15) indicated no change, while only 5% (three) reported a decrease. For those reporting a decrease, reduced funding was frequently cited as the cause for the reduction of interest on campus.



## **Alumni Engagement Activities**

An institution's alumni population is also a rich resource for career centres that seek to connect their students with experiential learning opportunities, informational interviews, and employment opportunities. This is a mutually beneficial relationship since alum are generally more than willing to provide advice and mentorship to students from their alma mater, and institutions have a vested interest in cultivating engaged alumni as future donors.

Hackman's second proposition was that peripheral units can increase their resource allocation by attracting unique external resources (Hackman, 1985). The expertise of alumni represents an external resource that the career centre brings to the institution, thereby increasing its environmental power. Thus, survey respondents were also asked about ways that they engage with alumni as a resource for current students, and 90% (57) of them indicated that they do engage in at least one way. The average number of employer engagement activities was 4.5, with a median of 4 services per career center. The range was 1 to 11 services for career centres that provided them. As Table 29 illustrates, career centres engage alumni in a variety of ways.

**Table 29: Career center engagement with alumni by engagement type (n = 57)**

Alumni engagement types	Career centres using (n/%)	Number using
Invitations to networking events with students	68%	39
LinkedIn groups	63%	36
Direct referrals to alumni for informational interviews	53%	30
Assisting with career programming (resume critiques, speed interviewing, etc.)	46%	26
Mentoring program between students and alumni	44%	25
Participation in new student orientation	28%	16
Leading career workshops	33%	19
Connections to clubs or student groups	28%	16
Online tools such as a directory or database	26%	15
Provide opportunities for alumni to host students for dinners or events	21%	12
Contributions to student newsletters/blogs	18%	10
Geographic region-based events	16%	9

Respondents were given the opportunity to detail other ways they engage with alumni; responses included the following:

- Alumni as tutors for students with academic concerns.
- Guest speaking opportunities.
- Alumni profiles on website or in marketing materials.
- Approaching alumni as potential employers of students.

This subsection outlined the services provided by career centres to alumni as well as types of engagement career centres engage in with alumni to provide services to current students. The next subsection covers what services are offered to employers.

#### **4.2.4.3. Services for Employers**

Another important set of stakeholders for career centres are the employers who hire students from their institution. Although most career centres view the

student as their primary stakeholder, creating services that make it easy for employers to hire students and alumni clearly benefits the students. Many employers also want to make sure their employer brand is known on campus so that they can attract the top candidates when it is time for them to hire in the future.

### **Employer Recruiting Services**

Career centres were asked about 34 different recruiting services for employers. Almost all career centres (62, 98%) reported providing some services specifically to employers. The average number of employer services was 15 per career centre, with a range of 7–26 for those that provided them. The median was 14 services per centre. The frequencies of employer services offered by career centres are reported in Table 30.

**Table 30: Services for employers (n = 62)**

<b>Employer services</b>	<b>Percentage of centres offering</b>	<b>Number offering</b>
Company information sessions	90%	56
On-campus interviews	87%	54
Part-time job postings	85%	53
Job postings—full-time/post-graduate	84%	52
Promotion of employer events off campus	73%	46
Volunteer postings (with non-profit organizations)	73%	46
Hallway tables	69%	43
Career fair (all job types)	68%	42
Introductions to faculty	68%	42
Internship postings—paid	64%	40
Career fair—faculty/major specific	51%	32
Introductions to student clubs	51%	32
Featured job postings	48%	30
Career fairs—summer jobs	47%	29
Provide wage subsidy information to employers	47%	29
Email blasts to students	45%	28
Post co-op jobs	45%	28
Employer office hours	40%	25
Consultations on recruiting practices	40%	25
Print advertising	39%	24
Resume referrals	39%	24
Social media campaigns	37%	23
Video conference interviews	37%	23
Unpaid internship postings	35%	22
Candidate pre-screening	31%	19
Resume books	24%	15
Pre-employment exam proctoring	21%	13
Online advertising	19%	12
Video conference presentations	19%	12
Paper-based job board	16%	10
Alumni-only job board	15%	9
Articles about companies in student newsletters	15%	9
Corporate partners program	13%	8
Virtual job fair	10%	6
Employer newsletter	8%	5

Career centres are more likely to charge fees for services to employers than they are to students, with 33% (21) reporting charging for one or more

services. The services that career centres are most likely to charge for include general career fairs (five, 21%), major specific career fairs (four, 17%), company information sessions (four, 17%), summer job fairs (three, 14%), hallway tables (three, 14%), and print advertising (two, 11%). Other services where career centres sometimes charge a fee include on-campus interviews, featured job postings, social media campaigns, banner advertising, corporate partner programs, and other types of job postings.

### Other Employer Services

Respondents were also asked if they provided professional development opportunities for employers. Only six career centres (10%) indicated that they provide these types of opportunities. When offered, these professional development services were generally offered free of charge or for a cost recovery fee. Table 31 lists professional development services offered in order of frequency.

**Table 31: Professional development services offered to employers by frequency offered**

Professional development (PD) for employers	Frequency
Invitations to on-campus lectures	3
Newsletters with PD features or research	3
Labor market trend/hiring information	3
Best practices in campus recruiting	2
Small employer group meetings on trends (industry/geographic specific)	2
Nominate for awards/recognition	2
Invite to open house to showcase institution	2
Interview skills training	1
Generational specific recruiting methods	1
Large employer only forums/conferences	1
Employer-only networking events	1
Provide space for external PD events	1
Peer-to-peer diversity workshops	1

While several career centres reported that they had employer advisory boards on campus, only three centres indicated that they had one specifically for the career centre. Of those, they reported that their boards consisted of 8–14 employer members. Another four career centres shared the details of their corporate partners program with employer representatives, ranging from 1 for a newly formed program up to 10–15 for an established one. There were too few respondents to either sets of questions about corporate advisory boards ( $n = 3$ ) or corporate partner programs ( $n = 3$ ) to provide additional information and maintain confidentiality of the respondents. While these employer advisory groups may represent a valuable external resource or contribute to the institutional mission, there were too few centres that had them for further analysis.

This section reviewed the services offered by career centres for employers who are seeking to hire from campus as well as peripheral services such as professional development activities and advisory boards. The next section will explore services for faculty.

#### ***4.2.4.4. Services for Faculty***

Another constituent group that career centres work with is the faculty of their institution. In this survey, respondents were asked about how their career centre works with faculty in two different ways: with the faculty member as an individual who might be seeking a job change or research connections to support his/her internal career growth and with the services the career centre provides to the faculty in the classroom to support students. How career centres support faculty in the classroom was discussed previously when determining the centrality of career centres using Hackman's (1985) concept as the lens. This section will detail how career centres support faculty as individuals.

In the survey, 54% (34) of career centres reported that they provide services to support faculty as individuals. The average number of services offered

to individual faculty was 2.5, with a range of one to five services per career centre. The median was two services. The seven unique services provided to faculty as individuals are listed in Table 32 in order of frequency offered. These represent the seven independent variables related to services for faculty that may be correlated with resource allocations.

**Table 32: Percentage of career centres offering services for faculty as individuals (n = 63)**

Services for faculty as individuals	Percentage offering	Number offering
CV reviews	30%	19
Career counseling or advising	22%	14
Access to job board/alerts	21%	13
Research connections with industry	19%	12
Career counseling or advising for spouses	14%	9
Web-based career resources	14%	9
Professional development workshops	11%	7

In the case of individual support, 54% (34) of career centres are providing one or more services to faculty. Earlier, analysis showed that 84% (53) of career centres provide support services for faculty for the classroom. This discrepancy may indicate that career centre staff see supporting the classroom activities as an extension of providing services for students—not as a relationship-building tool with the faculty. However, for those that do provide services to faculty as individuals, it may represent a technique to increase a unit’s institutional power through the relationships created if viewed through Hackman’s (1985) third proposition as a lens. Building personal relationships with key faculty could be a way career centres might garner institutional power.

#### **4.2.4.5. Summary of Services Offered**

As noted earlier, career centres are service-oriented units. Their primary stakeholders include students, alumni, employers, and faculty, and this subsection outlined the various services being provided to them by career centres today.

Table 33 shows the volume of services being offered across these stakeholder groups.

**Table 33: Number of services offered by career centres by stakeholder group**

	<b>Mean</b>	<b>Median</b>	<b>Range</b>
Career services for students	24	24	8–37
Career services for alumni	12	12	1–22
Engagement services for alumni	4.5	4	1–11
Recruiting services for employers	15	14	7–26
Engagement services for employers	5	5	1–16
Classroom services for faculty	4	4	1–9
Individual career services for faculty	2.5	2	1–5
Total	67	65	

Services that are experiencing growth include specialized services for international students, mentoring and job shadowing programs, LinkedIn profile reviews, online and drop-in advising services, and mock interviewing programs. Only job fairs and resource libraries are experiencing a decline.

Respondents were asked about 101 different services to help students and alumni with their career development (44 for students, 26 for alumni, 34 recruiting services for employers, and seven to support faculty in the classroom). Viewed through the lens of Hackman’s (1985) first proposition for peripheral units, any service that is contributing to helping students and alumni with their career development could be seen as contributing to the institutional mission, meaning that all 101 services may be possible predictor variables.

This subsection described the services offered to the primary stakeholder groups. The next subsection reviews the findings related to the philosophical orientation of career centres.



#### 4.2.5. Philosophical Orientations of Career Centres

SQ 5—What are the prevalent philosophical orientations within Canadian career centres today?—was developed to explore the gamut of philosophical orientations driving career centres today. Respondents were asked to share their thoughts about their career centre’s philosophical orientation through an open-ended question: “How would you describe the philosophical orientation or guiding principals [sic] of your career centre (i.e., planned happenstance, chaos theory, placement focused, developmental, etc.)?” About 94% (59) of respondents provided some thoughts around their centre’s philosophical orientation. While many were explicit in stating their philosophical orientation, others were less clear about which philosophies they subscribed to or how they were applied in their career centre. Here are some examples of responses:

Students' needs are various each individual to each individual, philosophical approaches should reflect on students' needs. In serving students, based on their needs, we guide them with various theories. —Western-region, centralized, university-based respondent

Practical education: teaching our students on how to conduct an effective job search while utilizing critical tools, such as: resume, cover letter, interviews, social media profiles, etc. —Ontario-region, centralized, college-based career centre respondent

We do not explicitly use a guiding philosophy. Though our strategy is to apply a holistic student centred approach that helps students build experience, leadership skills and career intelligence. —Atlantic-region, centralized, university-based career centre respondent

Our career services are based on a developmental approach. We support our students and alumni to develop the competencies needed to navigate career decisions, transitions, work search and career management. Our approach is informed most closely by planned happenstance. —Western-region, decentralized, university-based respondent

All responses were analyzed and coded into the theories outlined in Chapter 2. For those responses that did not explicitly state a theoretical

orientation, some of the key words and phrases used in coding are outlined in Table 34.

**Table 34: Coding chart for philosophical orientations/theories**

<b>Theory</b>	<b>Key words/phrases</b>
Chaos theory	Chance, luck
Constructivist	Student autonomy, self-sufficiency
Developmental	Holistic, career journey, whole student
Placement	Jobs, job search, employability, market-driven, results-oriented
Planned happenstance	Connections to employers, high impact experiences, experiential

Many respondents identified two or more orientations that were prevalent in their centres. The most common was a developmental approach, taken by 56% ( $n = 33$ ) of career centres, followed by planned happenstance (21, 36%), and constructivist (13, 22%). Placement still remains a significant approach within career centres today (12, 20%).

#### **4.2.6. Success Measures and Metrics**

This subsection presents the findings used to answer SQ 6: What are the metrics collected and reported by Canadian career centres today? As noted earlier, for this study, a metric refers to anything measured by the career centre either quantitatively or qualitatively to determine usage, quality, impact, or satisfaction. Metrics represent the ways career centres track their activity and the impact their interventions have on their constituents. Career centres collect several different types of success measures metrics, including overall office metrics, metrics about usage, and satisfaction and learning outcomes of specific services for students, alumni, and employers.

##### **4.2.6.1. Overall Career Centre Usage Rates**

Not surprisingly, 97% (61) of career centres reported collecting statistics about overall office usage and activity. These metrics measure the activity level or

usage rate of the career centre and include everything from how many students access their services to number of graduates who have found employment. Table 35 shows each of these metrics and the percentage of schools tracking them. By far, these metrics are primarily for institutional internal use only, with only 20 (33%) career centres indicating that they publish any of them externally.

**Table 35: Percentage of career centres collecting office usage metrics by type (*n* = 61)**

Metric	Percentage of career centres collecting	Number collecting
Total workshops offered	97%	59
Total appointments provided	95%	58
Total event attendance	95%	58
Total students who access centre	93%	57
Total jobs posted	89%	54
Total employer contacts	84%	51
Total alumni who access centre	62%	39
Total accessing online resources	44%	27
Post-graduate employment rate	43%	26
Co-op placement rate	41%	25
Total students who do NOT access centre	26%	16
Internship employment rate	25%	15
Graduate/professional school attendance	20%	12

Since these metrics are primarily used for internal purposes, there may be a relationship between metrics reported internally and the institutional and environmental power of the unit, as defined by Hackman (1985). In particular, total student and alumni usage, total workshops, appointments, accessing online resources, and event attendance may showcase the value placed upon the services by students and thus increase a centre's power. Total jobs posted and total employer contacts may be used to showcase the external resources brought in by the career centre. Internship and co-op placement rates are also an indicator of both the value placed upon these services by students and external resources. When analyzed through the lens of Hackman's theory, whether or not a career

centre measures each of these 10 metrics may impact the resources available to it, which ties back to my original purpose for conducting this study.

A unique office metric is the post-graduate employment rate because these data need to be collected from the students rather than generated through internal record-keeping. It is also by far the most common externally reported metric, with 26% (16) career centres indicating that they share it externally. The next most commonly reported external metrics include total student usage (nine, 15%), number of workshops offered (nine, 15%), co-op placements (eight, 13%), and number of student appointments, internship placement rates, and number of jobs posted—all at 11% (seven).

Because post-graduate employment is one of the key metrics of interest to internal and external stakeholders, reporting this information may be related to three of Hackman's (1985) propositions: relationship to institutional mission when reported externally, institutional power of the unit when reported internally, and the negotiation strategies of the career centre leader. Thus, whether or not a career centre tracks post-graduate employment is another factor that may influence resource allocation.

Another unique career centre metric is whether a career centre supported the institution in collecting data for national and international rankings and resource allocation. About 25% (15) of career centres reported that they are responsible for supporting institutional rankings initiatives. Of those career centres who support rankings participation, the most common type of support is to provide direct data on post-graduate employment (seven, 50%) and post-graduate salaries (eight, 56%) to the ranking body. Another type of support provided is to distribute surveys to employers (five, 31%) and to alumni (two, 13%). Assuming that prospective students, employers, and parents view rankings as a measure of quality, providing support for institutional participation to become ranked relates to the institutional

mission of providing quality education to students. Therefore, based on Hackman's theory (1985), whether or not a career centre supports institutional rankings may also influence the resources allocation.

The next subsection looks at how career centres collect metrics for measuring the usage, quality, impact, and satisfaction for specific programs or services.

#### ***4.2.6.2. Measuring Services for Students, Alumni, and Employers***

As noted in Chapter 2, when it comes to tracking metrics on specific programs for students and alumni, career centres track three different types: usage rates, satisfaction levels, and learning outcomes. Most centres (61, 97%) reported tracking at least some usage statistics for their services. On average, career centres track usage metrics on 21 different student services (see Table 36). Eighty percent (50) of career centres reported that they collect some of these metrics for internal institutional use, and 62% (39) reported that they collect some of these metrics for career centre use only.

These service usage data are primarily a measure of the "busy-ness" of the career centre and of how much activity is being generated. There is no implied quality measure in usage statistics, although a year-by-year comparison within a career centre that shows substantial increase in demand may indicate a growing positive reputation for the program or services or vice versa. If year-by-year usage rates substantially increase or decrease over time across all career centres, it may indicate a trend that the approach is either fading or expanding.

**Table 36: Percentage of career centres collecting student usage metrics (n = 63)**

<b>Student usage metrics</b>	<b>Percentage of career centres collecting</b>	<b>Number of career centres collecting</b>
Counseling/advising appointments—in person	92%	56
Resume/cover letter critiques	84%	51
Counseling/advisement drop ins	79%	48
Career topic workshop attendance	79%	48
Career panels attendance	70%	43
General career fair attendance	69%	42
Mock interviews with staff	69%	42
Guest speaker attendance	66%	40
Job board views	52%	32
Usage of online resources	52%	32
Usage of social media	51%	31

When it comes to trying to determine the quality or impact of their services, most career centres who seek to measure it use surveys of their students. About 75% (46) of career centres reported that they use either satisfaction surveys or learning outcomes measurements with their students to assess quality. It is much more common for career centres to conduct satisfaction surveys than learning outcomes assessments—100% of career centres who do any type of surveying of students reported conducting satisfaction surveys, and only 40% (18) looked at learning outcomes. On average, career centres reported conducting satisfaction surveys on nine of their student services and measuring learning outcomes on four of their services. The services for which satisfaction surveys were most commonly used are found in Table 37.

**Table 37: Percentage of career centres who conduct satisfaction surveys on student services (n = 63)**

<b>Student services</b>	<b>Percentage of career centres who conduct satisfaction surveys</b>	<b>Number who conduct surveys</b>
Career advisement appointments	72%	33
Career topic workshops	65%	30
Resume/cover letter critiques	57%	26
Career advisement—drop in	52%	24
Career fair—general	50%	23
Career panels	48%	22
Career topic guest speakers	43%	20
Mock interviews with staff	35%	16
Specialized services for international students	33%	15
Career fair—faculty/major specific	33%	15
Mock networking opportunities	30%	14

Career centres rarely seek to measure the impact their programs and services have on students' career development by measuring learning outcomes of their programs and services. Only 18 career centres reported using them at all, but when they do, the services for which learning outcomes were most commonly measured were the following: career topic workshops (eight, 42%), career advisement appointments (seven, 37%), resume/cover letter critiques (seven, 37%), job club/small group job search sessions (five, 26%), career fairs—general (four, 21%), specialized services for international students (four, 21%), and peer advising programs (four, 21%).

If a career centre has created learning outcomes for their programs and services, it may be an indicator that the centre is seeking to align with its institutional mission. Hackman's (1985) theory indicated that whether or not a career centre tracks learning outcomes may impact resource allocation. Chi-square tests showed that there were no significant differences in measuring learning outcomes across institution type, geographic region, or career centre type.

Data collection on usage of employer services is not as widespread as it is for student services, with only 78% (49) of career centres reporting that they track any employer metrics at all. For those that do, they collect usage data on an average of 13 different types of employer services. As Table 38 shows, the number of job postings and other measures of employer activity on campus were the most frequently collected.

**Table 38: Employer metrics by frequency collected (n = 63)**

Metric	Percent of career centres collecting	Number collecting
Job postings—full time	76%	35
On-campus interviews—companies	73%	34
On-campus interviews—number of interviews	71%	33
Company information sessions—student attendance	69%	31
Companies attending general career fair	65%	30
Company information sessions—number of companies	63%	29
Job postings—part-time	61%	28
Companies hosting hallway tables	45%	21
Job postings—paid internships	45%	21
Job postings—volunteer	43%	20
Companies attending major specific career fair	41%	19

Many career centres in this survey (83%; 52) also seek feedback from employers about students and their own services. Of those that solicit feedback, 94% (49) seek feedback about their students, while 88% (46) seek feedback about career centre services. The most common way to get feedback on students is through surveys of employers about their students (77%, 38). Another 70% (34) reported using individual meetings/phone calls with employers, and 12% (6) reported holding focus groups with employer to get feedback on students. To receive feedback on their own services, surveys are the most common tool, with 71% (33) of career centres using them. Like feedback on students, this is followed



by individual meetings/phone calls with employers (48%, 22), and focus groups (13%, six).

#### **4.2.6.3. Other Metrics Collected**

Career centres were asked about a few other best metrics practices in the survey to see if they had incorporated them into their practice. One of these was if they had conducted an internal or external assessment of their career centre in the past 5 years. More than 40% (27) indicated they had conducted an assessment that was either required by institutional leadership or an external body (21%, 13) or not required (22%, 14). While 16% (10) did not know if their centre had conducted an assessment, 41% (26) reported that they had not had an internal or external assessment of their centre.

When asked if their career center had a strategic plan in place, respondents reported various stages—from not having one at all, to having one that is out-of-date or incomplete, to having one that is up-to-date. Only 40% (25) reported having a current strategic plan, while 18% (11) said they have one that is out-of-date, incomplete (13%, eight), or in progress (6%, four). Nine (14%) indicated they were not planning to have one, and six (9%) did not know if their career centre had one.

Career centres were also asked if they created annual reports. About half (31) of career centres reported creating them for internal use only, while 11% (seven) indicated that they share them publicly. Eleven percent (seven) reported that they planned to create one in the next year, and another 22% (14) indicated that they did not plan to create one. Three (5%) respondents did not know if their centre created an annual report.

Respondents were also asked if their centre had conducted a needs assessment with their students to determine the programs and services that would

best serve them. About one-quarter (15) of the respondents indicated that they either had conducted a needs assessment in the past or were in the process of conducting one at the time of the survey. Another 25% (16) were planning on conducting one in the next year. While 43% (27) indicated that they did not plan to conduct one, another 8% (five) did not know if their career centre had conducted a needs assessment or not.

#### **4.2.6.4. Summary of Metrics Variables**

This subsection described the current metrics collected and reported by career centres both at the centre level and for specific programs and services. As noted in the literature noted in Chapter 2, the metrics that career centres are tracking are numerous and increasing.

Additionally, based on Hackman's (1985) theory, the 14 possible predictor variables that may be influencing resource allocations were identified (see Table 39).

**Table 39: Summary of possible predictor variables from metrics collection trends**

<b>Variable description</b>	<b>Type</b>
Tracking student usage	Dichotomous
Tracking alumni usage	Dichotomous
Workshop attendance	Dichotomous
Number of appointments	Dichotomous
Event attendance	Dichotomous
Online resource usage	Dichotomous
Learning outcomes	Dichotomous
Total jobs posted	Dichotomous
Total employer contacts	Dichotomous
Co-op placement rate	Dichotomous
Internship placement rate	Dichotomous
Post-graduate outcomes	Dichotomous
Rankings participation	Dichotomous
Annual report	Dichotomous

### **4.2.7. Summary of Sub-question Findings**

In the previous subsections, the findings to answer each of the six sub-questions were presented. These six sub-questions aligned with the literature review sections in Chapter 2 structure to investigate the external factors that influence career centre operations; the internal structures and organizational challenges; services offered to students, alumni, faculty, and employers; resources available to career centres; philosophical orientations of career centres; and the success measures and metrics collected.

For each of the sub-questions, descriptive findings such as frequency, mean, median, and ranges were presented to provide a comprehensive picture of the current landscape of post-secondary career centre operations.

### **4.3. Differences Across Career Centres**

To get a more detailed picture of the career centre landscape, the next step was to look for variations in how career centres operate across three demographic variables identified earlier—geographic region, institution type, and career centre type. For each of the categorical predictor variables identified through the analysis of the sub-questions, chi-square tests were run to look for significant differences in how each variable was operationalized. One-way analysis of variance was used to test for significant differences across these predictor variables for continuing response variables.

For many of the identified predictor variables, there were no significant differences in how they were operationalized regionally, institutionally or by career centre type. For example, no differences were found in articulated philosophical differences at the career centre by any of the three demographic variables using chi-square tests. However, statistical analysis did reveal many significant differences that will be described below. Non-significant results are not reported.

### 4.3.1. Operational Differences by Geographic Region

As noted in Chapter 1, respondents identified where their institution was located based upon the four CACEE regions—Atlantic, Ontario, Quebec and West. Chi-square tests were run for predictor variables identified by the sub-questions to identify differences by these four geographic regions.

#### 4.3.1.1. Differences Caused by External Trends

Geographic region was found to be significant in how career centres were responding to several external trends. Since many of these external trends vary in intensity across the country, it is not surprising that analyzing the data by geographic region highlights these differences. In particular, several technologies varied significantly across geographic region. In general, the Atlantic region appears to be taking advantage of more technologies than other regions of the country, while the Western region is generally behind the rest of the regions when it comes to adoption of technology platforms (see Table 40).

**Table 40: Technologies by geographic region (n = 63)**

	<b>Atlantic (n = 10)</b>	<b>Ontario (n = 26)</b>	<b>Quebec (n = 4)</b>	<b>Western (n = 23)</b>
Use of Facebook	100% (10)	73% (19)	100% (4)	52% (12)
Vault Insider Guides	20% (2)	15% (4)	100% (4)	17% (4)
Strong Interest Inventory	70% (7)	38% (10)	0% (0)	26% (6)
Job postings.ca	80% (8)	23% (6)	25% (1)	43% (10)
TalentEgg	80% (8)	11% (3)	50% (2)	39% (9)
WhoPlusYou (Magnet)	0% (0)	19% (5)	0% (0)	0% (0)
GoingGlobal	0% (0)	19% (5)	75% (3)	30% (7)
My World Abroad	40% (4)	12% (3)	75% (3)	26% (6)

In looking at how different technologies have been operationalized, Facebook has been operationalized differently across geographic regions ( $\chi^2(3, n = 63) = 9.813, p = .020$ ). As seen in Table 40, it has been universally adopted in

the Atlantic region and Quebec, whereas only three-quarters of career centres in Ontario and half of them in the West have adopted Facebook.

The frequency by which the Career Insider/Vault Insider guides were offered varied regionally ( $\chi^2(3, n = 63) = 15.042, p = .001$ ) with career centres in Quebec universally utilizing them and the rest of the country with a utilization rate of 20% or less.

The use of the Strong Interest Inventory also varied across geographic regions ( $\chi^2(3, n = 63) = 8.260, p = .041$ ). No career centres in Quebec use this tool while the majority, almost three-quarters, of the career centres in the Atlantic region use it. Ontario career centres have the next highest usage rate followed by career centres in the Western region.

As can be seen in Table 40, the frequencies of both GoingGlobal ( $\chi^2(3, n = 63) = 23.115, p = .024$ ) and My World Abroad ( $\chi^2(3, n = 63) = 23.115, p = .030$ ) vary significantly across geographic region, according to chi-square tests. Career centres in Quebec universally offer one of these tools with about half of the career centres in the Western region offering them. Career centres in Ontario are least likely to offer an international opportunities database.

Perhaps because of the inherently geographic nature of job boards, there were several differences in how job platforms have been implemented across Canada. Chi-square analysis showed that the implementation of all of them, with the exception of HandShake, varied by geographic region (see Table 40). Both Job Postings,  $\chi^2(3, n = 63) = 10.285, p = .016$ , and TalentEgg,  $\chi^2(3, n = 63) = 15.776, p = .001$ , are most heavily used in the Atlantic region and least used in Ontario, while WhoPlusYou,  $\chi^2(3, n = 63) = 7.729, p = .030$ , is exclusively used in Ontario.

### 4.3.1.2 Differences in Internal Organizational Challenges

The only internal trend where there a regional difference was identified was the stability of career centres budgets. As career centres are largely provincially funded, it is perhaps not surprising to see differences across geographic regions. Chi Square tests revealed that there were differences in budget changes across geographic regions,  $\chi^2(15, n = 58) = 25.902, p < .039$ . As can be seen in Table 41, career centres in Ontario were more likely to see a budget increase than career centres in the rest of the country. They were also less likely to have taken a budget cut. Career centres in the Western region had the most variation in their budget changes with approximately 40% reporting a budget increase and approximately 40% reporting a budget decrease. Career centres in the Atlantic region and Quebec both saw 24% reporting a modest increase while in Quebec, the remaining career centres reported a budget decrease and in the Atlantic, half of those who did not see a budget increase saw a decrease while the remaining half reported a static budget.

**Table 41: Budget changes by geographic region (n = 58)**

	<b>Atlantic</b>	<b>Ontario</b>	<b>Quebec</b>	<b>West</b>
Significant budget increases	0% (0)	19% (5)	0% (0)	5% (1)
Slight budget increases	25% (2)	27% (7)	25% (1)	31% (18)
Budget remains the same	37.5% (3)	35% (9)	0% (0)	20% (4)
Slight budget decreases	37.5% (3)	19% (5)	75% (3)	24% (14)
Significant budget decreases	0% (0)	0% (0)	0% (0)	20% (4)

While budget changes in the Atlantic region ranged from a slight decrease to a slight increase, budget changes in the Western region ranged from significant decreases to significant increases. Additionally, the percentage of career centres in Ontario who received an increase of any size was 46% (12) compared to 36%

(19) in the Western region, 25% (1) in Quebec and 25% (2) in the Atlantic region. Only 19% (5) of the career centres in Ontario reported a budget decrease at all compared to 37.5% (3) in the Atlantic region, 44% (18) in the Western region and 75% (3) in Quebec. From this it is evident that career centres in Ontario, as a whole, were more successful in increasing and protecting their budgets over the past 3 years.

#### 4.3.1.3. Resource differences

Geographic region was found to be significant in how career centres used space within their centres. There were significant differences in workshop space,  $\chi^2(3, n = 63) = 7.793, p = .050$ , and student workspace,  $\chi^2(3, n = 63) = 10.353, p = .016$ . The Atlantic region was least likely to have either of these facilities built into the career centre and Quebec was the most likely as can be seen in Table 42.

**Table 42: Space usage by geographic region (n = 63)**

	Atlantic		Ontario		Quebec		West	
	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer
Workshop space	10% (1)	90% (9)	46% (12)	54% (14)	75% (3)	25% (1)	26% (6)	74% (17)
Student workspace	20% (2)	80% (8)	50% (13)	50% (13)	100% (4)	0% (0)	61% (14)	39% (9)

#### 4.3.1.4. Differences in services

Geographic region was found to be significant in how career centres were operationalizing different services across stakeholder groups as can be seen in Table 43.

**Table 43: Services with significant variations by geographic region (n = 63)**

	Atlantic (n = 10)	Ontario (n = 26)	Quebec (n = 4)	Western (n = 23)

Major specific career fairs	10% (1)	54% (14)	75% (3)	61% (14)
Case interview preparation	20% (2)	27% (7)	100% (4)	26% (6)
Workshop: portfolio development	50% (5)	23% (6)	0% (0)	57% (13)
Workshop: dining etiquette	40% (4)	35% (9)	100% (0)	17% (4)
Workshop: case interviews	20% (2)	27% (7)	100% (4)	17% (4)
Alumni 1:1 advising	60% (6)	85% (22)	75% (3)	96% (22)
Alumni invited to career conferences	0% (0)	23% (6)	75% (3)	13% (3)
Alumni-only job board	10% (1)	19% (5)	75% (3)	4% (1)
Print advertising for employers	90% (9)	31% (8)	0% (0)	30% (7)
Research connections for faculty	20% (2)	8% (2)	75% (3)	22% (5)

There were two student services that varied significantly by geographic region: (1) whether or not the career centre offered a major specific job fair,  $\chi^2(3, n = 63) = 8.627, p = .035$ , and whether or not the centre offered case interview preparation,  $\chi^2(3, n = 63) = 10.063, p = .018$ . For both of these services, Quebec-based institutions were more likely to offer these services than the other regions of the country and the Atlantic region was least likely to offer them.

Geographic region was related to whether or not a career centre offered several different types of workshops. For example, portfolio development is more likely to be offered in the Western region with 57% of career centres offering this workshop and only 50% of centres in the Atlantic region and 23% in Ontario. It was not reported as offered at all in Quebec. On the other hand, as can be seen in Table 43, dining etiquette and case interviewing workshops were reported as offered at 100% of schools in Quebec.

There were three alumni services that varied significantly by geographic region: (1) whether or not the career centre offered one on one advisement for alumni,  $\chi^2(3, n = 63) = 6.901, p = .038$ ; (2) whether alumni were invited to career conferences,  $\chi^2(3, n = 63) = 11.286, p = .020$ , and (3) whether or not the centre offered an alumni only job board,  $\chi^2(3, n = 63) = 13.238, p = .008$ . Career centres in the West (96%, 22) and Ontario (85%, 22) are more likely to offer one-on-one alumni advisement services than career centres in Quebec (75%, 3) or the Atlantic



region (60%, 6). Centres in Quebec are much more likely to offer career conference invitations (75%, 3) and an alumni job board (75%, 3) than any other region.

There was one employer services that varied significantly by geographic region: whether or not the career centre provided print advertising options for employers,  $\chi^2(3, n = 63) = 6.901, p = .002$ . Print advertising is offered extensively in the Atlantic region (90%, 9) and only by about a third of career centres in Ontario (31%, 8) and the West (30%, 7). It is not offered at all in Quebec.

There was only one faculty service that varied significantly by geographic region---whether or not the career centre helped faculty to connect with employers for research,  $\chi^2(3, n = 63) = 10.409, p = .009$ . Quebec career centres are more likely to provide employers with research connections to faculty (75%, 3) than in other geographic regions such as the West (22%, 5), the Atlantic region (20%, 2) and Ontario (8%, 2).

#### **4.3.1.5. Metrics collection differences**

Chi-square tests were run for the metrics identified as related to resource allocation to see if there was a correlation between geographic region and whether or not each of these metrics were collected. As Table 4 reveals, only one metric was significantly different across geographic regions—whether the centre collected post-graduate employment data ( $\chi^2(3, n = 63) = 11.256, p = .011$ ).

**Table 44: Metrics by geographic region (n = 63)**

	Atlantic		Ontario		Quebec		West	
	Collects	Does not collect	Collects	Does not collect	Collects	Does not collect	Collect	Does not collect
Collects post-graduate success data	10% (1)	90% (10)	27% (7)	73% (19)	75% (3)	25% (1)	13% (3)	87% (20)

### 4.3.2. Operational Differences by Institution Type

As noted in Chapter 3, there were three career centre types with enough respondents to investigate further: Colleges, polytechnics, and universities. Chi square tests were run for each predictor variable identified for each of the sub-questions to determine if there was any variation by institutional type.

#### 4.3.2.1. Differences caused by external trends

Four of the factors identified in the external themes varied across institutional types (see Table 45). Two of these represented differences in technology implementations. Both Optimal Interview,  $\chi^2(2, n = 61) = 13.699, p = .010$ , and Optimal Resume,  $\chi^2(2, n = 61) = 7.974, p = .018$ , are more frequently used in colleges than polytechnics or universities. While overall uptake of these two application preparation software tools was not strong, the difference that a few colleges had implemented them while almost no universities or polytechnics was found to be statistically significant. From a practical standpoint, with only three institutions nationally embracing them, utilizing these specific tools does not appear to be an actual trend.

**Table 45: External trends by institutional type**

	<b>Colleges (n = 8)</b>	<b>Polytechnics (n = 4)</b>	<b>Universities (n = 49)</b>
Optimal interview	25% (2)	0% (0)	0% (0)
Optimal resume	25% (2)	0% (0)	2% (1)
Provides internship program	50% (4)	0% (0)	71% (35)
Employer mock interviews	25% (2)	25% (1)	67% (33)

One of the other significant differences by institution type whether or not a career centre provided internship programs,  $\chi^2(1, n = 61) = 8.958, p = .011$ . Internship programs were much more common in universities than other institutional types with almost three-quarters of them offering internship programs compared to none in polytechnics and half of colleges.

The final difference identified through the external trends analysis across institution types was whether or not the career centre offered the employer engagement activity of corporate mock interviews,  $\chi^2(2, n = 61) = 7.147, p = .028$ . Corporate mock interviews are most likely to be offered by career centres based in universities with two-thirds reporting offering them while only one-quarter of career centres in colleges and polytechnics offer them.

#### **4.3.2.2. Differences in internal organizational challenges**

There were two factors identified from the analyses of the internal organizational trends that varied across institutional type. The first was whether or not a career centre provided academic advisement as part of its portfolio,  $\chi^2(2, n = 61) = 13.814, p = .001$ . As can be seen in Table 46, academic advisement is most likely to be provided in career centres at colleges (37.5%, 3) and polytechnic institutions (50%, 2).

**Table 46: Academic advisement by institutional type**

	Colleges (n = 8)		Polytechnics (n = 4)		Universities (n = 49)	
	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer
Provides academic advisement	37.5% (3)	62.5% (5)	50% (2)	50% (2)	4% (2)	96% (47)

The other internal organizational trend difference that was identified through chi-square analysis across institution types was the entry level educational requirements for staff within the career centre,  $\chi^2(18, n = 61) = 28.244, p = .001$ . University based career centres were more likely to require a degree than other types of institutions. Colleges were least likely to require a degree of the three career centre types as can be seen in Table 47.

**Table 47: Staff education requirements by institution type**

	Colleges (n = 8)	Polytechnics (n = 4)	Universities (n = 49)
Master's degrees	12% (1)	0% (0)	18% (9)
Undergraduate degrees	38% (3)	25% (1)	64% (31)
College/university certificate	25% (2)	75% (3)	4% (1)
None	25% (2)	0% (0)	14% (7)

#### **4.3.2.3. Resource differences**

There were two resource differences that varied significantly by institutional type and they were both related to space. The first was the location on campus where the career centre was located,  $\chi^2(21, n = 58) = 38.900, p = .010$ . As can be seen in Table 48, universities had the most diversity in terms of their location. They were the only institutions where career centres might have their own building or be located within the faculty that they serve.

**Table 48: Where career centres are located on campus**

	<b>College (n = 8)</b>	<b>Polytechnic (n = 4)</b>	<b>University (n = 45)</b>
Within a student-services-dedicated building	43% (25)	25% (1)	28% (13)
Within a mixed-use building (academic/student services)	43% (25)	0% (0)	17% (8)
Within the student union	0% (0)	50% (2)	2% (1)
Within the faculty office they serve	0% (0)	0% (0)	35% (16)
They have their own building	0% (0)	0% (0)	11% (5)
Multiple locations on the same campus	0% (0)	25% (1)	6% (3)
Individual Offices (not in a centre)	14% (2)	0% (0)	0% (0)

The other space difference across institutional types was how space was utilized within the career centre. The availability of a physical resource library was found to be significant using a chi-square test,  $\chi^2(2, n = 63) = 8.330, p = .016$ . In looking at this operationally, 88% (7) of colleges report having a resource/library area for students compared to 53% (26) of universities and none reported within polytechnic institutions.

Another difference across institutional types was the availability of private offices for all professional staff,  $\chi^2(2, n = 63) = 6.368, p = .041$ . While 75% (5) of polytechnics reported private offices for all professional staff, only 57% (28) of universities and 12.5% (1) of colleges reported private offices for all professional staff (see Table 49). Respondents from polytechnics were more likely to have multiple career centre locations throughout campus which may mean they are embedded near the academic discipline that they serve and may be in private offices originally designed for faculty.

**Table 52: Space usage variations by institutional type**

	<b>Colleges (n = 8)</b>	<b>Polytechnics (n = 4)</b>	<b>Universities (n = 49)</b>
Physical resource library	88% (7)	0% (0)	53% (26)
Private offices for all professional staff	12.5% (1)	75% (3)	57% (28)

#### 4.3.2.4. Differences in Services

There were twenty services that showed significant variances in how they were operationalized across the different institutional types as can be seen in Table 50.

**Table 50: Services with significant variations by institutional type (n = 61)**

	<b>Colleges (n = 8)</b>	<b>Polytechnics (n = 4)</b>	<b>Universities (n = 49)</b>
Online appointments for students	25% (2)	50% (2)	71% (35)
Academic advisement	37.5% (3)	50% (2)	4% (2)
Offers online resources	75% (6)	100% (4)	98% (48)
Offers virtual job fair	50% (4)	0% (0)	4% (2)
Offers career workshops	50% (4)	75% (3)	90% (44)
Offers career panels	37.5% (3)	50% (2)	77.5% (38)
Offers guest speaker events	50% (4)	25% (1)	84 % (41)
Offers student newsletter	0% (0)	5% (2)	55% (27)
Workshop: dining etiquette	0% (0)	0% (0)	43% (21)
Workshop: grad school prep	0% (0)	0% (0)	43% (21)
Workshop: professional dress	87.5% (7)	0% (0)	53% (26)
Offers alumni LinkedIn groups	12.5% (1)	50% (2)	63% (31)
Alumni engaged in career programming	0% (0)	0% (0)	53% (26)
Offers paper-based job board	50% (4)	0% (0)	10% (5)
Prescreens candidates for employers	75% (6)	0% (0)	25% (12)
Provides internships	50% (4)	0% (0)	61% (35)
Introduces employers to clubs	0% (0)	0% (0)	35% (17)
Promotes off-campus events	12.5% (1)	50% (2)	82% (40)
Career-related workshops for faculty	12.5% (1)	50% (2)	8% (4)

Employer mock interviews	25% (2)	25% (1)	67% (33)
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Eight student services varied by how frequently they were implemented by institution type. As noted earlier, career centres within universities are much less likely offered academic advisement within the career centre with only 4% (2) reporting this service compared to 50% (2) of polytechnics and 37.5% (3) of colleges,  $X^2(2, n = 61) = 13.814, p = .003$ . College-based career centres were much more likely to offer virtual career fairs (50%, 4) whereas almost no universities (4%,2) and polytechnics (0%,0) do,  $X^2(2, n = 61) = 16.817, p = .001$ . Alternatively, about half of universities (55%, 27) and polytechnics (50%, 2) have student newsletters and no colleges reported having them,  $X^2(2, n = 61) = 8.383, p = .015$ . Universities are more likely to offer guest speaker events (84%, 41) than colleges (50%, 4) or polytechnics (25%, 1),  $X^2(2, n = 61) = 10.071, p = .012$ , and career panels (77.5%, 38) than colleges (37.5, 3) or polytechnics (50%, 2),  $X^2(2, n = 61) = 6.168, p = .046$ . Universities (98%, 48) and polytechnics (100%, 4) are more likely to offer online resources than colleges (75%, 6),  $X^2(2, n = 61) = 7.974, p = .034$ . Universities (0%, 44; 71%, 35) also more commonly offer career workshops,  $X^2(2, n = 61) = 8.178, p = .022$ , and online appointments for students,  $X^2(2, n = 61) = 6.790, p = .034$ , than either polytechnics (75%, 3; 50%, 2) or colleges (50%, 4; 25%, 2).

