Purpose, Partners, and Purses: Removing Barriers in Funding Postsecondary Education

by

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Committee Approval

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Abstract

This research explored how creating an opportunity for stakeholders to dialogue about funding might enhance Royal Roads University Student Services' purpose of reducing barriers for students. Adhering to ethical requirements, data were collected through a virtual world café and an online survey. Key findings revealed (a) barriers to funding postsecondary education (PSE), (b) traditional and nontraditional funding methods for PSE, (c) systemic obstacles to PSE relating to government and institutional supports, and (d) students found their own innovative ways to achieve their PSE goals. Recommendations are to (a) convene an annual meeting of diverse stakeholders to dialogue, (b) establish a task force comprising stakeholders to advance recommendations for actionable solutions, (c) elect task force members from the participants present, and (d) ensure task force members meet monthly to advance the recommendations into actionable solutions for Royal Roads University Student Services.

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Dr. Sandra Sellick, my supervisor, was a phenomenal supporter and assisted with my growth as a student, a professional, and a person. She posed questions to consider and reflect upon that had me contemplating other possibilities. Royal Roads is fortunate to have her.

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To my entire inquiry team, you demonstrated engaged teamwork at its finest, especially given the pandemic and having to do everything virtually. Doug Macnamara, Gayelene Bonenfant, Regula Lewis, and Kevin Rollason, a simple thank you is inadequate for your time, help, support, and guidance. Many others assisted by providing textbooks and encouragement. Thank you, Dr. Alice MacGillivray, my second supervisor, for your time and insights.

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List of Abbreviations

BC	British Columbia
CAUT	Canadian Association of University Teachers
CERB	Canada Emergency Response Benefit
CFS	Canadian Federation of Students
Child Welfare PAC	Child Welfare Political Action Committee Canada
COVID-19	Coronavirus disease 2019
CUPE	Canadian Union of Public Employees
IT	Information technology
PSE	Postsecondary education
PSI	Postsecondary institution
RESP	Registered education savings plan
RRU	Royal Roads University
RRUSS	Royal Roads University Student Services
TCPS	Tri-Council Policy Statement
UCRU	Undergraduates of Canadian Research-Intensive Universities
UNESCO	United Nations Educational, Scientific and Cultural Organization

Executive Summary

Long gone are the days when a high school diploma was all that was needed to get ahead in life. In my experience, the key to success is further education at a postsecondary institution. However, whether the education is sought at university or college, that key is very expensive, and many are unable to afford it. In this research, I looked at this issue by exploring the following main question: How might creating an opportunity for stakeholders to dialogue about funding enhance the Royal Roads University Student Services' (RRUSS) purpose of reducing barriers for Canadian students? I also used three subquestions:

1. What barriers to funding have Canadian postsecondary education stakeholders experienced before and during the coronavirus pandemic?
2. What barriers could be mitigated to enable all Canadian students to afford to attend Royal Roads University if they meet the entrance requirements?
3. What steps might be taken to enable Royal Roads University Student Services to better support the financial needs of students?

This research study not only addressed these issues, but also offered suggestions and recommendations for what could be done. It also aimed to increase and enhance stakeholder engagement, with data being collected in partnership with RRUSS. Overall, the intended outcome of this thesis was to provide RRUSS with possible solutions to reducing funding barriers for students. The scholarly literature review, which included seminal and current literature, informed the answers to the questions posed. The data collection method included a virtual world café and an online electronic survey. Participants were Royal Roads University

(RRU) stakeholders, including current and prospective students, alumni, funding sponsors, donors, RRU staff, board members, and government agents.

Through this research, I sought to determine some of the greatest barriers to funding postsecondary education. The research captured information regarding family and personal obligations, income and earning potential, and individuals' experiences obtaining scholarships, student loans or traditional lending. However, I also uncovered how individual students met success or failure in funding their postsecondary education (PSE), as well as the systemic obstacles to pursuing PSE and the innovative approaches they took to achieve their PSE goals.

The findings resulted in four recommendations: (a) convene an annual meeting of diverse stakeholders; (b) establish a RRU task force to meet monthly and advance recommendations to actionable solutions for RRUSS; (c) elect task force members from the participants present; and (d) advance the recommendations into actionable solutions for RRUSS.

These recommendations then led to the five implications: (a) the virtual world café proved to be a feasible tool in addressing challenges; (b) virtual world café integration into the curriculum offers real-world learning; (c) the virtual world café creates an ongoing mechanism that engages the three main stakeholder groups; (d) developing an ongoing task force leaves collaborative, experiential learning, and skill-building legacy; and (e) the task force may provide pathways to critical partnerships.

I conducted this study with the intent to reduce barriers for Canadian students. It is my hope that the inquiry recommendations can be used by RRUSS to help future students not only unlock their own personal success but also contribute to the success of their community and country in an increasingly connected world.

Chapter 1: Focus and Framing

Career growth and opportunities for leadership roles are often limited for people without postsecondary education (PSE). At the time of this research project, additional barriers arose due to the long-term impact of the coronavirus disease 2019 (COVID-19) pandemic. The pandemic exposed the disparity between those postsecondary students with financial means and access to resources and those without. These barriers placed families and individuals in vulnerable positions. Tuition costs can present a financial hardship if students are unable to obtain funding from employers or qualify for student loans. Working in a postsecondary institution (PSI), I witnessed students and colleagues with these struggles. My colleagues and I worked to reduce these obstacles for students with varied success. As both a student and the 2018–2019 student-elect on the Royal Roads University (RRU) Board of Governors, I witnessed how a lack of funding can impact Canadian students and Canadian PSIs. This sparked my desire to work toward a solution.