Institutional type was related to whether or not a career centre offered workshops in dining etiquette,  $X^2(2, n = 61) = 7.843, p = 0.020$ , professional dress  $X^2(2, n = 61) = 8.330, p = 0.016$ , and graduate school preparation,  $X^2(2, n = 61) = 7.843, p = 0.020$ , Professional dress workshops are offered most often by colleges (88%) and universities (52%) and they were not reported as offered at all at polytechnics.

Only one alumni career service, whether or not a career centre offered workshops for alumni, was found to be significantly different across institution

types,  $\chi^2(2, n = 61) = 6.020, p = .049$ . In this case, universities (59%) were significantly more likely to offer this service than polytechnics (50%) or colleges (12.5%).

There were two alumni engagement types that varied by institutional type: whether the career centre offered LinkedIn groups for alumni,  $\chi^2(2, n = 61) = 7.241, p = .021$ , and utilizing alumni to provide career programming such as resume critiques and speed interviewing,  $\chi^2(2, n = 61) = 11.097, p = .004$ . In both cases, these were found to be used more heavily by university-based career centres. Additionally, one way ANOVA revealed that there was a relationship between institutional type and the number of alumni engagement activities a career centre offered,  $F(2,58) = 6.12, p = .004$ . The analysis found that institutional type accounted for 14.57% of the variance between alumni engagement services ( $R^2(\text{adj}) = 14.57\%$ ). The statistical power of this finding may be limited because of the sample size ( $N = 61$ ). A post hoc power analysis revealed that on the basis of the mean, between-groups comparison effect size observed in this analysis ( $d = 2.03$ ), an  $n$  of approximately 18 would be needed for each institution type to obtain statistical power at the recommended .80 level.

There were six employer services that varied by institutional type. As can be seen in Table 51, paper-based job boards, virtual job fairs, and pre-screening candidates for employers are most often offered by college-based career centres. Promoting off-campus employer events, providing internships and introducing employers to student clubs were more likely to be offered by university-based career centres.

**Table 51: Employer services by institutional type**

	Colleges ( $n = 8$ )		Polytechnics ( $n = 4$ )		Universities ( $n = 49$ )	
	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer
Offers paper-based job board	50%	50%	0%	100%	10%	90%



$X^2(2, n = 61) = 9.401, p = .023$	(4)	(4)	(0)	(4)	(5)	(44)
Virtual job fair $X^2(2, n = 61) = 8.102, p = .017$	47% (3)	63% (5)	0% (0)	100% (4)	6% (3)	94% (46)
Provides internships $X^2(2, n = 61) = 8.958, p = .011$	50% (4)	50% (4)	0% (0)	100% (4)	61% (35)	29% (14)
Prescreens candidates $X^2(2, n = 61) = 10.227, p = .006$	75% (6)	25% (2)	0% (0)	100% (4)	25% (12)	75% (37)
Introduces employer to clubs $X^2(2, n = 61) = 16.484, p = .000$	0% (0)	100% (8)	0% (0)	100% (4)	35% (17)	65% (32)
Promotes off-campus events $X^2(2, n = 61) = 16.666, p = .000$	12.5% (1)	87.5% (7)	50% (2)	50% (2)	82% (40)	18% (9)

There was only one variation between frequency offered and institutional type for services provide to faculty as individuals---offering career workshops for faculty,  $X^2(2, n = 61) = 6.381, p = .026$ . Polytechnics were most likely to offer these workshops to faculty (50%, 2) followed by colleges (12.5%, 1) and universities (8%, 4).

#### **4.3.2.5. Metrics collection differences**

Chi-square analyses did not identify any differences by institutional type in the way metrics are collected and reported.

### **4.3.3. Operational differences by career centre type**

As noted in Chapter 3, for analysis, career centres were collapsed into four primary categories: Centralized, Business, Decentralized (non-business) and other. Chi-square and ANOVA were run for each of the identified predictor variables identified by the sub-questions to identify operational differences across career centre type. There were more operational differences across career centre type than by either geographic region or institution.

#### **4.3.3.1. Differences caused by external trends**

As you can see from Table 52, there were factors that varied by career centre type from four of the external themes that were identified: the changes to

student demographics, the rise of experiential education programs, technology platforms and changes to employer demands.

**Table 52: External trends by career centre type**

	<b>Business (n = 14)</b>	<b>Centralized (n = 39)</b>	<b>Decentralized (non-business) (n = 6)</b>	<b>Other (n = 4)</b>
Specialized services for international students	50% (7)	59% (23)	0% (0)	75% (3)
Mentoring program	71% (10)	23% (9)	33.3% (2)	50% (2)
Career Cruising platform	42% (6)	72% (28)	0% (0)	50% (2)
CareerLeader assessment	57% (8)	5% (2)	0% (0)	0% (0)
FirstHand/Evisors	43% (6)	3% (1)	17% (1)	0% (0)
Employers as mentors	79% (11)	15% (6)	33% (2)	75% (3)
Employers as mock interviewers	93% (13)	51% (20)	50% (3)	25% (1)
Employer provide workshops	57% (8)	10% (4)	50% (3)	0% (0)
Employers serve on advisory boards	43% (6)	8% (3)	0% (0)	0% (0)
Employers serve as case competition judges/coaches	79% (11)	8% (3)	17% (1)	0% (0)
Employers invited to institutional events	71% (10)	36% (14)	83% (5)	25% (1)

Chi-square analyses showed a significant difference in the frequency of specialized services for international students across career centre types,  $X^2(3, n = 63) = 8.132, p = .043$ . Table 52 showcases how these services are more frequently provided by “Other” centre types (75%, 3), followed by centralized career centres (59%, 23) and business school career centres (50%, 7). They were not reported as offered at all in non-business decentralized centres.

The only experiential education program that varied across career centre type was mentoring programs,  $X^2(3, n = 63) = 21.121, p = .000$ . Interestingly, the number of centres reporting a formalized mentoring program in both business careers centres and other centre types was lower than the number of centres who reported tapping employers as mentors for their students. This may be an error in the data submitted or may indicate that career centres are encouraging employers to act as mentors to students in informal ways or in employer-driven programs.

There were some technology differences across career centre types. One was the usage of Career Cruising,  $\chi^2(3, n = 63) = 12.669, p = .005$ . Three-quarters of centralized career centres offer this career exploration tool while about half of business school based career centres and “other” career centre types offer this tool and none of the non-business centralized career centres offer it. Another variation was the use of CareerLeader,  $\chi^2(3, n = 63) = 23.115, p = .000$ . CareerLeader was developed specifically as an assessment for use in business schools based career centers which have the highest usage rate with just over half providing this tool for students. Only a few centralized career centres offer it and none of the non-business school decentralized career centres or “Other” career centres offered this assessment. Finally, the use of FirstHand/Evisors was more prevalent in business school career centres, followed by non-business decentralized centres, while it is almost not offered at any “Other” or centralized career centres,  $\chi^2(2, n = 61) = 13.699, p = .007$ .

Chi Square tests also showed that there were six employer engagement opportunities that varied significantly by career centre type: (1) Employers as mentors,  $\chi^2(3, n = 63) = 21.344, p = .000$ ; (2) Employers as mock interviewers,  $\chi^2(3, n = 63) = 9.686, p = .021$ ; (3) Employers provide skills workshops,  $\chi^2(3, n = 63) = 16.043, p = .001$ , (4) Employers serve on advisory board,  $\chi^2(3, n = 63) = 12.385, p = .007$ ; (5) Employers serve as case judges/coaches,  $\chi^2(3, n = 63) = 30.147, p = .000$ ; and (6) Employers invited to events,  $\chi^2(3, n = 63) = 9.219, p = .027$ . Each of these engagement opportunities is offered significantly more frequently in business school career centres than other types of career centres. Decentralized, non-business career centres are next most likely to offer each of these engagement opportunities with the exception of sitting on advisory boards.

A one-way ANOVA was run to compare the effect of career centre type on the number of employer engagement opportunities. The ANOVA revealed that business school career centres offer significantly more engagement activities than

other types of career centres,  $F(3,59) = 10.56, p = 0.000$ , as can be seen in Table 53. The statistical power of this finding may be limited because of the sample size ( $N = 63$ ). A post hoc power analysis revealed that on the basis of the mean, between-groups comparison effect size observed in this analysis ( $d = 18.57$ ), an  $n$  of approximately 93 would be needed for each career centre type to obtain statistical power at the recommended .80 level.

**Table 53: Employer engagement opportunities by career centre type**

	Number of activities		
	Mean	Median	Range
Centralized	3.8	3.0	0–11
Business	8.9	9.5	4–14
Decentralized	4.5	4.5	0–11
Other	4.75	4.5	1–9

#### ***4.3.3.2. Differences in internal organizational challenges***

Only two differences were found in how career centres responded to internal trends across career centre types. The first was the type of career course offered by the career centre,  $\chi^2(18, n = 25) = 31.713, p = .024$ . The full list of course types can be found in Table 54. As it shows, credit bearing courses are more common in centralized career centres than in decentralized centres. For credit bearing courses, faculty-based career centres would need to justify the course as an essential part of a specific degree or curriculum.

Business school career centres were more likely to require a career course for all students while centralized career centers were more likely to offer career courses that were not required or only required for some students (see Table 54).

**Table 54: Course type by career centre type (n = 25)**

	Centralized (n = 39)	Business (n = 14)	Decentralized (n = 6)	Other (n = 4)
Credit-bearing, not required	2	0	0	0
Credit-bearing, required for all students	0	2	0	0
Credit-bearing, required for some students	3	0	0	0
Non-credit, not required	6	1	1	1
Non-credit, required for all students	0	3	0	0
Non-credit, required for some students	2	0	2	1
Percentage of type offering course	33%	43%	50%	50%

Whether a career centre offers academic advisement was also found to be related to career centre type  $X^2(3, n = 63) = 15.477, p = .002$  as well. As can be seen in Table 55, academic advisement is most likely to occur in career center type “Other”, which included career practitioners based in other units such as academic advisement or counseling. This may reflect the specific situation those individuals are based within.

**Table 55: Academic advisement by career centre type (n = 63)**

	Centralized		Business		Decentralized		Other	
	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer
Academic advisement	10% (4)	90% (35)	7% (1)	93% (13)	0% (0)	100% (6)	75% (3)	25% (1)

#### 4.3.3.3. Resource differences

The majority of the resources differences across career centres were found between career centre types. One way ANOVA found a significant difference between operational budget per student and career centre type,  $F(2,30) = 14.19, p = .000$  as is shown in Table 56. The analysis found that career centre type accounted for 42.2% of the variance between operational budgets ( $R^2(\text{adj}) = 42.20\%$ ). The statistical power of this finding may be limited because of the sample size ( $N = 33$ ). A post hoc power analysis revealed that on the basis of the mean, between-groups comparison effect size observed in this analysis ( $d = 142,691$ ), an

n of approximately 40 would be needed for each career centre type to obtain statistical power at the recommended .80 level.

**Table 1: Budget per student by career centre type (n = 59)**

	Operational Budget				Total Budget			
	Mean	Median	Range	Std. Dev.	Mean	Median	Range	Std. Dev.
Centralized	4.53	2.23	0.51 - 20.00	5.16	52.70	36.80	2.90 – 253.50	56.91
Business	54.80	48.00	13.90 - 166.70	42.95	588.00	268.00	111 - 3083	855.75
Decentralized	10.80	10.80	9.09 – 12.50	1.70	93.33	*	*	*

As can be seen from Table 56, there is a substantial difference in budget per student for business career centres versus non-business career centres. The much higher tuition charged by MBA programs seems to be filtering down into the budgets of these career centres.

One way ANOVA found that both the professional staff to student ratio,  $F(3,54) = 3.70, p = .017$ , and the total staff to student ratio,  $F(3,54) = 3.70, p = .017$ , varied by career centre type (see Table 57). The statistical power of these finding may be limited because of the sample size (N = 58). A post hoc power analysis revealed that on the basis of the mean, between-groups comparison effect size observed in each of these analyses, an n of approximately 23 would be needed for each career centre type for the professional staff ratio (d = 2396) and an n of approximately 26 would be needed for each career centre type for the total staff to student ration (d = 2151) to obtain statistical power at the recommended .80 level.

**Table 57: Staff to student ratios by career centre type (n = 59)**

	Total staff				Professional staff			
	Mean	Median	Range	Std. Dev.	Mean	Median	Range	Std. Dev.
Centralized	2,274	1,847	71–7,915	1,681	3,023	2,310	100–13,191	2,487
Business	451	295	22–1,167	372	491	383	24–1,286	392
Decentralized	2,689	1,366	660–10,000	3,313	2,832	1,500	660–10,000	3,272
Other	2,633	2,545	59–5,394		2,871	2,545	67–6,000	

As you can see from Table 57, on the whole, decentralized career centres have smaller student to staff ratios which could be perceived as a significant advantage to this type of organizational structure. As one-on-one coaching and advising is one of the most time consuming and impactful activities within a career centre, having a smaller ratio of students to staff indicates the potential to spend more time with each student.

The final resource difference by career centre type was whether or not a centre offered space for student to work varied significantly by career centre type,  $\chi^2(3, n = 63) = 9.450, p = .024$ . Student space was most common in centralized career centres with 67% (26) reporting dedicated student work space compared to 21% (3) at business career centres, 33% (2) at decentralized career centres and 50% (2) at other career centre types.

#### **4.3.3.4. Differences in services**

Differences in how services were implemented were most frequent across career centre types. As seen in Table 58, there were services that varied in their frequency of implementation by career centre type for all stakeholder groups.

**Table 81: Services with significant variations by career centre type (n = 63)**

	Centralized (n = 39)	Business (n = 14)	Decentralized (non-business) (n = 6)	Other (n = 4)
Academic advisement	10% (4)	7% (1)	0% (0)	75% (3)
Specialized services for international students	59% (23)	50% (7)	0% (0)	75% (3)
General career fair	82% (32)	50% (7)	50% (3)	100% (4)
Virtual career fair	8% (3)	0% (0)	17% (1)	50% (2)
Mentoring program	23% (9)	71% (10)	33.3% (2)	50% (2)
Case interview preparation	20% (8)	64% (9)	17% (1)	25% (1)
Mock networking events	62% (24)	79% (11)	67% (4)	75% (3)
Hosting student job club	26% (10)	57% (8)	0% (0)	25% (1)
Local company tours	23% (9)	79% (11)	17% (1)	50% (2)
Canada-wide company tours	5% (2)	58% (8)	0% (0)	25% (1)
International company tours	2.5% (1)	21% (3)	0% (0)	0% (0)
Workshop: dining etiquette	26% (10)	64% (9)	29% (2)	0% (0)
Workshop: professional etiquette	32% (12)	79% (11)	57% (4)	50% (2)
Workshop: finding internships	26% (10)	79% (11)	43% (3)	50% (2)
Workshop: professional dress	42% (16)	86% (12)	57% (4)	75% (3)
Workshop: MBTI	53% (20)	79% (11)	14% (1)	50% (2)
Workshop: case interviews	13% (5)	71% (10)	29% (2)	0% (0)
Alumni access to library	62% (24)	29% (4)	17% (1)	75% (3)
Alumni job club	8% (3)	43% (6)	0% (0)	0% (0)
Refers students to alumni	33% (13)	100% (14)	33% (2)	25% (2)
Alumni tapped as mentors	26% (10)	79% (11)	33% (2)	50% (2)
Alumni invited to geographically based events	8% (3)	43% (6)	0% (0)	0% (0)
Alumni participate in orientation	10% (4)	50% (7)	50% (3)	50% (2)
Networking events with alumni	51% (20)	100% (14)	67% (4)	25% (1)
Alumni engage in career programming	36% (14)	71% (10)	33% (2)	0% (0)
Hosting employer office hours	28% (11)	79% (11)	17% (1)	50% (2)
Offers resume book	8% (3)	64% (9)	33% (2)	25% (1)
Introduces clubs to employers	39% (15)	100% (14)	50% (3)	0% (0)
Promotes off-campus events	67% (26%)	100% (14)	67% (4)	25% (1)
Offers video information sessions	5% (2)	57% (8)	17% (1)	25% (1)
Career workshops for faculty	13% (5)	0% (0)	0% (0)	50% (2)
Connects employers and faculty for research	10% (4)	43% (6)	33% (2)	0% (0)
Employers are mock interviewers	51% (20)	93% (13)	50% (3)	25% (1)
Employer provide workshops	10% (4)	57% (8)	50% (3)	0% (0)
Employers serve on advisory boards	8% (3)	43% (6)	0% (0)	0% (0)
Employers serve as case competition judges/coaches	8% (3)	79% (11)	17% (1)	0% (0)
Employers invited to institutional events	36% (14)	71% (10)	83% (5)	25% (1)



Ten services for students varied significantly by career centre type. Business school based career centres offer more services that connect students and employers such as mentoring programs, company tours, case competitions, mock interviewers, resume books, and club introductions. As you can see from Table 58, company tours, whether they are local, Canada-wide or international, are much more likely to be hosted by business-school career centres than other types of career centres. Business school career centres are also more likely to host jobs clubs, hold mock networking events and have case interview preparation. Centralized career centres are more likely to host career fairs and provide specialized services for international students.

**Table 58: Student services by career centre type (n = 63)**

	Centralized		Business		Decentralized		Other	
	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer
Academic advisement $X^2(3, n = 63) = 10.461, p = 0.30$	10% (4)	90% (35)	7% (1)	93% (13)	0% (0)	100% (6)	75% (3)	25% (1)
Career fair $X^2(3, n = 63) = 8.471, p = .037$	82% (32)	18% (7)	50% (7)	50% (7)	50% (3)	50% (3)	100% (4)	0% (0)
Virtual career fair $X^2(3, n = 63) = 9.586, p = .021$	8% (3)	92% (36)	0% (0)	100% (14)	17% (1)	83% (5)	50% (2)	50% (2)
Case interview preparation $X^2(3, n = 63) = 10.033, p = .042$	20% (8)	80% (31)	64% (9)	36% (5)	17% (1)	83% (5)	25% (1)	75% (3)
Mock networking events $X^2(3, n = 63) = 8.191, p = .042$	62% (24)	38% (15)	79% (11)	21% (3)	67% (4)	33% (2)	75% (3)	25% (1)
Hosting student job club $X^2(3, n = 63) = 7.859, p = .049$	26% (10)	74% (29)	57% (8)	43% (6)	0% (0)	100% (6)	25% (1)	75% (3)
Local company tours $X^2(3, n = 63) = 15.055, p = .002$	23% (9)	77% (30)	79% (11)	21% (3)	17% (1)	83% (5)	50% (2)	50% (2)
Canada-wide company tours $X^2(3, n = 63) = 20.840, p = .000$	5% (2)	95% (37)	58% (8)	42% (6)	0% (0)	100% (6)	25% (1)	75% (3)
International company tours $X^2(3, n = 63) = 6.971, p = .008$	2.5% (1)	97.5% (38)	21% (3)	79% (11)	0% (0)	100% (6)	0% (0)	100% (4)

Six different workshops varied across career centre types as can be seen in Table 60. In all cases, they are more likely to be offered at business school career centres than at other types of career centres.

**Table 60: Workshops with significant variations by geographic region (n = 63)**

	Atlantic		Ontario		Quebec		West	
	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer
Portfolio development $\chi^2(3, n = 63) = 8.861, p = 0.031$	50% (5)	50% (5)	23% (6)	77% (20)	0% (0)	100% (4)	57% (13)	43% (10)
Dining Etiquette $\chi^2(3, n = 63) = 10.85, p = 0.013$	40% (4)	60% (6)	35% (9)	65% (17)	100% (4)	0% (0)	17% (4)	83% (19)
Case interviews $\chi^2(3, n = 63) = 12.14, p = 0.007$	20% (2)	80% (8)	27% (7)	73% (19)	100% (4)	0% (0)	17% (4)	83% (19)

There were three career services for alumni that varied significantly by career centre type. “Other” career centres (75%, 3) were more likely to provide access to the career resource library for alumni than other career centre types,  $\chi^2(3, n = 63) = 8.694, p = .040$ , including centralized career centres (62%, 24), business career centres (29%, 4) and decentralized career centres (17%, 1). “Other” centres (50%, 2) were also more likely to provide a virtual career fair for alumni,  $\chi^2(3, n = 63) = 7.471, p = .034$  than decentralized (17%, 1), business (7%, 1) and centralized (3%, 1) career centres. Business career centres (43%, 6) were more likely to offer alumni job clubs,  $\chi^2(3, n = 63) = 12.385, p = .007$ , than centralized career centres (8%, 3). Job clubs for alumni were not offered at the other two career centre types.

There were six alumni engagement services that varied significantly by career centre type. Additionally, one-way ANOVA showed that there was a relationship between career centre type and the number of alumni engagement activities a career centre offered ( $F(3,59) = 10.29, p = .000$ ). The analysis revealed (see Table 61) that institutional type accounted for 31% of the variance between

alumni engagement services ( $R^2(\text{adj}) = 31.00\%$ ). The statistical power of this finding may be limited because of the sample size ( $N = 64$ ). A post hoc power analysis revealed that on the basis of the mean, between-groups comparison effect size observed in this analysis ( $d = 5.16$ ), an  $n$  of approximately 98 would be needed for each career centre type to obtain statistical power at the recommended .80 level.

**Table 61: Alumni engagement services by career centre type ( $n = 63$ )**

	Centralized		Business		Decentralized		Other	
	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer	Offers	Does not offer
Direct referrals to alumni $X^2(3, n = 63) = 19.902, p = .000$	33% (13)	67% (26)	100% (14)	0% (0)	33% (2)	67% (6)	25% (1)	75% (3)
Alumni tapped as mentors $X^2(3, n = 63) = 12.337, p = .006$	26% (10)	74% (29)	79% (11)	21% (3)	33% (2)	67% (4)	50% (2)	50% (2)
Geographically based events $X^2(3, n = 63) = 12.385, p = .007$	8% (3)	92% (36)	43% (6)	57% (8)	0% (0)	100% (6)	0% (0)	100% (4)
Alumni participate in orientation $X^2(3, n = 63) = 12.386, p = .006$	10% (4)	90% (35)	50% (7)	50% (7)	50% (3)	50% (3)	50% (2)	50% (2)
Networking events with alumni $X^2(3, n = 63) = 12.849, p = .005$	51% (2)	49% (19)	100% (14)	0% (0)	67% (4)	33% (2)	25% (1)	75% (3)
Career programs with alumni $X^2(3, n = 63) = 8.685, p = .034$	36% (14)	64% (25)	71% (10)	29% (4)	33% (2)	67% (4)	0% (0)	100% (4)

As can be seen from Table 61, business school-based career centres were more likely to be offering all of these alumni engagement services compared to other career centre types.

Finally, were two services for faculty as individuals that varied significantly by career centre type. "Other" career centres (50%, 2) were more likely to offer career development workshops for faculty,  $X^2(3, n = 63) = 8.742, p = .042$ , than centralized career centres (13%, 5). Business school and decentralized non-business career centres did not report offering them at all. Business school career centres (43%, 6) were more likely to connect employers with faculty for research than decentralized, non-business centres (33%, 2) or centralized career centres

(10%, 4),  $\chi^2(3, n = 63) = 8.837, p = .024$ . “Other” career centres did not report offering this service at all.

#### 4.3.3.5. Metrics collection differences

Chi-square tests were done for each of the metrics to see if there were variations in the frequencies in which they were collected by career centre type. Two metrics varied significantly by career centre type, as Table 85 illustrates. The first is rankings participation ( $\chi^2(3, n = 61) = 21.536, p = .000$ ), which is much more likely to be engaged in by decentralized and business school career centres than by centralized career centres.

**Table 85: Metrics by career centre type (n = 63)**

	Centralized		Business		Decentralized		Other	
	Collects	Does not collect	Collects	Does not collect	Collects	Does not collect	Collects	Does not collect
Provide support for rankings	11% (4)	89% (34)	71% (10)	29% (4)	40% (2)	60% (4)	0% (0)	100% (4)
Track internship employment data	5% (2)	95% (37)	36% (5)	64% (9)	33% (2)	67% (4)	25% (1)	75% (3)

Decentralized career centres were also more likely to track internship placement rates ( $\chi^2(3, n = 61) = 9.119, p = .030$ ). Only 5% of centralized career centres track this information.

## 4.4. Primary Research Question Findings

This section of Chapter 4 provides the findings related to the primary research question for this study: How might the relationships between operational practices within Canadian career centres and the resources allocated to them be better understood? As noted earlier, I used Hackman’s (1985) theory on power and centrality in resource allocations as the overall framework for analysis.

Earlier in this chapter, I applied Hackman's (1985) concept of centrality to determine that all career centres could be treated as peripheral units in regard to resource allocations. This allowed me to use Hackman's propositions, as they applied to peripheral units, as the framework for determining which of the sub-question findings were likely to be most relevant to resource allocations in career centres. The first step was to use these findings to build a multiple regression model for each theme using the predictor variables for that theme.

As demonstrated by the findings, even after applying Hackman's (1985) theory as a filter, there were many variables identified in the themes that might be influencing resource allocation. As noted by McDonald (2014) McDonald (2014), "A common rule of thumb is that you should have at least 10 to 20 times as many observations as you have independent variables (*p. 7*)."

To see if I could eliminate enough potential predictor variables in each theme to run the multiple regression analysis, the first step in analyzing whether or not the variables were related was to conduct bidirectional stepwise regression to identify the subset of variables that explained the majority of the variation for each of the dependent variables.

As an illustrative example, using Hackman's (1985) theory as a lens for determining which external variables were most likely to be correlated with resource allocation, I identified 28 variables as potentially impacting the resources available to a career centre. The first dependent variable of interest when looking at resource allocation was operational budget. Bidirectional stepwise regression analysis of the 28 external theme predictor variables indicated that six variables were related to operational budget,  $F(6, 27) = 8.42, p = .000, R^2(adj) = 57.4\%$ . These predictor variables were (1) companies taking students on tours; (2) the number of entrepreneurship programs offered; (3) companies taking career centre staff on tours; (4) having a mentoring program; (5) having a CRM system; and (6) having an internship program. However, as only 34 respondents provided operational budget information and 63 provided staffing information, the multiple of

independent variables to response variables is only 1:5.6 rather than the 10 to 20 times the predictor variables needed so multiple regression cannot be used to statistically determine the variance.

Similarly, bidirectional stepwise analysis found eight variables that were related to total staffing levels, ( $F(6, 56) = 7.83, p = .000, R^2(adj) = 39.8\%$ ). They were (1) utilizing companies for capstone projects; (2) number of entrepreneurial services; (3) offering a co-op program; (4) companies taking students on tours; (5) companies taking staff on tours; (6) offering mock interviews; (7) companies presenting skills workshops; and (8) companies providing mentors. Only 63 respondents provided staffing information which makes the multiple of independent variables to response variables 1:7.8 for total staffing levels which again means that multiple regression cannot be used to determine the variance.

Unfortunately, for three of the four themes where predictor variables were identified, bidirectional stepwise regression did not rule out enough potential predictor variables to run the multiple regression analysis with confidence. Thus, I was unable to complete the multiple regression analysis to answer the primary research question.

However, while I was unable to use multiple regression to statistically confirm the relationships, I did ask a few questions within the survey that provided some insight into relationships between operational decisions and resources. In the survey, respondents were asked to rate the importance of several rationales when considering what services to add to or eliminate from their career centres. Table 63 shows how respondents rated each factor when considering which new student services to add. Table 64 shows how respondents rated each factor when considering which student services to eliminate. Please note that respondents were able to choose more than one option as the “most important” consideration.

In looking at what career centres said were issues of concern, budget and resource cuts both featured prominently in the open-ended questions. However, as Table 63 shows, despite these stated concerns about budgets and resources, very few career centres are seriously considering the potential for revenue generation when creating new student services. Although saving money was more of a consideration when eliminating a service, it still ranked fourth out of six as the “most important” rationale.

**Table 63: Importance of considerations when adding new student services (n = 50)**

Factor	Most important consideration	Important consideration	Consideration	Not a consideration
Address a gap in student career readiness	50%	38%	10%	2%
Student interest in service	30%	50%	16%	4%
Staff increases/changes	2%	34%	30%	34%
Similar to prior service but higher quality	10%	50%	14%	24%
Employer interest in services	14%	34%	28%	24%
Desire to be innovative in field	22%	54%	18%	8%
Raise money/increase revenue	10%	4%	18%	68%

**Table 64: Importance of considerations when eliminating student services (*n* = 42)**

Factor	Most important consideration	Important consideration	Consideration	Not a consideration
No longer necessary/students no longer need it	24%	33%	24%	17%
Student participation was low	31%	40%	17%	7%
Staff reductions/changes	14%	24%	36%	24%
Implemented similar new service of higher quality	14%	43%	14%	26%
Implemented similar new service with more efficiencies	21%	38%	12%	26%
Save money/cut costs	17%	19%	38%	24%

Respondents were also asked the rationale behind adding or eliminating employer services. In the case of adding employer services, 32 career centres provided insight into the factors considered when adding new services. Table 65 shows the responses provided when asked about the rationale to add employer services, and Table 66 shows the responses when asked about the rationale to eliminate employer services. Only 28 career respondents weighed in on the rationale for eliminating services for employers, but the data still provided some insights into these factors. While slightly more significant when considering changes to employer services than student services, raising money was only ranked as “most important” or “important” by 25% of respondents, and saving money was only ranked as “most important” or “important” by 40% of respondents. Considering how vocal respondents were about budget reductions impacting their centres, it is surprising to see how little impact of these budget changes is reflected in the analysis of rationale.



**Table 65: Importance of considerations when adding new employer services  
(n = 32)**

Factor	Most important consideration	Important consideration	Consideration	Not a consideration
Create opportunities for students	53%	41%	6%	0%
Employer requests for services	19%	47%	25%	9%
Staff increases/changes	3%	28%	34%	34%
Similar to prior service but higher quality	3%	50%	22%	25%
Student/alumni interest in services	16%	52%	16%	16%
Desire to be innovative in field	19%	40%	22%	19%
Raise money/increase revenue	9%	16%	25%	50%

While conclusions can only be based upon respondents' perceptions rather than statistical analysis, it appears that there are very limited relationships between operational decisions and resource allocations in Canadian career centres today.

**Table 66: Importance of considerations when eliminating employer services  
(n = 28)**

Factor	Most important consideration	Important consideration	Consideration	Not a consideration
Student interest declined	18%	43%	25%	14%
Employer participation	21%	25%	43%	11%
Staff reductions/changes	21%	25%	29%	25%
Implemented similar new service of higher quality	21%	21%	14%	43%
Implemented similar new service with more efficiencies	36%	7%	14%	43%
Save money/cut costs	25%	14%	32%	29%

## 4.5. Observations on Survey Responses

The final subsection in this chapter on key findings includes some observations on the survey responses themselves. Earlier in the study, the demographics of the survey respondents were presented; for the purposes of providing observations on the survey responses, it is useful to reiterate these demographics. Of the 63 respondents, 47 (75%) held the most senior role in their career centre—with titles of director, manager, or chairperson of their career centre, and two (3%) were either associate or assistant directors. Nine (14%) indicated a coordinator, officer, or program manager title, and five (8%) indicated their primary role was career advisor or counselor. Respondents averaged 8.4 years ( $Mdn = 6$ ) with their current career centre and more than 13 years experience in the career development field ( $Mdn = 12$ ). The range of tenure in their own centre ranged from 0.25 years to 41 years ( $SD = 7.9$  years), and the range of tenure in the field was 0.67 years to 41 years ( $SD = 8.5$  years).

### 4.5.1. Qualitative Survey Questions

The survey used in this study was primarily quantitative in nature. However, the survey did include more than 20 open-ended questions to allow participants to expand on their quantitative responses, and six open-ended questions were essential in the analysis. These open-ended questions were the following:

- If the career centre where you work has a mission and/or vision statement, please include them here.
- How would you describe the philosophical orientation or guiding principals [sic] of your career centre (i.e., planned happenstance, chaos theory, placement focused, developmental, etc.)?
- Do you foresee any changes to your career centre mandate in the next few years? If so, please describe.

- In your opinion, what changes have career centres in Canada experienced in the last 5 years?
- What career services issues are you reading about or talking about with your colleagues?
- In your opinion, how is your career centre perceived by your senior leadership?

When reviewing the responses to these questions, I made a few observations about the responses overall. First, with the exception of the first open-ended question—if the career centre where you work has a mission and/or vision statement, please include them here—all of the questions had a response rate of at least 84%. This indicates that at least 84% of the respondents felt that they had something to contribute to this question because they provided an optional response (Table 67).

**Table 67: Percentage of respondents who answered open-ended questions (n = 63)**

	Total responses	Responded that it did not apply or did not know	Responses that answered the question	Of responses, how many were clearly articulated?
Mission, vision statement	77% (49)	9% (6)	67% (43)	84% (36)
Philosophical orientation	95% (60)	6% (4)	88% (56)	66% (37)
Mandate changes	95% (60)	2% (1)	94% (59)	95% (56)
Past changes	87% (55)	3% (2)	84% (53)	100% (53)
Reading about	92% (58)	2% (1)	90% (57)	100% (57)
Leadership perceptions	95% (60)	5% (3)	90% (57)	100% (57)

When I looked more closely at the content of their answers, I found that a percentage of them did not demonstrate an understanding of the concept behind

the question for two of the questions: “What is your career centre mission or vision?” and “What is your career centre philosophical orientation?”

In these cases, the respondent attempted to answer the question, but the answer did not quite fit the question. For example, when I asked explicitly about the philosophical orientation of the career centre, several responses did not demonstrate an understanding of philosophical orientation:

Promote at our school a culture focussed on careers and employability.  
—Quebec-based university respondent

Skills transfer, self-direction and reflection. —Western-based university respondent

We offer students a Career Development Program (CDP) that provides them with services, resources, and networking opportunities designed to build the skills necessary to jump-start their career. —Ontario-based university respondent

Market focussed. Feedback from the marketplace a critical element to drive student programming. —Ontario-based university respondent

Several responses may also have been echoing the example theories mentioned in the question rather than demonstrating knowledge of what their overarching career centre orientations might be, including this one from a Western-based university respondent:

Students' needs are various each individual to each individual, philosophical approaches should reflect on students needs. In serving students, based on their needs, we guide them with various theories including above named ones.

This was also the case when respondents were asked about mission and vision. In the corporate sector, a mission statement is often a reflection of the organizational priorities and values. In the post-secondary sector, mission statements tend to be more all-encompassing statements that maximize the institution’s flexibility rather than limit it (Morphew & Hartley, 2006). Using either

the corporate approach to mission or the post-secondary one, a few respondents did not demonstrate a clear understanding of what a mission or vision statement would be. Some of these included their goals, values or other marketing statement describing their offices that would not generally be defined as a mission statement. Some of these examples include:

The co-operative education option allows you to apply your knowledge, develop skills and gain confidence, while you earn money to help pay for tuition. Employers benefit from hiring a co-op student in that they can solve short-term resource challenges, build capacity for new ventures, and bring fresh ideas to their workplace. —Atlantic-region college respondent

We're focused on our 5 values: Teamwork Accountability Enthusiasm Continuous Learning Community Focused. —Western-region university respondent

Both of the questions that respondents struggled with required knowledge of theoretical concepts beyond what they might need in their day-to-day role. Respondents had clearer responses when asked about their specific experiences, such as what they were reading or talking about now and what changes they have observed based upon their lived experience.

#### **4.5.2. Quantitative Survey Questions**

When reviewing the answers to the closed-ended questions there was one repetitive answer that really stood out. For several questions about day-to-day operations, a significant number of respondents selected “I don't know” as the answer to the question. This was surprising based upon the demographics of the respondents. In addition, when asked the total number of students their office was responsible for servicing, percentage of students accessing services, and percentage of international students, not all respondents were knowledgeable (see Table 68).

**Table 68: Percentage of respondents who were able to answer the question  
(*n* = 63)**

Question	Able to answer
Knew source of career centre funding	68% (43)
Knew total number of students office responsible for servicing	92% (58)
Knew percentage of students accessing services	79% (50)
Knew percentage of international students	86% (54)
Some understanding of criteria for budget determination	79% (50)
Some understanding of criteria for adding student programs	79% (50)
Some understanding of criteria for eliminating student programs	57% (36)
Some understanding of criteria for adding employer programs	51% (32)
Some understanding of criteria for eliminating employer programs	44% (28)
Knew if office has strategic plan	92% (58)
Knew if office has conducted a student needs assessment	90% (57)
Knew if office has an annual report	95% (60)

## 4.6. Summary

Chapter 4 began with a reiteration of the demographics of the respondents to the survey. This set the foundation for the first subsection, which presented the results of the analysis of whether career centres can be treated—based on Hackman’s (1985) concept of centrality—as peripheral units and thus as one group for further analysis.

In the second part of this chapter, I presented the results, filtered through Hackman’s (1985) theory of power and centrality in resource allocations, for each of the sub-questions to provide a detailed landscape of the current state of career services in Canada. As part of that analysis, I articulated the predictor variables that could have been used in the analysis to answer the primary research question: How might the relationships between operational practices within Canadian career centres and the resources allocated to them be better understood?

The third subsection reviewed the variations found in the operationalization of career centre programs and services for each theme by geographic region, institutional type, and career centre type. The fourth subsection presented the preliminary analysis, which determined that it was not possible to statistically answer the primary research question at this time. The final subsection provided some high-level observations about the actual survey responses that may have implications for research and practice. Thus, this chapter provides the foundation for the discussion of the key findings and recommendations for policy, practice, and research discussed in Chapter 5.

## **Chapter 5.**

### **Discussion and Implications**

#### **5.1. Overview**

As detailed in Chapter 1, the purpose of this study was to understand how career centres currently operate, in particular, the relationships between resources available to career centres and the services they offer and metrics, or measures of success, that are collected and reported. By taking a data-driven, theoretically framed approach, I hoped to identify specific tactics that would influence the practices of career centres who wished to enhance their resources and to have an impact on the field in which I have practiced for the last 20 years.

In the hopes of gaining a better understanding of the relationships between services offered and metrics collected and career centre resource allocations, I designed a pan-Canadian survey based upon what I found in the literature and with expert input from a national Delphi panel of career centre leaders. This survey explored career centre structures and resources, services offered to multiple stakeholders, metrics and success measures collected and reported, the external and internal challenges career centres face in their day-to-day business, and the philosophical orientations each career centre has adopted. Relationships between the resources a career centre had available to it, the centrality of career centres to the institutional mission, the environmental and institutional power a career centre accumulated, and the negotiation strategies of employers were explored using Hackman's (1985) theory of power and centrality in resource allocations as the framework for analysis.

This begins with a brief overview of the research problem followed by a review of the methodological approach and a discussion of the most surprising



findings of this study, followed by a discussion of the study limitations identified through the analysis. Next, sections detailing the implications for further research into the area of career centre operations and recommendations for policy makers within academic institutions and within professional associations in career development are presented. Because one of the initial intentions of this study was to improve practice, a detailed discussion of the recommendations for practitioners on how they might implement the findings in their career centres follows. The chapter concludes with my reflections as a practitioner-researcher on undertaking this study.

### **5.1.1. Statement of the Problem**

The majority of Canadian college and university students indicate that one of the primary motivators to seek post-secondary education is to increase their career prospects (Brainstorm Strategy Group, 2017). In recent years, the value of post-secondary education and the career outcomes it can generate have been under review from all fronts. Students, parents, and the public seek assurances that investment in further education will lead to enhanced career opportunities for graduates.

The atmosphere of increasing accountability to ensure post-graduate career success combined with a perception of limited resources has created a perceived gap between expectations and the resources needed to meet those expectations. In seeking to determine if this gap truly exists, I found sparse data about how Canadian post-secondary career centres operate in general and even less information about the relationships between operational practices and resource allocations. This lack of data means I have to assume that institutional leaders and career centre managers were making operational decisions that impact the career development of thousands of students across Canada without a comprehensive understanding of the impact of their decisions.

This led to the development of the primary research question for this study: How might the relationships between operational practices within Canadian career centres and the resources allocated to them be better understood? This study sought to address this problem by conducting an Anglophone national survey of post-secondary career centres to explore the current landscape based on six themes emergent from the literature as described in Chapter 2: the external conditions impacting career centres; their organizational structures and internal challenges; the financial, human and space resources available for them to operate; the services they provide to students, alumni, employers, and faculty; their philosophical orientations; and their measurements of success and metrics. This provided the foundation for the six sub-questions that were answered in this study:

- **SQ 1:** What are the current external factors influencing Canadian career centres?
- **SQ 2:** What are the current organizational structure and internal challenges influencing Canadian career centres?
- **SQ 3:** What are the resources available to Canadian career centre leaders today?
- **SQ 4:** What are the services provided to students, alumni and employers by Canadian career centres today?
- **SQ 5:** What are the prevalent philosophical orientations within Canadian career centres today?
- **SQ 6:** What are success factors measured and reported by Canadian career centres today?