In most PSIs, a department is dedicated to serving students' needs with a wide array of services. The Royal Roads University Student Services (RRUSS) department was led by Dr. Roberta Mason, the Vice-Provost, Student and Academic Services. Mason agreed to my capstone partner request, while Dr. Kyla McLeod, Director of Student Services, served as my primary sponsor. McLeod and I decided to work collaboratively, invest in the process, and contribute to the refinement of the project. McLeod and Mason understood that my learning and growth were essential elements of this undertaking. Together, we cocreated the following inquiry question and subquestions to engage stakeholders to enhance further RRUSS's purpose of reducing student barriers.

In conducting this inquiry, I explored the following inquiry question: How might creating an opportunity for stakeholders to dialogue about funding enhance Royal Roads University Student Services' purpose of reducing barriers for Canadian students? I also utilized three subquestions:

1. What barriers to funding have Canadian postsecondary education stakeholders experienced before and during the COVID-19 pandemic?
2. What barriers could be mitigated to enable all Canadian students to afford to attend Royal Roads University if they meet the entrance requirements?
3. What steps might be taken to enable Royal Roads University Student Services to better support the financial needs of students?

Significance of the Inquiry

The more education a person has, the better their chances are of earning a higher salary. Based on data gathered in the 2016 census, Statistics Canada (2017a) reported, on average, men with PSE earned 31% more than those with only a high school education, while women who obtained PSE earned 58% more than those with only a high school education (para. 3). However, despite this clear benefit, many Canadians stop pursuing education after high school. From the same census, Statistics Canada (2017b) found, although 86.3% of Canadians graduated from high school (para. 14), only 54% graduated with college or university diplomas or degrees (para. 1), and 5% obtained master's or doctoral degrees (para. 29). Drops in student numbers may be due to personal choices or indicate there are barriers to educational advancement that need to be identified. This inquiry offered me the opportunity to uncover the underlying factors that hinder an individual's choice in the pursuit of PSE.

This project was a collaborative exploration between RRUSS and its stakeholders to better understand barriers to student funding. The input gained from participants, including students and staff, can be used to develop ideas, identify information, uncover insights, and create new pathways for RRUSS. Individuals' interactions through this inquiry have also enhanced RRUSS's ability to inform and enlighten its stakeholders. If the institution were to reduce the funding barriers students have faced before and since the pandemic, it could further enhance its reputation.

The project has had benefits for all participants. The primary benefit for RRU alumni, as secondary stakeholders, was the satisfaction of giving back to the university by sharing their insight. Funding sponsors could benefit from tax breaks and public goodwill due to their involvement. Paid-work-experience partners could help equip more work-ready employees armed with higher education for the workforce. RRU could benefit by its board and executive team gaining stakeholder-informed operational processes, which can help with strategic decision-making and fulfilling governance obligations.

However, PSE funding is not guaranteed and changes to the current funding model, including removing barriers to funding, are urgently needed. PSE funding was already a target for funding cuts before the pandemic, when there was an economic downturn (O'Neill, 2020, para. 5), but the COVID-19 pandemic further jeopardized the PSE funding program.

Organizational Context and Systems Analysis

It was vital to examine the organizational context and systems surrounding this inquiry to understand the effects of both funding and externalities such as the COVID-19 pandemic on

PSE. The systems analysis demonstrated how this inquiry fell into the pattern of Senge's (2006, p. 67) classic loop.

Organizational Context

RRUSS fits into the RRU context through its mission to collaborate with internal and external stakeholders to empower RRU students throughout their learning experience (RRU, 2021, p. 1). Through collaboration with RRUSS, I identified the primary and secondary stakeholders as Canadian students, including alumni, current, and prospective, based on their relationship with RRUSS and its capacity to inform the principal research question.

RRU is a public PSI and has been recognized as such by the federal government (Canadian Association of University Teachers [CAUT], 2019). All recognized PSIs in Canada award academic credentials in alignment with provincial or territorial legislation and international levels, which ensures the quality of institutions and their programs (Canadian Information Centre for International Credentials, n.d.). This recognition allowed RRU to offer undergraduate and postgraduate degrees.

RRU was established as a university in British Columbia in 1995 and is governed by both a board of directors (Appendix A) and an executive team (Appendix B). The university has a regulatory responsibility to the British Columbia Ministry of Advanced Education Skills and Training.

The university's vision is "inspiring people with the courage to transform the world" (RRU, n.d.-b, Our Vision section, para. 1), while one of its goals is the desire to remove and find solutions to today's critical issues. RRU does this by creating partnerships as well as maintaining relationships with industry (commercial, government ministries, and PSIs) to collaborate, create

and enable a broader network to increase the chances for student success in both their education and future careers.

RRUSS, one of 75 departments within RRU, employs 23 full- and part-time workers (Appendix C). The RRUSS department is dedicated to serving students' needs with the goal of helping to reduce barriers for them to enable them to focus more on their academic success and futures. The RRUSS mission and purpose statement identifies four primary areas of focus: (a) student engagement, (b) team coaching, (c) career learning and development, and (d) student success (McLeod, 2020). Student funding assistance falls within the RRUSS department.

Like most PSIs in Canada, RRU obtains much of its funding from their province while the federal government assists indirectly. The territories are the exception to this rule as the federal government has more direct control. The federal Department of Finance provides transfer payments to the provinces and territories, and a portion of this money is used to fund PSE. The Department of Employment and Social Development Canada is responsible for the Canada Student Grants and Loans Program, which offers financial support to Canadian citizens and permanent residents. Universities Canada (2021) manages government-funded scholarship programs for private sector companies (para. 1). Beyond this, students can also apply for scholarships, bursaries, and grants through businesses, charitable foundations, and schools.

RRUSS staff have been tasked annually with the responsibility of looking after roughly 35,000 stakeholders, which include about 5,500 internal stakeholders, representing full- and part-time students, as well as 29,314 external stakeholders, including RRU alumni, funding sponsors, paid-work-experience partners, and government bodies responsible for PSE funding in British Columbia (McLeod, 2020). RRUSS's role has included managing the needs of government

bodies, students, and organizations, while also trying to assist students in reducing funding barriers to enable them to focus on their academic success. Sometimes there can be conflicting agendas, such as when a student found the education sector was bound by policies requiring a full-time program to qualify as full-time study only if at least one cohort portion of study was delivered in an institutional setting. K. McLeod (personal communication, May 12, 2021)[1] stated, "To become student loan eligible, a program format and length must conform to specific requirements determined by the province." McLeod's (2022) assertions are supported by the British Columbia Ministry of Advanced Education, Skills, and Training (2020, pp. 6–8) policy manual.

In accordance with the original university policy, RRU delivers educational programs through several modalities, including face-to-face, online, blended (a combination of face-to-face and online delivery), and online real-time programming. As of 2020, 70% of RRU's student population had completed their programs through online or blended delivery, more than double the 30% for most PSIs in Canada (G. Campden, personal communication, November 24, 2020; P. Dueck, personal communication, August 16, 2021; K. McLeod, personal communication, July 9, 2020). This was a limiting factor for students seeking funding in the past and posed a clear impediment to improved access to student funding.

RRU and RRUSS have worked in both centralized and decentralized models. Government-sponsored funding has been regulated through financial institutions, with the government setting specific terms and demanding centralized control. Conversely, funding was

[1] All personal communications in this report are used with permission.

decentralized when students sought assistance directly. Additionally, donors primarily contributed to decentralized endowments, as these were independent of an external governing body. RRU has also engaged in both centralized and decentralized models for curriculum, which must meet government-set criteria for accreditation. However, PSIs have some leeway, provided they meet the objectives and outcomes agreed upon with the government.

On March 11, 2020, the World Health Organization (2020) declared a pandemic (para. 9). Philip Steenkamp, the President of Royal Roads University, advised that all nonessential travel for students, faculty, and staff was cancelled (P. Steenkamp, personal communication, March 13, 2020). Five days later, the RRU campus was closed, with both in-person classes and residencies (i.e., one program in March that had two days remaining) moved to virtual settings, either fully online or online in real-time. All one-on-one support and advising services, such as counselling and information technology (IT) support, were immediately moved to online only. Fortunately, this online support option already existed. Within 2 weeks, the recreation centre offered virtual online exercise classes, and the library was back in operation through distance services, supporting students. Staff were redeployed to avoid layoffs. A comparison of individual student enrolment at RRU from 2019–2020 to the 2020–2021 calendar year (Table 1) indicated an increase in Canadian students and a decrease in the number of international students.

Table 1

Pre- and During- COVID-19 pandemic RRU Canadian and International Enrolment

Individual Count Type	2020 April 1 to 2021 March 31	2019 April 1 to 2020 March 31
Canadian students	3,761	3,605
International students	885	922
Total	4,646	4,527

Note. COVID-19 = Coronavirus disease 2019; RRU = Royal Roads University.

In that same period of time, spanning 2019–2020, RRU experienced a 2.6% increase in individual student enrolment (P. Dueck, personal communication, August 16, 2021). Statistics Canada reported that nationally the number of study permits issued from June through September 2020 decreased by 41.6% compared to the same period in 2019 (Matias et al., 2021, para. 10). The federal government conducted a year-over-year Labour Force Survey for the same months to understand what impact the COVID-19 pandemic might have on Canadian students' enrolment numbers (Statistics Canada, 2020c). The survey results indicated a drop of 20.1% at the national level (Matias et al., 2021, para. 18). RRU fared exceptionally well due to its expertise in online learning (A. Hinrichs, personal communication, August 6, 2021). However, this does not mean the pandemic spared RRU students from negative effects. They lost jobs, including internships, and required urgent financial help with living expenses to enable them to continue their studies at RRU (P. Steenkamp, personal communication, April 4, 2020). As a result, RRU appealed to recent donors to contribute to the Area of Greatest Student Need Fund (A. Hinrichs, personal communication, August 13, 2021).

RRU sent out 392 appeal letters to recent donors on April 7, 2020, and another 382 letters on June 10, 2020. In total, donors sent in $10,125.07. Financial emergency support would

typically assist 40 to 50 students in past years. During the 2019–2020 calendar year, 39 emergency case applications were received with a total amount of $56,036.00 requested, but 28 of the applications were denied after being deemed outside the scope for assistance (A. Hinrichs, personal communication, August 13, 2021). Due to the pandemic, not only did RRU see a spike in emergency assistance requests in 2020–2021, with 197 students asking for a total of more than $289 thousand in assistance, 87 of them had to be dismissed as being outside the scope for help (A. Hinrichs, personal communication, August 13, 2021). These requests exposed the fragility of student financial circumstances, showing how a sudden change, sometimes beyond their control, can create significant hardships. A mandate letter from the Minister of Advanced Education and Skills Training on June 1, 2021, recognized the difficulties that the COVID-19 pandemic posed for students, the economy, and PSIs without a meaningful shift in the status quo (Kang, 2021, pp. 1–6).

The pandemic not only profoundly influenced the context and impact of this study but has changed the Canadian and worldwide postsecondary educational and financial landscape forever (Blankenberger & Williams, 2020, p. 404; Kang, 2021, pp. 1, 3). Gaus (1947) supported this assertion in his seminal work on the social and economic impact of catastrophes on public administration (pp. 9, 13, 18). Common impacts and problems faced by students and PSIs in the early days following the pandemic announcement included the shift from primarily delivering face-to-face PSE to a virtual setting, infrastructure changes, insufficient IT knowledge for staff and students, scarcity of computer and internet access, psychological and health impacts, loss of jobs and job reductions, and travel bans, to name a few (El Masri & Sabzalieva, 2020, p. 312; Frenette et al., 2020, para. 2; Organisation for Economic Co-operation and Development, 2020a,

2020b; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2021, para. 7–11).