### **5.1.2. Overview of Methods and Respondents**

Since I wanted to provide a detailed overview of post-secondary Canadian career centre operations, an online survey was the most appropriate method to use for primary data collection. The majority of the survey was closed-ended questions, where respondents were asked to indicate if they provided a particular

service or not. The survey also included some open-ended questions to which respondents could provide detailed answers. After developing the initial survey, I used a Delphi panel of geographic, institutional, and career-centre type diverse experts to provide input on the survey questions and responses. I then piloted the survey with a group of local career professionals who participated in a focus group about their experience completing the survey. These two methods informed the final survey design. The final survey had 178 questions and took an average of 2.5 hours to complete.

Representatives from 63 career centres across Canada participated in the survey, with the largest geographic response rate—26 career centers (41%)—from Ontario, followed by 23 career centres (37%) from western Canada, 10 career centres (16%) from the Atlantic region, and four (6%) from Quebec. The large majority (49, 77%) of the survey respondents were from university-based career centres, followed by college-based centres (eight, 13%) and polytechnics (four, 6%). The two remaining career centres were based in other post-secondary institution types (e.g., CEGEPS, university colleges or private, religious-affiliated institutions). Respondents represented three major types of career centres: centralized, business, and decentralized (non-business). Four other respondents represented other types of career centres, and those responses were combined for analysis as an “other” category.

Of the 63 respondents, 47 (75%) held the most senior role in their career centre, with titles of director, manager or chairperson of their career centre, and two (3%) were either associate or assistant directors. Nine (14%) indicated a coordinator, officer, or program manager title, and five (8%) indicated their primary role was as a career advisor or counselor. Respondents averaged 8.4 years (*Mdn* = 6) with their current career centre and more than 13 years experience in the career development field (*Mdn* = 12). The range of tenure in their own centre

ranged from 0.25 years to 41 years ( $SD = 7.9$  years), and the range of tenure in the field was 0.67 years to 41 years ( $SD = 8.5$  years).

### **5.1.3. Summary of the Findings**

The initial findings presented in Chapter 4 were grouped into six broad categories, as outlined in Chapter 2: (a) external factors outside career centre control, such as the rapid growth in technology and trends in international student migration that impacted day-to-day operations; (b) internal factors, such as structure and reporting lines and whether cooperative education was embedded in the centre, that impacted career centre operations; (c) the financial, human, and spatial resources currently available to career centres; (d) the services provided to various stakeholders, including students, alumni, employers, and faculty; (e) the philosophical orientations career centres have embraced; and (f) the metrics and success measures that career centres measure and report.

Descriptive statistics such as ranges, means, and medians for multiple dimensions of current post-secondary career centre operations in Canada—such as the most common services offered to employers, the student-to-staff ratio within different types of career centres, the educational requirements for career centre staff, and the frequency with which career centres measure learning objectives, just to name a few areas—are provided in Chapter 4. Using Hackman's (1985) theory of centrality and power in resource allocations as the framework, I also identified specific activities that were likely to be related to the resources a career centre had at its disposal.

Additionally, although I found that using Hackman's (1985) theory as a lens allowed me to group all career centres as one type, peripheral units, I expected there to be differences in how career centres were operationalized across the dimensions of institutional type, geographic region, and career centre type. Using

chi-square analysis and one-way ANOVA, I investigated the variances between the overall findings across these three demographic dimensions and identified statistically significant differences.

After providing an overview of the current state for each of these six areas in answer to the sub-questions, I sought to answer the primary research question by conducting regression analysis to look for relationships between financial and human resources and the other five career centre dimensions investigated in this study (i.e., external issues, internal factors, services, philosophical orientations, and metrics). Unfortunately, because the overall response rate was low, even after using bidirectional step-wise regression to narrow down the number of possible predictor variables, I was unable to conduct meaningful multiple regression analysis. However, in the initial survey, a few questions provided some insights into the relationships between services and relationships, and those findings were detailed in Chapter 4.

I also provided observations on the responses to the survey questions that contributed to the two most surprising themes that emerged out of the findings from this study. These themes, that career centres are more alike than they are different and that it may be time to rethink the minimum qualifications for career centre staff, are discussed in detail in the sections that follow.

## **5.2. Discussion of the Findings**

From a survey this large, there are bound to be many findings revealed through the analysis of the data. Many of the findings were not surprising to me—they support the work of others in the field as well as my experience as a practitioner. One example of unsurprising findings was that career centres focus on quantity of services rather than on the quality of services offered. There is little emphasis on metrics and measure quality of services in practice. As noted earlier,

each career centre offers an average of 67 different services for students, alumni, employers, and faculty. More than 70% (46) of career centres reported recently adding new services or planning to add new services. Only 6% (four) of career centres reported eliminating any services within the past few years. At the same time, while 97% (61) of career centres collect usage data on their programs and services, only 75% (47) collect satisfaction data, and only 29% (18) collect learning outcomes data on any of their services. Career centres seem to equate volume of services with meeting the needs of their students.

Another finding that was not surprising was that career centres are not using data to make decisions about their programs and services. As just one example, only a quarter of career centres have conducted a formal needs assessment process with their students. However, when asked about why new career services were added, 88% (44) of career centres that responded said addressing a gap in student readiness was an important consideration or the most important consideration in deciding whether or not to add a particular service. I know that interacting with my students directly can provide significant insights into what programs and services will benefit them. However, participating career centres reported through this survey that they only worked with an average of 32% (median of 25%) of the student population they were tasked to serve. Without an inclusive process to uncover the needs of students not already participating in career centre services, the career development needs of the majority of the students within the post-secondary educational system in Canada are not being assessed and decisions about programs and services to support them are not being driven by data. How do career centres really know that they are providing the services that their students need? Is the low usage rate reflective of the value students place on the services currently being offered? Career centres would be well-served to conduct systematic investigation, monitoring, and improvement of their services and make evidence-based decisions to ensure their service offerings are inclusive and unbiased.

However, a few findings of the research particularly surprised me. The first was that career centres are not as different as we like to think we are. The second was how much the expectations of career centre staff have changed in the 20 years I have been in the field. The next subsections include a discussion of these two key take-aways.

### **5.2.1. More Alike Than Different**

Since moving to Canada, I have often been struck at professional conferences by how much career centre professionals identify with their career centre type, institution type, or region. I have heard dozens of times phrases such as “it’s different in the Atlantic region,” “business school career centres don’t face the same challenges that we do,” or “that doesn’t apply to the college sector.” We seem to enjoy pointing out the differences between our institutional contexts and using them as a reason to pigeonhole our expertise rather than looking for ways to adapt it.

This study revealed many statistically significant differences in how particular services were implemented across geographic region, institutional type, and career centre type. Overall, business school career centres are better resourced and provide more opportunities for connections to the business community than other types of career centres. Regional cultural differences play out in services offered, such as all schools in Quebec, with their French heritage, providing workshops in dining etiquette and schools in the Atlantic region, who send more of their alumni to other regions to work, offering more diversity in services to assist with relocation. University-based career centres are utilizing more technology tools than colleges and polytechnics.

While these are somewhat interesting findings, I was more struck by the similarities across these dimensions. When looking at the bigger picture,

challenges expressed by respondents concerning internal and external issues they were facing revealed many more similarities than differences. For example, this study found no differences in the implementation of co-op programs and entrepreneurial services despite the provincial differences in pressure from external and internal constituents to expand work-integrated learning. In addition, the increasing trend of internal collaboration with other units, whether with other career centres on campus, or health services, or specialized units that work with specific populations, was shown equally across all career centres. The struggle over how to effectively measure career centre success, whether through measuring learning outcomes, needs assessments, or annual reports, was shown to be a universal challenge. Additionally, other than directly providing academic advisement to students, there were no variations across these demographics in how career centres integrate with academics to support classroom activities or whether or not they offer a career course.

Finally, I was particularly surprised by two more similarities: First, I expected a significant difference in usage rates across career centre type, where business school-based career centres would have a significantly higher usage rate than centralized career centres in alignment with the resources provided to them. Second, I expected a significant difference across philosophical orientations since I think of business schools as much more placement focused than centralized career centres. I perceived this placement orientation as driving many of the employer initiatives that are more frequently offered within business school settings. Neither of these assumptions proved true.

What this tells me is that for the bigger picture challenges, we have an outstanding opportunity to learn from one another. However, my experience with career practitioner conferences and certification courses is that they focus on day-to-day issues—how to create a mentoring program, how to use social media to



increase attendance, and how to incorporate creative counseling techniques. Some of these learnings are adaptable from one setting to another; others are not.

What is rarely openly discussed is how career centres operate. I was surprised by how many respondents, despite their overall level of experience within their own centre and in the field, did not know the answers to some of the basic operational issues, such as the source of their career centre funding (32%, 20) and the percentage of students who access their services (21%, 13). I was also surprised that so many were unable to provide any rankings for considerations on why student services were added (21%, 13) or eliminated (43%, 26) or why employer services were added (49%, 31) or eliminated (56%, 35). Only 81% (35) of respondents who indicated that their career centre had a mission or vision could articulate it in this survey. This information seems like basic operational knowledge that everyone in a position of leadership within a career centre setting should possess in order to make sound operational decisions within their centre.

These findings make me question whether or not my original research question was the most important one to ask in the first place. Instead of investigating the operational choices career centres are making, if I were to conduct a similar study in the future, I would want to investigate more thoroughly the external and internal trends that are impacting career centres at a broader level. For example, I would ask more open-ended questions such as “How are you planning to meet the needs of a more diverse student body?”; “Does your philosophical orientation impact the services that you offer to students? If so, how?”; “As the post-secondary education system is changing to include more online academic programs, blended degrees and an increased emphasis on experiential learning, how will your career centre respond?”; and “How are you measuring the success of their centre?” I believe that these elements, which are beyond the

control of the career centre, have much more significant influence on career centre operations than the issues that are within the control of the career centre leader.

For this reason, I recommend that career centre practitioners in Canada take a step back and have open discussions about how their career centres operate, how decisions get made, and what challenges they are facing. The bigger picture challenges, such as limited resource availability, increasing accountability, changing student dynamics, increasing expectations for work-integrated learning, and how to integrate with academics, are impacting us all. Working together across institutional, geographic, and career centre type boundaries can provide multiple perspectives on how to respond to these challenges that could potentially have long-lasting impact on the way we support the career development of post-secondary students across Canada.

### **5.2.2. Changing Role of Career Practitioners**

When I first read Dey and Cruzvergara's (2014) article on the evolution of career services, the changing expectations and roles of staff resonated with my lived experience over the past 20-plus years. As noted earlier, I started my career in the Engineering Placement Office, where my master's degree in engineering was sufficient qualification to work directly with engineering students, until the centre merged to become the Career Development Center, and the focus shifted to career counseling. I was no longer considered qualified to work with students directly, so my role shifted to employer engagement. In my early employer engagement role, my technological aptitude (as online job boards and CRM systems were launching), my organizational and facilitation skills, and my natural sales and relationship-building talents were valued as career centres moved into the networking paradigm. As career centres shifted from a true counseling orientation to a coaching orientation, having a master's degree in any discipline, along with my employer relations experience, once again became sufficient

qualification for me to work directly with students—particularly in a placement-focused, MBA-only career centre. When given the opportunity to participate in hiring, I perpetuated the basic requirement of a master’s degree for any student-facing position throughout the remainder of my post-secondary career in the United States.

When I relocated to Canada in 2010, I was slightly surprised to see that a master’s degree was not a required qualification for associate director level roles or, frankly, any roles within the career centre at my institution. I assumed it was just one of those differences between Canada and the United States, like extended parental leave, and did not think too much about it. In the years since, I have personally hired 8 to 10 individuals into student-facing, professional roles and, at times, have been very pleased that I was not restricted to hiring individuals with advanced degrees.

However, in conducting this research, I have begun to question whether the flexibility in hiring is worth the trade-off for maintaining a level of professionalization in the field. If we take Contomanolis et al.’s (2015) advice and “hire for attitude and train for skills” (p. 25), it opens the door for critics to question whether or not career practitioners are actually professionals of a specialized field. Essentially, anyone can do it. Additionally, within the post-secondary context in particular, where our products are degrees and the most prestigious members of our institutions hold doctorates, is it okay for career practitioners to ignore the value placed on academic rigor set by the communities to which we belong? The shift away from advanced degrees may have inadvertently created an atmosphere of de-professionalization of career services as a profession.

As a practical example of why career practitioners should reconsider educational qualifications as an entry criterion, I present career courses as an example. Oliver and Spokane (1988) found that career courses were the most

effective career intervention type. A meta-analysis of research articles about career courses reported that

34 of the 38 output studies reported positive career course results; 90% of the studies we reviewed showed positive gains in vocational identity, career decision making, or other output variables. Similarly, of the 15 studies involving outcomes, 13 (87%) showed positive results. (Folsom & Reardon, 2003, p. 445)

Required for-credit career courses are considered by many practitioners to be the epitome of best practice for post-secondary student career development.

When hiring faculty to teach at the post-secondary level, whether for full-time tenure track positions or part-time sessional roles, many institutions require a doctoral degree, and almost all require a master's degree as the minimum educational attainment level. If an academic department was hiring faculty to teach an established career course, the minimum educational requirement would likely apply. Without adhering to the same educational standards in our hiring practices, I believe it is hard for career centres to make the case their staff are qualified to teach in this setting.

When asked about the theoretical orientation of their own career centre, only 66% (37) of career centres leaders could articulate the theory behind their practice. When asked to provide examples of the learning objectives, only two of the 19 respondents that indicated that they were seeking to measure them were able to articulate their learning objectives in an academically rigorous way. Formally trained academics tend to speak in a different language than staff who have not had the formal training, even as much as a master's degree. Speaking the language of educational pedagogy and theory is essential to building trust with faculty. I believe the onus is on the career centre to adapt to the level of the faculty if the goal is to create academically-based programs. One of the more interesting side effects of my conducting this doctoral work has been a positive change in the

way faculty respond to my suggestions for program changes and career centre initiatives. I do not believe my lived experience is unique.

In some cases, I think that the profession of career development is seeking to impose the rigor of qualifications on itself. There is a plethora of non-degree, certificate programs designed to qualify career development practitioners. In the post-secondary context, very few reported valuing these certificates as an entry criterion. Many of the certificate programs are targeting career services professionals in government-funded or private agencies.

For post-secondary career centres, however, the academic environment and the value placed upon formal credentials cannot be ignored. I believe it is time for post-secondary career centres in Canada to consider requiring an advanced degree as the entry level point into the profession. No doubt this is a controversial stand. There are many highly talented professionals currently working in career development who do not have formal academic training. Only 67% (42) of the respondents to this survey hold an advanced degree themselves. However, if we seek to both enhance the level of respect career centres receive within their own institutions and to raise the level of professionalism in our practice, I believe this is a necessary step to take.

### **5.3. Study Limitations**

In the research design and analysis of the results of this study, a few limitations were revealed that impacted the findings. The first limitation involved the response rate. While 63 career centres provided a sizeable sample, the exact number of post-secondary career centres in Canada is unknown. Many institutions have multiple career centres. For example, my home institution, Simon Fraser University, has four different offices that identify as career services centres. These

data would be more robust if there was more certainty around how the sample size and composition compared to the total population of career centres.

Additional limitations came out of the number of responses. First, Quebec was significantly underrepresented since the survey was only conducted in English. Second, the number of respondents from career centres in college-based and polytechnic institutions was low. One reason I believe this was the case is that there is less of a culture of surveying in these institutions, so there was less willingness to participate and possibly more effort required to gather the required data. Most of the rankings and accreditation programs that require extensive data collection and surveying apply specifically to universities. Additionally, the contact information for individuals at college career centres was harder to find; thus, a lower percentage of them were invited to participate in the survey in the first place.

The total number of questions in the survey created another important limitation to discuss. The large number of variables generated in the survey required a large number of significance tests to determine the relationships between the variables. The more significance tests that are conducted, the higher the probability that one or more of these significance tests resulted in a Type 1, or a false positive, error. In this case, this means that there is a likelihood that some of the relationships between predictor and response variables that were identified as significant through ANOVA analysis were not actually significant. One way to possibly alleviate this issue in the future is to be more intentional in the design of the questions to consolidate the variables into like groups to reduce the number of significance tests needed.

Related to this, the number of responses also impacted power of the analyses in this study. As seen by the power analyses reported for each of the ANOVAs, the number of respondents in each category type, whether it was institutional, geographic or career centre type, the power of this study was low.

This provides another indication that there are likely to be Type 1 errors in this study that could be eliminated by larger numbers of respondents.

Another limitation identified in the analysis was that not all participants were senior enough in their career centres to provide data for all survey questions. About one-quarter (16) of the respondents were not the leader of their centre. Future surveys of this type should be specifically addressed to career centre leaders, who should be encouraged to complete it personally.

The length of time necessary may have been a barrier for the senior leader to complete the survey, so shortening the survey by eliminating data not needed for analysis may help increase the response rate of senior leaders. After completing the analysis, it is clear that some of the questions could be reworked to shorten the survey. For example, rather than duplicate all of the services offered in the metrics section, just adding a choice to select whether usage metrics, (i.e., satisfaction surveys or learning outcomes) were collected would be sufficient. Services for alumni were also a duplication of the services for students. Since such a high percentage of career centres offered the same services for alumni as they offered for students, this section could be combined to ask what services they offer to students and/or alumni. One open-ended question could be added for them to differentiate between any service differences.

Additionally, since so few career centres charge fees for services, one question asking what services, if any, do they charge a fee for could be used rather than incorporating that option into every service within the survey. Additionally, if this study is conducted regularly, then all the questions about which services they have added or eliminated would no longer be needed. A longitudinal study would also help to eliminate errors in memory. Finally, the limited amount of information collected about services for parents and other external constituents indicate that this entire section of the survey could be omitted.

The use of Hackman's (1985) theory as a framework may have been a limitation in this study. There were many ways the data could have been parsed, and choosing Hackman's theory as the lens excluded other findings that may be relevant to career centre operations. Alternative approaches could have included resource dependency theory (Pfeffer, 2005), institutional theory (Mintzberg, 1983), or decision theory (March & Olsen, 2009; Simon, 1997), and using a different theory as the lens for analysis may have yielded different results.

Upon reflection, several challenges came to using Hackman's (1985) theory as the analytical framework come to mind. The first challenge was that this study was not originally designed with Hackman's theory in mind. Thus, many questions that may have provided valuable insight were not embedded into the survey and therefore were excluded from analysis. Some possible questions that might have been included if the study had been designed with Hackman's theory in mind include the following:

- What negotiation strategies do you employ when negotiating your budget?
- What is your institutional mission?
- What external resources does your career centre provide to the institution? Does anyone else provide similar services?
- How important is alumni engagement to your institution?

Not having a framework during the survey design process meant that I did not ask enough questions about the institutional context, and I had to make assumptions about which data that were collected would represent the various concepts within Hackman's theory. For example, I assumed that all institutions care about engaging and supporting their alumni, and therefore the ability to engage with alumni represented environmental power. This could be one of several erroneous assumptions about what constitutes centrality, environmental



power, institutional power, and negotiation strategies that would impact resource allocations.

Additionally, Hackman's (1985) theory itself did not explicitly consider the impact of factors external to the institution that may impact the resource allocations within the institution. For example, the impact of trends in technology and changing student demographics found in the literature review could only be incorporated into the analysis using Hackman's theory as a lens as they were represented by the services offered within the career centre. There may be ways these factors are influencing resource allocations directly that could not be accounted for using her theory as the lens.

Another potential gap within Hackman's (1985) theory was that her definition of centrality relies solely on the purpose of the unit rather than the individual services or functions that a unit performs. There may be significant programs and services provided by a unit that are highly valued resources that are beyond the defined purpose of that unit. In the case of this study, to ensure that these potential predictor variables were not missed, Hackman's propositions were not used to narrow down the service theme variables found in the study for further analyses.

However, these challenges do not diminish the value in using Hackman's (1985) theory as a framework for analysis. The purpose of the theoretical framework was to help me remain focused on what the important points for analysis were, provide a lens through which to interpret the data, and provide a way to connect the results. This study collected an enormous amount of data; without this framework to make sense of it all, the findings would be scattershot and overwhelming for anyone reading them.

## **5.4. Implications for Research**

As a practitioner-researcher, my initial goal was influence practice in career centre operations, and it was unclear to me how my work would influence the world of research. However, as I began to assimilate my findings, I realized that several implications for research came out of this study.

### **5.4.1. Non-academic Unit Centrality Framework**

As noted in Chapter 2, I did not start this study with a theoretical framework in mind. I started this study seeking to better understand the relationships between career centre operational practices and resources. It was only after I completed my data collection that I sought out a theoretical framework to help me make sense of the vast amount of data I had collected.

I selected Hackman's (1985) theory of centrality and power in resource allocations as a lens through which to determine which relationships to further investigate. Hackman's theory, compared to the others I explored in the process, was the best fit for the data at the time because it focused on the internal unit level within the institution, incorporated many of the ideas and concepts from earlier theories, and was designed to apply to non-academic units within the post-secondary context.

However, similar to Ashar and Shapiro (1988), when I began to apply Hackman's (1985) theory as a framework, I found a gap in how to determine the centrality of the departmental unit I wanted to investigate. In her initial work, she assumed all academic units were core and all non-academic units were peripheral. However, other researchers did not make that assumption and suggested that non-academic units could be core (Coy & Pratt, 1998; Crawford, 1998).

For this reason, I developed a framework, based upon some elements from Ashar and Shapiro's (1988) work, for determining the centrality of an academic unit to determine if a career centre should be considered a core or peripheral unit. This framework objectively measured the factors identified in Table 60 to determine the centrality of the career centre within the institutional context. This framework could be easily adapted by future researchers to determine the centrality of other non-academic units on campus and thus provides an original contribution to research as a field of study.

**Table 69: Summary of framework for determining centrality of non-academic units**

Factor	Description	Scale
Reporting unit	Does department report to academic or non-academic unit?	0 pts = non-academic 1 pt = academic unit
Reporting level	How close to the president does the unit report?	0 pts = director/associate director 1 pt = associate VP/associate dean 2 pts = VP, provost, or dean 3 pts = president
Career centre name	Does the unit have words that reflect the academic mission such as "learning" or "academic"?	0 pts = no 1 pts = yes
Required course	Does the unit have a required course for all or some students?	0 pts = no required course 1 pt = required for some, non-credit-bearing 2 pts = required for all, non-credit-bearing 3 pts = required for some, credit-bearing 4 pts = require for all, credit-bearing
Integrated into classroom	How many classroom integrated activities does the unit provide?	1 point for each service; maximum of 4 points
Percentage of population served	How many students choose to use the unit's services?	0 pts = percentage less than mean 1 pt = percentage above the mean but less than one standard deviation from mean 2 pts = percentage between 1 and 2 standard deviations from mean 3 pts = percentage above 2 standard deviations from mean
Collaborations on campus	How many other units does this unit collaborate with?	0 pts = number less than mean 1 pt = number above the mean but less than one standard deviation from mean 2 pts = number between 1 and 2 standard deviations from mean 3 pts = number above 2 standard deviations from mean

## **5.4.2. Recommendations for Future Research**

In addition to providing a framework for the refinement of Hackman's (1985) theory for non-academic units and providing critique to Hackman's theory, this study has the potential to contribute to future research in two other areas: (a) repetition of this survey will better describe the evolution of the Canadian career centre post-secondary landscape over time, and (b) it will identify related areas where future investigation will be valuable.

### **5.4.3.1. Changes to Survey for Longitudinal Use**

One of the key implications for research in this study is the need to collect this information from Canadian institutions on a regular basis so that changes can be observed over time. While it is interesting to note the most common programs and services today, it will prove much more useful to track changes to programs, services, budgets, and metrics over time. A clear recommendation is to repeat this survey, under the auspices of CACEE, every 2 to 3 years. CACEE has already agreed to partner to run this study in spring 2019. With this in mind, there are a few changes I would recommend for future versions of the study.

Additional questions that specifically address some of the identified trend themes could also be added to get a deeper understanding of current issues.

Some examples of these questions are listed below:

- What, if anything, is your career centre doing to specifically prepare students for careers other than full-time jobs (i.e. contract work, “gig” work such as Uber, and side businesses)?
- How is your career centre supporting Indigenous students, non-visible minorities, and students with mental health issues?
- What skills do you look for when you hire new staff?
- What are the most requested data from your office?

The addition of questions that arose out of the trends identified in this survey will provide a more robust picture of the landscape for the next iteration. Continuing to evolve the survey questions based upon the trends identified in each of the prior studies will ensure that the data remains current and relevant.

The final recommendations for repeating this study are intended to increase the response rate. The first recommendation is to translate it into French to increase the participation of post-secondary institutions in Quebec. The second recommendation is to start early searching out career centres in college and polytechnic settings to engage them with the data from this study to encourage them to participate in the future study. Finally, conducting this survey at a different time of year other than the fall term, which is the peak time for recruiting activity, may lead to a higher response rate.

#### ***5.4.3.2. Areas Worth Further Investigation***

It is important to generate more empirical-based research within the Canadian context. Although the list of topics for which empirical data is needed is extensive, I believe these are the areas where additional research is most critical.

One of these areas is research into the impact experiential learning activities are having on post-graduate employment and success. Canadian institutions are building co-op programs, mentoring programs, field placements programs, service learning, classroom projects, study-abroad, and a variety of other types of experiential learning programs. In 2017, the Province of Ontario announced its Career Kick Start program, which will invest nearly \$190 million over 3 years to support more experiential learning opportunities for K-12 and post-secondary students (Sousa, 2017).

The Ontario budget report cited a survey sponsored by the Business/Higher Education Roundtable in 2016 of students and recent graduates

as their rationale for adding additional experiential education program, stating that “88 percent thought that students who graduate with degrees that offer work-related experience have an advantage when it comes to finding a job” (Sousa, 2017, p. 61). While a survey of students and graduates is useful for understanding their perceptions, it would be more useful if studies were done on the impact of various experiential learning opportunities to determine if this perception is accurate for all work-integrated learning or if some types are more impactful than others for some types of students. This would give post-secondary institutions some ammunition to request targeted funding and, potentially, protect autonomy in determining the appropriate programs for their own students.

Another area where I believe more research is needed is on the role of career courses on campus. In this study, I found no relationships between resources available to career centres and whether the career centre offered a career course. I found this surprising because I assumed that having a career course, particularly one that was credit-bearing, would lead to more resources for career centres since it indicates an alignment with institutional mission and centrality. I also found the lack of a relationship between educational requirements for career centre staff and resources to be surprising. I believe that the lack of academic credentials is related to how few career centres have successfully implemented credit-bearing career courses in their institutions. These findings make me wonder if institutions find career courses as valuable as career centres believe them to be. This may be due to lack of current objective data on the impact of career courses on student outcomes, an inability for career centres’ directors to effectively articulate the proposed benefits to the right individuals within the institution, or the lack of qualified individuals to create these courses, or it may be that there is another factor at play. These findings warrant additional study on the role and impact of career courses on our campuses.

Another area worth further investigation is the relationships between career centre philosophical orientations, services, and resources. In another study, the data collected through this survey could be analyzed to investigate if there are relationships between the stated orientation of career centres and the services they provide to students. It would also be interesting to investigate if the metrics they are collecting are aligned with their stated philosophical orientation to see if they are successfully operationalizing their philosophical orientation. This analysis would shed more light on how career centres are actually operating within Canada.

Another potential area of investigation is to remove the delimitations designed into this study and include agencies, both public and private, that provide career development services to individuals, as well as career centres from private sector, non-degree-granting institutions. There may be operational best practices that would emerge from a more inclusive definition of career centre.

Finally, an additional area where additional research is necessary is on how career centres work with employers and on what the impact of these activities are for our students. In this survey, 10% of career centre staff nationally are exclusively dedicated to employer relations. Another 20% have dual roles supporting both student development and employer relations. Career centres should be measuring the impact of employer activities, determining best practices, and sharing case studies about how we work with students, all of which are done in other student services areas. This will enable us all to be better practitioners as we learn from one another.

## **5.5. Implications for Policy**

Post-graduate career success is no longer an issue just for career centre leaders. In 2017, the Liberal government in Ontario began negotiations with universities designed to link funding to institutional outcomes, such as graduation



or employment rates (Chiose, 2017b). The Premier's Highly Skilled Workforce Panel in Ontario is recommending that every student has at least one experiential experience during his/her post-secondary education (Conway et al., 2016). HEQCO published a report in 2015 ranking the performance of each province's post-secondary education system that included jobs for graduates as a key quality indicator (Weingarten et al., 2015). Governmental agencies are paying attention to institutional post-graduate outcomes success.

Consequently, using Hackman's (1985) concepts of institutional power, environmental power, centrality as related to institutional mission, and negotiation strategies, I provide, based on this study, some recommendations to policy makers at the institutional and professional association level.

### **5.5.1. Recommendations for Institutional Leaders**

Each academic institution in Canada has its own mission, vision, values, and culture. Career centres, as a subunit within the institution, should always align their own mission statement and services with the institutional vision. The more clarity institutional leaders can provide about the role of career development within the institutional mission, the more effectively the career centre can implement it. As the findings in this study reveal, there seems to be significant confusion about the real value institutional leaders place on career services. While the articulated messages are often that career development is important, the resources do not always follow.

It might be assumed that within a career centre setting there is a direct correlation between the resources a career centre has and its ability to provide services. If this were the case, an increase in operational budget would lead to an increase in the ability to provide services for students or a decrease in the number of staff would lead to a decrease in services. However, as noted earlier, despite

almost 60% (34) of career centres reporting either a static budget or a budget decrease, more than 70% (46) of career centres reported recently adding new services or planning to add new services. Only 6% (four) of career centres reported eliminating any services within the past few years. This implies that current career centre staff are having to stretch both their financial and human resources to continue to provide the number of services expected.

As predicted by Dey and Cruzvergara (2014), much of this service growth is in areas of non-traditional career services activities designed to build employer and alumni engagement, such as mentoring and job shadowing programs, corporate mock interviews, and networking opportunities. Although this study neglected to ask about when services to support classroom-based activities were added to the career centre portfolio, anecdotally, I believe it to be a relatively recent occurrence.

The ways career centres are stretching and expanding their services indicate that many career centres are struggling to find their place within the institutional setting. Is their primary role to help graduates find jobs? Is it to build engagement with the alumni corporate community? Is it to support the educational mission of the institution? Is it to create work-integrated learning opportunities for students? This is not to say that career centres cannot do all of these things, but in times of resource challenges, clarity about the priorities of institutional leadership would help career centre staff make the most appropriate decisions for their own institutional context.

### **5.5.2. Recommendations for Professional Associations**

A myriad of professional associations influence the practice of career development on post-secondary campuses. CERIC, which primarily focuses on the practice of career counseling and advising across all types of organizations;

CACEE, which considers itself to be the primary voice of post-secondary career practitioners in Canada; Co-operative Education and Work Integrated Learning Canada, which focuses on work-integrated learning; and the Career Development Association, which provides a certification program and ongoing training, are just a few. Some findings from this study can be used to make recommendations to these professional associations to improve the profession of career development as a whole.

#### ***5.5.2.1. Use Findings in Educational Materials***

The first recommendation is to incorporate some of the findings from this research into the educational materials used by the associations. For example, CACEE offers a Career Educator Certificate program, which includes modules on employer relations, student services, and other components of career centres. The data on the current service offerings can provide a richer perspective of the current practices within the post-secondary context. Currently, these workshops, which have historically been written from the presenter's personal experience perspective, do not provide a complete picture of the broader Canadian context. While I am unfamiliar with the content of the educational materials for other associations, I hope that, when possible, they are willing to incorporate the findings from this study as well.

#### ***5.5.2.2. Develop Standards for Minimum Data Collection***

A lot of work has already been done to provide tools on how to measure outcomes and the impact of career centre interventions such as learning outcomes, competencies, and employability skills. Unfortunately, these impacts are generally not being measured within the post-secondary context. Career centres are spending a significant amount of resources collecting many types of usage metrics, even when most of these metrics are not used externally. Further, only 40% (25) of career centres reported having conducted an internal/external

assessment to determine the quality and effectiveness of their programs and services. Despite the 2010 release of *Career Centre Evaluation: A Practitioner's Guide*, published by CERIC, many career centres are unaware of its existence, and only one-third have used it to try to evaluate their services (Dietsche & Lees, 2017).

Career centres appear to need some assistance creating a framework for how to evaluate their impact and tell their story. It would be useful for one of the national professional associations to take the lead in determining a standardized list of metrics that career centres should collect and in developing guidelines on how to report them. The list might include usage metrics, satisfaction surveys, and outcomes measurements as part of the metrics toolbox. This function is similar to the role that MBA Career Services and Employer Alliance (MBA CSEA) plays in providing standards for post-graduate employment data collection and reporting. Having standardized reporting tools for career centre operations, along with consequences for non-compliance, would ease the burden of trying to figure out which metrics are most important and would provide easier benchmarking of career centre effectiveness across institutions.

## **5.6. Implications for Practice**

One of the primary purposes of this study was to improve practice by better understanding the relationships between operational decisions and resource allocations. The findings from this study inspired 10 recommendations for career centre leaders as well as a methodology for any career centre practitioner to use to benchmark his/her own career centre against the national findings.

### **5.6.1. Recommendations for Career Centre Directors**

In seeking to better understand the relationships between career centre operational choices and resources, Hackman's (1985) view on operational decisions did offer a framework to evaluate the programs and services currently provided. While definitive relationships between specific operational decisions and resources could not be determined due to the low response rate, Hackman's concepts of institutional power, environmental power, centrality as related to institutional mission, and negotiation strategies provided a basis to recommend 10 specific tactics for career centres to employ.

#### **5.6.1.1. Service Recommendations**

Six specific recommendations for career centre directors came out of this study related to service offerings. Each of these will be described in detail below.

##### **1. Provide additional support for international and Indigenous students on campus by ensuring that staff are trained to work with these populations and that specialized services are offered**

According to a 2016 Canadian national report, five key legislative changes were designed to encourage international students to study in Canada and stay in Canada beyond their degree to become permanent residents and citizens (Canadian Bureau for International Education, 2016). One of the key recommendations out of this review of globalization trends in education was to drive economic growth for the nation by strengthening the post-secondary system to support global initiatives. Post-secondary institutions that ride this trend may see financial rewards as the federal government embraces immigration as a growth strategy.

For career centres, this means providing specialized services for the international students that are already on campus and preparing to welcome even greater numbers. As Hackman's (1985) theory illustrates, services provided to

international students and having staff trained to support them may both be related to higher financial resources for the career centre. International students bring more revenue into their institutions, and when career centres can demonstrate that they are supporting those students, they may be rewarded with a share of this revenue as additional financial support. While I believe that the institutions are less likely to directly fund positions due to the instability of the worldwide political landscape, which could lead to a sudden drop in international students on campus, operational budgets can fluctuate year-to-year much easier based upon actual enrollment.

Some examples of specialized services for international students offered on campuses include workshops on the Canadian workplace and business etiquette, English as an additional language support and accent reduction classes, partnerships with the International Student Office on campus, and, perhaps most importantly, well-trained staff who are culturally aware of the issues that international students face in Canada who can work one-on-one with international students.

One of the more unique services is externship, or a job shadowing program, in which international students spend time at a Canadian workplace in their area of career interest in an unpaid capacity observing and reflecting on the work environment. At one Atlantic-region, decentralized business career centre, this takes the form of 35 hours at the host organization spread over a semester. Another unique service offered by a Western-region, university-based central career centre is a once-monthly open forum, roundtable style, that brings international students from all disciplines together to talk about career concerns.

Additionally, as Canada as a nation and post-secondary institutions grapple with the implications of past policies on Indigenous students, ensuring career centre staff are trained in how to effectively and respectfully work with First Nations

students and to provide specialized services to support these students are essential. Unfortunately, this survey did not yield examples of these innovations in services for Indigenous students which provides an opportunity for other practitioners to showcase their initiatives.

## **2. Provide entrepreneurial resources for students seeking to explore non-traditional career paths**

According to Csorba and Termuende (2015), “Entrepreneurship has become such a staple at Canadian post-secondary institutions that it is now surprising to see a college or university without an entrepreneurship offering” (para. 1). While most of these initiatives are within the academic sphere, career centres cannot afford to neglect this trend. Once exposed to the possibility of becoming an entrepreneur, whether right after their post-secondary experience or later down the road, a growing percentage of students will be turning to their career centres for support.

If career centres truly embrace the idea that “career” does not equal “job,” then they need to expand their offerings to include more non-traditional paths. Providing access to online resources; having career panels with entrepreneurs; hosting career fairs specifically for, or including a section, of start-up companies offering workshops taught by entrepreneurs on starting one’s own business; or offering workshops on business plan writing are some of the more common examples of implementable services to support student entrepreneurs.

Some post-secondary institutions in the Atlantic region have partnered with their Entrepreneurship Offices to offer entrepreneurial co-op placements for students where they are supervised by a faculty or staff member from the centres. One Ontario-based university allows co-op terms with companies still in the incubator phase. A few schools indicated that they host an Entrepreneurship in Residence program, where an entrepreneur holds office hours for students to drop

in and ask questions. These are all programs that can be implemented without providing specialized training for staff.

In alignment with Hackman's (1985) theory, I believe that career centres that recognize the popular trend toward entrepreneurship on their campuses and create partnerships with individuals leading those initiatives will gain internal power within their organization. Despite the lack of specific findings in this study, my experience is that internal power provides leverage in negotiating for resources.

### **3. Provide expanded services to support classroom-based teaching and learning**

At the heart of every post-secondary institution is the mission to provide outstanding instruction to its students. Teaching and instruction has historically been the domain of faculty in the classroom. The low number of credit-bearing, career courses is an indication that institutions have not embraced a shift of instruction to staff positions. However, career centres are uniquely positioned to provide support to the classroom experience, which, based upon Hackman's (1985) theory, should lead to increased institutional power and resources.

In this study, the most common service provided by career centres for faculty (offered at 73% of centres surveyed) was performing workshops in the classroom setting, with staff effectively acting as instructors in the classroom. In particular, this service opens the door for future collaboration to bring careers directly into the classroom, assuming that the instruction by the staff member is of high quality. Other common services provided to support classroom-based initiatives, such as access to online resources and assessments, major-specific career path information and post-graduate employment data, support for career-related assignments, and assistance with reflection assignments, all indicate the faculty view the career centre as knowledgeable professionals in their field.



Another way one career centre reported supporting the classroom was by helping design rubrics for grading assignments related to careers. I suggest that this collaboration provides value to the faculty in their goal to provide better instruction as well as generates internal power for the career centre, as described in Hackman's (1985) theory. Although it is beyond the scope of this study, the trend of having career centre staff present in the classroom brings into question what the academic and training requirements should be for career centre staff who may be entering the classroom.

Other services, such as securing external experts as classroom speakers, finding employers to sponsor class projects, and arranging company tours for classrooms demonstrate to the faculty the connectedness of the career centre with the corporate community. For career centres with strong employer engagement talent, this may provide environmental power to the career centre, as Hackman (1985) suggested, although no relationships were determined in this study.

These types of services support the notion that institutions are looking for ways to connect the material being taught in the classroom with possible careers for students. Beyond that, my practitioner experience brings the perspective that faculty are expensive resources for an institution and that institutions are adding staff to provide the support for faculty as a cheaper alternative to hiring additional faculty. Thus, I believe it is in the best interest of the career centre to work closely with faculty to support in-class initiatives.

#### **4. Create opportunities for employers and alumni to engage with the institution through the career centre to provide expertise for students**

According to Dey and Cruzvergara's (2015) predictions, the role of the career centre is shifting to that of a connector and community builder. The world of work is changing at a rapid pace, and some of the top jobs of 2050 have not even been invented yet. There is no way for career centre staff to keep up with the pace of change. However, the connections with employers uniquely position career

centres at the forefront of the new labor market. By creating ways for students to tap into this rich resource, career centres can lead their institutions into this new territory.

I also expect the rise of artificial intelligence will make some of our historical key services, specifically resumes and cover letter reviews and mock interviews, obsolete. A U.S.-based company showcased a robot at the 2017 NACE conference that professed to be better at reading facial expressions than humans in an interview setting. Several schools have adopted a platform called VMOCK that they report anecdotally does a better job of critiquing resumes than their junior staff. There are dozens of job boards and job aggregators out there that post student jobs. The career centres are no longer students' only resource for internships and new graduate opportunities. This creates the risk that career centres could become obsolete if they continue to operate as they did 20 years ago.

If career centres embrace the new technologies as ways to free up staff time to be able to provide more activities that engage the corporate and alumni community with students, career centres can remain relevant despite these technological advances. By shifting focus to create meaningful human interactions to engage students in self-exploration and goal setting, educate them about careers options, and help students build professional networks outside their immediate social circle, career centres are poised to be even more important within the post-secondary context.

##### **5. Provide recruiting services, such as career fairs, resume referrals, and multi-purpose job boards to make it easy for employers to find the right candidates**

Technology has made it easier than ever for employers to post their jobs and get hundreds if not thousands of candidates from all over the world for their open positions. Applicant tracking systems can identify the appropriate key words

and bring up the short list of candidates in seconds. What technology has not yet been able to accomplish is to find the human fit between organizations and candidates. It is expensive to make the wrong hire, so many organizations are looking to the career centre to help them identify the right candidates for their roles.

According to *The 2-Hour Job Search*, by Steve Dalton (2012), hiring managers prefer to hire internal candidates when they are looking for new talent, followed by those who have had success in a similar organization in a similar role who have publicly demonstrated that success. For the new graduates served by career centres, neither of these methods apply except for when employers rehire their co-op or internship students. However, Dalton asserts that the next preferred method by which employers hire is referral. Career centres can play a major role in referring the right candidates to their employer connections based upon their knowledge of their student body and the employers they work with.

As shown in this study, this can take on many forms, such as career fairs, multi-purpose job boards, and resume referrals. Career fairs are highly visible large-scale events that bring many employers to campus and can positively impact the reputation of a career centre on campus. Providing specialized fairs by academic unit, employer industry, or type of position may help with the perception that the career centre tailors its services to its students. Multi-purpose job boards that include part-time jobs, internships, co-op positions and projects, in addition to full-time jobs, provide a one-stop tool for employers seeking to hire from a particular institution. They provide the option to recruit candidates earlier in their academic career. For administrators, having a job board with great opportunities for all students is an easy concept to understand. Many administrators seek to view things from the student experience, and having one job board, rather than multiple ones within the same institution, is an appealing concept.

Resume referrals are the most controversial of these services because they involve the career centre staff sending off a bundle of resumes of students who match the qualifications the employer is seeking. In my own experience, I have been asked by employers to screen candidates for tenacity, leadership potential, and initiative. Because firsthand knowledge of all individual students is limited, it is hard to justify screening candidates based upon soft skills such as those. However, career centres can easily screen candidates based upon the hard criteria in the job posting, such as academic major, GPA, prior experience, residency/work authorization, specific technical skill such as a programming language, and written language ability (based upon their cover letter). For employers who get hundreds of resumes for entry-level job postings, many of which do not meet the minimum qualifications, having the career centre send a bundle of resumes where all candidates have the hard skills they are seeking makes the recruiter's job significantly easier. It shows that the career centre understands the needs of the employer, and in my experience, has led to the employer posting positions exclusively at my institution. While this may not be a service that career centres wish to promote broadly to administrators and students, the employers who receive this type of service most certainly provide positive feedback to faculty and administrators about the career centre when asked.

#### **6. Build relationships with individual faculty by providing services that support them personally in their spouse or children's job search, research, and career development**

According to Hackman's (1985) theory, relationships are one of the primary keys to building institutional power. Building positive personal relationships with others makes it more likely that they will become a champion for the career centre and advocate on its behalf. In my experience, faculty are not familiar with the current trends in seeking corporate employment. Assisting them, their spouse, or child with a resume and providing access to the career centre job board does not take much staff time but will be appreciated by the faculty member. Another easy

connection point is making sure the employer relations team is familiar with the research the faculty does so that if the opportunity arises to propose a conversation about a collaboration, that connection can be made. Employers are looking for unusual ways to get onto campus—working with a faculty member with expertise and access to great students in the discipline the employer wants to recruit from creates a win-win-win situation.

### **5.6.1.2. Operational Recommendations**

There were four recommendations for operational decisions, unrelated to service offerings, that came out of this study based on Hackman's (1985) theoretical framework. Each of these tactical recommendations are provided below.

## **7. Maintain a placement-oriented philosophical orientation and track and report the post-graduate outcomes of students**

In 1999, Rayman wrote:

The emphasis previously put on placement must be redirected across a range of activities (e.g., purveying occupational and educational information, providing individual and group career counseling, conducting vocational assessment, teaching job-seeking skills, delivering life-career planning workshops, installing computer-assisted interventions, cultivating emerging small employers) that confirm the provision of career services as a part of the total postsecondary experience. (p. 3)

However, a 2013 U.S. survey by Hart Research Associates, referenced by Hazelkorn (2015), established that 84% of voters thought colleges should be required to make information available regarding job placement rates of their graduates.

In reviewing the most commonly offered services offered by career centres today, four of the top six services are definitively placement oriented (e.g., resume/cover letter critiques, interview preparation, mock interviews, and a job

board). Career centres, no matter how they choose to articulate their philosophical orientation, continue to provide placement-oriented services. Despite efforts to eradicate “placement” from the terminology used to describe our offices, these services still define us.

My recommendation is that we stop trying to deny the label of “placement” but rather embrace it. This is what our students want from their post-secondary experience—to get a good job. If career centres are the primary unit that support students in achieving this goal and vocalize that their mission on campus is to support students in achieving that goal, I believe the resources will follow.

### **8. Investigate how to support institutional participation in national and international rankings**

Bastedo and Bowman (2011) conducted an empirical study to test the hypothesis that institutional revenue is linked to rankings participation. They found that students and parents were somewhat influenced by rankings when students sought to improve their social status by attending a non-local university. However, faculty and institutional administrators themselves were more profoundly influenced by rankings as a measure of quality. The rankings were determined to highly influence faculty who sit on federal or provincial boards that make R&D allocations as well as influence the decisions of senior administrators for internal resource allocations because they are perceived to have significant influence on perspective students, alumni, parents, and other donors.

Because rankings participation is important to senior administrators, it is logical that career centres that support the effort to participate in the most appropriate rankings for their institutions (e.g., the ones where their institution is likely to rank most favorably) are likely to be perceived by internal administrators as supportive of institutional goals. U.S.-based business school career centres seeking to compete for the top non-local MBA candidates have long been involved in providing these data to a variety of rankings publications.

As noted in Chapter 4, there are a variety of ways career centres in Canada support institutional rankings participation. The most commonly reported ways to support rankings participation is to supply post-graduate employment and salary data in the rankings process. Clearly, only those career centres that collect this information can participate in rankings support in this way, which provides another argument for collecting post-graduate outcome data in the first place.

Beyond these ways to support institutional rankings, I suggest that career centres themselves seek out rankings where they feel that their institution would be well represented beyond the large-scale international and national rankings. For example, my home institution, Simon Fraser University, wanted to become known as a globally oriented institution. When I received an email about the QS World Ranking, I forwarded it to our Institutional Research area, which agreed that we should participate. The role of the career centre in this ranking was to distribute the survey to our employers, particularly those outside of Canada. We actively participated, along with other institutional units, for the past several years and have placed in the top 50, bringing us increased prestige and reputational awareness. Career centre staff, with their connections to the corporate community, can bring local or new rankings to the attention of the appropriate people on campus and support their initiatives to participate.

### **9. Embrace the use of social media platforms to build the career centre brand**

A 2012 survey of 78 U.S. career centres showed that 97% were using some kind of social media platform (Osborn & LoFrisco, 2012). Four years later in Canada, that percentage was only 88%, according to this study. Osborn and LoFrisco (2012) found that the benefits to using social media sites, as noted by the career centres using them, outweighed the drawbacks, and benefits included students' responsiveness to social media sites; increased visibility and attendance at events; increased communication with students; and increased connection to

alumni, professionals, and employers. In addition, it is low-cost or free and easy to use. A few respondents also commented that using social media helped them maintain their image with students that they were current in their field by posting articles and other resources.

While Osborn and LoFrisco's (2012) study did not investigate the perceptions of administrators or faculty on career centre social media usage, I found the comment about appearing relevant to be particularly telling because it indicated an awareness of how social media could influence the power of career centres on campus. Interestingly, 75% of the career centres in Osborn and LoFrisco's study reported advertising their social media activity through other means, such as email signatures of staff, websites, print materials, and other tools, to increase on-campus awareness of their social media sites. While the majority of this marketing was undertaken to increase the uptake of their platforms by students, an added benefit is the visibility on campus for resource allocation decision makers.

In their study, Osborn and LoFrisco (2012) also found career centres mainly used social media to provide information, including job search tips, links to career-related articles, and information about events and workshops. Interestingly, most career centres, 78%, reported that 25% or less of their tweets or posts were directly related to job postings. Similar to the unwillingness of career centres to embrace their placement role, I think that this is a missed opportunity to engage with students and to increase institutional reputation. Since the primary reason students attend post-secondary institutes is to get a good job, promoting some of the key post-graduate opportunities available to students and alumni would increase followership. Additionally, highlighting one or two great jobs from high-profile employers would solidify the on-campus reputation of the career centre as the connection point to the employer community.



## **10. Implement a Customer Relationship Management (CRM) system to be able to track relationships with employers and provide real-time data to internal constituents**

In my experience, smaller career centres spend the majority of their time working directly with students on the preparation side. They may or may not have anyone dedicated full-time or part-time to employer relations. However, other units on campus—alumni relations, advancement/development, faculty, the president's office, and many others—are making connections with the corporate community. I believe that the best argument smaller career centres can make is for a unified CRM system for all external-focused units, which would allow the career centre to tap into the existing corporate connections more easily for job leads and to support career programming. These connections could be tracked and leveraged by other units within the institution as well. The biggest barrier, in my experience, to a united CRM is political. Departments are protective of their data and their contacts. It takes a significant amount of internal power, to use Hackman's term, to bring everyone together on a project of this scale (Hackman, 1985). However, being able to implement it may raise the profile and perceived value of the career centre itself.

### **5.6.2. Using Survey Results to Benchmark Your Career Centre**

When I began this study, I sought to better understand the landscape of post-secondary career services in part because I wanted to be able to compare how the career centre where I am director was performing in terms of services, metrics, and resources to similar career centres in Canada. One way that the data in this study could be used by career centre practitioners is to use it to benchmark their services with similar career centres to see if the services they are providing, the metrics they are collecting, and the resources that they have available are similar to other career centres of their type, institutional type, or geographic region.

As an example, take a fictional Western, university-based, centralized career centre. The career centre has six professional staff and two support staff and is tasked with providing career services for 15,000 students. The total annual budget for the career centre is \$725,000, of which \$65,000 is operating budget.

One way to benchmark the resources available is to calculate the student-to-staff ratio by dividing the number of students by the number of staff and the budget per student by dividing the budget by the number of students. The fictional career centre ratios can be seen in Table 70. Since budget and staff numbers vary significantly by career centre type, the comparison benchmark is other centralized career centres. Both the total staff- and professional staff-to-student ratios are lower than the mean within one standard deviation, which indicates that our sample career centre is slightly better resourced, from a staffing perspective, than most centralized career centres.

**Table 70: Benchmarking resources using the data**

	Sample career centre	Centralized center mean	Centralized centre standard deviation
Student-to-professional staff ratio	1:2,500	3,023	2,487
Student-to-total staff ratio	1:1,875	2,274	1,681
Total budget per student	48.33	52.70	56.91
Operational budget per student	4.33	4.53	5.16

On the other hand, both the total budget per student and the operational budget per student are slightly lower than the mean, within one standard deviation, indicating that the sample career centre has slightly lower resources, from a financial perspective, than the average career centre.

Similar comparisons can be made to determine if the services offered by this fictional career centre to students, alumni, employers, and faculty are similar to other career centres the area. For example, if our Western-based fictional centre

did not currently offer career panels, portfolio development workshops, or services for entrepreneurs, it might want to consider adding them its portfolio so students from this institution remain competitive with those from other local institutions. On the other hand, if the fictional career centre offers an externship program, it knows that it is a relatively unique service because it is only offered at four other career centres in Canada, which may be worth highlighting to senior administrators to demonstrate innovation.

## **5.7. Conclusion**

This study sought to describe several facets of the operations of Canadian post-secondary career centres by providing descriptive data on the impact on career centre operations of external factors such as technology changes and student population shifts; internal factors such as reporting lines; human, financial and spatial resources available to career centres; services offered to students, alumni, employers and faculty; philosophical orientations of career centres; and the success measures collected and reported. These data will enable career centre leaders to benchmark their own operations with other Canadian career centres.

Using Hackman's (1985) theory of power and centrality in resource allocations as the analytical framework, I evaluated these findings to provide 10 tactics that career centres might implement at their own institutions that may support increased resource allocations. This study is already having an impact on practice because a research brief summarizing much of the benchmarking data has been widely distributed through several presentations and conferences. It is being incorporated into the training programs of CACEE for new career services professionals and was presented in three webinars in early 2018. The value of collecting it has been acknowledged, and a follow-up survey has been scheduled in 2019 to collect longitudinal data through a modified, shortened version of the survey.

Additionally, it is hoped that this study will have an impact on future research into resource allocations using Hackman's theory as the analytical tool for other non-academic units by providing a framework for determining the centrality or peripherality of the unit. From this study also came several other recommendations for future research to better understand the role of career centres in the post-secondary context. Recommendations for policy makers, including institutional leaders and professional associations, impacting the practice of career development were also included.

In closing, this research stemmed from my daily role as a practitioner frustrated by budget cuts and staffing reductions in the face of increasing student demands. I believe that the 10 practical tactics provide a solid starting point for career centre leaders seeking to improve their resources. Personally, I started implementing many of them at my own centre as the data emerged over the past few years and have found that making my case at the budget table each year is easier.

I take from this study a deeper respect for my career services colleagues across Canada, particularly those in centralized career centres with enormous mandates who have been so willing to share their stories and the details of their operations despite the increasing pressures of their offices. I feel very blessed to work in an institution that supported me in completing this research by providing some release time and providing a safe space to discuss and debate the results. I hope that these findings help to support the great work that is being done across Canada that most assuredly contributes to the success of thousands of post-secondary graduates each year.

## 5.8. Lessons learned

The journey I undertook to complete this dissertation was not without its challenges. There were times when I wondered if I would ever complete it and, if I did, would it make difference in how I approached my practice, my scholarship or my thinking. In reflecting back at the end of this journey, I can definitively say the process has had a fundamental impact on how I view research, theory and my practice.

One of the biggest lessons I learned was the importance of theory as a foundation for understanding what is both possible and probable in practice. Being able to name my own theoretical orientation and the lens through which I see things brings a better understanding of different perspectives approaches. Having a solid theoretical approach to answering research questions provides a useful framework to ensure my research is effective and efficient. For example, if I had Hackman's (1985) theory in mind when designing my survey, I would have asked several different questions but I also would have eliminated many, many others. With this framework, the entire survey would have had more focus.

Additionally, I learned that bigger and more comprehensive is not always better. While my study helped clarify the picture of the Canadian landscape, the number of variables generated impacted the ability to make conclusions without increasing the likelihood of errors. A more focused approach could have provided stronger conclusions about particular aspects of career centre operations rather than a broad strokes description of many components.

Finally, I found this dissertation to be a wake up call for me on the importance of supporting the creation of more Canadian context. As a transplanted American, this study opened my eyes to how often Canada is assumed to be just like the U.S. It has creating a lasting awareness of my own

natural inclination to make the same mistake which, hopefully, I can now be more mindful of in future work and practice.

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## Appendix A.

### Table of Research Questions and Variables

Section 1: Overview				
Survey question	Research questions	Literature influencing addition	Answer type / Variable type	Data Analysis
1. If the career centre where you work has a mission and / or vision statement, please include them here.	SQ2; RQ1	Hackman	Open ended	Coding for themes
2. How would you describe the philosophical orientation or guiding principals of your career centre (i.e. planned happenstance, chaos theory, placement focused, developmental, etc.)?	SQ5	Theoretical Orientation	Open ended	Coding for themes
3. Do you foresee any changes to your career centre mandate in the next few years? If so, please describe.	SQ2; RQ1	External conditions; Internal conditions	Open ended	Coding for themes
4. In your opinion, what changes have career centres in Canada experienced in the last 5 years?	SQ1; SQ2; RQ1	External conditions; Internal conditions	Open ended	Coding for themes

5. What career services issues are you reading about or talking about with your colleagues?	SQ1; SQ2; RQ1	External conditions; Internal conditions	Open ended	Coding for themes
Section 2: Career Centre Resources				
<b>Survey question</b>	<b>Research questions</b>	<b>Literature influencing addition</b>	<b>Answer type / Variable type</b>	<b>Data Analysis</b>
6. Name of Institution	Demographic		Open ended	N/A
7. In which province or territory is your institution located?	Demographic		Constructed, categorical variable	Descriptive statistics
8. Which selection best describes the type of institution where you work?	Demographic		Constructed, categorical variable	Descriptive statistics
9. The language spoken at your institution is primarily:	Demographic		Constructed, categorical variable	Descriptive statistics
10. What is the name of your career centre / unit?	SQ2	Internal conditions	Open ended	Coding for themes
11. Which best describes the type of unit where you work?	SQ2; Demographic	Internal conditions	Constructed, categorical variable	Descriptive statistics

12. Has the type of career centre at your institution changed over the past few years? If so, how? (i.e. Two centres combined; A new centre was created within a faculty.)	CACEE question		Open ended	Not analyzed in this study
13. What do you perceive to be the strengths of your current structure / model?	CACEE question		Open ended	Not analyzed in this study
14. What do you perceive to be the weaknesses of your current career structure / model?	CACEE question		Open ended	Not analyzed in this study
15. To which type of unit / area does your career centre directly report?	SQ2; RQ1	Hackman; Internal conditions	Constructed, categorical variable	Descriptive statistics
16. What is the name of the area to which your career centre reports?	SQ2; RQ1	Hackman; Internal conditions	Open ended	Coding for themes; Descriptive statistics
17. To whom (job title) does the director/manager of your career centre report?	SQ2; RQ1	Hackman; Internal conditions	Open ended	Coding for themes; Descriptive statistics
18. Has your reporting structure changed in the last few years? If so, how?	SQ2;RQ1	Hackman; Internal conditions	Open ended	Coding for themes



19. What do you perceive to be the strengths / weaknesses of this reporting structure?	SQ2;RQ1	Hackman; Internal conditions	Open ended	Coding for themes
20. In your opinion, how is your career centre perceived by your senior leadership?	SQ2; RQ1	Hackman	Open ended	Coding for themes
21. What is the total current student population your office is responsible for serving?	SQ4	Hackman; Services; Resources	Open ended number	Descriptive statistics
22. What is the approximate percentage of your total student population that accesses your services (except job postings or other online, open resources)?	SQ4	Hackman	Open ended number	Descriptive statistics
23. Of your total student population, what is the approximate percentage of international students?	SQ4	External conditions; Services	Open ended number	Descriptive statistics
24. What type(s) of students does your office serve? Select all that apply including those that pay a service fee.	SQ4	External conditions; Services	Constructed, categorical variable	Descriptive statistics
25. What is your current title?	SQ2; Demographic	Hackman	Open ended	Coding for themes
26. How many years have you worked at your career centre?	Demographic		Open ended number	Descriptive statistics

27. How many years have you worked in the career services field?	Demographic		Open ended number	Descriptive statistics
28. What is your educational background? Please check all that apply.	SQ3; Demographic		Constructed, categorical variable	Descriptive statistics
29. How many professional staff does your centre have in each category?	SQ3	Resources	Constructed, categorical variable	Descriptive statistics
30. Do professional staff within your career centre hold faculty positions?	SQ3	Resources	Binary variable	Descriptive statistics
31. If your centre has a minimum educational requirement for professional staff in each area, please indicate it:	SQ3	Resources	Constructed, categorical variable	Descriptive statistics
32. What professional designations / certifications does your centre REQUIRE for professional staff?	SQ3	Resources	Constructed, categorical variable	Descriptive statistics
33. How many non-professional staff (paid or unpaid) does your career centre have in each category this year?	SQ3	Resources	Open ended number	Descriptive statistics
34. Does your centre utilize students as peer advisors or coaches?	SQ3	Resources	Binary variable	Descriptive statistics
35. Does your career centre have a formal staff performance management / review process?	SQ3; SQ6	Resources; Success measures	Binary variable	Descriptive statistics

36. If you have a performance management program for staff, does it directly impact their compensation? Check all that apply.	SQ3; SQ6	Resources; Success measures	Constructed, categorical variable	Descriptive statistics
37. In what ways are your staff encouraged to contribute to the field of career development?	CACEE question		Constructed, categorical variable	Not analyzed for this study
38. Does your career centre provide any of the following professional development opportunities for your professional staff? Check all that apply	CACEE question		Constructed, categorical variable	Not analyzed for this study
39. If your career centre provides professional development on specific topics, what area(s) were provided in the past year for any professional members? Please select all that apply.	CACEE question		Constructed, categorical variable	Not analyzed for this study
40. Does your career centre anticipate a leadership change in the next 3-5 years?	CACEE question		Constructed, categorical variable	Not analyzed for this study
41. Does your career centre have any form of succession plan in place for leadership changes?	SQ3	Internal conditions; Success measures	Constructed, categorical variable	Descriptive statistics
42. Where is your career centre located on campus?	SQ3	Hackman; Resources	Constructed, categorical variable	Descriptive statistics

43. Approximately how many square feet does your career centre occupy?	SQ3	Hackman; Resources	Open ended number	Descriptive statistics
44. Which of the following are built into your career centre?	SQ3	Resources	Constructed, categorical variable	Descriptive statistics
45. If you anticipate any changes to the location or footprint of your career centre, please describe.	SQ3	Hackman; Resources	Open ended	Coding for themes
46. Does your career centre pay to outsource or hire consultants to provide any of its services?	SQ3	Resources	Binary variable	No skips question 47; Descriptive statistics
47. What services does your career centre outsource either partially or completely:	SQ3	Resources	Constructed, categorical variable	Descriptive statistics
48. Please provide your career centre's approximate 2015-2016 budget information	SQ3	Resources	Open ended number	Descriptive statistics
49. How has your career centre's operational budget (excluding salaries) changed over the past 3 years?	SQ3	Resources	Constructed, categorical variable	Descriptive statistics
50. What are the primary reasons your operational budget has changed over the past 3 years?	SQ3	Resources; Hackman; Success measures	Constructed, categorical variable	Descriptive statistics

51. Approximately what percentage of your career centre's budget comes from each of the following sources (Must add to 100%):	SQ3	Resources	Open ended number	Descriptive statistics
52. If you receive an institutional budget allocation, which best describes how it is determined:	SQ3	Resources; Hackman	Constructed, categorical variable	Descriptive statistics
53. How is your career centre's percentage of the larger unit's budget determined?	SQ3	Resources	Constructed, categorical variable	Descriptive statistics
54. When your career centre budget is determined, which factors are taken into consideration?	SQ3; SQ4; SQ6	Resources; Hackman	Constructed, categorical variable	Descriptive statistics
55. What other factors are taken into consideration when justifying your budget?	SQ3; SQ4; SQ6	Resources; Hackman	Open ended question	Coding for themes
<b>Part 3: Career Center Services for Students, Alumni, Employers and Others</b>				
<b>Survey question</b>	<b>Research Questions</b>	<b>Literature influencing addition</b>	<b>Variable type</b>	<b>Data Analysis</b>
56. Please indicate the services your career centre offers to STUDENTS. Please indicate if you currently charge a fee for each services.	SQ4	Services; External conditions	Constructed, categorical variable	Descriptive statistics
57. Please list any other service your career centre provides to STUDENTS that is not listed above. Please indicate when you	SQ4; RQ1	Services	Open ended question	Coding for themes

started offering it and if there is a fee.				
58. For the services you've stopped providing over the past five years, please indicate how important each consideration was in eliminating these services.	SQ4; SQ6	Services; Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
59. For the student services you've started providing over the past five years, please indicate how important each consideration was in creating these services.	SQ4; SQ6	Services; Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
60. What do you consider to be the most innovative 1-3 services your career centre provides to students? Please describe them in detail.	CACEE Question		Open ended	Not analyzed for this study
61. Does your career centre offer programs or services for students who want to become entrepreneurs?	SQ4	Services	Binary variable	No skips question 62; Descriptive statistics
62. What types of services does your career centre provide for students who want to become entrepreneurs?	SQ4	Services	Open ended question	Coding for themes
63. Does your career centre offer a career course or series (credit or non-credit) for students?	SQ4	Services	Binary variable	No skips question 64 & 65;

				Descriptive statistics
64. What is the structure of your course / series for students? Is it tuition based, fee assessed or no fee?	SQ4	Services	Constructed, categorical variable	Descriptive statistics
65. If your career centre offers required career programming in a different format, please describe below. Please include if it is for graduate and/or undergraduate students and if there is a fee assessed.	SQ4	Services	Open ended question	Coding for themes
66. Does your career centre offer services to alumni?	SQ4	Services; External conditions	Binary variable	No skips questions 67- 76; Descriptive statistics
67. Please indicate the services your career centre offers to ALUMNI Please indicate if you currently charge a fee for each services.	SQ4; RQ1	Services	Constructed, categorical variable	Descriptive statistics
68. Please list any other service your career centre provides to ALUMNI that is not listed above. Please indicate if there is a fee.	SQ4	Services	Open ended question	Coding for themes
69. What do you consider to be the most innovative 1-3 services your career centre provides to	CACEE question		Open ended question	Not analyzed for this study

alumni? Please describe in detail.				
70. On your campus, has there been increased or decreased interest in providing services for alumni in the past few years? What changes have you seen?	SQ4	Services; External conditions	Constructed, categorical variable	Descriptive statistics
71. What workshop topics does your career centre currently offer to students/alumni?	SQ4	Services	Constructed, categorical variable	Descriptive statistics
72. Please list any other workshop topics your career centre offers for students or alumni.	SQ4	Services	Open ended question	Coding for themes
73. In addition to providing alumni with services for their own career development, many career centres tap into alumni as a resource for current students. In what way does your career centre connect students with alumni?	SQ4	Services; Hackman	Constructed, categorical variable	Descriptive statistics
74. Please describe any other ways your career centre connects students with alumni.	SQ4	Services; Hackman	Open ended question	Coding for themes
75. What online resources does your career centre provide for students and alumni:	SQ4	Services	Constructed, categorical variable	Descriptive statistics
76. If your career centre uses a technology not listed here, please list it along with when you started offering it.	SQ4	Services	Open ended question	Coding for themes



77. Please indicate the services your career centre provides for EMPLOYERS. Please indicate if there is a fee for each services.	SQ4; RQ1	Services; External conditions	Constructed, categorical variable	Descriptive statistics
78. Please list any other services for EMPLOYERS that your career centre provides. Please include if you charge a fee for that service.	SQ4	Services; External conditions	Open ended question	Coding for themes
79. For the employer services you've stopped providing over the past five years, please indicate how important each consideration was in eliminating these services.	SQ4; SQ3; SQ6	Services; External conditions; Hackman	Constructed, categorical variable	Descriptive statistics
80. For the employer services you've started providing over the past five years, please indicate how important each consideration was in creating these services.	SQ4; SQ3; SQ6	Services; External conditions; Hackman	Constructed, categorical variable	Descriptive statistics
81. What do you consider to be the most innovative 1-3 services your career centre provides to employers? Please describe them in detail.	CACEE question		Open ended question	Not analyzed for this study
82. In what ways does your career centre engage employers on campus beyond recruiting activities? Please select all that apply.	SQ4; RQ1	Services; Hackman	Constructed, categorical variable	Descriptive statistics

83. Please list any other ways you engage employers on campus outside of recruiting activities.	SQ4; RQ1	Services; Hackman	Open ended question	Coding for themes
84. Does your career centre offer professional development opportunities for your employer connections?	SQ4	Services	Binary variable	No skips questions 85 & 86; Descriptive statistics
85. What types of professional development opportunities does your career centre offer for employers?	SQ4	Services	Constructed, categorical variable	Descriptive statistics
86. Please list any other professional development opportunities your career centre provides for employers.	SQ4	Services	Open ended question	Coding for themes
87. Does your career centre have a corporate partners program?	SQ4	Services; External conditions	Binary variable	No skips questions 88 & 89; Descriptive statistics
88. Please answer the questions below about your corporate partnership program.	SQ4	Services	Open ended question	Coding for themes
89. What services do employers who are part of your corporate partners program receive for their membership beyond what your career centre provides for non-members?	SQ4	Services	Constructed, categorical variable	Descriptive statistics

90. Does your career centre have a corporate advisory board?	SQ4	Services	Binary variable	No skips questions 91 & 92; Descriptive statistics
91. Please answer the questions below about your corporate advisory board.	SQ4	Services	Open ended question	Coding for themes
92. How does your career centre utilize your corporate advisory board?	SQ4	Services	Constructed, categorical variable	Descriptive statistics
93. How does your career centre assign employer relationship management?	SQ4	Services; Internal conditions	Constructed, categorical variable	Descriptive statistics
94. Does your career centre maintain a target employer list for new prospective employers?	SQ4	Services	Constructed, categorical variable	Descriptive statistics
95. Please indicate the services your career centre offers to FACULTY (as individuals - not for their classes) at your institution.	SQ4; RQ1	Services; Hackman	Constructed, categorical variable	Descriptive statistics
96. Please indicate the services your career centre provides to FACULTY for use in the classroom or working with students:	SQ4	Services; Hackman	Constructed, categorical variable	Descriptive statistics
97. Please list any other service your career centre provides to FACULTY that is not listed above. Please indicate when you	SQ4	Services; Hackman	Open ended question	Coding for themes

started offering it and if there is a fee.				
98. What do you consider to be the most innovative 1-3 services your career centre provides to faculty (if any)? Please describe in detail.	CACEE question		Open ended question	Not analyzed in this study
99. Please indicate the services your career centre specifically offers to PARENTS at your institution. Please indicate if you currently charge a fee for each services	SQ4	Services; External conditions	Constructed, categorical variable	Descriptive statistics
100. Please list any other service your career centre provides to PARENTS that is not listed above. Please indicate when you started offering it.	SQ4	Services; External conditions	Open ended question	Coding for themes
101. What do you consider to be the most innovative 1-3 services your career centre provides to parents (if any)? Please describe them in detail.	CACEE question		Open ended question	Not analyzed in this study
102. With which areas on campus does your career centre partner with to provide specific programs and services? How frequently do you collaborate?	SQ4	Services; Hackman	Constructed, categorical variable	Descriptive statistics
103. What other areas of campus, if any, does your career center collaborate with? How frequently do you collaborate?	SQ4	Services; Hackman	Constructed, categorical variable	Descriptive statistics

104. What are the primary considerations when partnering with other areas on campus?	SQ4, SQ3, SQ2, SQ6	Services; Resources, Hackman	Constructed, categorical variable	Descriptive statistics
105. What do you consider to be the 1-3 most innovative collaborations / partnerships your career centre participates in? Please be specific.	CACEE question		Open ended question	Not analyzed in this study
106. Does your career centre sell any products or services to companies, other institutions or the general public?	SQ4, SQ3	Services; Resources	Binary variable	No skips questions 107 & 108; Descriptive statistics
107. What types of non-core products / services does your career centre sell? To whom are they sold?	SQ4, SQ3; RQ1	Services; Resources	Open ended question	Coding for themes
108. Are there any other types of non-core products or services that your career centre sells for revenue generation? To whom are they sold?	SQ4, SQ3; RQ1	Services; Resources	Open ended question	Coding for themes
<b>Part 4: Career Centre Success Factors, Metrics and Reporting</b>				
<b>Survey question</b>	<b>Research questions</b>	<b>Literature influencing addition</b>	<b>Variable type</b>	<b>Data Analysis</b>

109. Does your career centre track and report any of the following metrics on overall office usage?	SQ6; RQ1	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
110. If your centre tracks post-graduate employment, what time frame do you use?	SQ6; RQ1	Success measures	Constructed, categorical variable	Descriptive statistics
111. How do you collect post-graduate employment information? Please select all that apply.	SQ6	Success measures	Constructed, categorical variable	Descriptive statistics
112. What has been your most successful methods for collection post-graduate employment information?	SQ6	Success measures	Constructed, categorical variable	Descriptive statistics
113. How has the number of metrics your career centre tracks changed over the past 5 years?	SQ6; RQ1	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
114. Which stakeholders, if any, have expressed interest in any of your career centre metrics in the last year?	SQ6, SQ2; RQ1	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
115. How has the number of stakeholders interested in your career centre metrics changed over the past 5 years?	SQ6, SQ2; RQ1	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
116. For which of these services does your career centre track/ report student or alumni usage rates?	SQ6	Success measures	Constructed, categorical variable	Descriptive statistics

117. Are there any other student / alumni services for which your career centre tracks usage rates?	SQ6	Success measures	Open ended question	Coded for themes
118. Does your career centre survey students about their satisfaction rates or learning outcomes for any of your programs or services?	SQ6	Success measures	Binary variable	No skips questions 119 -121; Descriptive statistics
119. For which of these services does your career centre survey students about their satisfaction rates or learning outcomes	SQ6	Success measures	Constructed, categorical variable	Descriptive statistics
120. Would you be willing to confidentially share your surveys / assessments with the researcher for additional analysis?	SQ6		Binary variable	No skips question 121
121. Thank you for agreeing to share your surveys/assessment instruments. Please indicate the email address at which the researcher can contact you for more information.	Demographic		Open ended	
122. Has your career centre conducted a student career needs assessment of your student body?	SQ6	Success measures; Hackman	Binary variable	No skips question 123; Descriptive statistics

123. What was the primary driver(s) behind your career centre's decision to implement a needs assessment?	SQ6, SQ4, SQ2	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
124. Has your career centre developed a set of learning outcomes or competencies students / alumni are expected to gain from interacting with your centre?	SQ6	Success measures; Hackman	Binary variable	No skips question 125 & 126; Descriptive statistics
125. What was the primary driver(s) behind your career centre's decision to define learning outcomes or competencies?	SQ6, SQ4, SQ2	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
126. Please list the learning outcomes or competencies your career centre has developed, if any.	SQ6	Success measures	Open ended question	Coding for themes
127. Please indicate the employer services for which your career centre tracks / reports usage metrics.	SQ6; RQ1	Success measures	Constructed, categorical variable	Descriptive statistics
128. Are there any other employer metrics that you track / report?	SQ6	Success measures	Open ended question	Coding for themes
129. Does your career centre solicit feedback from employers about your students or services?	SQ6; RQ1	Success measures	Binary variable	No skips question 130; Descriptive statistics



130. How does your career centre solicit employer feedback about your students and your services?	SQ6; RQ1	Success measures	Constructed, categorical variable	Descriptive statistics
131. Does your career centre track or report usage metrics for services for any stakeholder other than students/alumni or employers?	SQ6	Success measures	Binary variable	Descriptive statistics
132. If yes to any of the above, please describe the metric(s) your career centre is tracking or reporting.	SQ6	Success measures	Open ended question	Coding for themes
133. Is your career centre responsible for compiling or submitting data for national or international rankings?	SQ6	Success measures; Hackman	Binary variable	No skips questions 134 & 135; Descriptive statistics
134. What services does your career center provide to support your institution in national / international rankings? Check all that apply.	SQ6	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
135. Which ranking(s) does your career centre provide data for? Check all that apply.	SQ6	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
136. Has your career centre conducted an internal or external assessment of your career centre services in the past 5 years?	SQ6	Success measures	Binary variable	Yes skips question 137; Descriptive statistics

137. Will your career centre conduct an internal or external assessment of your career centre services in the next 5 years?	SQ6	Success measures	Binary variable	No skips question 138; Descriptive statistics
138. If your career centre already has or plans to conduct an assessment, what are your primary drivers for doing so?	SQ6, SQ4, SQ2	Success measures; Hackman	Constructed, categorical variable	Descriptive statistics
139. Does your career centre have a strategic plan?	SQ6	Success measures	Constructed, categorical variable	Descriptive statistics
140. Does your career centre produce an annual report?	SQ6	Success measures	Constructed, categorical variable	No skips questions 141 & 142; Descriptive statistics
141. Would you be willing to confidentially share your annual report(s) with the researcher for additional analysis?	SQ6		Binary variable	No skips question 142
142. Thank you for agreeing to share your annual report. Please indicate the email at which the researcher can contact you for additional information.	SQ6		Open ended question	
143. After the survey analysis is complete, there may be findings that require clarification or more information. Would	SQ6		Binary variable	No skips question 144

you be willing to be contacted about a follow-up interview?				
144. Thank you for your willingness to be contacted about an interview. Please provide your contact details so the researcher can follow up.	SQ6		Open ended question	
145. Thank you for completing this survey. If you would like a copy of the summary report, please enter your contact details below. Summary reports will be distributed in June 2017. If you are not interested, please leave these fields blank	SQ6		Open ended question	
146. If you are interested in being entered into the drawing for one of four Kindle e-Readers, please enter your email again below. Winners will be notified no later than December 15, 2017. If you are not interested, please leave this field blank	SQ6		Open ended question	

## Appendix B.

### One-Page Proposal for CACEE

#### **Career Centre National Survey: Services, Resources and Metrics**

*Request for CACEE Board consideration by Christine Sjolander, Executive Director, Graduate Career Management Centre, SFU Beedie School of Business*

There's little doubt that there is increasing interest in post-graduate placement outcomes from students, parents, senior administrators and the general public for all post-secondary institutions. Career centres in Canada are facing increasing pressures on their limited resources and increasing requirements to report the impact of their services on their students, alumni and employers. The purpose of the proposed survey is to provide real, aggregate data about changes to centre resources, services for students and employers, and metric collection and metric reporting over the past 5 years.

The survey will be in four parts and will take about 45 minutes to complete:

- Size, structure, populations served and reporting lines
- Career Centre resources (staff, operational budget, etc.) and how they are generated (institutional allotment, student levies, employer fees/company partner programs, entrepreneurial ventures, etc.)
- Services offered to students, alumni, employers and parents by career centres and how they've changed over the last 5 years
- Metrics career centres are currently collecting and reporting

#### **Asks from CACEE:**

- Recommend a small group (2-3) of CACEE representatives to review the survey questions and answer selections before the survey is finalized to ensure it comprehensively represents all post-secondary sectors and geographic locations. This will also provide an opportunity

for CACEE to add any questions that are relevant to the membership that might be outside the scope of this study but of interest to CACEE members.

- Distribute this online survey via email to your membership in August 2016. I will send a detailed message, approved through SFU's research ethics board, explaining the survey and use of data that can be distributed directly by Dan Relihan, CACEE president.
- Send two follow up reminders to CACEE members (mid-September and late September).

**In return for assistance with promotion and distribution, I will provide to CACEE:**

- Detailed aggregate results of the survey by sector (community college, university, central, business school, etc.) and by province for use in CACEE Career Educator 101 and Recruiter 101 workshops (assuming adequate response rate) in the form of a Research Brief for distribution in May 2017.
- Provide all survey participants with a summary report to use on their own campuses to advocate for additional resources as well as learn about creative practices other campuses are embracing
- Recognize CACEE's partnership in any publications, presentations or articles related to my dissertation work
- Present the results (if my proposal were accepted) at the CACEE Conference in June 2017
- All survey respondents will be invited to participate in a drawing for one of five Kindle eReaders.

**General Timeline:**

- April 2016: Invite CACEE representatives to review the draft survey using a Delphi methodology (iterative approach). Draft survey has already been submitted to my dissertation committee for initial review.
- May 2016: Incorporate feedback on survey from CACEE representatives and ethics review.
- July 2016: Pilot survey with small group of career centre representatives and incorporate any changes needed following pilot.

August 2016: Send to CACEE representatives for final review after changes from pilot.  
Sept – Oct: Wait through Career Centre peak period.  
Nov. 2016: Deploy online survey  
Jan. 2017: Close survey and start data analysis

**Questions:** Please contact me. Christine Sjolander, [csjoland@sfu.ca](mailto:csjoland@sfu.ca), 778-782-7704

## **Appendix C.**

### **Complete Online Survey**

#### **Career Centre Benchmarking Survey on Resources, Services and Metrics**

##### **Survey Instructions and Consent Information**

Thank you for your interest in completing the Career Centre Benchmarking Survey on Resources, Services and Metrics. This research is very important to better understand the career services field across Canada. This survey is being conducted in collaboration with the Canadian Association of Career Educators and Employers (CACEE) by Christine Sjolander, CACEE member and doctoral student in Education at Simon Fraser University. A long-time career practitioner, Christine also serves as the Executive Director, Graduate Career Management Centre at SFU's Beedie School of Business.

For the purposes of this survey, we use the term "career centre" to represent any unit, department or area dedicated the provision of career development services to students on campus. We are using a broad definition of career development services to include co-op, internship and other experiential learning programs, preparation programs for post-graduate employment, career related advisement and counseling services and services and job / employment search functions.

The purpose of this study is to gain a better understanding of how career services areas across Canada are resourced in terms of budgets and staffing, what services they provide to students, alumni, employers and others, and what metrics are being collected and reported. Assuming an adequate response rate,

data will be reported by region, sector (college, university, etc.) and by career center type so that institutions can better compare with their peers.

Because of its comprehensive nature, this study will take 60 - 90 minutes to complete. You may save your responses and return to complete it at a later time. Participation in this survey is entirely voluntary and you may exit the survey at anytime without submitting your responses for inclusion in the study. You are free to decline to answer any particular question you do not wish to answer for any reason. While all questions in the survey are optional, please answer them as completely as possible so that we can build a comprehensive picture of the Canadian post-secondary career development landscape.

All participants who complete the survey will receive a research brief with a summary of the results in June 2017. Participants will also receive the chance to win one of four Kindle e-Readers by submitting your email into the drawing. Winners will be notified no later than December 1, 2016 and prizes will be mailed to them. This survey will remain open for participation until November 10, 2016.

All responses will be kept confidential and will not be identified by individual. Responses will be compiled together and analyzed and reported as a group. Individual responses will be anonymized before inclusion in any future reports or publication. Only individuals who specifically provide consent within survey that they are willing to be re-contacted about sharing their annual reports or for follow-up interviews will be re-contacted by the researcher. No other participants will be re-contacted after the close of the survey.