The Canadian government addressed student needs by postponing and extending Canada Student Loan repayments for 6 months interest free (Thurton, 2020, para. 1; Trudeau, 2020, para. 13). The government also introduced the Canada Emergency Response Benefit (CERB) for individuals whose employment was impacted (Trudeau, 2020, para. 15). Anne Kang (2021), Minister of Advanced Education and Skills Training, similarly emphasized the government's commitment to supporting students and populations impacted by the COVID-19 pandemic as a pathway to success (p. 3).

It was impossible to forecast the full impact of the pandemic on students and PSE. Blankenberger and Williams (2020, p. 404) agreed with Kang (2021, pp. 1–3) on the importance of PSIs in advancing equity, integrity, and accountability in both pre- and post-COVID eras. Blankenberger and Williams (2020) further stated,

> Catastrophic events are change agents and that when introduced into an ecological system, the system will react to achieve a new equilibrium. Those in government need to be aware and plan how to react by understanding that this is a potential catalyst for changing traditional policies and institutions. The impact of these changes will be felt in a wide array of policy areas, and higher education is one area that has been rocked by COVID-19. (p. 404)

Systems Analysis

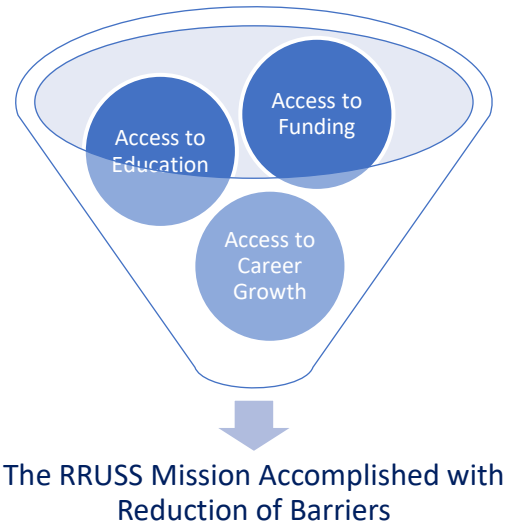
Scholars and thinkers have differentiated boundaries and barriers based on their purpose. For example, Southern (2018) noted a boundary's purpose is "to maintain a relationship"

(para. 16), while a barrier "shut[s] down a relationship" (para. 16). In contrast, Midgley et al. (1998) argued the opposite position, suggesting that boundaries function to exclude and suggest that values and shared beliefs were the boundary-setting criteria (p. 467). Meadows (2008) argued, "Boundaries are of our own making, and they can and should be reconsidered for each new discussion, problem or purpose" (p. 98). Meadows also stated, "Ideally, we would have the mental flexibility to find an appropriate boundary for thinking about each new problem" (p. 98). Nonetheless, all boundaries underpin the importance of empowering stakeholders to contribute, collaborate, and enhance student access to the necessary funding and support. Within this project's scope, boundaries were the provincial ministries of PSE and Finance, RRU, and students.

RRUSS employees strove to overcome barriers that impeded access to funding, education, and career growth (Figure 1). These barriers implied that the current and future structure of PSE student funding, which was constrained prior to the pandemic, was subject to further disruptions resulting from the substantial shift in the economy. However, Senge (2006) asserted, "There is no blame" (p. 67). Blaming the government or the economy for these difficulties was not the answer. All individuals are part of the same system, and the solution lies within their relationships (Senge, 2006, p. 67).

Figure 1

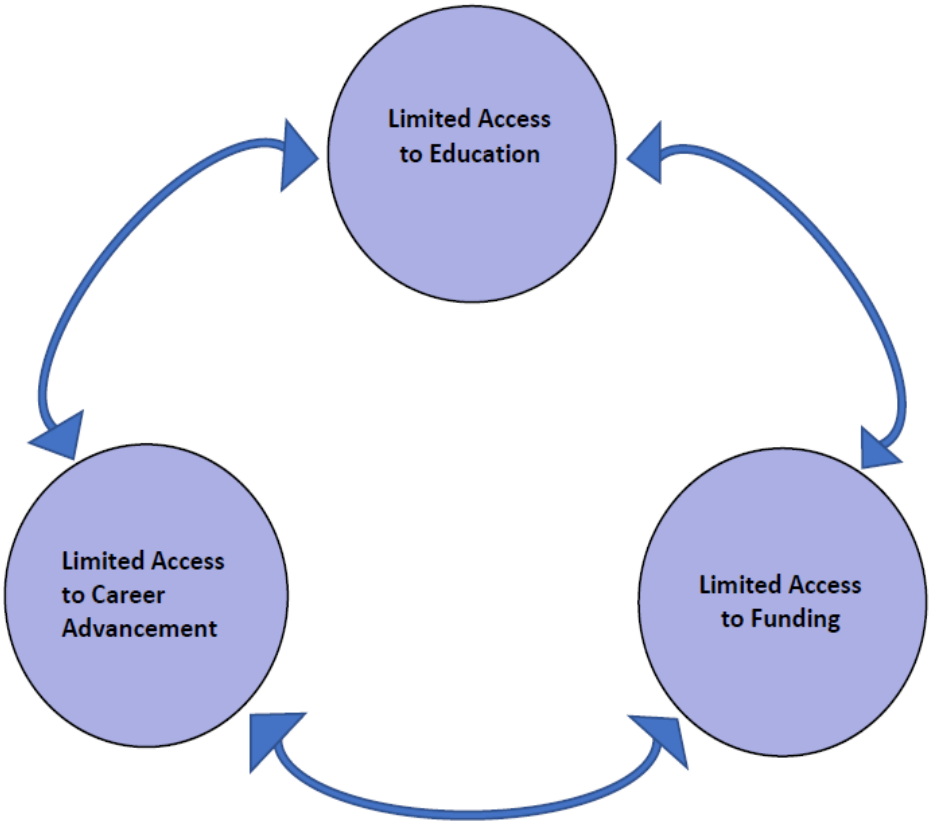
The RRUSS Barrier Reduction Funnel Represents How Meeting Students' Needs for Funding, Education, and Career Growth Will Reduce Barriers



The current government funding model and the funding crisis have significantly impacted the funding structure for students, posing barriers to students attending RRU to pursue their education. The present full- and part-time statuses mean that students cannot obtain appropriate government loans, and, as a result, credit-worthy students must resort to taking on additional debt, including obtaining personal lines of credit or loans, adding to their mortgage, and even increasing credit card debt when access to government funding was denied. Many students continue to apply for funding throughout their program, which takes away from the time they need for studying. Others put their educational endeavours on hold or cancel them entirely, limiting their opportunities to advance within organizations. As shown in the reinforcing circle diagram in Figure 2, the implications of a lack of education, due to diminished access, have broader-reaching effects on the economy as employees are less likely to achieve career advancement.