This study has been designated as “minimal risk” to you as a participant as no anticipated harm will come to you through participation. Participation in this survey is entirely voluntary and you may exit the survey at any time without submitting your responses for inclusion in the study. Refusal to participate or withdrawal/dropout after agreeing to participate will not have an adverse effect or



consequences on the participants including impacting your entry into the drawing for a Kindle eReader.

If you would like to obtain any further information on details of the survey, please contact Christine Sjolander via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca). If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics [jtoward@sfu.ca](mailto:jtoward@sfu.ca) or 778-782-6593. By filling out this survey, you are consenting to participate. To continue, please click "next."

### **Part 1: Overview:**

1. If the career centre where you work has a mission and / or vision statement, please include them here.
2. How would you describe the philosophical orientation or guiding principals of your career centre (i.e. planned happenstance, chaos theory, placement focused, developmental, etc.)?
3. Do you foresee any changes to your career centre mandate in the next few years? If so, please describe.
4. In your opinion, what changes have career centres in Canada experienced in the last 5 years?
5. What career services issues are you reading about or talking about with your colleagues?

### **Part 2: Career Centre Resources**

In this section, we're collecting information on career centre staffing, budget and other resources at your career centre. For the purposes of this survey, "career

centre" refers to any unit or department that provides career development services on campus. Please answer the resourcing questions at your career centre specifically rather than the larger department or institution you may belong to.

6. Name of Institution:

7. In which province or territory is your institution located?

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nunavet
- Yukon
- Nova Scotia
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan

8. Which selection best describes the type of institution where you work?

- University
- University-College
- Public Institute
- Polytechnic
- College
- Private career college or institute
- Secular private university
- Faith-based or denominational institution
- Cegep system

9. The language spoken at your institution is primarily:

- English
- French
- Other

10. What is the name of your career centre / unit?

11. Which best describes the type of unit where you work?

- Centralized career centre with co-op
- Centralized career centre without co-op
- Decentralized career centre with co-op - faculty based (non-business)
- Decentralized career centre with co-op - business
- Decentralized career centre without co-op - faculty based (non-business)
- Decentralized career centre without co-op - business
- Centralized co-op office exclusively
- Decentralized co-op office exclusively - faculty based (non business)
- Decentralized co-op office exclusively - business
- Dedicated career professional working within another unit such as counseling, academic advising, etc.
- Other, please specify... \_\_\_\_\_

12. Has the type of career centre at your institution changed over the past few years? If so, how? (i.e. Two centres combined; A new centre was created within a faculty.)

13. What do you perceive to be the strengths of your current structure / model?

14. What do you perceive to be the weaknesses of your current career structure / model?

15. To which type of unit / area does your career centre directly report?

- Academic affairs
- Development / Advancement
- Enrollment Management
- Student Affairs / Student Services
- School/Faculty within the institution
- Other, please specify... \_\_\_\_\_

16. What is the name of the area to which your career centre reports?

17. To whom (job title) does the director/manager of your career centre report?

18. Has your reporting structure changed in the last few years? If so, how?

19. What do you perceive to be the strengths / weaknesses of this reporting structure?

20. In your opinion, how is your career centre perceived by your senior leadership?

21. What is the total current student population your office is responsible for serving?

22. What is the approximate percentage of your total student population that accesses your services (except job postings or other online, open resources)?

23. Of your total student population, what is the approximate percentage of international students?

24. What type(s) of students does your office serve? Select all that apply including those that pay a service fee.

- Undergraduate students of all Faculties
- Undergraduate students except those served by Faculty-specific career centres on campus
- Undergraduate students in your Faculty only
- Masters level students of all Faculties
- Masters level students except those serviced by Faculty-specific career centres on campus
- Masters level students in your faculty only
- PhD level students of all Faculties
- PhD level students except those serviced by Faculty-specific career centres on campus
- PhD level students in your Faculty only
- Diploma / certificate program students (all types)
- Continuing Education students
- International Exchange students
- Post-doc students

- Academically upgrading students
- Apprenticeship students
- EAL/ESL program students
- Prospective / newly admitted students
- Alumni
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

25. What is your current title?

26. How many years have you worked at your career centre?

27. How many years have you worked in the career services field?

28. What is your educational background? Please check all that apply.

- College or university certificate in career development
- Undergraduate degree in career development
- Undergraduate degree in \_\_\_\_\_
- Masters degree in \_\_\_\_\_
- Post-masters degree in career development
- Doctorate (EdD or PhD) in \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

### **Career Centre Staffing**

29. How many professional staff does your centre have in each category?

For the purposes of this survey, we are defining professional staff as non-student staff whose responsibilities are non-administrative. For part-time staff, please indicate the equivalent of full-time staff. For example, someone who works 1/2 time would equate to 0.5 FT staff.

Number whose  
primarily  
responsibility is in  
this area

Counselors/Advisors/Educators/Coaches/Consultants

Employer Relations specialists

Dual role (both counselors and employer relations)

Directors / Managers

Co-op specific advisors / coaches

Co-op specific employer relations

Co-op specific - dual role (both counselors and  
employer relations)

Internship specialists



Marketing specialists

Event management specialists

Technology specialists

Other

Total professional staff

30. Do professional staff within your career centre hold faculty positions?

- Yes. All professional staff are faculty.
- Only the manager/director is faculty.
- Some hold faculty appointments and some don't.
- No. None are faculty.

31. If your centre has a minimum educational requirement for professional staff in each area, please indicate it:

College /university certificate in career development	Undergraduate degree	Masters degree	Doctorate
-------------------------------------------------------------------	-------------------------	-------------------	-----------

Counselors / Advisors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer Relations Specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dual roles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Director / Manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Co-op specific advisors / coaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Co-op specific employer relations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Co-op specific - dual role (both counselors and employer relations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internship specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marketing specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Event management specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technology specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. What professional designations / certifications does your centre REQUIRE for professional staff?

- Certified Career Development Professional (CCPD)
- Career Development Practitioner (CCCD)
- Coaching certification (i.e. NACE or International Coach Federation)
- Canadian Counselling and Psychotherapy Association (CCC)
- Certified Human Resources Professional (CHRP)
- Ordre des psychologues du Québec (OPQ)
- Ordre des conseillers et conseillères d'orientation du Québec (OCCOQ)
- Ordre des conseillers en Ressources Humaines et en Relations Industrielles Agréés du Québec (CHRA)
- None required
- Other, please specify... \_\_\_\_\_

33. How many non-professional staff (paid or unpaid) does your career centre have in each category this year?

Administrative staff

Graduate assistants / interns

Co-op students

Volunteers/ interns/field placement

Work/study students

Other

34. Does your centre utilize students as peer advisors or coaches?

- Yes
- Not currently but we plan to.
- No. We don't have plans to use peer advisors.

35. Does your career centre have a formal staff performance management / review process?

- Yes, it works well
- Yes, but it's not as effective as we'd like

- No, but we plan to implement one
- No.
- I don't know.

36. If you have a performance management program for staff, does it directly impact their compensation? Check all that apply.

- Yes, staff receive some type of monetary reward for high performance.
- Yes, staff receive some type of non-monetary reward (i.e. interesting new projects, sabbaticals, etc.) for high performance.
- Yes, staff receive some kind of monetary penalty (i.e. no salary increase) for poor performance.
- Yes, staff receive some kind of non-monetary penalty (i.e. increased oversight of work) for poor performance.
- No. There is not a link between the performance management program and compensation.

37. In what ways are your staff encouraged to contribute to the field of career development?

- Presenting at conferences
- Writing for trade publications
- Writing for academic journals
- Supervising / training interns

- Volunteering in professional associations
- Reading / sharing relevant publications
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

38. Does your career centre provide any of the following professional development opportunities for your professional staff? Check all that apply

- Membership in professional associations (CACEE, CACUSS, CAFCE, etc.)
- Conference registration / travel
- Formal related training programs (MBTI, CACEE Career Educator, etc.)
- In-house professional development training by paid external consultants
- In-house professional development by internal experts (paid or unpaid)
- In-house professional development by partner employer organizations (unpaid or heavily discounted)
- Tuition waived or discounted for courses at your institution
- Participation in institutional PD events (through HR or other units)
- Provide professional development funds to be utilized by staff at their discretion
- Association webinars
- Other, please specify... \_\_\_\_\_

39. If your career centre provides professional development on specific topics, what area(s) were provided in the past year for any professional members? Please select all that apply.

- Career advisement/counseling skills
- Self-assessment instruments
- Working with special student populations. Please specify. \_\_\_\_\_
- Employer outreach / development
- Labour market / employment outlook information
- Social media training
- Fundraising
- Presentation skills / workshop facilitation
- Technology specific training (Prezi, CRM system, etc.)
- Mental / emotional health training
- Job search / employment tools
- Ethics and professional standards
- Other, please specify... \_\_\_\_\_

40. Does your career centre anticipate a leadership change in the next 3-5 years?

- Yes, our director/manager/chair is planning to retire.

- Maybe, our director/manager is open to new opportunities.
- No, our director/manager/chair plans to stay on longer than 3-5 years.
- I don't know.

41. Does your career centre have any form of succession plan in place for leadership changes?

- Yes, we have a plan.
- No, we don't.
- I don't know.

42. Where is your career centre located on campus?

- Within the student union
- Within the faculty department we serve
- We have our own building
- Within a student services dedicated building
- Other, please specify... \_\_\_\_\_

43. Approximately how many square feet does your career centre occupy?

44. Which of the following are built into your career centre?

- Private offices for counseling/advising team



- Private offices for all professional staff
- Workshop / classroom space
- Resource / library area
- Interview rooms
- Student work spaces
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

45. If you anticipate any changes to the location or footprint of your career centre, please describe.

46. Does your career centre pay to outsource or hire consultants to provide any of its services?

- Yes
- No

47. What services does your career centre outsource either partially or completely:

- Career advisement for students/ sub-group of students
- Career advisement for alumni/ sub-group of alumni
- Event management (career fairs, etc.)
- Specialized workshops/ skill development training for students
- Translation services

- Marketing materials / website development
- Online testing services
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

### **Career Centre Budgets**

In this subsection, we are collecting specific budget information to determine financial support from your institution.

48. Please provide your career centre's approximate 2015-2016 budget information

Salaries and benefits

Operational

Other

Total

49. How has your career centre's operational budget (excluding salaries) changed over the past 3 years?

- Increased significantly

- Increased slightly
- Remained the same
- Decreased slightly
- Decreased significantly

50. What are the primary reasons your operational budget has changed over the past 3 years?

51. Approximately what percentage of your career centre's budget comes from each of the following sources (Must add to 100%):

Institutional allocation

Student / alumni fees

Employer service fees

Employer partnership program fees

Ancillary fees/ sales of services/products

Grants

Donations / gifts

Other

52. If you receive an institutional budget allocation, which best describes how it is determined:

- Assigned percentage of larger departmental budget (i.e. Student Affairs, etc.)
- Specific dollar amount per student in population to be served
- Career centre formally presents budget request each year for approval
- Other, please specify... \_\_\_\_\_

53. How is your career centre's percentage of the larger unit's budget determined?

- Same percentage every year
- Varies based upon projected departmental need (i.e. larger graduating class, new academic program, etc.)
- Varies based upon demonstrated departmental need (i.e. career centre provides justification)
- Other, please specify... \_\_\_\_\_

54. When your career centre budget is determined, which factors are taken into consideration?

	Not a consideration	Consideration	Important consideration	Primary consideration	Unknown
Impact of external	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

factors  
(i.e.  
increased  
student  
population  
, inflation,  
etc.)

Proposed new career centre programs / services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
---------------------------------------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Usage rates of students, alumni and employers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
--------------------------------------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Quality measures of career centre programs / services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
----------------------------------------------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Impact of budget cut on services                             

Expectation of generation of external funds                             

55. What other factors are taken into consideration when justifying your budget?

**Part 3: Career Center Services for Students, Alumni, Employers and Others**

In this section, we will be collecting information about the programs and services your career centre offers to various stakeholders.

56. Please indicate the services your career centre offers to STUDENTS.

Please indicate if you currently charge a fee for each services. (Part 1)

For this question, please select all options that apply to each service. For example, if your centre currently offers a job shadowing program that was started 2 years ago where you charge students a fee, please select "Currently providing", "Started providing in last 5 years" and "Fee charged." This question refers to current students of any type. If some students are charged a fee and some are not, please default to the students who are the primary users of that service.

	Currentl y providin g	Started providin g in last 5 years	Stopped providin g in last 5 years	Plan to provide in next 2 years	Do not offer/ plan to offer	Fee charged
Counseling / advising appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counseling / advising advisement - drop in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counseling / advising - online (email, IM, webinar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic advising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self- assessments - online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Self- assessments - pen/paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information resources - online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information library (physical space)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job shadowing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mentoring program with alumni / employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer mentoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Peer advising program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - Summer jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty / major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - virtual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career conferences / Days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume / cover letter critiques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mock Interviews with staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate mock interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock interviews with peers/students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consulting / Case interviewing preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job Board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job alerts/subscriptions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

57. Please indicate the services your career centre offers to STUDENTS.

Please indicate if you currently charge a fee for each services. (Part 2)

For this question, please select all options that apply to each service. For example, if your centre currently offers a job shadowing program that was started 2 years ago where you charge students a fee, please select "Currently providing",

"Started providing in last 5 years" and "Fee charged." This question refers to current students of any type. If some students are charged a fee and some are not, please default to the students who are the primary users of that service.

	Currently providing	Started providing in last 5 years	Stopped providing in last 5 years	Plan to provide in next 2 years	Do not offer/plan to offer	Fee charged
Informational interview referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Networking events (not company sponsored)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock networking opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workshops on career topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Small group skills sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job club / small group job search sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career panels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career topic guest speakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student newsletter / blog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - local	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - non-local, in Canada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Company tours - non- local, international	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Externships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co- curricular record	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential file service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advisor to student clubs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for international students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Graduate school information

Linkedin Profile reviews

58. Please list any other service your career centre provides to STUDENTS that is not listed above. Please indicate when you started offering it and if there is a fee.

59. For the services you've stopped providing over the past five years, please indicate how important each consideration was in eliminating these services.

Not a consideration	Consideration	Important consideration	Most important consideration
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No longer necessary / students no longer need it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student participation was low	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff reductions / changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implemented similar new service of higher quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implemented similar new service with more efficiencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Save money / cut costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

60. For the student services you've started providing over the past five years, please indicate how important each consideration was in creating these services.

	Not a consideration	Consideration	Important consideration	Most important consideration
Address a gap in student career readiness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student interest in services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff increases / changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Similar to prior service but higher quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer interest in services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Desire to be innovative in field

Raise money / increase revenue

Other

61. What do you consider to be the most innovative 1-3 services your career centre provides to students? Please describe them in detail.

62. Does your career centre offer programs or services for students who want to become entrepreneurs?

Yes

No

63. What types of services does your career centre provide for students who want to become entrepreneurs?

Workshops on starting your own business

Workshops on business plan writing

Workshops on securing financing

Access to online resources

Career speakers / panels on entrepreneurship

- Entrepreneur in Residence program
- Fairs with start-up companies
- Support student entrepreneurship clubs
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

64. Does your career centre offer a career course or series (credit or non-credit) for students?

- Yes
- No
- One is in development

65. What is the structure of your course / series for students? Is it tuition based, fee assessed or no fee?

	Undergraduate students	Graduate students	Tuition based	Fee charged by career centre	No fee	Not offered
Career course - credit based, required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

for all  
students

Career  
course -  
credit  
based,  
required  
for some  
students

Career  
course -  
credit  
based,  
not  
required  
for any  
students

Career  
series -  
non-  
credit,  
required  
for all  
students

Career series - non-credit, required for some students

Career series - non-credit, not required

Co-op course - academic credit based, required for all students

Co-op course - academic credit based,

required  
for all  
CO-OP  
students

Co-op  
course -  
academi  
c credit  
based,  
not  
required

Co-op  
course -  
additive  
credit  
based,  
required  
for all  
students

Co-op  
course -  
additive  
credit  
based,  
required  
for all

CO-OP  
students

Co-op

course -  
additive  
credit  
based,  
not  
required

66. If your career centre offers required career programming in a different format, please describe below. Please include if it is for graduate and/or undergraduate students and if there is a fee assessed.

67. Does your career centre offer services to alumni?

- Yes
- No

68. Please indicate the services your career centre offers to ALUMNI Please indicate if you currently charge a fee for each services.

Only available up to 1-2 years out	Long-term access	Fee-based (immediate or after a period of time)	Not offered to alumni
---------------------------------------------	---------------------	----------------------------------------------------------	--------------------------

Career advisement appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career advisement - drop in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career advisement - online (email, IM, webinar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-assessments - online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-assessments - pen / paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information resources - online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information library (physical space)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty / major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career fair - virtual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career conferences / days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informational interview referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Networking events (not company sponsored)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alumni only job board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to student job board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job alerts/ subscriptions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume / cover letter critiques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Job club / small group job search sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workshops on career topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small group skills sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career topic guest speakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alumni newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential file service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for alumni with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for international alumni	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

69. Please list any other service your career centre provides to ALUMNI that is not listed above. Please indicate if there is a fee.

70. What do you consider to be the most innovative 1-3 services your career centre provides to alumni? Please describe in detail.

71. On your campus, has there been increased or decreased interest in providing services for alumni in the past few years? What changes have you seen?

72. What workshop topics does your career centre currently offer to students/alumni? Please select all delivery methods that apply.

	In- person	Webinar - live	Video / online - recorded	Not offered
Resume writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cover letters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job Search	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-Assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Networking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informational interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LinkedIn profiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salary/offer negotiation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Dining etiquette	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional / business etiquette	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graduate school preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career planning by academic year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presentation skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post-graduate success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal branding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Portfolio development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Choosing a major / concentration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Careers in.....major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finding internships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Preparing for co-op	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canadian work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dress / Personal image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hidden Job Market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government / Public Service applications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online job search / Application tracking systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social job search	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional school preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic careers / CV prep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MBTI or other specific assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Case interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working on campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

73. Please list any other workshop topics your career centre offers for students or alumni.

74. In addition to providing alumni with services for their own career development, many career centres tap into alumni as a resource for current students. In what way does your career centre connect students with alumni?

- Online tools such as a directory or database
- LinkedIn Groups
- Direct referrals to alumni for informational interviews
- Provide opportunities for alumni to host students for dinners or events
- Mentoring program between students and alumni
- Geographic region based events
- Leading career workshops
- Participation in new student orientation
- Contributions to student newsletters / blogs
- Connections to clubs or student groups

- Invitations to networking events with students
- Assisting with career programming (resume critiques, speed interviewing, etc.)

75. Please describe any other ways your career centre connects students with alumni.

76. What online resources does your career centre provide for students and alumni (Part 1)i:

	Curre ntly provid ing for stude nts	Curre ntly provid ing for alumn i	Starte d provid ing in last 5 years	Stopp ed provid ing in last 5 years	Plan to provid e in next 2 years	Do not offer/p lan to offer	Fee charg ed for stude nts	Fee charg ed for alumn i
Career Insider / Vault								
Wetfeet								
Career Cruising								
Optimal Resume								

VMOCK								
Optimal Interview								
Interview Stream								
TypeFocu s								
MBTI								
Strong Interest Inventory								
Strengths Quest								
CareerLea der								
Navigator								
Optimal letter								

Big Guide to Working Abroad								
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Going Global								
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Evisors/First Hand								
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10000 Coffees								
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12Twenty								
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77. What online resources does your career centre provide for students and alumni (Part 2):

	Currently providing for students	Currently providing for alumni	Started providing in last 5 years	Stopped providing in last 5 years	Plan to provide in next 2 years	Do not offer/planned to offer	Fee charged for students	Fee charged for alumni
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Facebook page								
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LinkedIn Group	[		[			[		
Twitter feed	[		[			[		
Other social media	[		[			[		
Symplicity	[		[			[		
Orbis	[		[			[		
WhoPlusY ou	[		[			[		
Jobpostin gs.ca	[		[			[		
TalentEgg	[		[			[		
Bridges	[		[			[		
Research opportuniti es database	[		[			[		

Webinars - purchased	[		[			[		
Online chat with coaches	[		[			[		
Road Trip Nation	[		[			[		
My World Abroad	[		[			[		
Governme ntal databases	[		[			[		
Handshak e	[		[			[		

78. If your career centre uses a technology not listed here, please list it along with when you started offering it.

79. Please indicate the services your career centre provides for EMPLOYERS. Please indicate if there is a fee for each services. (Part 1)

Currentl y	Started providin	Stopped providin	Plan to provide	Do not offer/pla	Fee charged
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	providing	in last 5 years	in last 5 years	in next 2 years	in to provide	
Job postings - full-time/post graduate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paper based job board/bulletin board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - summer jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty/major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - virtual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On Campus Interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Company Information Sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hallway tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Office hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Email blasts to students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Featured job postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social media campaigns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online / banner advertising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Print advertising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate partners program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Employer newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship postings - paid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship postings - unpaid (other than non- profit organizations )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volunteer postings (with non- profit organizations )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Part-time job postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

80. Please indicate the services your career centre provides for EMPLOYERS.  
Please indicate if there is a fee for each services.

	Currentl y providin g	Started providin g in last 5 years	Stopped providin g in last 5 years	Plan to provide in next 2 years	Do not offer/pla n to provide	Fee charged
Resume books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Candidate pre- screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introductions to faculty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introductions to student clubs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Promotion of employer events off campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Alumni only job board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pre- employment exam proctoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employer wage subsidy / tax credit information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video conference interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video conference presentation s	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Articles about company in newsletters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Consultation

s on  
recruiting  
practices

81. Please list any other services for EMPLOYERS that your career centre provides. Please include if you charge a fee for that service.

82. For the employer services you've stopped providing over the past five years, please indicate how important each consideration was in eliminating these services.

	Not a consideration	Consideration	Important consideration	Most important consideration
Student interest declined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer participation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Staff reductions / changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implemented similar new service of higher quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implemented similar new service with more efficiencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Save money / cut costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

83. For the employer services you've started providing over the past five years, please indicate how important each consideration was in creating these services.

Not a consideration	Consideration	Important consideration	Most important consideration
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Create opportunities for students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer requests for services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff increases / changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Similar to prior service but higher quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student / alumni interest in services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Desire to be innovative in field	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Raise money / increase revenue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

84. What do you consider to be the most innovative 1-3 services your career centre provides to employers? Please describe them in detail.

85. In what ways does your career centre engage employers on campus beyond recruiting activities? Please select all that apply.

- Mentors for students
- Guest lecturers in class
- Mock interviewers
- Career panelists
- Recruiters / employers in residence
- Provide career advising appointments
- Provide skills development workshops
- Provide resume critiques
- Dining etiquette workshop guests
- Take career centre staff on company tours
- Take students on company tours
- Corporate / program advisory boards
- Applied research projects
- Capstone project sponsors / judges
- Case competition coaches / judges
- Special event invitations

86. Please list any other ways you engage employers on campus outside of recruiting activities.

87. Does your career centre offer professional development opportunities for your employer connections?

Yes

No

88. What types of professional development opportunities does your career centre offer for employers?

	Free	Cost recovery fee	Revenue generating fee	Not offered
Interview skills training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Candidate assessment training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generational specific recruiting methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social media training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Best practices in campus recruiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Large employer only forums/conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small employer group meetings on trends (industry/geographic specific)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invitations to on-campus lectures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Newsletters with PD features or research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employer only networking events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nominate for awards / recognition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invite to open house to showcase institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide space for external PD events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Labour market trend / hiring information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

89. Please list any other professional development opportunities your career centre provides for employers.

90. Does your career centre have a corporate partners program?

- Yes
- No

If yes, please answer the questions below about your corporate partnership program.

91. Approximately how many employers belong to your program each year?

92. What is the fee for participation in your program?

93. How often do employer renew their membership?

94. Do you publicly post your corporate partners on your website?

95. What services do employers who are part of your corporate partners program receive for their membership beyond what your career centre provides for non-members?

- Advertising / branding online
- Advertising / branding within career centre
- Advertising / branding at events
- Early scheduling of on-campus interviews

- Early scheduling of company information sessions
- Free interview rooms or other on-campus recruiting activity that other employers pay for
- Resume book(s)
- Pre-screening of candidates
- Introductions to faculty
- Introductions to student clubs
- Introductions to administrators
- CPP only networking events
- CPP only professional development activities
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

96. Does your career centre have a corporate advisory board?

- Yes
- No

If yes, please answer the questions below about your corporate advisory board.

97. Approximately how many employers sit on your board each year?

98. Are employers expected to financially contribute to sit on the advisory board?

99. How often does your advisory board meet?

100. Do you publicly post your advisory board members on your website?

101. How does your career centre utilize your corporate advisory board?

- Provide input into career centre services
- Provide insights into recruiting and industry trends
- Review career center materials such as workshops, guides, etc.
- Share student resume book with advisory board
- First invitations for on campus recruiting activities
- First invitations for engagement activities
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

102. How does your career centre assign employer relationship management?

- Generalist(s) who works with all employers.



- By industry
- By student group, program or major
- By job type such as co-op or full-time
- By geographic area
- By employer priority (i.e. prestige, tiered list, etc.)
- Other, please specify... \_\_\_\_\_

103. Does your career centre maintain a target employer list for new prospective employers?

- Yes, and it's updated regularly
- Yes, but it's out of date
- No, we primarily respond to employer inquiries.
- No.
- I don't know.
- Other, please specify... \_\_\_\_\_

104. Please indicate the services your career centre offers to FACULTY (as individuals - not for their classes) at your institution.

- Career counseling / advising
- Career counseling / advising for spouses

- Professional development workshops
- CV reviews
- Job board access / alerts
- Web-based resources for faculty
- Research connections to industry
- Other, please specify... \_\_\_\_\_

105. Please indicate the services your career centre provides to FACULTY for use in the classroom or working with students:

- Self-assessments - online
- Self - assessments - pen/paper
- Access to career resources online for class
- Company tours for their classes
- Guest speakers for their classes
- Career related workshops in class (by staff)
- Employer connections for class projects
- Major/career specific information for faculty
- Reports on post-graduate employment
- Support for related assignments
- Pre / post experiential learning reflection assistance
- Other, please specify... \_\_\_\_\_

106. Please list any other service your career centre provides to FACULTY that is not listed above. Please indicate when you started offering it and if there is a fee.
107. What do you consider to be the most innovative 1-3 services your career centre provides to faculty (if any)? Please describe in detail.
108. Please indicate the services your career centre specifically offers to PARENTS at your institution. Please indicate if you currently charge a fee for each services.

	Currently providing	Started providing in last 5 years	Plan to provide in next 2 years	Do not offer/plan to offer
Parent orientation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parent newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parent website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged to post internships for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged to post co-op / internship / summer / part-time jobs for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Encouraged to post post-graduate jobs for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workshops for parents (other than orientation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allow parents to join students at advising meetings (with student's consent)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parent club or association	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guide for parents on supporting student's career development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

109. Please list any other service your career centre provides to PARENTS that is not listed above. Please indicate when you started offering it.

110. What do you consider to be the most innovative 1-3 services your career centre provides to parents (if any)? Please describe them in detail.

111. With which areas on campus does your career centre partner with to provide specific programs and services? How frequently do you collaborate?

	Annually	Once a semester/term	Monthly	Weekly	It happened once.	We don't collaborate.	Not applicable at my institution
Other career centres on campus		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
Academic advising (outside of your centre)		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
Counseling services (outside of your centre)		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
Academic departments / units		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
Advancement/Development		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
Alumni Relations / Association		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>

External Relations	<input type="checkbox"/>		<input type="checkbox"/>	
Offices for students with disabilities	<input type="checkbox"/>		<input type="checkbox"/>	
Offices for international students	<input type="checkbox"/>		<input type="checkbox"/>	
Offices for Indigenous students	<input type="checkbox"/>		<input type="checkbox"/>	
Offices for LGBTX students	<input type="checkbox"/>		<input type="checkbox"/>	
Offices for other minority populations on campus	<input type="checkbox"/>		<input type="checkbox"/>	
Women's centers	<input type="checkbox"/>		<input type="checkbox"/>	
Other student services units	<input type="checkbox"/>		<input type="checkbox"/>	

(outside of your  
centre)

Health centre	<input type="checkbox"/>		<input type="checkbox"/>	
Residence Life office	<input type="checkbox"/>		<input type="checkbox"/>	
Dining services	<input type="checkbox"/>		<input type="checkbox"/>	
Financial Aid / Services	<input type="checkbox"/>		<input type="checkbox"/>	
Teaching & Learning Centres	<input type="checkbox"/>		<input type="checkbox"/>	
Student recruitment	<input type="checkbox"/>		<input type="checkbox"/>	

112. What other areas of campus, if any, does your career center collaborate with? How frequently do you collaborate?

113. What are the primary considerations when partnering with other areas on campus?

Not a consideration	Consideration	Important consideration	Most important consideration
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Target specific student populations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase student participation / awareness as a whole	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tapping into expertise around campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solves logistics challenges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Desire to provide innovative services to students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Build reputation for career centre on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Sharing resources / costs for programming / services

○                      ○                      ○                      ○

114. What do you consider to be the 1-3 most innovative collaborations / partnerships your career centre participates in? Please be specific.

115. Does your career centre sell any products or services to companies, other institutions or the general public?

Yes

No

116. What types of non-core products / services does your career centre sell? To whom are they sold?

	Employers	Other schools	General public
Consulting services for internship program development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consulting services for recruiting program development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-house developed career development guides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Online workshops or webinars

In-house developed IT systems

117. Are there any other types of non-core products or services that your career centre sells for revenue generation? To whom are they sold?

#### Part 4: Career Centre Metrics and Reporting

In this section of the survey, we will ask you to identify the data you are currently collecting and reporting about your career centre activities.

118. Does your career centre track and report any of the following metrics on overall office usage? For the purposes of this survey, reporting internally refers to within your institution only. Reporting externally means through your website, reports or other public information.

	Track for career centre use only	Report internally	Report externally	Do not track
Total students who access centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total alumni who access centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total students who do NOT access centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total appointments provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total workshops offered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total event attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total employer contacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total jobs posted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post-graduate employment rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship employment rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-op employment rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graduate / professional school attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accessing online resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

119. If your centre tracks post-graduate employment, what time frame do you use?

- At graduation / program completion
- 90 days post-graduation / program completion
- 6 months post-graduation / program completion
- 1 year post-graduation / program completion
- 18 months post-graduation / program completion
- More than 18 months post-graduation/program completion
- We do not track post-graduate employment
- Other, please specify... \_\_\_\_\_

120. How do you collect post-graduate employment information? Please select all that apply.

- Online survey pre-graduation
- Online survey post-graduation
- Survey at convocation
- Phone calls to graduates
- LinkedIn or other online search tool
- External vendor conducts survey on our behalf
- Other area (institutional research, parent unit etc.) collects data on our behalf as part of larger survey
- Post card or snail mail letter to home address

- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

121. What has been your most successful methods for collection post-graduate employment information?

122. How has the number of metrics your career centre tracks changed over the past 5 years?

- Increased significantly
- Increased slightly
- Stayed the same
- Decreased slightly
- Decreased significantly
- I don't know

123. Which stakeholders, if any, have expressed interest in any of your career centre metrics in the last year?

- Students
- Senior administrators
- Alumni
- Parents
- Faculty

- Other units on campus
- Employers
- Media
- Donors
- Board of Governors
- Other, please specify... \_\_\_\_\_

124. How has the number of stakeholders interested in your career centre metrics changed over the past 5 years?

- Increased significantly
- Increased slightly
- Stayed the same
- Decreased slightly
- Decreased significantly

125. For which of these services does your career centre track/ report student or alumni usage rates? (Part 1) For the purposes of this survey, reporting internally refers to within your institution only. Reporting externally means through your website, reports or other public information.

Track for	Report	Report	Do not	Do not
career	internally	externally	track	offer
centre use				
only				

Counseling /advisement appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counseling / advisement - drop in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counseling / advisement - online (email, IM, webinar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic advising appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information library (physical space) usage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job shadowing participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mentoring program with alumni / employers participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer mentoring program participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer advising usage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career fair (all job types) attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - Summer jobs attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty / major specific attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - virtual - attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career conferences attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informational interview referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock Interviews with staff participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate mock interviews participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock interviews with peers/students participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Job board views	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job alerts/ subscriptions participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

126. For which of these services does your career centre track/ report student or alumni usage rates? (Part 2) For the purposes of this survey, reporting internally refers to within your institution only. Reporting externally means through your website, reports or other public information.

	Track for career centre use only	Report internally	Report externally	Do not track	Do not offer
Mock networking opportunities participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume / cover letter critiques number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job club / small group job search sessions participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Small group skills sessions attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career topic workshops attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career panels attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career topic guest speaker attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student newsletter subscribers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - local - participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - non-local, in Canada - participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Company tours - non-local, international - participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Externships - participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-curricular record users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential file service users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consulting / Case interviewing preparation participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for students with disabilities participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for international	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

student  
participation

Usage of online resources

Usage of online assessments

Usage of social media platforms

127. Are there any other student / alumni services for which your career centre tracks usage rates?

128. Does your career centre survey students about their satisfaction rates or learning outcomes for any of your programs or services?  
Satisfaction surveys address how valuable the participant felt the service to be. Learning outcomes are generally evaluated by assessing the student's pre-service understanding or skill level and his/her post-service understanding or skill level.

- Yes
- No

129. For which of these services does your career centre survey students about their satisfaction rates or learning outcomes? (Part 1)  
Satisfaction surveys address how valuable the participant felt the service to be. Learning outcomes are generally evaluated by assessing the student's

pre-service understanding or skill level and his/her post-service understanding or skill level.

	Satisfacti on Survey	Learning Outcomes Assessme nt	Do not survey	Report results internall y	Report results external ly	Do not offer
Career advisement appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career advisement - drop in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career advisement - online (email, IM, webinar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic advising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information library (physical space)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Job shadowing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mentoring program with alumni / employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer mentoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer advising program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - Summer jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty / major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career fair - virtual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informational interview referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock Interviews with staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate mock interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock interviews with peers/studen ts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job board / postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Job alerts/  
subscriptions                                   

130.      For which of these services does your career centre survey students about their satisfaction rates or learning outcomes? (Part 2)  
Satisfaction surveys address how valuable the participant felt the service to be. Learning outcomes are generally evaluated by assessing the student's pre-service understanding or skill level and his/her post-service understanding or skill level.

	Satisfaction Survey	Learning Outcomes Assessment	Do not survey	Report results internally	Report results externally	Do not offer
Mock networking opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume / cover letter critiques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job club / small group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



job search  
sessions

Small group  
skills  
sessions

Career  
topic  
workshops

Career  
panels

Career  
topic guest  
speakers

Student  
newsletter

Company  
tours -  
local

Company  
tours - non-  
local, in  
Canada

Company tours - non- local, international	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Externships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co- curricular record	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential file service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consulting / Case interviewing preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

international  
students

Online resources

Online assessments

Social media platforms

On campus jobs

131. Would you be willing to confidentially share your surveys / assessments with the researcher for additional analysis?

- Yes
- No

If yes, thank you for agreeing to share your surveys/assessment instruments. Please indicate the email address at which the researcher can contact you for more information.

132. Has your career centre conducted a student career needs assessment of your student body?

- Yes, and it's current.
- Yes, but it's out of date.
- Yes.
- We're in the process of conducting one now
- No, but we plan to in the next year.
- No.

133. What was the primary driver(s) behind your career centre's decision to implement a needs assessment?

- Saw a mismatch between services offered and student needs
- Want to keep up with best practices in field
- Want to provide justification for additional resources and support
- Required to conduct one by institutional leaders
- Other, please specify... \_\_\_\_\_

134. Has your career centre developed a set of learning outcomes or competencies students / alumni are expected to gain from interacting with your centre?

- Yes, and they're current.
- Yes, but they're out of date
- Yes.
- We're in the process of developing them now.

- No, but we plan to in the next year.
- No.

135. What was the primary driver(s) behind your career centre's decision to define learning outcomes or competencies?

- Ensure students are benefiting from programs and services
- Wanted to keep up with best practices in field
- Wanted to provide justification for additional resources and support
- Required to define them by institutional leaders
- Wanted to de-emphasize placement rate as outcome of services
- Ability to tie them into staff performance reviews
- Other, please specify... \_\_\_\_\_

136. Please list the learning outcomes or competencies your career centre has developed, if any.

137. Please indicate the employer services for which your career centre tracks / reports usage metrics.

Track for career centre use only	Report internally	Report externally	Do not track	Do not offer
-------------------------------------------	----------------------	----------------------	-----------------	-----------------

Job postings - full-time/post graduate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types) employer attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - summer jobs employer attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty/major specific employer attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - virtual employer attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company Information Session - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sessions - student  
attendance

Hallway tables -       
number of  
companies

Office hours -       
number of  
companies

Email blasts to       
students - number  
of companies

Featured job       
postings - number  
of companies

Social media       
campaigns -  
number of  
companies

Online / banner       
advertising -  
number of  
companies

Print advertising - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate partners program - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employer newsletter - employer subscribers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship postings - paid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship postings - unpaid (other than non-profit organizations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volunteer postings (with non-profit organizations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Part-time job postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



138. Please indicate the employer services for which your career centre tracks / reports usage metrics.

	Track for career centre use only	Report internally	Report externally	Do not track	Do not offer
Resume books - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume referrals - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introductions to faculty - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introductions to student clubs - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Promotion of employer events off campus - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alumni only job board postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Professional development workshops for employers - attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employer only networking events - attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pre-employment exam proctoring - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video conference interviews - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video conference presentations - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On Campus Interviews number of interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

On Campus

Interviews number  
of companies

139. Are there any other employer metrics that you track / report?

140. Does your career centre solicit feedback from employers about your students or services?

Yes

No

141. How does your career centre solicit employer feedback about your students and your services?

	Feedback on Students	Feedback on Career Centre Services
Individual meetings / phone calls with employers	<input type="checkbox"/>	<input type="checkbox"/>
Surveys to employers	<input type="checkbox"/>	<input type="checkbox"/>
Focus groups with employers	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

142. Does your career centre track or report usage metrics for services for any stakeholder other than students/alumni or employers?

- Faculty
- Parents
- Other units on campus
- Community members
- Other, please specify... \_\_\_\_\_
- None

143. If yes to any of the above, please describe the metric(s) your career centre is tracking or reporting.

144. Is your career centre responsible for compiling or submitting data for national or international rankings?

- Yes
- No

145. What services does your career center provide to support your institution in national / international rankings? Check all that apply.

- Post-graduate employment data
- Post-graduate salary data
- Distribution of surveys to employers for completion
- Distribution of surveys to alumni for completion
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

146. Which ranking(s) does your career centre provide data for? Check all that apply.

- McLeans
- Financial Times
- World University Ranking
- QS World Ranking
- Jobboom
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

147. Has your career centre conducted an internal or external assessment of your career centre services in the past 5 years?

- Yes, it was required.
- Yes, but it was not required.
- No.
- I don't know.

148. Will your career centre conduct an internal or external assessment of your career centre services in the next 5 years?

- Yes, it will be required.
- Yes, but it is not required.
- No.

I don't know.

149. If your career centre already has or plans to conduct an assessment, what are your primary drivers for doing so?

- It is required by our institutional leadership.
- Desire to keep up with best practices in the field
- Provide justification for additional resources
- Internal restructuring / staffing changes within the career centre
- Changes in student body driving changes to services
- Other, please specify... \_\_\_\_\_

150. Does your career centre have a strategic plan?

- Yes.
- Yes, but it's out of date.
- Yes, but it's incomplete.
- No.
- No, but we plan to create one.
- I don't know
- Other, please specify... \_\_\_\_\_

151. Does your career centre produce an annual report?

- Yes, and we share it publicly.

- Yes, but we only distribute it internally.
- No.
- No, but we plan to create one in the next couple of years.
- I don't know.

152. Would you be willing to confidentially share your annual report(s) with the researcher for additional analysis?

- Yes
- No

If yes, thank you for agreeing to share your annual report. Please indicate the email at which the researcher can contact you for additional information.

153. After the survey analysis is complete, there may be findings that require clarification or more information. Would you be willing to be contacted about a follow-up interview?

- Yes
- No

If yes, thank you for your willingness to be contacted about an interview. Please provide your contact details so the researcher can follow up.

Name

Email

Institution

Thank you for completing this survey. If you would like a copy of the summary report, please enter your contact details below. Summary reports will be distributed in June 2017. If you are not interested, please leave these fields blank.

Name

Institution

Email

If you are interested in being entered into the drawing for one of four Kindle e-Readers, please enter your email again below. Winners will be notified no later than December 15, 2017. If you are not interested, please leave this field blank.

Email



## Appendix D.

### Delphi Panel Invitation—General Participants

TO: Individual email  
FROM: Christine Sjolander <csjoland@sfu.ca>  
RE: Invitation to participate in instrument development Delphi panel

Dear <first\_name>

You are invited to participate in an exciting and important Delphi panel of experts to provide input on the design a nationwide survey of career services centres in Canada. As an experienced professional in career services, I believe you will have valuable contributions to make in the development of the survey.

This panel is being organised by myself, Christine Sjolander, a doctoral student at Simon Fraser University under the supervision of Dr. Michelle Nilson. Up to 10 experts from university, college and institute career centres from across Canada will be invited to participate in this Delphi panel.

This study uses the Delphi technique, and includes series of 3 on-line questionnaires designed

to identify important topics and/or themes by professionals. Each person on the panel completes all 3 questionnaires during the study in order to reach consensus among group members. The first online questionnaire consists of about 75 open-ended questions that should take no more than 30 minutes.

After all panel members have completed the first questionnaire, I will incorporate the findings to develop the second questionnaire for you to complete in June 2016. I will repeat this one last time to arrive at a final consensus among experts in

August 2016. Participants will each receive one chance to enter a drawing to win a Kindle e-reader for each round of the Delphi panel completed.

The results of the Delphi process will be used to develop an on-line survey of career centres in Canada. We also intend that this survey will be a learning process for everyone involved and will facilitate the interaction of experts and practitioners in an area of direct relevance to their common interest.

We will ask for your name, e-mail address, and other contact information in the questionnaires; however, this is for participant tracking only. All of your information will be kept confidential and all data will be aggregated and unidentifiable in subsequent reports.

You will find more details regarding Delphi process on the attached Consent Form.

Please be assured that participation is entirely voluntary and you will be able to withdraw from the process at any time. The results of the Delphi panel will be published as the final survey instrument as well as in other academic publications and my final doctoral dissertation.

If you would like to obtain any further information on details of the survey, please contact me via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca). If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics [jtoward@sfu.ca](mailto:jtoward@sfu.ca) or 778-782-6593.

To facilitate participation in this panel, I have included the link to the Round 1 questionnaire below. If you choose to participate in the panel, I respectfully request your completion of this survey no later than May 31, 2016. Completion of the questionnaire indicates your consent to participate in the panel.

<https://sfu.fluidsurveys.com/s/CareerCentreDelphi1/>

Your assistance is highly appreciated. I look forward to hearing from you.

Best wishes,  
Christine Sjolander

## **Appendix E.**

### **Delphi Round 1: Career Centre Benchmarking Survey**

#### **Instructions**

For each question in the survey, please list as many answer selections for the question as you can. If a question is unclear, please feel free to comment on the question itself as part of the answer.

1. Your Name
2. What types of career centre have you worked in? (Centralized with co-op, decentralized, etc.)
3. What type(s) of students does your office serve?
4. To which unit within your institution does your career centre report?
5. What types of roles do the professional staff in your career centre hold (i.e. Career Advisors, Employer Outreach, etc.)?
6. What types of roles do the non-professional staff does your career centre have (administrative, co-op students, etc.)?
7. What types of professional development opportunities does your career centre provide for your professional staff?
8. If your career centre provides professional development on specific topics, what areas have were provided in the past year for any professional members?

9. If your career centre outsources any services completely or partially, please list them.
10. How is your institutional budget allocation determined?
11. What factors are taken into consideration when determining your budget allocation?
12. Please list the services your career centre currently offers to STUDENTS.
13. What types of services, if any, does your career centre provide for students who want to become entrepreneurs?
14. If your career centre offers a career course for students or alumni, please describe it. Please include if it is for graduate and/or undergraduate students and if it is required or not.
15. Please list the services your career centre currently offers for alumni.
16. What workshop topics does your career centre currently offer?
17. In addition to providing alumni with services for their own career development, many career centres tap into alumni as a resource for current students. In what way does your career centre connect students with alumni or utilize them for career development programming?
18. What online resources does your career centre provide for students and alumni?
19. Please list the services your career center provides to EMPLOYERS.
20. Other than recruiting activities, how does your career centre engage employers on campus?

21. What types of professional development opportunities, if any, does your career centre offer for employers?
22. If your career centre has a corporate partners program, please describe it. How many members, who can join, how much does it cost, etc.
23. What services do employers who are part of your corporate partners receive for their membership beyond what your career centre provides for non-members?
24. If your career centre has a corporate advisory board, please describe it. How big is it, who can join, how are members selected, is there a fee?
25. How does your career centre utilize your corporate advisory board?
26. How does your career centre assign employer relationship management?
27. Does your career centre maintain a target employer list for new prospective employers? If so, how was it developed?
28. Please list the services your career centre currently offers to FACULTY.
29. Please list the services your career centre currently offers to PARENTS.
30. Please list the other departments / units with which your career centre collaborates.
31. Why does your career centre choose to collaborate with other departments / units on campus?
32. If your career center sells products or services to generate revenue, please list them below.

33. What office-level metrics does your career centre currently track? (i.e. total number of workshops, total jobs posted, total number of students who access career centre, etc.)
34. Which stakeholders have expressed interest in any of your career centre metrics in the last year?
35. For which of your services does your career centre track/ report student or alumni usage rates?
36. Does your career centre survey students about their satisfaction with any of your programs / services? If so, which ones?
37. Does your centre survey students on their learning outcomes after any of your programs or services? If so, which ones?
38. If you've developed learning outcomes for any of your programs or services, what were the reasons you decided to develop them?
39. If your career centre has conducted a needs assessment of your student body, what were the reasons you decide to conduct one?
40. What employer metrics does your career centre track / report?
41. How does your career centre solicit employer feedback about your students and your services?
42. If your career centre is tracking or reporting any metrics for other constituent groups, please describe what you're collecting and reporting.
43. What information, if any, does your career center provide to support your institution in national / international rankings?

44. Which ranking(s) does your career centre provide data for, if any?
45. If your career centre has conducted an internal or external assessment, or plans to in the near future, what are the reasons behind conducting the assessment?
46. What questions were not included in this survey that you think would be important to include?



## Appendix F.

### Delphi Round 2: Participant Invitation

Dear <First\_Name>,

Thank you very much for your feedback in the first round of the Delphi panel. Everyone who participated added value in making the questions more comprehensive and effective. I hope that you will continue to participate in the next round of feedback. For reference, I've also attached the consent form I included with the official invitation to participate.

I also wanted to update you on how this might fit into a possible collaboration between CACEE and CERIC. Just after I'd started this study, CERIC put out an RFP for a study very similar to the one I had already started for my dissertation work. After discussions with CACEE, in particular the CACEE Research Committee, I agreed to include this survey within CACEE's formal response to CERIC's call for proposals. We will not find out about the awarding of the proposal until the end of the month. However, with that in mind, there are some specific questions included in the attached draft that are specific to the CERIC proposal beyond the original scope of my work. If CACEE does receive the CERIC grant, Susan Forseille of Thompson Rivers University, will be following up the survey with interviews of a sample career centre leaders on the areas CERIC is most interested in. CACEE would also follow up this survey with another survey of campus leaders on the value of career development services on campus. If we are not awarded the proposal, I will be moving forward with this survey regardless, without the CERIC specific questions following the same time frame I originally outlined.

If this collaboration makes you uncomfortable or in any other way impacts your willingness to participate in the Delphi Panel, please let me know as soon as possible. You are welcome to exit the study at any point without penalty. Whether the CACEE proposal is successful or not, I will not personally be receiving any remuneration from CERIC or other institution for the completion of this study.

**Delphi Round Two Instructions:**

Attached please find an MS Word version of the draft of the full survey to be distributed to career centers nationwide. In this round, I'd like you to review the wording of each question, including the answer selections, for clarity, comprehensiveness and order. You do not need to answer the questions in the survey at this time. Instead, please make any suggestions for re-wording the questions and answers to make them more clear. I've turned on the "Track Changes" feature to capture your changes and please liberally use the "Comments" feature in MS Word to add any other thoughts.

Please complete your review and send me back your comments via email **no later than July 1.**

I will incorporate all changes into the next version of the survey which will be piloted with a small group of career professionals who have not seen any of the prior versions in late July. Following that pilot, if there are significant changes needed, I'll send out a final review to the Delphi panel by August 1. If the pilot doesn't generate significant changes, the third round of review may not be necessary so please include as much feedback as you're willing to share in this round.

If you have any questions about the survey or the process, please feel free to

reach out to me.

Best wishes,  
Christine

## Appendix G.

### Delphi Panel Invitation—CACEE Research Committee

TO: Individual email  
FROM: Christine Sjolander <csjolander@sfu.ca>  
RE: Invitation to participate in instrument development Delphi panel

Dear <first\_name>

You are invited to participate in an exciting and important Delphi panel of experts to provide input on the design a nationwide survey of career services centres in Canada. As a member of research committee of the Canadian Association for Career Educators and Employers (CACEE), I wanted to seek your participation first.

This panel is being organised by myself, Christine Sjolander, a doctoral student at Simon Fraser University under the supervision of Dr. Michelle Nilson. Up to 10 experts from university, college and institute career centres from across Canada will be invited to participate in this Delphi panel.

This study uses the Delphi technique, and includes series of 3 on-line questionnaires designed to identify important topics and/or themes by professionals. Each person on the panel completes all 3 questionnaires during the study in order to reach consensus among group members. The first online questionnaire consists of about 75 open-ended questions that should take no more than 30 minutes.

After all panel members have completed the first questionnaire, I will incorporate the findings to develop the second questionnaire for you to complete in June 2016. I will repeat this one last time to arrive at a final consensus among experts in August 2016. Participants will each receive one chance to enter a drawing to win a Kindle e-reader for each round of the Delphi panel completed.

The results of the Delphi process will be used to develop an on-line survey of career centres in Canada. We also intend that this survey will be a learning process for everyone involved and will facilitate the interaction of experts and practitioners in an area of direct relevance to their common interest.

We will ask for your name, e-mail address, and other contact information in the questionnaires; however, this is for participant tracking only. All of your information will be kept confidential and all data will be aggregated and unidentifiable in subsequent reports.

You will find more details regarding Delphi process on the attached Consent Form.

Please be assured that participation is entirely voluntary and you will be able to withdraw from the process at any time. The results of the Delphi panel will be published as the final survey instrument as well as in other academic publications and my final doctoral dissertation.

If you would like to obtain any further information on details of the survey, please contact me via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca). If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics [jtoward@sfu.ca](mailto:jtoward@sfu.ca) or 778-782-6593.

To facilitate participation in this panel, I have included the link to the Round 1 questionnaire below. If you choose to participate in the panel, I respectfully request your completion of this survey no later than May 31, 2016. Completion of the questionnaire indicates your consent to participate in the panel.

<https://sfu.fluidsurveys.com/s/CareerCentreDelphi1/>

Your assistance is highly appreciated. I look forward to hearing from you.

Best wishes,

Christine Sjolander

# Appendix H.

## Delphi Panel Consent Form

Consent Form for Delphi Panel

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**Career Centre Resources, Services and Metrics: A pan-Canadian benchmarking survey**

**Study Number: 2016s0165**

### ***Who is conducting the study?***

**Principal Investigator:** Christine Sjolander, Doctoral Student, Faculty of Education, csjoland@sfu.ca, 778-782-7704. This study is part of a doctoral dissertation for the completion of an Doctor in Education degree.

**Faculty Supervisor:** Michelle Nilson, Associate Professor, Faculty of Education, mnilson@sfu.ca, 778-782-8122

### ***Why should you take part in this study?***

We want to learn more about changes to the resources, services and metrics of Canadian career centres within post-secondary institutions. We are inviting people like yourself who have significant expertise in career centre operations to participate in a Delphi panel of experts to provide input into the design of a national on-line survey.

### ***Your participation is voluntary.***

Your participation is voluntary. You have the right to refuse to participate in this

study. If you decide to participate, you may still choose to withdraw from the study at any time without any negative consequences. If you choose to enter the study and then decide to withdraw at a later time, all data collected from you during your enrolment in the study will be destroyed.

### ***What is a Delphi study?***

The Delphi technique seeks to obtain consensus on the opinions of experts, termed panel members, through a series of structured questionnaires. As part of the process, the responses from each round are incorporated into the next round to the participants who are then given an opportunity to respond again to the emerging data. The Delphi is therefore an iterative multi-stage process designed to combine opinion into group consensus.

We are inviting you to participate as a Delphi panel member. This would involve answering an online questionnaire related to the resources, services and metrics of Canadian post-secondary career centres that will be used to develop a comprehensive survey for national distribution. It is envisaged that this should take approximately 30 minutes to complete. In future rounds, the responses from prior rounds will be incorporated into the online survey. In order to allow timely conclusion of the study we would respectfully request a response time of 2 weeks for completion of each round.

This study uses the Delphi technique, and includes series of 3 on-line questionnaires designed to identify important topics and/or themes by professionals. Each person on the panel completes all 3 questionnaires during the study in order to reach consensus among group members. The first online questionnaire consists of about 75 open-ended questions that should take no more than 30 minutes.

### ***What are the risks to participating in the study?***

There are no foreseeable risks to you in participating in this study.

### ***What are the benefits of participating?***



We do not think taking part in this study will help you directly. However, in the future, others may benefit from what we learn in this study and from the results from the national survey.

***Will you be paid for your time/ taking part in this research study?***

We will not pay you for the time you take to be in this study. However, participants will each receive one chance to enter a drawing to win a Kindle e-reader for each round of the Delphi panel completed. For example, participants that may choose to withdraw after one round will be entered once and participants that complete all three rounds will be entered three times. Your odds of winning the e-reader is based on the number of individuals who participate in each round of the study.

***Measures to maintain confidentiality***

We will ask for your name, e-mail address, and other contact information in the questionnaires; however, this is for participant tracking only. All of your information will be kept confidential and all data will be aggregated and unidentifiable in subsequent reports.

***Data protection***

Survey responses will be collected online using a quality-assured Canadian based survey company. Results will be downloaded to a password protected, Simon Fraser University owned computer to allow analysis by the researcher. Data will be stored for up to 5 years or the completion of the final component of the research project, the national survey, whichever is sooner. At that time, it will be destroyed.

***How will results be disseminated?***

The results of this study will be incorporated into the final online survey distributed nationally. Additionally, these results will be reported in a graduate thesis and may also be published in journal articles and books.

Aggregate findings from the national online survey will be available to all survey participants as well as to CACEE.

***Who can you contact if you have questions about the study?***

If you would like to obtain any further information on details of the survey, please contact Christine Sjolander via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca) or at 778-782-7704.

***Who can you contact if you have complaints or concerns about the study?***

If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics [jtoward@sfu.ca](mailto:jtoward@sfu.ca) or 778-782-6593

***What are your next steps?***

Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impacts.

To participate in this study, please visit the link below. Completion of the survey indicates your consent to participate.

<https://sfu.fluidsurveys.com/s/CareerCentreDelphi1/>

# Appendix I.

## Delphi Panel Study Protocol

**Study Title:** Delphi Panel to develop pan-Canadian benchmarking survey instrument

**Principal Investigator:** Christine Sjolander, EdD candidate, csjoland@sfu.ca, 778-782-7704

**Senior Supervisor:** Michelle Nilson, Associate Professor, mnilson@sfu.ca, 778-782-8122

**Faculty:** Faculty of Education

**Collaborator:** Canadian Association of Career Educators and Employers (CACEE), Paul Smith, Executive Director, pauls@cacee.com

CACEE has agreed to recommend a small group (2-3) of CACEE representatives to serve on a Delphi pane of experts to review the questions and answers in a forthcoming instrument to ensure it comprehensively represents all post-secondary sectors and geographic locations in Canada.

In return for assistance in identifying experts, CACEE will have the opportunity to include questions in the survey that are of interest to CACEE membership but outside the scope of this study.

**Background (must include an explanation of the need/justification for the study.)**

In the literature and in the popular press, the value of post-secondary education and the post-graduate career outcomes it can generate is being questioned more than ever before (Carlson, 2013; Contomanolis, Cruzvergara, Dey, & Steinfeld,

2015; Snowden, 2015). At many institutions, the career centre is the unit primarily viewed as responsible for the post-graduate employment outcomes of its students.

Despite increasing interest in post-graduate placement outcomes (Carretta & Ratcliffe, 2013; Zumeta, 2005), not much is known about how career centres in Canada are responding to budget pressures and increasing expectations. Career centres in Canada are facing increasing pressures on their limited resources and increasing requirements to report the impact of their services on their students, alumni and employers.

Additionally, there is a gap in the Canadian literature on career development within the post-secondary context (Lalande & Magnusson, 2007; Shea, 2010). Much has been written from a narrative perspective about individual career centre responses to these changes; however, this study seeks empirical information across the Canadian post-secondary sector as a whole. Given the growing importance placed upon data and information, this study will contribute in the following ways:

- By providing current, objective indicators of the changes to budgets and staffing within the Canadian career centre context
- By providing descriptive statistics of the programs and services currently offered by Canadian career centres and potential indicators of new trends
- By providing benchmarks on current metrics being collected by career centres which may provide an opportunity to develop national standards

**Study Purpose (the main reason(s) the study is being conducted)**

The purpose of this study is to develop a comprehensive and effective survey instrument of career centers across Canada about their resources, services and metrics. As my own experience within the Canadian context is

relatively limited, concerns about how to ensure that the survey would be representative of the entire post-secondary sector brought about investigation into the Delphi Method as a tool for the survey design phase. In addition to bringing others' expertise to the design of the survey, the Delphi method can provide the added benefit of building support for the research project (Geist, 2010).

#### Prospective Participant Information

The first step to creating a good Delphi panel is to determine the criteria for expert selection (Cole, Donohoe, & Stellefson, 2013). There is no standard specifications around how many experts should make up a Delphi panel but rather panel size seems to be determined by logistics and common sense (Keeney, Hasson, & McKenna, 2006). When selecting participants for the Delphi panel, I will use a variation on quota sampling methodology ("Qualitative Research Methods Overview," 2011) to ensure representation from post-secondary educational institutions across Canada of varying types of career centres and institutions.

An ideal mix of panelists will include experts who have worked in all of the criteria outlined in Table 1. As the CACEE Research Committee has a significant interest the topic the first invitations to sit on the panel will be sent individually to each committee member. The Research Committee currently consists of members from Memorial University, McGill University, Wilfrid Laurier University and University of Manitoba. Highlighted in blue are the areas represented by the CACEE Research Committee.

The panel will be supplemented by representatives from other CACEE member institutions who are known to me and will be approached individually to participate. I will access the CACEE membership directory, which I have unrestricted access

to as a CACEE member, and select potential participants based upon their institutional characteristics to fill in the gaps below.

*Table 1: Delphi Panel Quota Sampling*

<b>CACEE Regions</b>	<b>Institution Type</b>	<b>Career Centre Type</b>
Atlantic	University	Centralized career centre with co-op
Ontario	University-College	Centralized career center without co-op
Quebec	Polytechnic	Decentralized career center with co-op (faculty-based / non-business)
Canada West	College	Decentralized career center without co-op (faculty-based / non-business)
Other	Francophone	Decentralized career center with co-op (faculty-based / business)
	Anglophone	Decentralized career center with co-op (faculty-based / business)
		Centralized career center – co-op exclusive
		De-centralized career center – co-op exclusive (faculty-based/non-business)
		De-centralized career center – co-op exclusive (faculty-based/ business)

## Detailed Research Procedures

While there are no specific rules about how many rounds a Delphi study should have, Keeney et al. (2006) caution that response exhaustion must be considered in the design (Keeney et al., 2006). In this study, the Delphi will consist of three rounds:

**Round 1:** Using a dissensus approach, the goal of this round will be to solicit expert opinion on the multiple choice answers for the questions. Open ended questions will be used to gather as many options as possible for inclusion in the final instrument design. The round 1 Delphi panel survey is included with this application.

All data collection will occur online using FluidSurveys. Invitations will be emailed upon approval from DORE. While survey respondents will be known to the researcher, all data will be reported in aggregate and confidentiality will be protected. By the end of May 2016, the Round 1 survey will be closed and data analysis will begin.

**Round 2:** Following the analysis of the Round 1 survey and the modification of the survey to include multiple choice answers identified by the experts, Round 2 will commence using FluidSurveys as the online tool. Using a consensus approach, the goal of this round will be to solicit expert opinion on the survey questions to ensure that close-ended questions have accurate choices reflective of all participants. Additionally, panelists will be asked if proposed answer selections can be collapsed into broader categories. Experts will be invited to provide comment on all questions. While survey respondents will be known to the researcher, all data will be reported in aggregate and confidentiality will be protected. By the end of June 2016, the Round 2 survey will be closed and data analysis will begin.

**Round 3:** After Round 2, a second ethics application will be submitted to pilot the survey. Following the pilot, a third round of the Delphi be used to validate changes made after the pilot group test. Experts will be invited to provide comment on all questions. While survey respondents will be known to the researcher, all data will be reported in aggregate and confidentiality will be protected. By mid-August 2016, the Round 3 survey will be closed and data analysis will begin.

Participants will each receive one chance to enter a drawing to win a Kindle e-reader for each round of the Delphi panel completed. For example, participants that may choose to withdraw after one round will be entered once and participants that complete all three rounds will be entered three times.

### **Potential Benefits**

While there are no direct benefits to individuals participating in this study, all experts have built careers in this area so have a vested interest in quality data surrounding their practice. It is expected that the final survey will provide benefits to policy makers, administrative leaders and career centre practitioners.

### **Potential Risks**

There are no anticipated risks to participants in the study. Consent will occur if participants choose to start the survey. Participation is voluntary and participants may skip any questions that they are uncomfortable answering.

### **Maintenance of Confidentiality**

All data collection will occur online through FluidSurveys. While information is transmitted over the internet confidentiality cannot be guaranteed, the host of the system collecting the data, FluidSurveys, is compliant with Canadian privacy (all data resides on Canadian servers) and accessibility standards (W3C).



Participants will be identified by name, e-mail address, and other contact information in the Delphi Panel; however, this is for participant tracking only. All identifiable information will be kept confidential and all data will be aggregated and unidentifiable in subsequent reports.

Results will be downloaded to a password protected, Simon Fraser University owned computer to allow analysis by the researcher.

### **Data Analysis Plan**

After Round 1, data will be analyzed using the qualitative analysis method of document analysis to analyze the experts answers to open-ended questions. Responses will be categorized and coded. Taking a dissensus approach, all answer selections listed by the panelists will be added as multiple choice selections for the next iteration of the survey, along with answer selections identified by the researcher through literature review.

Any additional questions suggested by the panelists will be reviewed for inclusion. Questions that appear in two or more panelists' feedback will automatically be included into the next iteration of the survey. Questions that appear only once will be reviewed for inclusion based upon relatedness to the survey topic and purpose.

For Round 2, the researcher is seeking consensus that all answer selections are necessary and that they are comprehensive for each question. Qualitative analysis of open-ended questions will be used to categorize and code the data. If three or more panelists agree that answer selections can be combined into one selection, I'll collapse those answer selections. If three or more panelists agree that the answer list is comprehensive, the answer list will be considered complete. If new selections emerge during round 2 and are mentioned by 2 or more panelists, they will be included in the pilot survey.

Both quantitative analysis of closed-ended questions and qualitative analysis of open-ended questions will be used to analyze the data in Round 3. Feedback from the pilot study will have been incorporated and Delphi panelists will be asked to select if each question is “Ready for inclusion” or “Not ready for inclusion.” If “Not ready for inclusion,” experts will be asked to provide open-ended comment about the question.

### **Retention and Destruction of Data**

Data will be stored for up to 3 years or the completion of the final component of the research project, the national online survey, whichever is sooner. At that time, it will be destroyed.

### **Dissemination of Results**

The results of this study will be incorporated into the final online survey distributed nationally. Additionally, these results will be reported in a graduate thesis and may also be published in journal articles and books.

Aggregate findings from the national online survey will be available to all survey participants as well as to CACEE.

## Appendix J.

### Pilot Group Invitation

TO: Individual email  
FROM: Christine Sjolander csjoland@sfu.ca  
RE: Invitation to participate in pilot of national survey of career centres

Dear <first\_name>

You are invited to participate in an exciting and important pilot survey and focus group to provide input on the design a nationwide survey of career services centres in Canada (Pilot Study: Pilot of pan-Canadian benchmarking survey instrument; SFU Study Number: 2016s0323). As an experienced professional in career services, I believe you will have valuable contributions to make in the development of the survey.

This pilot and focus group is being organised by myself, Christine Sjolander, a doctoral student at Simon Fraser University under the supervision of Dr. Michelle Nilson. Up to 6 practitioners from university, college and institute career centres in the local Vancouver area will be invited to participate in this pilot and focus group.

If you choose to participate, I will send you the online survey about July 15 to complete at your convenience but no later than Monday, July 25. The survey will take about 45 minutes to complete. You will also be part of a focus group that will meet on Wednesday, July 27 at 5:00 p.m. at the Segal Graduate Centre. This focus group will take about 90 minutes and refreshments will be provided. The purpose of the focus group is to gather your impressions and opinions of the survey itself including the clarity of the instructions and questions.

The results of this focus group will be used in the development an on-line survey of career centres in Canada. We also intend that this survey will be a learning process for everyone involved and will facilitate the interaction of experts and practitioners in an area of direct relevance to their common interest.

Due to the nature of focus groups, your identity will not be confidential to other members of the group. However, your survey responses will be kept confidential. Additionally, all focus group data will be aggregated and unidentifiable in subsequent reports.

You will find more details regarding the pilot and focus group on the attached Consent Form.

Please be assured that participation is entirely voluntary and you will be able to withdraw from the process at any time. The results of the pilot and focus group will be published as the final survey instrument as well as in other academic publications and my final doctoral dissertation.

If you would like to obtain any further information on details of the survey, please contact me via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca). If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics [jtoward@sfu.ca](mailto:jtoward@sfu.ca) or 778-782-6593.

If you are interested in participating in this pilot, please let me know of your willingness as soon as possible.

Your assistance is highly appreciated. I look forward to hearing from you.

Best wishes,  
Christine Sjolander

## **Appendix K.**

### **Pilot Group Survey**

#### **Career Centre Benchmarking Survey on Resources, Services and Metrics**

Survey instructions and consent information

Thank you for your interest in completing the Career Centre Benchmarking Survey on Resources, Services and Metrics. This research is very important to better understand the career services field across Canada. For the purposes of this survey, we use the term "career centre" to represent any unit, department or area dedicated the provision of career development services to students on campus. We are using a broad definition of career development services to include co-op, internship and other experiential learning programs, preparation programs for post-graduate employment, career related advisement and counseling services and services and job / employment search functions.

The purpose of this study is to gain a better understanding of how career services areas across Canada are resourced in terms of budgets and staffing, what services they provide to students, alumni, employers and others, and what metrics are being collected and reported. This study will take about 45 minutes to complete. You may save your responses and return to complete it at a later time.

Participation in this survey is entirely voluntary and you may exit the survey at anytime without submitting your responses for inclusion in the study. You are free to decline to answer any particular question you do not wish to answer for any reason. While all questions in the survey are optional, please answer them as completely as possible so that we can build a comprehensive picture of the

Canadian post-secondary career development landscape. All participants who complete the survey will receive the chance to win one of five Kindle e-Readers.

All responses will be kept confidential and will not be identified by individual. Responses will be compiled together and analyzed and reported as a group. If you would like to obtain any further information on details of the survey, please contact me via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca). If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics [jtoward@sfu.ca](mailto:jtoward@sfu.ca) or 778-782-6593. By filling out this survey, you are consenting to participate. To continue, please click "next."

1. If the career centre where you work has a mission and / or vision statement, please include them here.
2. How would you describe the philosophical orientation or guiding principals of your career centre (i.e planned happenstance, chaos theory, placement focused, developmental, etc.)?
3. Do you foresee any changes to your career centre mandate in the next few years? If so, please describe.
4. In your opinion, what changes have career centres in Canada experienced in the last 5 years?
5. What career services issues are you reading about or talking about with your colleagues?

### **Career Centre Resources**

In this section, we're collecting information on career centre staffing, budget and other resources.

6. Name of Institution

7. In which province or territory is your institution located?

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nunavet
- Yukon
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Yukon

8. Which selection best describes the type of institution where you work?

- University



- University-College
- Public Institute
- Polytechnic
- College
- Private career college or institute
- Secular private university
- Faith-based or denominational institution
- Cegep system

9. The language spoken at your institution is primarily:

- English
- French
- Other

10. What is the name of your career centre / unit?

11. Which best describes the type of unit where you work?

- Centralized career centre with co-op
- Centralized career centre without co-op
- Decentralized career centre with co-op - faculty based (non-business)
- Decentralized career centre with co-op - business

- Decentralized career centre without co-op - faculty based (non-business)
- Decentralized career centre without co-op - business
- Centralized co-op office exclusively
- Decentralized co-op office exclusively - faculty based (non business)
- Decentralized co-op office exclusively - business
- Dedicated career professional working within another unit such as counseling, academic advising, etc.
- Other, please specify... \_\_\_\_\_

12. Has the type of career centre at your institution changed over the past few years? If so, how? (i.e. Two centres combined; A new centre was created within a faculty.)

13. What do you perceive to be the strengths and weaknesses of your current structure / model?

14. To which type of unit does your career centre directly report?

- Academic affairs
- Development / Advancement
- Enrollment Management
- Student Affairs / Student Services
- School/Faculty within the institution

Other, please specify... \_\_\_\_\_

15. What is the name of the unit to which your career centre reports?
16. To whom (job title) does the director/manager of your career centre report?
17. Has your reporting structure changed in the last few years? If so, how?
18. What do you perceive to be the strengths and weaknesses of this reporting structure?
19. In your opinion, how is your career centre perceived by your senior leadership?
20. What is the total student population your office is responsible for serving?
21. What is the approximate percentage of your total student population that accesses your services (except job postings or other online, open resources)?
22. Of your total student population, what is the approximate percentage of international students?
23. What type(s) of students does your office serve? Select all that apply including those that pay a service fee.

- Undergraduate students of all Faculties
- Undergraduate students except those served by Faculty-specific career centres on campus
- Undergraduate students in your Faculty only

- Masters level students of all Faculties
- Masters level students except those serviced by Faculty-specific career centres on campus
- Masters level students in your faculty only
- PhD level students of all Faculties
- PhD level students except those serviced by Faculty-specific career centres on campus
- PhD level students in your Faculty only
- Diploma / certificate program students (all types)
- Continuing Education students
- International Exchange students
- Post-doc students
- Academically upgrading students
- Apprenticeship students
- EAL/ESL program students
- Prospective / newly admitted students
- Alumni

Other, please specify... \_\_\_\_\_

Other, please specify... \_\_\_\_\_

24. What is your current title?

25. How many years have you worked at your career centre?

26. How many years have you worked in the career services field?

27. What is your educational background? Please check all that apply.

College or university certificate in career development

Undergraduate degree in career development

Undergraduate degree in \_\_\_\_\_

Masters degree in \_\_\_\_\_

Post-masters degree in career development

Doctorate (EdD or PhD) in \_\_\_\_\_

Other, please specify... \_\_\_\_\_

### **Career Centre Staffing**

28. How many professional staff does your centre have in each category? For the purposes of this survey, we are defining professional staff as non-student staff whose responsibilities are non-administrative. For part-time

staff, please indicate the equivalent of full-time staff. For example, someone who works 1/2 time would equate to 0.5 FT staff.

Number whose  
primarily  
responsibility is in  
this area

Counselors/Advisors/Educators/Coaches/Consultants

Employer Relations specialists

Dual role (both counselors and employer relations)

Directors / Managers

Co-op specific advisors / coaches

Co-op specific employer relations

Co-op specific - dual role (both counselors and employer relations)

Internship specialists

Marketing specialists

Event management specialists

Technology specialists

Other

Total professional staff

29. If your centre has a minimum educational requirement for professional staff in each area, please indicate it:

	College /university certificate in career development	Undergraduate degree	Masters degree	Doctorate
Counselors / Advisors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer Relations Specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dual roles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Director / Manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Co-op specific advisors / coaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Co-op specific employer relations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Co-op specific - dual role (both counselors and employer relations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internship specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marketing specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Event management specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technology specialists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. What professional designations / certifications does your centre REQUIRE for professional staff?



- Certified Career Development Professional (CCPD)
- Career Development Practitioner (CCCD)
- Coaching certification (i.e. NACE or International Coach Federation)
- Canadian Counselling and Psychotherapy Association (CCC)
- Certified Human Resources Professional (CHRP)
- Ordre des psychologues du Québec (OPQ)
- Ordre des conseillers et conseillères d'orientation du Québec (OCCOQ)
- Ordre des conseillers en Ressources Humaines et en Relations Industrielles Agréés du Québec (CHRA)
- None required
- Other, please specify... \_\_\_\_\_

31. Do professional staff within your career centre hold faculty positions?

- Yes. All professional staff are faculty.
- Only the manager/director is faculty.
- Some hold faculty appointments and some don't.
- No. None are faculty.

32. How many non-professional staff (paid or unpaid) does your career centre have in each category this year?

Administrative staff

Graduate assistants / interns

Co-op students

Volunteers/ interns/field placement

Work/study students

Other

33. Does your centre utilize students as peer advisors or coaches?

- Yes
- Not currently but we plan to.
- No. We don't have plans to use peer advisors.

34. How many total professional staff did your career centre have in each of the years below?

2015 - 2016

2014 - 2015

2013 - 2014

2012 - 2013

35. How many total non-professional staff did your career centre have in each of the years below?

2015 - 2016

2014 - 2015

2013 - 2014

2012 - 2013

36. Does your career centre have a formal staff performance management / review process?

- Yes, it works well
- Yes, but it's not as effective as we'd like
- No, but we plan to implement one
- No.

37. If you have a performance management program for staff, does it directly impact their compensation? Check all that apply.

- Yes, staff receive some type of monetary reward for high performance.
- Yes, staff receive some type of non-monetary reward (i.e. interesting new projects, sabbaticals, etc.) for high performance.
- Yes, staff receive some kind of monetary penalty (i.e. no salary increase) for poor performance.
- Yes, staff receive some kind of non-monetary penalty (i.e. increased oversight of work) for poor performance.

- No. There is not a link between the performance management program and compensation.

38. In what ways are your staff encouraged to contribute to the field of career development?

- Presenting at conferences
- Writing for trade publications
- Writing for academic journals
- Supervising / training interns
- Volunteering in professional associations
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

39. Does your career centre provide any of the following professional development opportunities for your professional staff? Check all that apply

- Membership in professional associations (CACEE, CACUSS, CAFCE, etc.)
- Conference registration / travel
- Formal related training programs (MBTI, CACEE Career Educator, etc.)
- In-house professional development training by paid external consultants
- In-house professional development by internal experts (paid or unpaid)

- In-house professional development by partner employer organizations (unpaid or heavily discounted)
- Tuition waived or discounted for courses at your institution
- Participation in institutional PD events (through HR or other units)
- Provide professional development funds to be utilized by staff at their discretion
- Association webinars
- Other, please specify... \_\_\_\_\_

40. If your career centre provides professional development on specific topics, what area(s) were provided in the past year for any professional members? Please select all that apply.

- Career advisement/counseling skills
- Self-assessment instruments
- Working with special student populations. Please specify. \_\_\_\_\_
- Employer outreach / development
- Labour market / employment outlook information
- Social media training
- Fundraising
- Presentation skills / workshop facilitation
- Technology specific training (Prezi, CRM system, etc.)

- Mental / emotional health training
- Job search / employment tools
- Ethics and professional standards
- Other, please specify... \_\_\_\_\_

41. Does your career centre anticipate a leadership change in the next 3-5 years?

- Yes, our director/manager/chair is planning to retire.
- Maybe, our director/manager is open to new opportunities.
- No, our director/manager/chair plans to stay on longer than 3-5 years.
- I don't know.

42. Does your career centre have any form of succession plan in place for leadership changes?

- Yes, we have a plan.
- No, we don't.
- I don't know.

43. Does your career centre pay to outsource or hire consultants to provide any of its services?

- Yes
- No

44. What services does your career centre outsource either partially or completely:

- Career advisement for students/ sub-group of students
- Career advisement for alumni/ sub-group of alumni
- Event management (career fairs, etc.)
- Specialized workshops/ skill development training for students
- Translation services
- Marketing materials / website development
- Online testing services
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

#### Career Centre Budgets

In this subsection, we are collecting specific budget information to determine financial support from your institution.

45. Please provide your career centre's approximate 2016-2017 budget information

Salaries and benefits

Operational

Other

Total

46. Please provide your career centre's approximate operational budgets (including self-generated funds) for each of the years below.

2015-2016

2014-2015

2013-2014

2012-2013

47. How has your career centre's operational budget (excluding salaries) changed over the past 3 years?

- Increased significantly
- Increased slightly
- Remained the same
- Decreased slightly
- Decreased significantly

48. What are the primary reasons your operational budget has changed over the past three years?

49. Approximately what percentage of your career centre's budget comes from each of the following sources (Must add to 100%):



Institutional allocation

Student / alumni fees

Employer service fees

Employer partnership program fees

Ancillary fees/ sales of services/products

Grants

Donations / gifts

Other

50. If you receive an institutional budget allocation, which best describes how it is determined:

- Assigned percentage of larger departmental budget (i.e. Student Affairs, etc.)
- Specific dollar amount per student in population to be served
- Career centre formally presents budget request each year for approval
- Other, please specify... \_\_\_\_\_

51. How is your career centre's percentage of the larger unit's budget determined?

- Same percentage every year
- Varies based upon projected departmental need (i.e. larger graduating class, new academic program, etc.)
- Varies based upon demonstrated departmental need (i.e. career centre provides justification)
- Other, please specify... \_\_\_\_\_

52. When your career centre budget is determined, which factors are taken into consideration?

	Not a consideration	Consideration	Important consideration	Primary consideration	Unknown
Impact of external factors (i.e. increased student population, inflation, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proposed new career centre	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

programs  
/ services

Usage rates of students, alumni and employers

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Quality measures of career centre programs / services

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Impact of budget cut on services

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Expectation of generation of external funds

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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53. What other factors are taken into consideration when justifying your budget?

54. Where is your career centre located on campus?

- Within the student union
- Within the faculty department we serve
- We have our own building
- Within a student services dedicated building
- Other, please specify... \_\_\_\_\_

55. Approximately how many square feet does your career centre occupy?

56. Which of the following are built into your career centre?

- Private offices for counseling/advising team
- Private offices for all professional staff
- Workshop / classroom space
- Resource / library area
- Interview rooms
- Student work spaces
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

57. If you anticipate any changes to the location or footprint of your career centre, please describe.

**Career Center Services for Students, Alumni, Employers and Others**

In this section, we will be collecting information about the programs and services your career centre offers to various stakeholders.

58. Please indicate the services your career centre offers to STUDENTS.

Please indicate if you currently charge a fee for each service. For this question, please select all options that apply to each service. For example, if your centre currently offers a job shadowing program that was started 2 years ago where you charge students a fee, please select "Currently providing", "Started providing in last 5 years" and "Fee charged." This question refers to current students of any type. If some students are charged a fee and some are not, please default to the students who are the primary users of that service.

	Currently providing	Started providing in last 5 years	Stopped providing in last 5 years	Plan to provide in next 2 years	Do not offer/planned to offer	Fee charged
Counseling / advising appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counseling / advising advisement - drop in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Counseling / advising - online (email, IM, webinar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic advising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self- assessments - online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self- assessments - pen/paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information resources - online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information library (physical space)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Job shadowing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mentoring program with alumni / employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer mentoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer advising program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - Summer jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty / major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - virtual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career conferences / Days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume / cover letter critiques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock Interviews with staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate mock interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock interviews with peers/students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consulting / Case	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



interviewing  
preparation

Job Board

Job alerts/  
subscriptions

Informational  
interview  
referrals

Networking  
events (not  
company  
sponsored)

Mock  
networking  
opportunities

Workshops on  
career topics

Small group  
skills sessions

Job club /  
small group

job search  
sessions

Career panels

Career topic  
guest speakers

Student  
newsletter /  
blog

Company  
tours - local

Company  
tours - non-  
local, in  
Canada

Company  
tours - non-  
local,  
international

Externships

Co-curricular record	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential file service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advisor to student clubs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for international students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graduate school information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Linkedin Profile reviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

59. Please list any other service your career centre provides to STUDENTS that is not listed above. Please indicate when you started offering it and if there is a fee.

60. For the services you've stopped providing over the past five years, please indicate how important each consideration was in eliminating these services.

	Not a consideration	Consideration	Important consideration	Most important consideration
No longer necessary / students no longer need it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student participation was low	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff reductions / changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implemented similar new service of higher quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implemented similar new service with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

more  
efficiencies

Save money /      
cut costs

Other

61. For the student services you've started providing over the past five years, please indicate how important each consideration was in creating these services.

	Not a consideration	Consideration	Important consideration	Most important consideration
Address a gap in student career readiness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student interest in services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff increases / changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Similar to prior service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

but higher  
quality

Employer                                                                          
interest in  
services

Desire to be                                                                          
innovative in  
field

Raise money /                                                                          
increase  
revenue

Other                                                                               

62. What do you consider to be the most innovative 1-3 services your career centre provides to students? Please describe them in detail.