Figure 2

Reinforcing Circle Diagram



Note. Adapted from *The Fifth Discipline* by P. Senge, 2006, Doubleday, p. 82. Copyright 2006 by P. Senge.

An RRU 2020 survey showed 87% of RRU graduate students worked full time (35 hours or more) while attending school, with the remainder reporting they did not work while attending school (K. McLeod, personal communication, September 2, 2020). In total, 71% of the respondents indicated their employer did not provide funding support while, at the same time, the remaining 29% of the full-time employees revealed their employers provided some financial assistance to attend school. Nine of the respondents reported their employers paid partial tuition and fees, while five explained their employers paid all their tuition and fees. The final four

respondents had various amounts paid by their employer, enabling them to attend residency with pay. Further, 28% of the total respondents indicated they received a loan to finance their education. Of these individuals, 22.4% obtained their loan through a financial institution, while 9.8% obtained their loan through the government.

The RRU (2020) *Financial Aid and Awards Annual Report* for 2019–2020 revealed 12.4% of students enrolled at RRU applied for funding through the university, and only 4.1% received the funding they applied for. More students likely would have applied were it not for restrictions on the criteria for awards or if their financial circumstances were not recognized in the eligibility requirements. Furthermore, students reported competing with international students could be a barrier for Canadian students attending a Canadian PSI, as they may have received financial supports if they did not have to compete with international students for RRU awards. This indicated students have approached multiple sources to obtain funding to attend school. It also demonstrated that several factors, including limited employer-supported funding, increased pressure from the national and international competition for awards, and the anomalous impacts of the COVID-19 pandemic on PSE, place a strain on individuals attending PSE.

Overview of the Thesis

The objective of the thesis was to highlight the importance of dialogue in exploring the barriers faced by Canadian PSE students. Chapter 1 introduced RRU as the organizational partner and RRUSS as the sponsoring partner, framing the context for this inquiry while delving into the systems analysis. In Chapter 2, I review current thought leadership and scholarly literature, focusing on funding for PSE in Canada and the impacts of major events on PSE

budgets to understand funding challenges. Chapter 3 outlines the appreciative inquiry methodology, qualitative data collection methods (virtual world café and online electronic survey), ethical considerations, and academic contributions. The study findings and conclusions on the perceptions of the project participants are detailed in Chapter 4. I close the report with Chapter 5, presenting the summary, recommendations, and organizational implications for this research.

Chapter 2: Literature Review

I found exploring the RRUSS mission to reduce funding barriers and enable students to focus on their learning much like unravelling a thread on a sweater. To provide context for my inquiry into removing funding barriers for Canadian students to PSE, I reviewed the literature on two topics: funding for PSE in Canada and the impacts of major events on PSE budgets. Understanding the current research and statistics on PSE funding was crucial to provide context for exploring barriers and solutions for stakeholders. As such, I searched for scholarly literature on funding and the effects of the pandemic to support learning and contribute to the body of academic understanding for this thesis. Recent, legitimate, and peer-reviewed sources provided context for this research.

Funding for Postsecondary Education in Canada

The necessity of PSE needed to be explored as well as how its absence negatively impacts economic outcomes (Blom et al., 2015, pp. 1, 5, 11; Graves & Kuehn, 2022, p. 1; Hyder & Gilliam, 2015, para. 1; Lalonde & McKean, 2017, p. 82; Weingarten & Hicks, 2018, p. 501). The literature demonstrated PSE graduates earned approximately 65% more than nongraduates (Lalonde & McKean, 2017, p. iv; Seltzer, 2022, p. 1; Statistics Canada, 2017a, para. 2). The Conference Board of Canada found a high return on investment for those obtaining PSE, most notably for women, as compared to men (Berger & Parkin, 2009, p. 17; Frenette, 2019, para. 7, 25, 26; Lalonde & McKean, 2017, p. 77; Prokopenko, 2018, para. 47). Although there were many reasons individuals sought PSE, obtaining a higher salary was often their primary reason (Finnie et al., 2019; Ogilvie & Eggleton, 2011, p. 33). Researchers found, during the first year of the pandemic in 2020, those hit hardest by job loss were people in low-paying jobs who had not

graduated from PSE (Blum, 2021, para. 4; Government of Canada, 2021c; Lalonde & McKean, 2017, p. 77; Matias et al., 2021, para. 16–17).

Funding for PSE has had a layered, complex, and interrelated structure. It was necessary to examine the structure to gain insight and appreciate each role. As such, I explored eight subtopics: (a) Canada's history of PSE and policy, (b) competition for resources for PSE, (c) impact of policies, (d) government funding allocation, (e) budgetary shortfalls, (f) gaps in educational funding, (g) tuition fees and access to funding, and (h) postpandemic PSE funding. Given that both universities and colleges had experienced revenue shortfalls due to a drop in financial contributions from corporate donors and more competition for government funding, I needed to explore the literature to understand the impact of this gap in educational costs and revenues on the institutions and students.