63. Does your career centre offer programs or services for students who want to become entrepreneurs?

             Yes

             No

64. What types of services does your career centre provide for students who want to become entrepreneurs?

             Workshops on starting your own business

- Workshops on business plan writing
- Workshops on securing financing
- Access to online resources
- Career speakers / panels on entrepreneurship
- Entrepreneur in Residence program
- Fairs with start-up companies
- Support student entrepreneurship clubs
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

65. Does your career centre offer a career course or series (credit or non-credit) for students?

- Yes
- No
- One is in development

66. What is the structure of your course / series for students? Is it tuition based, fee assessed or no fee?

Undergraduate students	Graduate students	Tuition based	Fee charged by career centre	No fee	Not offered
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Career course

- credit based,  
required for  
all students

Career course

- credit based,  
required for  
some  
students

Career course

- credit based,  
not required  
for any  
students

Career series

- non-credit,  
required for  
all students

Career series

- non-credit,  
required for  
some  
students



Career series         
- non-credit,  
not required

Co-op course         
- credit based,  
required for  
all students

Co-op course         
- credit based,  
required for  
all CO-OP  
students

Co-op course         
- credit based,  
not required

67. If your career centre offers required career programming in a different format, please describe below. Please include if it is for graduate and/or undergraduate students and if there is a fee assessed.

68. Does your career centre offer services to alumni?

Yes

No

69. Please indicate the services your career centre offers to ALUMNI Please indicate if you currently charge a fee for each services.

	Only available up to 1-2 years out	Long- term access	Fee-based (immediate or after a period of time)	Not offered to alumni
Career advisement appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career advisement - drop in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career advisement - online (email, IM, webinar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-assessments - online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-assessments - pen / paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information resources - online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information library (physical space)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career fair (all job types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty / major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - virtual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career conferences / days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informational interview referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Networking events (not company sponsored)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alumni only job board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to student job board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job alerts/ subscriptions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Resume / cover letter critiques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job club / small group job search sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workshops on career topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small group skills sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career topic guest speakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alumni newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential file service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for alumni with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specialized services      
 for international  
 alumni

70. Please list any other service your career centre provides to ALUMNI that is not listed above. Please indicate if there is a fee.

71. What do you consider to be the most innovative 1-3 services your career centre provides to alumni? Please describe in detail.

72. On your campus, has there been increased or decreased interest in providing services for alumni in the past few years? What changes have you seen?

73. What workshop topics does your career centre currently offer to students/alumni?

	In- person	Webinar - live	Video / online - recorded
Resume writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cover letters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job Search	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-Assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Networking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informational interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LinkedIn profiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salary/offer negotiation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dining etiquette	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional / business etiquette	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graduate school preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career planning by academic year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presentation skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post-graduate success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal branding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Portfolio development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Choosing a major / concentration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Careers in.....major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Finding internships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preparing for co-op	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canadian work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dress / Personal image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hidden Job Market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government / Public Service applications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online job search / Application tracking systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social job search	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional school preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic careers / CV prep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MBTI or other specific assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Case interviews
- Working on campus

74. Please list any other workshop topics your career centre offers for students or alumni.

75. In addition to providing alumni with services for their own career development, many career centres tap into alumni as a resource for current students. In what way does your career centre connect students with alumni?

- Online tools such as a directory or database
- LinkedIn Groups
- Direct referrals to alumni for informational interviews
- Provide opportunities for alumni to host students for dinners or events
- Mentoring program between students and alumni
- Geographic region based events
- Leading career workshops
- Participation new student orientation
- Contributions to student newsletters / blogs
- Connections to clubs or student groups
- Invitations to networking events with students



- Assisting with career programming (resume critiques, speed interviewing, etc.)

76. Please describe any other ways your career centre connects students with alumni.

77. What online resources does your career centre provide for students and alumni:

	Currently providing for students	Currently providing for alumni	Started providing in last 5 years	Stopped providing in last 5 years	Plan to provide in next 2 years	Do not offer/planned offer	Fee charged for students	Fee charged for alumni
Career Insider / Vault	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetfeet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career Cruising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Optimal Resume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VMOCK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Optimal Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview Stream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TypeFocus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MBTI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strong Interest Inventory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
StrengthsQ uest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CareerLea der	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Navigator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Optimal letter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Big Guide to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Working  
Abroad

Going           
Global

Evisors/Fi           
rst Hand

10000           
Coffees

12Twenty

Facebook           
page

LinkedIn           
Group

Twitter           
feed

Other           
social  
media

Symplicity

Orbis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WhoPlusYou	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jobposting s.ca	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TalentEgg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research opportunities database	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Webinars - purchased	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online chat with coaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road Trip Nation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My World Abroad

Governmental databases

Handshake

78. If your career centre uses a technology not listed above, please list it along with when you started offering it.

79. Please indicate the services your career centre provides for EMPLOYERS. Please indicate if there is a fee for each service.

	Currently providing	Started providing in last 5 years	Stopped providing in last 5 years	Plan to provide in next 2 years	Do not offer/planned to provide	Fee charged
Job postings - full-time/post graduate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paper based job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

board/bulletin board

Career fair (all job types)

Career fair - summer jobs

Career fair - faculty/major specific

Career fair - virtual

On Campus Interviews

Company Information Sessions

Hallway tables

Office hours

Email blasts to students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Featured job postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social media campaigns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online / banner advertising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Print advertising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate partners program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employer newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship postings - paid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship postings - unpaid (other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

than non-profit organizations)

Volunteer postings (with non-profit organizations)

Part-time job postings

Resume books

Resume referrals

Candidate pre-screening

Introductions to faculty

Introductions to student clubs

Promotion of employer



events off  
campus

Alumni only        
job board

Pre-        
employment  
exam  
proctoring

Employer        
wage subsidy  
/ tax credit  
information

Video        
conference  
interviews

Video        
conference  
presentations

Articles about        
company in  
newsletters

Consultations on recruiting practices

80. Please list any other services for EMPLOYERS that your career centre provides. Please include if you charge a fee for that service.

81. For the employer services you've stopped providing over the past five years, please indicate how important each consideration was in eliminating these services.

	Not a consideration	Consideration	Important consideration	Most important consideration
Student interest declined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer participation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff reductions / changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implemented similar new service of higher quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Implemented similar new service with more efficiencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Save money / cut costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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82. For the employer services you've started providing over the past five years, please indicate how important each consideration was in creating these services.

	Not a consideration	Consideration	Important consideration	Most important consideration
Create opportunities for students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer requests for services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Staff increases / changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Similar to prior service but higher quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student / alumni interest in services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Desire to be innovative in field	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Raise money / increase revenue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

83. What do you consider to be the most innovative 1-3 services your career centre provides to employers? Please describe them in detail.

84. In what ways does your career centre engage employers on campus beyond recruiting activities?

- Mentors for students
- Guest lecturers in class

- Mock interviewers
- Career panelists
- Recruiters / employers in residence
- Provide career advising appointments
- Provide skills development workshops
- Provide resume critiques
- Dining etiquette workshop guests
- Take career centre staff on company tours
- Take students on company tours
- Corporate / program advisory boards
- Applied research projects
- Capstone project sponsors / judges
- Case competition coaches / judges
- Special event invitations

85. Please list any other ways you engage employers on campus outside of recruiting activities.

86. Does your career centre offer professional development opportunities for your employer connections?

- Yes
- No

87. What types of professional development opportunities does your career centre offer for employers?

	Free	Cost recovery fee	Revenue generating fee
Interview skills training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Candidate assessment training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generational specific recruiting methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social media training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Best practices in campus recruiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Large employer only forums/conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small employer group meetings on trends (industry/geographic specific)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invitations to on-campus lectures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Newsletters with PD features or research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employer only networking events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nominate for awards / recognition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Invite to open house to showcase institution

Provide space for external PD events

Labour market trend / hiring information

88. Please list any other professional development opportunities your career centre provides for employers.

89. Does your career centre have a corporate partners program?

Yes

No

90. Please answer the questions below about your corporate partnership program.

Approximately how many employers belong to your program each year?

What is the fee for participation in your program?

How often do employer renew their membership?

Do you publicly post your corporate partners on your website?

91. What services do employers who are part of your corporate partners program receive for their membership beyond what your career centre provides for non-members?

- Advertising / branding online
- Advertising / branding within career centre
- Advertising / branding at events
- Early scheduling of on-campus interviews
- Early scheduling of company information sessions
- Free interview rooms or other on-campus recruiting activity that other employers pay for
- Resume book(s)
- Pre-screening of candidates
- Introductions to faculty
- Introductions to student clubs
- Introductions to administrators
- CPP only networking events
- CPP only professional development activities
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

92. Does your career centre have a corporate advisory board?

- Yes
- No



93. Please answer the questions below about your corporate advisory board.

Approximately how many employers sit on your board each year?

Are employers expected to financially contribute to sit on the advisory board?

How often does your advisory board meet?

Do you publicly post your advisory board members on your website?

How does your career centre utilize your corporate advisory board?

- Provide input into career centre services
- Provide insights into recruiting and industry trends
- Review career center materials such as workshops, guides, etc.
- Share student resume book with advisory board
- First invitations for on campus recruiting activities
- First invitations for engagement activities
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

94. How does your career centre assign employer relationship management?

- Generalist(s) who works with all employers.

- By industry
- By student group, program or major
- By job type such as co-op or full-time
- By geographic area
- By employer priority (i.e. prestige, tiered list, etc.)
- Other, please specify... \_\_\_\_\_

95. Does your career centre maintain a target employer list for new prospective employers?

- Yes, and it's updated regularly
- Yes, but it's out of date
- No, we primarily respond to employer inquiries.
- No.
- I don't know.
- Other, please specify... \_\_\_\_\_

96. Please indicate the services your career centre offers to FACULTY (as individuals - not for their classes) at your institution.

- Career counseling / advising
- Career counseling / advising for spouses
- Professional development workshops
- CV reviews

- Job board access / alerts
- Web-based resources for faculty
- Research connections to industry
- Other, please specify... \_\_\_\_\_

97. Please indicate the services your career centre provides to FACULTY for use in the classroom or working with students:

- Self-assessments - online
- Self - assessments - pen/paper
- Access to career resources online for class
- Company tours for their classes
- Guest speakers for their classes
- Career related workshops in class (by staff)
- Employer connections for class projects
- Major/career specific information for faculty
- Reports on post-graduate employment
- Support for related assignments
- Pre / post experiential learning reflection assistance
- Other, please specify... \_\_\_\_\_

98. Please list any other service your career centre provides to FACULTY that is not listed above. Please indicate when you started offering it and if there is a fee.

99. What do you consider to be the most innovative 1-3 services your career centre provides to faculty (if any)? Please describe in detail.

100. Please indicate the services your career centre specifically offers to PARENTS at your institution. Please indicate if you currently charge a fee for each services.

	Currently providing	Started providing in last 5 years	Plan to provide in next 2 years	Do not offer/plan to offer
Parent orientation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parent newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parent website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged to post internships for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged to post co-op / internship / summer / part-time jobs for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged to post post-graduate jobs for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Workshops for parents (other than orientation)

Allow parents to join students at advising meetings (with student's consent)

Parent club or association

Guide for parents on supporting student's career development

101. Please list any other service your career centre provides to PARENTS that is not listed above. Please indicate when you started offering it.

102. What do you consider to be the most innovative 1-3 services your career centre provides to parents (if any)? Please describe them in detail.

103. With which areas on campus does your career centre partner with to provide specific programs and services? How frequently do you collaborate?

Annually	Once a semester /term	Monthly	Weekly	It happens	We don't	Not applicable at my
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					ned once.	collabo rate.	institut ion
Other career centres on campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic advising (outside of your centre)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counseling services (outside of your centre)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic departments / units	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advancement/Development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alumni Relations / Association	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External Relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Offices for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offices for international students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offices for Indigenous students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offices for LGBTX students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offices for other minority populations on campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Women's centers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other student services units (outside of your centre)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Residence Life office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dining services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial Aid / Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching & Learning Centres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student recruitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

104. What other areas of campus, if any, does your career center collaborate with? How frequently do you collaborate?

105. What are the primary considerations when partnering with other areas on campus?

	Not a consideration	Consideration	Important consideration	Most important consideration
Target specific student populations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



participation /  
awareness as  
a whole

Tapping into                                                                          
expertise  
around campus

Solves logistics                                                                       
challenges

Desire to                                                                                
provide  
innovative  
services to  
students

Build reputation                                                                       
for career  
centre on  
campus

Sharing                                                                                  
resources /  
costs for  
programming /  
services

106.            What do you consider to be the 1-3 most innovative collaborations /  
partnerships your career centre participates in? Please be specific.

107. Does your career centre sell any products or services to companies, other institutions or the general public?

- Yes
- No

108. What types of non-core products / services does your career centre sell? To whom are they sold?

	Employers	Other schools	General public
Consulting services for internship program development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consulting services for recruiting program development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-house developed career development guides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online workshops or webinars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-house developed IT systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

109. Are there any other types of non-core products or services that your career centre sells for revenue generation? To whom are they sold?

### **Career Centre Metrics and Reporting**

In this section of the survey, we will ask you to identify the data you are currently collecting and reporting about your career centre activities.

110. Does your career centre track and report any of the following metrics on overall office usage? For the purposes of this survey, reporting internally refers to within your institution only. Reporting externally means through your website, reports or other public information.

	Track for career centre use only	Report internally	Report externally	Do not track
Total students who access centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total alumni who access centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total students who do NOT access centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total appointments provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total workshops offered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total event attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total employer contacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total jobs posted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post-graduate employment rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship employment rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-op employment rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graduate / professional school attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accessing online resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

111. If your centre tracks post-graduate employment, what time frame do you use?

- At graduation / program completion
- 90 days post-graduation / program completion
- 6 months post-graduation / program completion
- 1 year post-graduation / program completion
- 18 months post-graduation / program completion
- More than 18 months post-graduation/program completion
- We do not track post-graduate employment

Other, please specify... \_\_\_\_\_

112. How do you collect post-graduate employment information? Please select all that apply.

- Online survey pre-graduation
- Online survey post-graduation
- Survey at convocation
- Phone calls to graduates
- LinkedIn or other online search tool
- External vendor conducts survey on our behalf
- Other area (institutional research, parent unit etc.) collects data on our behalf as part of larger survey
- Post card or snail mail letter to home address
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

113. What has been your most successful methods for collection post-graduate employment information?

114. How has the number of metrics your career centre tracks changed over the past 5 years?

- Increased significantly
- Increased slightly
- Stayed the same

- Decreased slightly
- Decreased significantly
- I don't know

115. Which stakeholders, if any, have expressed interest in any of your career centre metrics in the last year?

- Students
- Senior administrators
- Alumni
- Parents
- Faculty
- Other units on campus
- Employers
- Media
- Donors
- Board of Governors
- Other, please specify... \_\_\_\_\_

116. How has the number of stakeholders interested in your career centre metrics changed over the past 5 years?

- Increased significantly
- Increased slightly

- Stayed the same
- Decreased slightly
- Decreased significantly

117. For which of these services does your career centre track/ report student or alumni usage rates? For the purposes of this survey, reporting internally refers to within your institution only. Reporting externally means through your website, reports or other public information.

	Track for career centre use only	Report internally	Report externally	Do not track	Do not offer
Counseling / advisement appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counseling / advisement - drop in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counseling / advisement - online (email, IM, webinar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic advising appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career information library (physical space) usage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job shadowing participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mentoring program with alumni / employers participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer mentoring program participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer advising usage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types) attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - Summer jobs attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty / major specific attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - virtual - attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Career conferences attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informational interview referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock Interviews with staff participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate mock interviews participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock interviews with peers/students participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job board views	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job alerts/ subscriptions participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock networking opportunities participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume / cover letter critiques number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Job club / small group job search sessions participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small group skills sessions attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career topic workshops attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career panels attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career topic guest speakers attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student newsletter subscribers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - local - participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - non- local, in Canada - participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - non- local, international - participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Externships - participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-curricular record users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential file service users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consulting / Case interviewing preparation participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for students with disabilities participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for international students participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Usage of online resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Usage of online assessments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Usage of social media platforms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

118. Are there any other student / alumni services for which your career centre tracks usage rates?

119. Does your career centre survey students about their satisfaction rates or learning outcomes for any of your programs or services?  
Satisfaction surveys address how valuable the participant felt the service to be. Learning outcomes are generally evaluated by assessing the student's pre-service understanding or skill level and his/her post-service understanding or skill level.

- Yes
- No

120. For which of these services does your career centre survey students about their satisfaction rates or learning outcomes? Satisfaction surveys address how valuable the participant felt the service to be. Learning outcomes are generally evaluated by assessing the student's pre-service understanding or skill level and his/her post-service understanding or skill level.

	Satisfaction Survey	Learning Outcomes Assessment	Do not survey	Report results internally	Report results externally
Career advisement appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career advisement - drop in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career advisement - online (email, IM, webinar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic advising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career information library (physical space)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job shadowing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mentoring program with alumni / employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peer mentoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Peer advising program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - Summer jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty / major specific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - virtual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informational interview referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock Interviews with staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate mock interviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mock interviews with peers/students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job board / postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job alerts/ subscriptions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mock networking opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume / cover letter critiques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job club / small group job search sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small group skills sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career topic workshops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career panels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career topic guest speakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - local	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - non-local, in Canada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company tours - non-local, international	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Externships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-curricular record	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credential file service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consulting / Case interviewing preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Specialized services for students with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialized services for international students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online assessments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social media platforms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On campus jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

121. Would you be willing to confidentially share your surveys / assessments with the researcher for additional analysis?

- Yes
- No

122. If yes, thank you for agreeing to share your surveys/assessment instruments. Please indicate the email address at which the researcher can contact you for more information.

123. Has your career centre conducted a student career needs assessment of your student body?

- Yes, and it's current.
- Yes, but it's out of date.
- Yes.
- We're in the process of conducting one now
- No, but we plan to in the next year.
- No.

124. What was the primary driver(s) behind your career centre's decision to implement a needs assessment?

- Saw a mismatch between services offered and student needs
- Want to keep up with best practices in field
- Want to provide justification for additional resources and support
- Required to conduct one by institutional leaders
- Other, please specify... \_\_\_\_\_

125. Has your career centre developed a set of learning outcomes or competencies students / alumni are expected to gain from interacting with your centre?

- Yes, and they're current.
- Yes, but they're out of date

- Yes.
- We're in the process of developing them now.
- No, but we plan to in the next year.
- No.

126. What was the primary driver(s) behind your career centre's decision to define learning outcomes or competencies?

- Ensure students are benefiting from programs and services
- Wanted to keep up with best practices in field
- Wanted to provide justification for additional resources and support
- Required to define them by institutional leaders
- Wanted to de-emphasize placement rate as outcome of services
- Ability to tie them into staff performance reviews
- Other, please specify... \_\_\_\_\_

127. Please list the learning outcomes or competencies your career centre has developed.

128. What was the primary driver(s) behind your career centre's decision to define learning outcomes or competencies?

- Wanted to de-emphasize placement rate as outcome of services
- Wanted to keep up with best practices in field

- Wanted to provide justification for additional resources and support
- Required to define them by institutional leaders
- Other, please specify... \_\_\_\_\_

129. Please indicate the employer services for which your career centre tracks / reports usage metrics.

	Track for career centre use only	Report internally	Report externally	Do not track	Do not offer
Job postings - full-time/post graduate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair (all job types) employer attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - summer jobs employer attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career fair - faculty/major specific employer attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Career fair - virtual employer attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company Information Session - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company Information Sessions - student attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hallway tables - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Office hours - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Email blasts to students - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Featured job postings - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social media campaigns - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Online / banner advertising - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Print advertising - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate partners program - number of companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employer newsletter - employer subscribers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship postings - paid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internship postings - unpaid (other than non-profit organizations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volunteer postings (with non-profit organizations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Part-time job postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resume books - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Resume referrals - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introductions to faculty - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introductions to student clubs - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Promotion of employer events off campus - employer requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alumni only job board postings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional development workshops for employers - attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employer only networking events - attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Pre-employment exam proctoring - employer requests

Video conference interviews - number of companies

Video conference presentations - number of companies

On Campus Interviews number of interviews

On Campus Interviews number of companies

130. Are there any other employer metrics that you track / report?

131. Does your career centre solicit feedback from employers about your students or services?

Yes

No

132. How does your career centre solicit employer feedback about your students and your services?



	Feedback on Students	Feedback on Career Centre Services
Individual meetings / phone calls with employers	<input type="checkbox"/>	<input type="checkbox"/>
Surveys to employers	<input type="checkbox"/>	<input type="checkbox"/>
Focus groups with employers	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

133. Does your career centre track or report usage metrics for services for any stakeholder other than students/alumni or employers?

- Faculty
- Parents
- Other units on campus
- Community members
- Other, please specify... \_\_\_\_\_

134. If yes to any of the above, please describe the metric(s) your career centre is tracking or reporting.

135. Is your career centre responsible for compiling or submitting data for national or international rankings?

- Yes

No

136. What services does your career center provide to support your institution in national / international rankings? Check all that apply.

- Post-graduate employment data
- Post-graduate salary data
- Distribution of surveys to employers for completion
- Distribution of surveys to alumni for completion
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

137. Which ranking(s) does your career centre provide data for? Check all that apply.

- McLeans
- Financial Times
- World University Ranking
- QS World Ranking
- Jobboom
- Other, please specify... \_\_\_\_\_
- Other, please specify... \_\_\_\_\_

138. Has your career centre conducted an internal or external assessment of your career centre services in the past 5 years?

- Yes, it was required.
- Yes, but it was not required.
- No.

139. Will your career centre conduct an internal or external assessment of your career centre services in the next 5 years?

- Yes, it will be required.
- Yes, but it is not required.
- No.
- I don't know.

140. If your career centre already has or plans to conduct an assessment, what are your primary drivers for doing so?

- It is required by our institutional leadership.
- Desire to keep up with best practices in the field
- Provide justification for additional resources
- Internal restructuring / staffing changes within the career centre
- Changes in student body driving changes to services
- Other, please specify... \_\_\_\_\_

141. Does your career centre have a strategic plan?

- Yes.

- Yes, but it's out of date.
- Yes, but it's incomplete.
- No.
- No, but we plan to create one.
- I don't know
- Other, please specify... \_\_\_\_\_

142. Does your career centre produce an annual report?

- Yes, and we share it publicly.
- Yes, but we only distribute it internally.
- No.
- No, but we plan to create one in the next couple of years.
- I don't know.

143. Would you be willing to confidentially share your annual report(s) with the researcher for additional analysis?

- Yes
- No

144. If yes, thank you for agreeing to share your annual report. Please indicate the email at which the researcher can contact you for additional information.

145. After the survey analysis is complete, there may be findings that require clarification or more information. Would you be willing to be contacted about a follow-up interview?

Yes

No

146. If yes, thank you for your willingness to be contacted about an interview. Please provide your contact details so the researcher can follow up.

Name

Email

Institution

Phone

Thank you for completing this survey. If you would like a copy of the summary report, please enter your contact details below. Summary reports will be distributed no later than June 2017.

Name

Institution

Email

If you are interested in being entered into the drawing for one of five Kindle e-Readers, please enter your email again below. Winners will be notified no later than January 15, 2017.

Email

## Appendix L.

### Pilot Group Consent Form

#### Consent Form for Survey Pilot and Focus Group

**Pilot Study: Pilot of pan-Canadian benchmarking survey instrument**

**Study Number: 2016s0323**

#### *Who is conducting the study?*

**Principal Investigator:** Christine Sjolander, Doctoral Student, Faculty of Education, csjoland@sfu.ca, 778-782-7704. This study is part of a doctoral dissertation for the completion of an Doctor in Education degree.

**Faculty Supervisor:** Michelle Nilson, Associate Professor, Faculty of Education, mnilson@sfu.ca, 778-782-8122

**Research Assistant:** Samantha Rosiczkowski, SFU undergraduate student, Faculty of Arts, srosiczk@sfu.ca.

#### *Why should you take part in this study?*

We want to learn more about changes to the resources, services and metrics of Canadian career centres within post-secondary institutions. We are inviting people like yourself who are practitioners in career centre operations to participate in the pilot of an upcoming national survey to provide input into the survey design. As we are asking you to provide expertise based upon your own professional experience and expertise, we will not be seeking REB approval from your own institution.

***Your participation is voluntary.***

Your participation is voluntary. You have the right to refuse to participate in this study. If you decide to participate, you may still choose to withdraw from the study at any time without any negative consequences. If you choose to enter the study and then decide to withdraw at a later time, all data collected from you during your enrolment in the study will be destroyed. Refusal to participate or withdrawal/dropout after agreeing to participate will not have an adverse effect or consequences on you, your employment or education.

***What would be expected of me if I participate?***

We will send you the online survey in mid-July to complete at your convenience but no later than Monday, July 25. The survey will take about 45 minutes to complete. You will also be part of a focus group will meet on Wednesday, July 27 at 5:00 p.m. at the Segal Graduate Centre, 500 Granville Street, Vancouver. This focus group will take about 90 minutes and refreshments will be provided.

***What are the risks to participating in the study?***

There are no foreseeable risks to you in participating in this study. This study as been designated as “minimal risk” as neither the online survey nor the focus group will include personal or controversial topics or questions.

***What are the benefits of participating?***

We do not think taking part in this study will help you directly. However, in the future, others may benefit from what we learn in this study and from the results from the national survey.

***Will you be paid for your time/ taking part in this research study?***

We will not pay you for the time you take to be in this study. However, participants will each receive refreshments at the focus group and a \$10 Starbucks card for participating.



### ***Measures to maintain confidentiality***

Due to the nature of focus groups, your identity will not be confidential to other members of the group. However, your survey responses will be kept confidential. Additionally, your comments and feedback in the focus group will be aggregated into the final survey instrument and unidentifiable in subsequent reports. We encourage participants not to discuss the content of the focus group to people outside of the group; however, we can't control what participants do with the information discussed.

Recordings of the focus group will only be accessible to the principal investigator, faculty supervisor and the research assistant present at the focus group. Recordings will only be used as back up to verify that notes from the session reflect the accuracy of comments made by participants. The recordings will not be transcribed and recordings will be destroyed when the survey is finalized. If comments from the focus group are utilized in describing the methodology used in the principal investigator's dissertation, they will be anonymized to protect your identity.

### ***Data protection***

Survey responses will be collected online using a quality-assured Canadian based survey

company. The digital recording of the focus group, along with the survey responses, will be downloaded to a password protected, Simon Fraser University owned computer to allow analysis by the researcher.

Electronically collected data, including completion of the pilot survey and the digital recordings, will be stored for up to 3 years or the completion of the final component of the research project, the national online survey, whichever is sooner. Focus groups notes will be stored in a locked office at SFU for up to 3 years or the

completion of the final component of the research project, the national online survey, whichever is sooner. At that time, it will be destroyed.

***How will results be disseminated?***

The results of this study will be incorporated into the final online survey distributed nationally. Additionally, these results will be reported in a graduate thesis and may also be published in journal articles and books.

Aggregate findings from the national online survey will be available to all survey participants as well as to the Canadian Association of Career Educators and Employers.

***Who can you contact if you have questions about the study?***

If you would like to obtain any further information on details of the study, please contact Christine Sjolander via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca) or at 778-782-7704.

***Who can you contact if you have complaints or concerns about the study?***

If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics [jtoward@sfu.ca](mailto:jtoward@sfu.ca) or 778-782-6593.

***What are your next steps?***

Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impacts.

To participate in this study, please contact the researcher, Christine Sjolander, [csjoland@sfu.ca](mailto:csjoland@sfu.ca), and the link to the online survey and the remaining details of the focus group will be sent to you.



## Appendix M.

### Pilot Group Study Protocol

**Study Title:** Pilot of pan-Canadian benchmarking survey instrument

**Principal Investigator:** Christine Sjolander, EdD candidate, csjoland@sfu.ca, 778-782-7704

**Senior Supervisor:** Michelle Nilson, Associate Professor, mnilson@sfu.ca, 778-782-8122

**Faculty:** Faculty of Education

**Collaborator:** There are no collaborators for this study.

**Background (must include an explanation of the need/justification for the study.)**

In the literature and in the popular press, the value of post-secondary education and the post-graduate career outcomes it can generate is being questioned more than ever before (Carlson, 2013; Contomanolis, Cruzvergara, Dey, & Steinfeld, 2015; Snowden, 2015). At many institutions, the career centre is the unit primarily viewed as responsible for the post-graduate employment outcomes of its students.

Despite increasing interest in post-graduate placement outcomes (Carretta & Ratcliffe, 2013; Zumeta, 2005), not much is known about how career centres in Canada are responding to budget pressures and increasing expectations. Career centres in Canada are facing increasing pressures on their limited resources and increasing requirements to report the impact of their services on their students, alumni and employers.

Additionally, there is a gap in the Canadian literature on career development within the post-secondary context (Lalande & Magnusson, 2007; Shea, 2010). Much has been written from a narrative perspective about individual career centre responses to these changes; however, this study seeks empirical information across the Canadian post-secondary sector as a whole. Given the growing importance placed upon data and information, this study will contribute in the following ways:

- By providing current, objective indicators of the changes to budgets and staffing within the Canadian career centre context
- By providing descriptive statistics of the programs and services currently offered by Canadian career centres and potential indicators of new trends
- By providing benchmarks on current metrics being collected by career centres which may provide an opportunity to develop national standards

### **Study Purpose (the main reason(s) the study is being conducted)**

The purpose of this study is to develop a comprehensive and effective survey instrument of career centers across Canada about their resources, services and metrics. The initial instrument was developed through the use of a Delphi panel methodology (SFU study 2016s0165). This study will pilot the survey with a group of practitioners and includes a focus group to gather feedback on the survey experience before finalizing the survey for national distribution.

### **Prospective Participant Information**

Pilot participants will be up to 6 career practitioners working locally known to the principal investigator through her work as a career practitioner at SFU. All participants are over age 19. As these individuals are providing their professional expertise based upon their own experience, we will not be seeking REB approval from their institutions. Up to 3 of those pilot participants will be other SFU doctoral

students who are also professional career practitioners. Participants will be invited individually to participate in this pilot.

### **Detailed Research Procedures**

Pilot participants will be sent an email invitation to complete the online survey using FluidSurveys with the draft version of instructions that will be sent to future survey participants. The email invitation will include the consent form. The survey will take approximately 45 minutes to complete and will be completed in advance of the focus group.

The survey instrument has been included in this ethics application. About 10 days after receiving the survey, pilot participants will meet in person for a 90 minute focus group to discuss the survey. The focus group will meet at the SFU Segal Graduate School Building, 500 Granville Street, Vancouver in room 2600. The focus group will follow the focus group script included in this ethics application. Included in the script is a request for verbal consent from all participants.

The focus group discussion will be recorded with two digital recorders and an undergraduate SFU student research assistant will take detailed notes of comments and feedback on each question in the survey and the instructions to participants. Comments from participants will be specifically limited to improve the quality of the survey instructions and questions. We encourage participants not to discuss the content of the focus group to people outside of the group; however, we can't control what participants do with the information discussed.

Recordings will only be accessible to the principal investigator, faculty supervisor and the research assistant present at the focus group. Recordings will only be used as back up to verify that notes from the session reflect the accuracy of comments made by participants. The recordings will not be transcribed and recordings will be destroyed when the survey is finalized. If comments from the

focus group are utilized in describing the methodology used in the principal investigator's dissertation, they will be anonymized to protect the identities of participants.

### **Potential Benefits**

While there are no direct benefits to individuals participating in this study, all participants have careers in this area so have a vested interest in quality data surrounding their practice. It is expected that the final survey will provide benefits to policy makers, administrative leaders and career centre practitioners. All participants will receive light food and beverages during the focus group as well \$10 gift certificate to Starbucks as a thank you for participating.

### **Potential Risks**

There are no anticipated risks to participants in the study. This study is designated "Minimal Risk" as neither the survey nor the focus group include questions of a personal or confidential nature. Consent will occur if participants choose to complete the survey and attend the focus group. Participation is voluntary and participants may skip any questions that they are uncomfortable answering. Refusal to participate or withdrawal/dropout after agreeing to participate will not have an adverse effect or consequences on the participants, their employment or education.

### **Maintenance of Confidentiality**

In a focus group setting, confidentiality cannot be guaranteed. Many of the participants are already known to one another. For those that do not know each other, we will do a brief introductions at the start of the focus group. In this study, comments will not be attributed to any individual in any future published work to maintain individual confidentiality.

Pilot participants online survey responses will not be shared with other participants or included in the final survey results.

### **Data Analysis Plan**

Feedback on each instruction section and each question will be manually reviewed one at a time after the focus group.

### **Retention and Destruction of Data**

Electronically collected data, including completion of the pilot survey and the digital recordings, will be stored for up to 3 years or the completion of the final component of the research project, the national online survey, whichever is sooner. Focus groups notes will be stored in a locked office at SFU for up to 3 years or the completion of the final component of the research project, the national online survey, whichever is sooner. At that time, it will be destroyed.

### **Dissemination of Results**

The focus group results of this study will be incorporated into the final online survey distributed nationally. Specific results of this pilot will not be published independently. The results of the national survey will be reported in a graduate thesis and may also be published in journal articles and books.

Aggregate findings from the national online survey will be available to all survey and pilot participants as well as to the Canadian Association of Career Educators and Employers.



## Appendix N.

### Focus Group Script

**Introduction:** “Hello everybody, my name is Christine Sjolander and this is my research assistant, TBD. I will be conducting the discussion and TBD will observe and take notes. We invited you all here tonight to discuss the draft of the national benchmarking survey of career centers in Canada. I will ask you several open-ended questions about your experience taking this survey. There is no right or wrong opinion about your survey experience.

Your personal opinions and viewpoints are very important for us. All of your feedback is important so please express yourself freely during the discussion.

This conversation will be recorded using the digital recorders on the table. This is to make sure that we capture everything that is discussed. Only myself and TBD will listen to the recordings. No names or personal information will be used in any future published work. I ask everyone to respect the privacy of this group and not share any comments made by yourself or others outside this group.

**Some practical issues:** This discussion will last for about one hour. We ask you to please switch off your mobile phones. Please give everyone the chance to express their opinion during the conversation. You can address each other when expressing your opinion; TBD and I are only here to assist in the discussion.

I’ve given you each a copy of your completed survey and the instruction email you received. Please feel free to refer to these as we go through the discussion. You do not need to share your answers with other focus group participants. Is everything clear about the course of the focus group discussion?

At this point, I'd like to ask that you verbally state your consent to participate in this focus group. Let's get started:

Q1: Please share your name, your institution and current role. Q2: To get started, what is your overall opinion of the survey? Q3: About how long did it take you to complete the survey?

Q4: Was there anything that was unclear in the survey instructions or invitation email?

Q5: Let's look at the first section of the survey – general information. Starting at the beginning, was there anything clear about Question 1? Question 2? Question 3? Etc.

Q6: The next section is about career centre resources and staffing. Going through each of these questions one by one, is there anything that could be phrased differently for more clarity?

Q7: The next section is about career centre services. Let's look at each question and I'd appreciate any feedback you have on each one.

Q8: The last section is about career centre metrics. Looking at each of these questions, was there anything unclear about the questions in this section?

Q9: Do you have any final thoughts about the overall survey, the instructions or any of the questions?

Thank you very much for participating in this focus group. All of your comments and suggestions will enable me to make sure the survey is as effective and comprehensive as possible before distributing it nationally.

If you have second thoughts about any of the comments you made today in this focus group that you would like excluded from the study, please let me know. Once

again, I ask that you keep the conversation today private and do not share comments others may have made outside of this setting.

I'm hoping to have the survey ready for national distribution in mid-August. When you receive it at that time, please complete it again as the answers you provided in the pilot will be excluded from the final results.

Before you leave, I have a small token of appreciation for your participation today. Please enjoy this Starbucks gift card with my compliments.

## **Appendix O.**

### **Post-Secondary Institutions Reporting to Statistics Canada**

## **List of postsecondary institutions**

### **Introduction**

The following list presents the postsecondary institutions that were surveyed by the Centre for Education Statistics at Statistics Canada to generate the enrolment, finance, and educator data presented in this publication. The list of institutions presented for a jurisdiction is not necessarily the same set of institutions that it considers to make up its public postsecondary system.

The Centre for Education Statistics at Statistics Canada (CES) receives post-secondary data, either directly or through provincial or regional co-ordinating bodies, for approximately 280 institutions. When campuses and affiliated institutions are included, the number is much larger. The list of institutions from which data are collected may change from time-to-time for several reasons including, the opening or closing of institutions and delays in identifying existing institutions by CES.

There has not been a thorough examination of the entire set of postsecondary institutions in Canada. Although CES collects data from all of Canada's major institutions, it is not clear how many smaller institutions may be missing from the data collection. The Centre for Education Statistics is attempting to deal with these issues by developing, in consultation with jurisdictions, a comprehensive registry of all postsecondary institutions in Canada, and by developing a categorization of

institutions with definitions and rules for counting parent institutions, campuses and affiliated institutions that will make the analysis of data more meaningful.

In this list, the names of campuses, schools or centres affiliated to a main institution were those in use at the time covered by this publication, except in cases where the province/territory has chosen to use the current name. Statistics Canada may not be able to identify data separately for campuses, schools or centres affiliated with a main institution.

### Universities and Degree-Granting institutions by jurisdiction

#### **Newfoundland and Labrador**

Memorial University of Newfoundland  
Fisheries and Marine Institute of Memorial University Harlow Campus - Memorial University  
Memorial University Off Campus Centres Sir Wilfred Grenfell College - Corner Brook

#### **Prince Edward Island**

University of Prince Edward Island  
Atlantic Veterinary College, University of Prince Edward Island

#### **Nova Scotia**

Acadia University Acadia Divinity College  
Atlantic School of Theology Dalhousie University  
Dalhousie University Polytechnic Mount St. Vincent University Nova Scotia Agricultural College  
Nova Scotia College of Art & Design Saint Mary's University  
St. Francis Xavier University Coady International Institute Université Sainte-Anne  
University College of Cape Breton  
University College of Cape Breton, Technology Campus University of King's College

#### **New Brunswick**

Bethany Bible College Mount Allison University St. Thomas University  
University of New Brunswick  
University of New Brunswick - Fredericton Campus University of New Brunswick - St. John Campus Université de Moncton  
Université de Moncton - Campus de Moncton Université de Moncton - Campus de Shippagan Université de Moncton - Campus d'Edmundston

#### **Quebec**

Bishop's University  
Thomas Moore Institute for Adult Education Concordia University  
Concordia University - Sir George Williams Campus Concordia University - Loyola Campus  
McGill University Université de Montréal École Polytechnique  
École des Hautes Études Commerciales Université de Sherbrooke  
Université du Québec  
École nationale d'administration publique Institut national de la recherche scientifique École de technologie supérieure  
Télé-université

Université du Québec à Chicoutimi Université  
du Québec en Outaouais Université du  
Québec à Montréal Université du Québec à  
Rimouski Université du Québec à Trois-  
Rivières

Université du Québec en Abitibi-  
Témiscamingue Université Laval

### **Ontario**

Brock University

Concordia Lutheran Theological College  
Carleton University

Collège Dominicain de Philosophie et de  
Théologie Institut de Pastorale du Collège  
Dominicain Lakehead University

Laurentian University Algoma University  
College

Collège Universitaire de Hearst Huntington  
University Thorneloe University Université de  
Sudbury McMaster University McMaster  
Divinity College

McMaster University - Conestoga McMaster  
University - Mohawk Nipissing University

Queen's University

Queen's Theological College Redeemer  
University College Royal Military College of  
Canada Ryerson University

Trent University Tyndale College Tyndale  
Bible College Tyndale Seminary University of  
Guelph Collège d'Alfred

Kemptville College of Agricultural Technology  
Ridgetown College

University of Ottawa Université Saint-Paul  
University of Toronto Emmanuel Bible  
College Erindale College

Knox College

Ontario Institute for Studies in Education  
(OISE) Regis College

Scarborough College St. Augustine College

Toronto School of Theology University  
College

University of St. Michael's College University  
of Trinity College Victoria University

Wycliffe College University of Waterloo  
Conrad Grebel College Renison College

St. Paul's College

University of St. Jerome's College University  
of Western Ontario Brescia College

Huron University College King's College

St. Peter's Seminary Wilfrid Laurier University  
Wilfrid Laurier Seminary University of Windsor  
Assumption University Canterbury College

Holy Redeemer College Iona College

York University Atkinson College Glendon  
College

### **Manitoba**

Brandon University

Canadian Mennonite University

Menno Simons College, Canadian Mennonite  
University William and Catherine Booth Bible  
College

University of Manitoba

Collège Universitaire de Saint-Boniface

St. Andrew's College, University of Manitoba  
St. John's College, University of Manitoba

St. Paul's College, University of Manitoba  
University of Winnipeg

Providence College and Theological  
Seminary Steinbach Bible College

### **Saskatchewan**

Canadian Bible College Canadian Theological  
Seminary University of Regina

Campion College Luther College

Saskatchewan Indian Federated College  
University of Saskatchewan

Central Pentecostal College Lutheran  
Theological Seminary St. Andrew's College

St. Thomas More College St. Joseph's  
College

St. Peter's College

University College of Emmanuel & St. Chad

## **Alberta**

Athabasca University Augustana University  
College Canadian Nazarene College  
Canadian University College

Concordia University College of Alberta  
King's University College

Newman Theological College University of  
Alberta

North American Baptist College St. Stephen's  
Theological College University of Calgary

University of Lethbridge

## **British Columbia**

Open Learning Agency Royal Roads  
University Seminary of Christ the King Simon  
Fraser University

Technical University of British Columbia  
Trinity Western University

Canadian Baptist Seminary University of  
British Columbia Regent College

Vancouver School of Theology University of  
Northern British Columbia University of  
Victoria

## **Community Colleges and Related institutions by jurisdiction**

### **Newfoundland and Labrador**

College of the North Atlantic C.N.A., Baie  
Verte Campus C.N.A., Bay St. George  
Campus C.N.A., Bonavista Campus C.N.A.,  
Burin Campus

C.N.A., Carbonear Campus C.N.A.,  
Clarenville Campus C.N.A., Corner Brook  
Campus

C.N.A., Engineering Technology, Ridge Road  
Campus C.N.A., Grand Falls - Windsor  
Campus

C.N.A., Gander Campus

C.N.A., Happy Valley - Goose Bay Campus  
C.N.A., Labrador West Campus

C.N.A., Placentia Campus C.N.A., Port Aux  
Basques Campus

C.N.A., Prince Philip Drive Campus C.N.A.,  
St. Anthony Campus C.N.A., Seal Cove  
Campus

C.N.A., Stephenville Crossing Campus  
C.N.A., Topsail Road Campus

### **Prince Edward Island**

Holland College

Holland College, Atlantic Tourism and  
Hospitality Institute Holland College, Atlantic  
Welding and Fabrication Centre Holland  
College, Aerospace and Industrial  
Technology Centre Holland College, Justice  
Institute of Canada

Holland College, Charlottetown Centre  
Holland College, Marine Centre Holland  
College, Summerside Centre Holland  
College, Montague Centre

Holland College, Institute of Adult and  
Community Education Holland College,  
Royalty Centre

Holland College, Tignish/Dalton Centre

### **Nova Scotia**

Canadian Coast Guard College Collège de  
l'Acadie

Nova Scotia Community Colleges (NSCC)

N.S.C.C., Adult Vocational Training Campus,  
Dartmouth N.S.C.C., Adult Voc Training  
Campus, Cape Breton N.S.C.C., Annapolis  
Campus

N.S.C.C., Burrigge Campus N.S.C.C.,  
Colchester Campus

N.S.C.C., College of Geographic Sciences  
N.S.C.C., Cumberland Campus N.S.C.C.,  
Halifax Campus

N.S.C.C., Hants Campus N.S.C.C., Institute  
of Technology N.S.C.C., I.W. Akerly Campus  
N.S.C.C., Kingstec Campus N.S.C.C.,  
Lunenburg Campus N.S.C.C., Marconi  
Campus N.S.C.C., Nautical Institute N.S.C.C.,  
Pictou Campus N.S.C.C., Strait Area Campus  
N.S.C.C., Shelburne Campus N.S.C.C.,  
Sydney Campus N.S.C.C., Truro Campus

Nova Scotia School of Fisheries and  
Aquaculture Queen Elizabeth II Health  
Sciences Center

The Institute for Early Childhood Education  
and Developmental Services Queen Elizabeth  
II, School of Applied Nursing

### **New Brunswick**

École des pêches du Nouveau-Brunswick  
Maritime Forest Ranger School

Maritime Forest Ranger School - Fredericton  
Maritime Forest Ranger School - Bathurst  
New Brunswick Community College N.B.C.C.,  
Bathurst Campus

N.B.C.C., Campbellton Campus N.B.C.C.,  
Dieppe Campus N.B.C.C., Edmunston  
Campus

N.B.C.C., Miramichi Campus N.B.C.C.,  
Moncton Campus N.B.C.C., Peninsule  
Acadienne N.B.C.C., Saint John Campus  
N.B.C.C., St. Andrew's Campus N.B.C.C.,  
Woodstock Campus

N.B.C.C.D., New Brunswick College of Craft  
& Design School of Radiological Technology,  
Moncton Hospital School of Radiological  
Technology, Moncton Hospital

School of Radiological Technology, Saint  
John Regional Hospital

### **Quebec**

Académie Julien Inc.