Canada's History of Postsecondary Education and Policy

From 1945 to 1960, many returning veterans took advantage of the postwar benefit program offered by the federal government, resulting in a large influx of individuals seeking PSE (Bruneau, 2004, p. 25; Canadian Federation of Students [CFS], n.d., 2013, p. 1; Canadian Union of Public Employees [CUPE], 2018b, para. 2; Harden, 2016, p. 8; Rehabilitation Information Committee, n.d., pp. 4, 6, 8–15; Usher, 2018a, 2018b, 2018c, 2018d, 2018e). Under the Veterans Rehabilitation Act (as cited in Government of Canada, 2017, para. 20), 54,000 Canadian veterans received funding to go to university—so many that 370 army huts were moved to the University of British Columbia for use as classrooms and housing. The program helped the PSE system double in 15 years (CFS, 2016, p. 9; Usher, 2018a, para. 2; Wisenthal, 2014, para. 2).

The postwar education boom continued with PSE enrolments tripling from 1959 to 1970, forming the system in place today (CFS, 2016, p. 9; Wisenthal, 2014, para. 2, 15). In the 1960s and 1970s, governments covered more than 80–90% of postsecondary costs (CFS, 2013, p. 1; CUPE, 2018b, p. 1). The Federal-Provincial Fiscal Arrangements Act (1985) passed in 1967, and the responsibility for PSE was given to the provinces (CUPE, 2018b, p. 2). The tax relief for education and the federal student loan system came into existence in 1964, while the Registered Education Savings Program was introduced in the early 1970s (Fleury & Martineau, 2016, p. 1; Orlikow, 2013; Usher, 2018b, para. 14). At this time, universities became research-intensive, and the provincial government spent considerable dollars on expanding and improving the system.

Canada went through four recessions from the mid-1970s to the mid-1990s, and this had a lasting impact on PSE's structure, delivery, and funding (Bonham, 2017, para. 9; Di Matteo, 2017, pp. 34, 66; Kronick et al., 2020, para. 3; Usher, 2018c, para. 7, 11). Graduate programs were introduced in Canada at that time (Usher, 2018c, para. 5), as higher educational qualifications became necessary for various jobs. During this timeframe, unemployment in Canada ranged from 6–10% (Card & Riddell, 1993, p. 150; Di Matteo, 2017, pp. 57, 58, 66; Gower, 1992, p. 2; Usher, 2018c, para. 1) and enrolment for PSE doubled (Association of Universities and Colleges of Canada, 2011, p. 5; Usher, 2018c, para. 2).

Until the 1980s, the federal government covered 85% of the education costs borne by the provinces (Usher, 2018c, para. 7), as outlined in section 93 of the Constitution Act of 1867 (Government of Canada, 2023). When policy changes were put in place during the 1980s to address international pressure to control debt and tighten fiscal policy, funds were redirected away from education and towards the unity crisis and deficit reduction (Laurin & Drummond,

2021). This resulted in a 7% increase in tuition costs (Usher, 2018c, para. 12). The federal government's trend of reducing educational spending continued until the 1990s (Laurin & Drummond, 2021).

Although the Canadian government acknowledged the reduction in funding to support PSE, some suggested the resulting PSE deficit could be mitigated by bringing in more international students (Government of Canada, 2019, para. 1). This practice quickly became the standard for PSIs, with institutions charging international students up to six times the tuition fees charged to Canadian students (Universities Canada, n.d., 2021). It was only when the pandemic struck that reliance on this revenue stream, and its sudden loss, created a significant budgetary shortfall. In response, international tuition fees rose by 1.7% for the 2020–2021 calendar year (Statistics Canada, 2020d, para. 2).

From 1993 to 2003, PSE funding was cut by approximately 60%, and tuition rose (CFS, 2013; CUPE, 2018b, p. 2). However, shifting the cost burden to students resulted in reduced enrolment at PSIs (Malcolmson & Lee, 2004, p. 4; Usher, 2018d, para. 5). This led to faculty and staff pay freezes, while at the same time, the number of students dropped further when provinces provided loans instead of grants (Usher, 2018d, para. 5).

By the late 1990s, the federal government stepped in to create scholarships, education savings grants, and increased tax credits, as well as student aid, to help bridge the educational funding gap (Junor & Usher, 2007, p. 5). Tuition fees levelled out, but then came the crash of 2008 and a deep recession not seen since the Great Depression (Malcolmson & Lee, 2004, p. 5). Once again, in response to shrinking provincial and federal budgets and a reduction of government grants, higher-paying international students were used to make up for this shortfall

in funding in 2009 (Brennan et al., 2021, p. 902; Matias et al., 2021, para. 1; Mueller & Harrison, 2021, p. 31; Usher, 2018e, para. 5). Diana MacKay (as cited in Davidson, 2015), Executive Director of the Conference Board of Canada, provided the following explanation for this: "We have got to be pragmatic and understand that there are no more public dollars easily available for education in an environment where health-care financing is another . . . top priority and people in power are aging" (para. 34). David Robinson (as cited in Davidson, 2015), Executive Director of the CAUT, stated, "New cost drivers are advertising for students, as well as bursaries and scholarships, to offset the rising cost of tuition" (para. 20). Given the historical trends, Canadian PSE can expect to experience further competition for funds and reductions.

Competition for Resources for Postsecondary Education

Existing challenges such as changing demographics, increased health demands, globalization, and climate change remain high on the public policy agenda, which compete with PSE for public dollars (O'Neill, 2020, para. 12). Professional and peer-reviewed literature revealed policies, government funding allocation, and budgetary shortfalls could impact the future of education.

Aligning with O'Neill (2020) on environmental challenges, Pawson (2016) suggested factors such as financial crises and recurring world issues place "educational institutions in many parts of the world at risk" (p. 14). In 2021, Canada's federal budget outlined a stimulus package to promote a rebound from the recession (Government of Canada, 2021a). Of the 288 entries outlined, "missing from Budget 2021 [was] a federal funding plan for universities and colleges, despite the critical role post-secondary education and research can play in ensuring an equitable

recovery" (CAUT, 2021a, p. 1). At that time, the New Democratic Party and Green Party leaders argued that further supports were necessary for postsecondary students (Aiello, 2021, p. 17).