Access

Adult Education Centre Atelier - École des  
Cèdres Campus Notre-Dame-de-Foy

Centre d'études collégiales en Charlevoix  
Centre d'études collégiales de Montmagny

Centre d'Éducation pour Adultes  
Administration Commerce Temps-Partiel  
Centre d'éducation pour adultes (CEA)  
Camirand

Centre d'éducation pour adultes (CEA)  
Pierre-Dupuy Temps-Partiel

Centre de formation en mécanique de  
véhicules lourds de Saint-Romuald,  
C.F.M.V.L. Centre de formation  
professionnelle de l'Outaouais, C.F.P.O.

Centre intégré en alimentation et tourisme,  
C.I.A.T

Centre national de conduite d'engins de  
chantier, C.N.C.E.C. Centre administration  
commerce et secrétariat

Centre Agricole de Mirabel Centre André  
Morissette Centre Bernard-Gariepy

Centre d'Orientation et Formation des  
Immigrants (COFI) - Outaouais Centre  
d'éducation pour adultes (CEA) Daniel-  
Johnson

Centre d'éducation pour adultes (CEA) de  
formation H.S. Billings Centre d'éducation  
pour adultes (CEA) de formation  
professionnelle (FP)

Centre d'éducation pour adultes (CEA) de  
l'Accore (formation professionnelle (FP))

Centre d'éducation pour adultes (CEA) du  
Goeland (formation professionnelle (FP))

Centre d'éducation pour adultes (CEA) et  
formation professionnelle (FP) de Saint-  
Raymond

Centre d'éducation pour adultes (CEA) de  
formation professionnelle Les Cimes Centre  
d'éducation pour adultes (CEA) Gabriel  
Rousseau

Centre d'éducation pour adultes (CEA)  
Grand-Pre

Centre d'éducation pour adultes (CEA)  
Informatique Buerau de Verdun Centre  
d'éducation pour adultes (CEA) le Flores

Centre d'éducation pour adultes (CEA) le  
Maillon Centre d'éducation pour adultes  
(CEA) Louis-Jolilet

Centre d'éducation pour adultes (CEA)  
Métiers l'Aérospatiale Centre d'éducation  
pour adultes (CEA) Polyvalente Chomedey  
Centre d'éducation pour adultes (CEA)  
Radisson

Centre d'éducation pour adultes (CEA)  
Samuel-de-Champlain Centre de formation  
professionnelle (CFP)

Centre de formation professionnelle (CFP) -  
Pontiac



Centre de formation professionnelle (CFP) -  
Compétences Outaouais Centre de formation  
professionnelle (CFP) d'Alma

Centre de formation professionnelle (CFP)  
Mont-Joli - Mitis Centre de formation  
professionnelle (CFP) Vallée-de-la-Gatineau  
Centre de formation professionnelle (CFP) de  
Coaticook

Centre de formation professionnelle (CFP) de  
la Jamesie Centre de formation  
professionnelle (CFP) du Granit Centre de  
foresterie

Centre de formation Eastern Quebec

Centre de formation professionnelle (CFP)  
24-Juin Centre de formation Vision 20-20

Centre de formation Agricole Centre de  
formation Harricana Centre d'équipement  
motorisé Centre des carrières West Quebec  
Centre éducatif l'Abri

Centre de formation professionnelle (CFP)  
Bel Avenir Centre de formation  
professionnelle (CFP) des Moulins Centre  
Frère-Moffette formation professionnelle  
Centre La Croisée

Centre l'Envol

Centre l'Envol formation professionnelle  
Centre Marie-Rivier

Centre Nouvel-Horizon Centre Odilon-  
Gauthier Centre Paul-Rousseau Centre  
Performance Plus Centre Polymétier

Centre Régional int. de formation Centre  
Relais de la Lièvre

Centre Riverdale

Centre Riverside Park Tech.

Centre Vision-Avenir formation  
professionnelle Centre de formation  
professionnelle (CFP)

Centre de formation professionnelle (CFP)  
Qualitech Centre de Formation  
Professionnelle (CFP) Anjou

Centre de Formation Professionnelle (CFP)  
Antoine-de-St-Exupery Centre de Formation  
Professionnelle (CFP) Arvida

Centre de Formation Professionnelle (CFP) -  
A.W.-Gagné Centre de Formation  
Professionnelle (CFP) C.-E.-Pouliot Centre de  
Formation Professionnelle (CFP) Calixa-  
Lavalée

Centre de Formation Professionnelle (CFP)  
Carrefour Form. Mauricie Centre de  
Formation Professionnelle (CFP) Chandler -  
Grande-Rivière Centre de Formation  
Professionnelle (CFP) Chanoine-Armand-  
Racicot Centre de Formation Professionnelle  
(CFP) Chateauguay Valley

Centre de Formation Professionnelle (CFP)  
Chisasibi

Centre de Formation Professionnelle (CFP)  
Compétence 2000 Centre de Formation  
Professionnelle (CFP) Dalbe-Viau Centre de  
Formation Professionnelle (CFP) D'Amqui

Centre de Formation Professionnelle (CFP)  
Daniel-Johnson Centre de Formation  
Professionnelle (CFP) de Black Lake Centre  
de Formation Professionnelle (CFP) de  
Charlevoix Centre de Formation  
Professionnelle (CFP) de Chateauguay  
Centre de Formation Professionnelle (CFP)  
de Duchesnay Centre de Formation  
Professionnelle (CFP) de Hopetown Centre  
de Formation Professionnelle (CFP) de la  
Pointe-du-Lac

Centre de Formation Professionnelle (CFP)  
de Lachine-Dalbe-Viau Centre de Formation  
Professionnelle (CFP) de L'Argile

Centre de Formation Professionnelle (CFP)  
de L'Asbesterie Centre de Formation  
Professionnelle (CFP) de Lévis Centre de  
Formation Professionnelle (CFP) de Matane

Centre de Formation Professionnelle (CFP)  
de Memphremagog Centre de Formation  
Professionnelle (CFP) de Neufchatel Centre  
de Formation Professionnelle (CFP) de  
Rochebelle Centre de Formation  
Professionnelle (CFP) de Sainte-Marie Centre  
de Formation Professionnelle (CFP) de Saint-  
Joseph Centre de Formation Professionnelle  
(CFP) de Verdun

Centre de Formation Professionnelle (CFP)  
de Wakeham Centre de Formation

Professionnelle (CFP) des Patriotes Centre de Formation Professionnelle (CFP) des Sommets Centre de Formation Professionnelle (CFP) Dolbeau-Mistassini

Centre de Formation Professionnelle (CFP) du Fleuve-et-des-Lacs Centre de Formation Professionnelle (CFP) du Nunavik

Centre de Formation Professionnelle (CFP) - Édifice André-Jacob Centre de Formation Professionnelle (CFP) Émile-Legault Centre de Formation Professionnelle (CFP) E.M.O.I.C.Q. Centre de Formation Professionnelle (CFP) en Métallurgie

Centre de Formation Professionnelle (CFP) en Métallurgie de Laval Centre de Formation Professionnelle (CFP) Fierbourg

Centre de Formation Professionnelle (CFP) Gabriel-Rousseau Centre de Formation Professionnelle (CFP) Gérard-Filion Centre de Formation Professionnelle (CFP) Gordon Robertson Centre de Formation Professionnelle (CFP) Hors-Murs Centre de Formation Professionnelle (CFP) Hull

Centre de Formation Professionnelle (CFP) IPIQ

Centre de Formation Professionnelle (CFP) Jacques-Rousseau Centre de Formation Professionnelle (CFP) Jonquière

Centre de Formation Professionnelle (CFP) Kajusivik Centre de Formation Professionnelle (CFP) La Baie Centre de Formation Professionnelle (CFP) Le Chantier Centre de Formation Professionnelle (CFP) Le Flores Centre de Formation Professionnelle (CFP) Le Tremplin Centre de Formation Professionnelle (CFP) Le Virage

Centre de Formation Professionnelle (CFP) L'Envolée de Montmagny Centre de Formation Professionnelle (CFP) L'Oasis

Centre de Formation Professionnelle (CFP) Maniwaki

Centre de Formation Professionnelle (CFP) Marie-de-l'Incarnation Centre de Formation Professionnelle (CFP) Maurice-Barbeau Centre de Formation Professionnelle (CFP)

Métiers L'Aérospatiale Centre de Formation Professionnelle (CFP) Mistissini

Centre de Formation Professionnelle (CFP) Montagne de Lignes Centre de Formation Professionnelle (CFP) Morilac

Centre de Formation Professionnelle (CFP) Multiservices Centre de Formation Professionnelle (CFP) Nova

Centre de Formation Professionnelle (CFP) Paspebiac-Bonaventure Centre de Formation Professionnelle (CFP) Paul-Émile Dufresne Centre de Formation Professionnelle (CFP) Pavillon Technique Centre de Formation Professionnelle (CFP) Pavillon-de-l'Avenir Centre de Formation Professionnelle (CFP) Pierre-Dupuy

Centre de Formation Professionnelle (CFP) Pozer Centre de Formation Professionnelle (CFP) Roberval

Centre de Formation Professionnelle (CFP) Saint-Exupery

Centre de Formation Professionnelle (CFP) Samuel-de-Champlain Centre de Formation Professionnelle (CFP) Seigneurie

Centre de Formation Professionnelle (CFP) Shawville Centre de Formation Professionnelle (CFP) Val-d'Or Centre de Formation Professionnelle (CFP) Wilbrod-Bherer Centre informatique et d'administration (CIA) de Lasalle

Centre informatique et d'administration (CIA) de L'Ouest-de-L'île Centre informatique et d'administration (CIA) de Verdun-Lasalle Centre de Formation Professionnelle (CFP) Blainville

Centre de Formation Professionnelle (CFP) Centre de Formation Routier Express Centre d'études professionnelles

Centre Formation Compétence-Rive-Sud Centre Formation Horticole de Laval Centre Formation Métiers de L'Acier

Centre Formation Professionnelle (CFP) des Moissons Centre Formation Professionnelle (CFP) des Riverains Centre Formation Professionnelle (CFP) Lac-Abitibi Centre Formation Professionnelle (CFP) l'Automobile Centre Formation Professionnelle (CFP)

l'Émergence Centre Formation Routier St-Jérôme

Centre Formation Transport Charlesbourg  
Centre Formation Professionnelle (CFP)  
Centre Sectoriel des Plastiques

CFRN formation professionnelle

Champlain Regional College - Campus  
Lennoxville Champlain Regional College –  
Campus St-Lambert-Longueuil Champlain  
Regional College – Campus Saint-Lawrence

CIMIC - Centre intégré de mécanique  
industrielle de la Chaudière

Cité Étudiante Polyno

Collège d'enseignement général et  
professionnel (CÉGEP) de L'Abitibi-  
Témiscamingue Collège d'enseignement  
général et professionnel (CÉGEP) d'Alma

Collège d'enseignement général et  
professionnel (CÉGEP) d'Ahuhtsic Collège  
d'enseignement général et professionnel  
(CÉGEP) André-Laurendeau

Collège d'enseignement général et  
professionnel (CÉGEP) de Bois-de-Boulogne  
Collège d'enseignement général et  
professionnel (CÉGEP) de Chicoutimi  
Collège d'enseignement général et  
professionnel (CÉGEP) Dawson

Collège d'enseignement général et  
professionnel (CÉGEP) de Drummondville  
Collège d'enseignement général et  
professionnel (CÉGEP) Édouard-Montpetit  
Collège d'enseignement général et  
professionnel (CÉGEP) François-Xavier-  
Garneau Collège d'enseignement général et  
professionnel (CÉGEP) Gérald-Godin

Collège d'enseignement général et  
professionnel (CÉGEP) de la Gaspésie et des  
Îles Collège d'enseignement général et  
professionnel (CÉGEP) de Granby-Haute-  
Yamaska Collège d'enseignement général et  
professionnel (CÉGEP) de Baie-Comeau

Collège d'enseignement général et  
professionnel (CÉGEP) John Abbott

Collège d'enseignement général et  
professionnel (CÉGEP) régional de  
Lanaudière à Joliette

Collège d'enseignement général et  
professionnel (CÉGEP) régional de  
Lanaudière à l'Assomption

Collège d'enseignement général et  
professionnel (CÉGEP) régional de  
Lanaudière à Terrebonne

Collège d'enseignement général et  
professionnel (CÉGEP) de Jonquière Collège  
d'enseignement général et professionnel  
(CÉGEP) de La Pocatière Collège  
d'enseignement général et professionnel  
(CÉGEP) de Lévis-Lauzon Collège  
d'enseignement général et professionnel  
(CÉGEP) de Limoilou Collège  
d'enseignement général et professionnel  
(CÉGEP) Lionel-Groulx Collège  
d'enseignement général et professionnel  
(CÉGEP) de Maisonneuve Collège  
d'enseignement général et professionnel  
(CÉGEP) de Matane Collège d'enseignement  
général et professionnel (CÉGEP)  
Montmorency Collège d'enseignement  
général et professionnel (CÉGEP) de  
l'Outaouais

Collège d'enseignement général et  
professionnel (CÉGEP) de la Région de  
l'Amiante Collège d'enseignement général et  
professionnel (CÉGEP) de Rimouski

Collège d'enseignement général et  
professionnel (CÉGEP) de Rivière-du-Loup  
Collège d'enseignement général et  
professionnel (CÉGEP) de Rosemont  
Collège d'enseignement général et  
professionnel (CÉGEP) de Sainte-Foy  
Collège d'enseignement général et  
professionnel (CÉGEP) de St-Félicien  
Collège d'enseignement général et  
professionnel (CÉGEP) de Saint-Hyacinthe

Collège d'enseignement général et  
professionnel (CÉGEP) Saint-Jean-sur-  
Richelieu Collège d'enseignement général et  
professionnel (CÉGEP) de Saint-Jérôme

Collège d'enseignement général et  
professionnel (CÉGEP) de Saint-Laurent  
Collège d'enseignement général et  
professionnel (CÉGEP) de Sept-Îles Collège  
d'enseignement général et professionnel

(CÉGEP) de Shawinigan Collège  
d'enseignement général et professionnel  
(CÉGEP) de Sherbrooke Collège  
d'enseignement général et professionnel  
(CÉGEP) de Sorel-Tracy Collège  
d'enseignement général et professionnel  
(CÉGEP) de Trois-Rivières Collège  
d'enseignement général et professionnel  
(CÉGEP) de Valleyfield Collège  
d'enseignement général et professionnel  
(CÉGEP) de Victoriaville Collège  
d'enseignement général et professionnel  
(CÉGEP) du Vieux-Montréal

Collège d'enseignement général et  
professionnel (CÉGEP) Beauce-Appalaches  
Collège d'enseignement général et  
professionnel (CÉGEP) Marie Victorin  
Collège d'information et d'administration de  
l'ouest-de-l'île

Collège dans la cité de la villa Sainte-  
Marcelline Collège André-Grasset

Collège Bart Collège Centennal

Collège d'affaires Ellis Collège Français  
Collège Héritage Collège Mother House

Collège Vanier / Vanier College Collège Jean-  
de-Brébeuf Collège Lafleche

Collège LaSalle Collège de Lévis Collège  
Marianopolis Collège Mérici

Collège Secrétariat Notre-Dame Collège  
O'Sullivan de Montréal Collège O'Sullivan de  
Québec Collège Moderne de Trois-Rivières  
Collège dans la Cité

Collège Marie-de-France

Collège préuniversitaire Nouvelles Frontières  
Collège Stanislas

Conservatoire de musique de Gatineau  
Conservatoire de musique de Montréal  
Conservatoire de musique de Québec  
Conservatoire de musique de Rimouski  
Conservatoire de musique de Saguenay  
Conservatoire de musique de Val-d'Or  
Conservatoire d'Art Dramatique de Montréal  
Conservatoire d'Art Dramatique du Québec  
Conservatoire Lassalle

École commerciale du Cap

École de Musique Vincent d'Indy École  
académie les Estacades École Antoine-  
Bernard

École du Mont-Sainte-Anne École forestière  
de La Tuque École Gérard-Filion

École hôtelière des Laurentides École  
hôtellerie de Laval

École Jean-Jacques-Bertrand École Joseph-  
Hermas-Leclerc École le Goeland

École Marie-Anne

École Massey-Vanier École nationale du  
cirque École Odilon-Gauthier

École Paul-Germain-Ostiguy École Paul-  
Rousseau

École Professionnelle des Métiers École  
Professionnelle Saint-Hyacinthe École  
Polymécanique de Laval

École Polyvalente Cure-Mercure École  
Polyvalente des Monts École Saint-Frédéric

École Secondaire de la Rencontre École  
Secondaire A.-NorbertoMorin École  
Secondaire Grande-Rivière École Secondaire  
La Magdeleine École Secondaire Paul-Gerin-  
Lajoie École Secondaire Beurivage

École Secondaire Chavigny École Secondaire  
Val-Maurice Formatronique

Institut du tourisme et de l'hôtellerie du  
Québec Institut de Technologie Agricole de  
Saint-Hyacinthe Institut de Technologie  
Agricole de La Pocatière Institut supérieur  
d'électronique, Montréal

Institut Teccart Inc. John F. Kennedy Centre

Le Petit Séminaire de Québec Laurentian  
Regional High School Laurier MacDonald  
Vocational

Laval-Laurentide-Lanaudière - Centre  
d'Orientation et Formation des Immigrants  
(COFO)

M.F.R., Maison Familiale Rurale du Granit  
Métiers de la Construction

Métiers de l'Horticulture Métiers des  
Faubourgs Métiers du Commerce Métiers du  
Meuble Métiers du Sud-Ouest

Métiers Équipement Motorisé  
Montréal - Centre d'orientation et  
Formation des Immigrants (COFI) Polyvalente  
Chanoine-Armand-Racicot  
Polyvalente Ancienne-Lorette Polyvalente de  
Disraeli  
Programme Mile End High School  
Rosemount Technology Centre  
St. Pius X Vocational Centre Séminaire de  
Sherbrooke Shadd Business Centre  
Siège social de l'université du Québec  
Vocational Education Center  
West Island Career Centre Multicollège de  
l'Ouest du Québec

### **Ontario**

Algonquin College of Applied Arts &  
Technology Cambrian College  
Canadian Memorial Chiropractic College  
Canadore College of Applied Arts &  
Technology  
Cancer Care Ontario, Hamilton School of  
Radiation Therapy Centennial College of  
Applied Arts & Technology  
Collège Boréal d'art appliqués et de  
technologie Campus de Hearst  
Campus de Kapuskasing Campus de New  
Liskeard Campus de Sturgeon Falls Campus  
de Timmins Campus d'Elliot Lake  
Collège des Grands Lacs d'arts appliqués et  
de technologie Conestoga College Institute of  
Technology & Advanced Learning  
Confederation College of Applied Arts &  
Technology  
Durham College of Applied Arts & Technology  
Eastern Ontario School of X-Ray Technology,  
Kingston General Hospital Fanshawe College  
of Applied Arts & Technology  
George Brown College of Applied Arts &  
Technology  
Georgian College of Applied Arts &  
Technology & Advanced Learning Humber  
College Institute of Technology North  
Campus

La Cité Collégiale  
Cité Collégiale - Campus d'Ottawa  
Cité Collégiale - Campus de Hawkesbury Cité  
Collégiale - Campus de Cornwall  
Lambton College of Applied Arts &  
Technology  
London Regional Cancer Centre, School of  
Radiation Therapy Loyalist College of Applied  
Arts & Technology  
Mohawk College of Applied Arts &  
Technology Niagara College of Applied Arts &  
Technology Niagara Parks Commission  
School of Horticulture Northern College of  
Applied Arts & Technology  
Northern College of Applied Arts &  
Technology, Porcupine Site Ontario Cancer  
Foundation, School of Radiation Therapy,  
Thunder Bay Ontario Cancer Foundation,  
School of Radiation Therapy, Windsor Ontario  
Cancer Foundation, School of Radiation  
Therapy, Kingston Ontario College of Art &  
Design  
Ontario School of Radiation Therapy, Ontario  
Cancer Institute Ottawa Regional Cancer  
Centre, School of Radiation Therapy St. Clair  
College of Applied Arts & Technology  
St. Lawrence College of Applied Arts and  
Technology St. Lawrence College, Brockville  
St. Lawrence College, Cornwall  
Sault College of Applied Arts & Technology  
Sault College of Applied Arts & Technology  
Elliot Lake Campus Seneca College of  
Applied Arts & Technology  
Sheridan College Institute of Technology &  
Advanced Learning Sir Sandford Fleming  
College of Applied Arts & Technology The  
Michener Institute, Applied Health Sciences

### **Manitoba**

Assiniboine Community College Cancer Care  
Manitoba  
Health Sciences Centre  
Health Sciences Centre, School of  
Respiratory Therapy Health Sciences Centre,

School of Cytotechnology Keewatin  
Community College

L'École Technique et Professionnelle Red  
River College

Yellowquill College

### **Saskatchewan**

Carlton Trail Regional College Cumberland  
Regional College Cypress Hills Regional  
College North West Regional College  
Northlands College

Parkland Regional College Prairie West  
Regional College

Radiation Therapy Program, Saskatoon  
Cancer Centre Regina Health, School of  
Diagnostic Cytotechnology Saskatchewan  
Indian Institute of Technology

Saskatchewan Institute of Applied Science  
and Technology (S.I.A.S.T.) S.I.A.S.T., Avord  
Centre

S.I.A.S.T., Woodland Campus S.I.A.S.T.,  
Palliser Campus S.I.A.S.T., Wascana  
Campus S.I.A.S.T., Kelsey Campus

School of Radiation Therapy, Allan Blair  
Cancer Centre Southeast Regional College

### **Alberta**

Alberta College of Art and Design Bow Valley  
College

Cross Cancer Institute, School of Radiation  
Therapy

Fairview College

Grande Prairie Regional College Grant  
MacEwan Community College Grant  
MacEwan Community College

School of Psychiatric Nursing, Alberta  
Hospital Ponoka Keyano College

Lakeland College

Lakeland College, Vermilion Campus  
Lakeland College, Lloydminster Campus  
Lethbridge Community College Medicine Hat  
College

Mount Royal College NorQuest College

Northern Alberta Institute of Technology  
Northern Lakes College

Olds College Portage College Red Deer  
College

Southern Alberta Institute of Technology

Tom Baker Cancer Centre, School of  
Radiation Therapy

### **British Columbia**

British Columbia Institute of Technology  
Capilano College

Camosun College

College of New Caledonia College of the  
Rockies Douglas College

Emily Carr Institute of Art & Design Institute of  
Indigenous Government Justice Institute of  
British Columbia Kwantlen University College

Langara College

Malaspina University College

Nicola Valley Institute of Technology Northern  
Lights Community College North Island  
College

Northwest Community College Okanagan  
University College Selkirk College

University College of the Cariboo University  
College of the Fraser Valley Vancouver  
Community College

### **Yukon Territory**

Yukon College

### **Northwest Territories**

Aurora College

Aurora College, Aurora Campus Aurora  
College, Thebacha Campus Aurora College,  
Yellowknife Campus

### **Nunavut**

Nunavut Arctic College

Nunavut Arctic College, Kivalliq Campus  
Nunavut Arctic College, Kitikmeot Campus  
Nunavut Arctic College, Nunatta Campus

## Appendix P.

### Survey Recruitment Email—CACEE Members

TO: Individual email  
FROM: Dan Relihan, President, CACEE  
RE: Invitation to participate in Canadian national survey of career centres

Dear <first\_name>

As a CACEE member and career services professional, you are invited to participate in an exciting and important nationwide survey of career services centres in Canada. Through this research project, we are seeking to: gain a better understanding of how career services areas across Canada are resourced in terms of budgets and staffing; learn what services they provide to students, alumni, employers and others; and identify what metrics are being collected and reported.

This survey is being organized by CACEE member Christine Sjolander, long time career services practitioner and a doctoral student at Simon Fraser University under the supervision of Dr. Michelle Nilson. Christine currently serves as the Executive Director of the Graduate Career Management Center at SFU's Beedie School of Business. Career services practitioners from post-secondary institutions across Canada are invited to participate.

For the purposes of this survey, we use the term "career centre" to represent any unit, department or area dedicated to the provision of career development services to students on campus. We are using a broad definition of career development services to include co-op, internship and other experiential learning programs,

preparation programs for post-graduate employment, career related advisement and counseling services and services and job / employment search functions.

Due to its comprehensive nature, if you are willing to participate, this survey will take 60 – 90 minutes to complete. Participation is entirely voluntary and you may exit the survey at any time without submitting your responses for inclusion in the study. You are free to decline to answer any particular question you do not wish to answer for any reason. All responses will be kept confidential and will not be identified by individual. Responses will be compiled together and analyzed and reported as a group.

To participate in this survey, please click here:

<https://sfu.fluidsurveys.com/surveys/careercentresurvey/survey-on-resources-and-metrics-v4-0/>

All participants who complete the survey will receive a CACEE Research Brief with a summary of the results in June 2017. All participants are also eligible for a chance to win one of four Kindle e-Readers. If you would like to obtain any further information on details of the survey, please contact Christine Sjolander via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca).

Your assistance in this important Canadian initiative is highly appreciated. We look forward to hearing from you.

Best wishes,

Dan Relihan





## **Appendix Q.**

### **Survey Recruitment Email—Non-CACEE Members**

TO: Individual email  
FROM: Christine Sjolander  
RE: Invitation to participate in Canadian national survey of career centres

As a key career services contact for your institution, I am writing to invite you to participate in an exciting and important nationwide survey of career services centres in Canada. Through this research project, we are seeking to gain a better understanding of how career services areas across Canada are resourced in terms of budgets and staffing, what services they provide to students, alumni, employers and others, and what metrics are being collected and reported.

In partnership with the Canadian Association for Career Educators and Employers (CACEE), this survey is being executed by myself, a long-time career services practitioner and a doctoral student at Simon Fraser University under the supervision of Dr. Michelle Nilson. I also currently serve as the Executive Director of the Graduate Career Management Center at SFU's Beedie School of Business. Career services practitioners from all types of post-secondary institutions across Canada have been invited to participate.

For the purposes of this survey, we use the term "career centre" to represent any unit, department or area dedicated to the provision of career development services to students on campus. We are using a broad definition of career development services to include co-op, internship and other experiential learning programs,

preparation programs for post-graduate employment, career related advisement and counseling services and services and job / employment search functions.

Due to its comprehensive nature, this survey will take 60 – 90 minutes to complete. Participation is entirely voluntary and you may exit the survey at anytime without submitting your responses for inclusion in the study. You are free to decline to answer any particular question you do not wish to answer for any reason. All responses will be kept confidential and will not be identified by individual. Responses will be compiled together and analyzed and reported as a group.

To participate in this survey, please click here:

<https://sfu.fluidsurveys.com/surveys/careercentresurvey/survey-on-resources-and-metrics-v4-0/>

The survey will remain open for participation until about October 1, 2016. All participants who complete the survey can choose to receive a Research Brief with a summary of the results in June 2017. All participants are also eligible for a chance to win one of four Kindle e-Readers. If you would like to obtain any further information on details of the survey, please contact me via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca).

Your assistance in this important Canadian initiative is highly appreciated. I look forward to hearing from you.

Best wishes,

Christine Sjolander



## **Appendix R.**

### **LinkedIn Recruitment Post**

Headline: Research Study: Career Centre Benchmarking Survey on Resources, Services and Metrics

As a Canadian career services professional, you are invited to participate in an exciting and important nationwide survey of career services centres seeking to gain a better understanding of how career services areas across Canada are resourced in terms of budgets and staffing, what services they provide to students, alumni, employers and others, and what metrics are being collected and reported.

If you are willing to participate, this survey will take about 90 minutes to complete. Participation is entirely voluntary and all responses will be kept confidential. Participants who complete the survey will receive a chance to win one of five Kindle eReaders.

For more information and to participate in this survey, please click here:  
<http://sfu.fluidsurveys.com/surveys/careercentresurvey/survey-on-resources-and-metrics-v3-0/>

If you would like to obtain any further information on details of the survey, please contact me via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca).

## **Appendix S.**

### **National Survey Consent Form**

Consent included on landing page of online survey.

### **Career Centre Resources, Services and Metrics: A pan-Canadian benchmarking survey**

#### **Survey instructions and consent information**

Thank you for your interest in completing the Career Centre Benchmarking Survey on Resources, Services and Metrics. This research is very important to better understand the career services field across Canada. This survey is being conducted in collaboration with the Canadian Association of Career Educators and Employers (CACEE) by Christine Sjolander, CACEE member and doctoral student in Education at Simon Fraser University. Christine also serves as the Executive Director, Graduate Career Management Centre, Beedie School of Business at Simon Fraser University.

For the purposes of this survey, we use the term "career centre" to represent any unit, department or area dedicated the provision of career development services to students on campus. We are using a broad definition of career development services to include co-op, internship and other experiential learning programs, preparation programs for post-graduate employment, career related advisement and counseling services and services and job / employment search functions.

The purpose of this study is to gain a better understanding of how career services areas across Canada are resourced in terms of budgets and staffing, what

services they provide to students, alumni, employers and others, and what metrics are being collected and reported.

This study will take about 45 minutes to complete. You may save your responses and return to complete it at a later time. You are free to decline to answer any particular question you do not wish to answer for any reason. While all questions in the survey are optional, please answer them as completely as possible so that we can build a comprehensive picture of the Canadian post-secondary career development landscape.

All participants who complete the survey will receive the opportunity for one entry ticket for a random drawing to win one of five Kindle e-Readers. Winners will be notified no later than December 1, 2016 and prizes will be mailed to them.

All responses will be kept confidential and will not be identified by individual. Responses will be compiled together and analyzed and reported as a group. Individual responses will be anonymized before inclusion in any future reports or publication. Only individuals who specifically provide consent within survey that they are willing to be re-contacted about sharing their annual reports or for follow-up interviews will be re-contacted by the researcher. No other participants will be re-contacted.

This study has been designated as “minimal risk” to you as a participant as no anticipated harm will come to you through participation. Participation in this survey is entirely voluntary and you may exit the survey at any time without submitting your responses for inclusion in the study. Refusal to participate or withdrawal/dropout after agreeing to participate will not have an adverse effect or consequences on the participants including impacting your entry into the drawing for a Kindle eReader.

If you would like to obtain any further information on the details of the survey, please contact the principal investigator, Christine Sjolander, via e-mail at [csjoland@sfu.ca](mailto:csjoland@sfu.ca). If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics [jtoward@sfu.ca](mailto:jtoward@sfu.ca) or 778-782-6593.

By filling out this survey, you are consenting to participate. To continue, please click "next."



## Appendix T.

### National Survey Study Protocol

**Study Title:** Career Centre Resources, Services and Metrics: A pan-Canadian benchmarking survey

**Principal Investigator:** Christine Sjolander, EdD candidate, csjoland@sfu.ca, 778-782-7704

**Senior Supervisor:** Michelle Nilson, Associate Professor, mnilson@sfu.ca, 778-782-8122

**Faculty:** Faculty of Education

**Collaborator:** Canadian Association of Career Educators and Employers (CACEE), Dan Relihan, relihan.dan@gmail.com.

CACEE has agreed to promote this survey to their membership. In exchange for promotion assistance, we will provide CACEE with a detailed report of the findings and a presentation at their national conference next May.

Christine Sjolander, in addition to being a EdD candidate, is also a CACEE member and the Executive Director, Career Management Centre at the Beedie School of Business at Simon Fraser University.

#### **Background (must include an explanation of the need/justification for the study.)**

In the literature and in the popular press, the value of post-secondary education and the post-graduate career outcomes it can generate is being questioned more than ever before (Carlson, 2013; Contomanolis, Cruzvergara, Dey, & Steinfeld, 2015; Snowden, 2015). At many institutions, the career centre is the unit primarily viewed as responsible for the post-graduate employment outcomes of its students.

Despite increasing interest in post-graduate placement outcomes (Carretta & Ratcliffe, 2013; Zumeta, 2005), not much is known about how career centres in Canada are responding to budget pressures and increasing expectations. Career centres in Canada are facing increasing pressures on their limited resources and increasing requirements to report the impact of their services on their students, alumni and employers.

Additionally, there is a gap in the Canadian literature on career development within the post-secondary context (Lalande & Magnusson, 2007; Shea, 2010). Much has been written from a narrative perspective about individual career centre responses to these changes; however, this study seeks empirical information across the Canadian post-secondary sector as a whole. Given the growing importance placed upon data and information, this study will contribute in the following ways:

- By providing current, objective indicators of the changes to budgets and staffing within the Canadian career centre context
- By providing descriptive statistics of the programs and services currently offered by Canadian career centres and potential indicators of new trends
- By providing benchmarks on current metrics being collected by career centres which may provide an opportunity to develop national standards

### **Study Purpose (the main reason(s) the study is being conducted)**

The purpose of this study is to develop a comprehensive and effective survey instrument of career centers across Canada about their resources, services and metrics. The initial instrument was developed through the use of a Delphi panel methodology (SFU study 2016s0165). This study will deploy the survey nationally to career services professionals across Canada.

### **Prospective Participant Information**

Prospective participants will be recruited through three different channels.

- **Direct email solicitations:** A review of the websites of all the 280 post-secondary education institutions listed in the Centre for Education Statistics at Statistics Canada report has been undertaken to identify the individuals who manage career services offices on campus. Email contact information for these individuals has been collected from these public sources. Approximately 450 individuals will be contacted through this channel.
- **CACEE membership list:** An email will be sent by CACEE to its individual members asking them to complete the survey. Approximately 200 individuals will be contacted.
- **LinkedIn Groups:** A group announcement will be sent through the following Canadian Career Services related LinkedIn Groups inviting survey participation:
  - **CACEE / ACSEE:** More than 1300 members.
  - **Orbis User Group for Universities & Colleges:** More than 140 members.

With the exception of the CACEE membership list, all contact details for participants is public information and does not require consent. For the CACEE membership list, an agreement was reached with the National Board to distribute the survey to its membership. It will be distributed by CACEE and the contact details will not be shared with the researcher.

### **Detailed Research Procedures**

Individuals identified through online research will be sent a personalized email invitation explaining the study and inviting them to participate in early August. The invitation will include the link to the survey. CACEE members will be sent an invitation to participate from the CACEE organization staff in mid-August. This email invitation will include the link to the survey. Postings will go on the LinkedIn groups in early August that include a link to the survey.

The survey will take approximately 45 minutes to complete. The survey will remain open until early October. Reminders will be sent to all channels in late August and mid-September.

Only individuals who specifically provide consent within survey that they are willing to be re-contacted about sharing their annual reports or for follow-up interviews will be re-contacted by the researcher. No other participants will be re-contacted.

### **Potential Benefits**

While there are no direct benefits to individuals participating in this study, all participants have careers in this area so have a vested interest in quality data surrounding their practice. It is expected that the final survey will provide benefits to policy makers, administrative leaders and career centre practitioners.

Participants will not receive any remuneration for participating in the survey.

However, all participants, whether they withdraw from participating or not, will receive the opportunity to submit their name and email for one ticket for a random drawing to win one of five Kindle eReaders for participating in the survey. Winners will be notified no later than December 1, 2016 and prizes will be mailed to them.

### **Potential Risks**

There are no anticipated risks to participants in the study. Consent will occur if participants choose to complete the survey. Participation is voluntary and participants may skip any questions that they are uncomfortable answering. This study is designated as “minimal risk” to participants as the probability and magnitude of harm or discomfort anticipated is not greater in and of themselves than those ordinarily encountered in daily life. Refusal to participate or withdrawal/dropout after agreeing to participate will not have an adverse effect or consequences on the participants.

### **Maintenance of Confidentiality**

All data collection will occur online through FluidSurveys. While information that is transmitted over the internet confidentiality cannot be guaranteed, the host of the system collecting the data, FluidSurveys, is compliant with Canadian privacy (all data resides on Canadian servers) and accessibility standards (W3C).

Participants will be identified by title and institution in the survey; however, this is for participant tracking only. All identifiable information will be kept confidential and all data will be aggregated and unidentifiable in subsequent reports. Individual responses will be kept confidential in any future reports or publication.

Results will be downloaded to a password protected, Simon Fraser University owned computer to allow analysis by the researcher. This computer will be kept in a locked office when not in use.

### **Data Analysis Plan**

Data analysis will begin when the survey closes in October. As one of the goals of this study is to provide benchmarking data about what career centres are doing, a significant portion of the data analysis will be to develop descriptive statistics. Analysis will include frequency counts and percentages and will be graphically represented through bar and pie charts. If the response rate is sufficient, results will include descriptive statistics of each of the variables across different post-secondary sectors and provinces.

As I'm also investigating the relationship between resources and metrics with services offered, if any, the variables that are indicators of each of these areas will need to be analyzed using multiple regression analysis. Multiple regression analysis is defined as "a flexible method of data analysis that may be appropriate whenever a quantitative variable (the dependent or criterion variable) is to be examined in relationship to any other factors (expressed as independent or predictor variables)" (Berger, 2003). In this case, as I'm looking at the impact of

several independent values on dependent values, multiple regression is an appropriate analysis tool.

Open ended questions will be analyzed using the qualitative analysis techniques of coding based upon themes emerging from the responses.

Statistical analysis will be done using Tableau, SPSS, NVivo and / or a similar SFU licensed data analytics software packages. Data analysis is expected to be completed by March 2017.

### **Retention and Destruction of Data**

Data will be stored for up to 5 years on an SFU owned, password protected server after completion of analysis and publication of results. At that time, it will be destroyed.

### **Dissemination of Results**

The results of this survey will be reported in a graduate thesis and may also be published in journal articles and books.

Aggregate findings from the national online survey will be available to all survey and pilot participants as well as to CACEE.