Further consideration should be given to affordability and access (Council of Ministers of Education, Canada, 2009; Hancock & Ragg-Times, 2005, p. 13; Lalonde & McKean, 2017, p. 16), especially given that Canadian PSIs charge more than comparable countries (Lalonde & McKean, 2017, p. 17) such as Denmark, Sweden, and Finland, which offer free PSE to European Union citizens. Furthermore, Denmark pays students to attend school, and Norway offers free PSE to all individuals, no matter the individual's level of education or country of origin. Germany also offers free undergraduate education to both national and international students. This provides insight to Canadian PSIs about what may be needed to compete and attract students. The primary goal of CFS is to encourage tuition-free PSE, including apprenticeships and skilled trades (Harden, 2016, pp. 3-4). Despite the focus on education in the British Columbia (BC) government budgets (Government of BC, 2021; BC Ministry of Advanced Education, Skills, and Training, 2021), individuals are still forced to choose between buying food, choosing an education, repaying loans, and covering other living costs. The CFS (2021) lobby document proposed several measures to eliminate financial barriers, including standardized PSE funding and subsidies across Canada (p. 7). Achievement of this goal addressed concerns raised about the high tuition fees, the debt loads students and family members carry, and link to negative impacts on mental health (BC Federation of Students, 2020, para. 3; Evans, as cited in Bresnahan, 2020, para. 1; CFS, 2021, p. 4; CUPE 3906, 2015, para. 3–4; Malcolmson & Lee, 2004, p. 16). By 2021, 85% of professional degree holders graduated with

some amount of debt (Galarneau & Gibson, 2020, para. 1), and 3 years after graduation, two thirds of this debt had not been repaid (para. 27).

In 2020, the Government of Canada reported the five largest expenditures of the federal government were healthcare, social security, interest on the debt, fiscal equalization, and provincial and territorial transfer payments. Part of PSE funding was from the transfer payments provided to provincial and territorial governments (Di Matteo, 2017, p. 47), but when the federal government released those transfer payments, it came with conditions of expected outcomes.

The Government of BC's (2021) *Budget 2021: Stronger BC for Everyone* was tabled on April 19, 2021. Selina Robinson, Minister of Finance, noted the focus would be on areas including healthcare, pandemic and recovery contingencies, and affordable housing (Government of BC, n.d.; BC Ministry of Finance, 2021; Robinson, 2021, para. 10). Money was also advanced to elementary and high schools to address mental health, racism, and reconciliation, while capital investments were allocated to upgrade and build K–12 and PSI schools (Government of BC, 2021, pp. 47–48; Office of the Minister, personal communication, June 22, 2023). There was no provision in this budget announcement to increase funding for PSE.

Lastly, performance-based funding was rolled out in two of Canada's provinces in 2021: Ontario and Alberta (Peters, 2021, para. 1–5; Smith, 2020, para. 1, 13; Spooner, 2019, para. 1). This policy tied government funding to certain PSI measurements, including graduates' income and employment rates. As a result, PSIs were not only competing for funding from other government initiatives, but also with one another.

Impact of Policies

RRU, like other PSIs, relied on funding governed by policies that guided the strategic allocation of public funds for education. Most provinces and territories across Canada aligned with the Government of BC's high-level criteria for education funding, which included (a) accessibility; (b) affordability; (c) quality; (d) accountability; and (e) coordination (Advanced Education Administration Act, 2022, Section 3, para. 2; Government of Alberta, n.d., para. 1; Government of BC, n.d., para. 1; Government of New Brunswick, 2008, p. 22; Government of Northwest Territories, 2021, p. 5; Government of Nova Scotia, 2020, p. 7; Government of Ontario, 2022, para. 1; Government of Prince Edward Island, 2021, para. 1; Government of Québec, n.d., para. 1; Government of Saskatchewan, n.d.-b, p. 3). In contrast, the Government of Newfoundland and Labrador (2020, p. 3), Government of Nunavut (2019, p. 3), and Government of Yukon (n.d.) have a more granular approach to the accountability criteria, although these three government bodies have specific frameworks for funding eligibility and accessibility. Their frameworks did not follow the more structured outline referenced by the other territories and provinces, instead their policies spoke to their geography and cultural context.

All provinces and territories are members of the Council of Ministers of Education, Canada, a forum in which ministers of education discuss policy. Their goal is to increase the accessibility and quality of PSE for Canadians (Council of Ministers of Education, Canada, n.d., para. 1), and their top priority is affordability. Unfortunately, what some consider affordable might be out of reach for others. Statistics Canada "works with the [Council of Ministers of Education, Canada] CMEC, and the provinces and territories to ensure the collection,

coordination, and publication of pan-Canadian education statistics" (Canadian Information Centre for International Credentials, 2009, p. 1).

When funding was allocated annually from the Minister of Education of each province and territory in Canada to PSIs, regulations, accountability, and performance assessments were in place to ensure due diligence when using provincial funding resources (Barnetson & Boberg, 2000, p. 8). The ministry granted the PSIs permission to deliver programs and regulated the tuition PSIs charge. As such, PSIs were responsible for the curriculum, program design, number of credits, and program delivery platforms. These platforms included online, face-to-face, hybrid, blended, combination of online real-time, real-time-online, part-time, or full-time programs (Bates, 2018, p. 1; Council of Ministers of Education, Canada, n.d., para. 1–8; Tudor, 2018, p. 73), and these components became the criteria for funding allocation.

Government Funding Allocation

Canadian student tuition accounts for approximately one third of the actual educational costs in Canada (Statistics Canada, 2020a, para. 1), highlighting a significant gap between the fees charged and the actual costs of delivering education (Johnson, 2019, para. 15). The funding allocation for Canadian university students involves complex financial flows facilitated by the federal Minister of Finance, who transfers money to the banks that provide loans, credit lines, and credit cards to students for their PSE.

Exacerbating funding gaps, the COVID-19 pandemic reduced PSIs' ability to offset revenue losses from international students (O'Neill, 2020, p. 11; Weingarten & Hicks, 2018, p. 501). While the Office of the Parliamentary Budget Officer announced that Budget 2021 projected $5.7 billion in PSE spending over the next 5 years (Employment and Social

Development Canada, 2021, para. 10), this did not address immediate funding challenges. Additionally, the C. D. Howe Institute forecast a grim recovery outlook extending beyond 2055 (Laurin & Drummond, 2021, p. 2).

From the perspective of students, challenges such as not qualifying for the CERB and mandatory unpaid placements limit opportunities for paid work, exacerbating financial strain (Undergraduates of Canadian Research-Intensive Universities [UCRU], 2020, pp. 3–6; Government of Canada, 2021b). Although the higher education sector is uniquely positioned to address these challenges, it has struggled to compete for resources and attention from policymakers.

Budgetary Shortfalls

The Canadian government initiated a perpetual cycle prepandemic by permitting tuition hikes with caps to offset the shortfall, resulting in institutional and student funding gaps. Tuition increases to cover funding gaps were permitted at rates substantially higher than inflation (Policy Options, 2007, p. 3). This was unfortunate, as Canadians were seeking affordable, accessible, quality PSE (Weingarten & Hicks, 2018, p. 499). In the literature, many researchers agreed funding influenced retention rates for PSI (Tudor, 2018, p. 73; Umbricht et al., 2017, p. 647), with some noting increased costs associated with PSE in delivery, operation, and administration (Al-Samarrai et al., 2020, p. 2). Typically, 45–50% of PSIs' operating revenues come from the provincial public funds and governments that regulate the tuition (Bresnahan, 2020; CUPE, 2018a; Weingarten & Hicks, 2018, p. 498). However, of the rest, 28.3% of revenues came from tuition fees, with "the remainder from donations, private grants, investments, and other minor revenue streams" (Statistics Canada, 2020b, para. 4). In 2008, the global crisis saw a further

decline in public spending on PSE. In fact, the data showed PSE funding has been reduced every time there was an economic downturn (O'Neill, 2020, para. 5).

In contrast to BC's tabled budget (Government of BC, 2021), Saskatchewan's 2021 provincial budget included a "$60 million increase beyond annual operating funding over the next two years" (Government of Saskatchewan, 2021a, para. 2) for PSE. As a result, Saskatchewan has strategically positioned itself as a leader in PSE funding through its forward-looking planning. Specifically, its Graduate Retention Program included forgiving $20,000 of debt for students who committed to a 5-year professional employment term in the province (Government of Saskatchewan, n.d.-a, para. 1). This program supported Saskatchewan in mitigating the considerable challenges the province faces due to the aging and tax-exempt status of its population, thereby creating additional demands on government funding specific to the province. Despite this, the multiyear investment in PSE suggested a long-term tax solution beneficial to the province and its students. The Government of Saskatchewan (2021b) asserted this investment in education would "help grow financial sustainability over the long-term" (para. 2). The Advanced Education Minister in Saskatchewan, Gene Makowsky, acknowledged how disruptive the pandemic had been to both PSI and students; however, Makowsky understood how crucial PSE was in assisting the province in meeting its goals for growth (Government of Saskatchewan, 2021b, para. 3). Typically, during economic downturns, the government cuts PSI funding (O'Neill, 2020, para. 5). Historically, this created a gap at a time when individuals wanted or needed to seek further education to change careers, contributing to the rise in cumulative student and government debt (Chiose, 2014, para. 5; Zimmerman, 2009, para. 6).

Despite past cutbacks, the Saskatchewan provincial government has invested in the future by putting money into education.

Tuition Fees and Access to Funding

To help offset the gap between student resources and PSE costs, PSIs offer qualifying students the chance to receive bursaries, awards, scholarships, emergency loans, and funding support obtained from external partners, corporations, and families. Students have often relied on three to six sources of income to cover the PSE costs (Indspire, n.d., p. 5; Policy Options, 2007, p. 3). In 2017, the Conference Board of Canada noted Canada ranked 14 out of the 16 comparator countries for providing scholarships to PSE students (Lalonde & McKean, 2017, p. 1).

Access to funding depended on existing funding policy, which either helped or hindered a student's ability to continue their studies. This was dependent on factors such as (a) the student's perceived financial means, (b) family status, and (c) other prescribed standards (Palmer, 2020, pp. 37–38; Policy Options, 2007, pp. 1–6). Prior to the COVID-19 pandemic, students faced rising tuition costs and limitations on government and private loans, which carried higher interest rates (Johnson & Rahman, 2005, p. 103). These changes contradicted the Council of Ministers of Education, Canada's (n.d.) mandate for accessible and affordable access to PSE (para. 3). The need for the Canadian federal and provincial governments to reduce PSE costs and barriers to funding to allow access to affordable education has been a topic of conversation for years.

The goal of accessible educational policies was further challenged for students with disabilities and those from disadvantaged family structures (Aefsky, 2021, p. 7; Ogilvie & Eggleton, 2011, p. 28; Orlikow, 2013, para. 14). Canadian Hearing Services (2014) lobbied the

government for equitable treatment for access to PSE due to the higher costs students faced when obtaining proper support and extended time needed to complete their studies (p. 3). In 2014, only 3.1% of individuals living with hearing impairments completed PSE, compared to 10.2% of hearing Canadians (Canadian Hearing Services, 2014, p. 3). It is no surprise that 40% of deaf Canadians identify as unemployed compared to 6.9% of hearing Canadians (Canadian Hearing Services, 2014, p. 3).

The situation is even worse for children in the foster care system. When examining the PSE completion rate for foster children, only 0.8% of those who grew up in foster care graduated with a PSE (Samson & April, 2021, para. 1). The Child Welfare Political Action Committee Canada (Child Welfare PAC, n.d.-a), a registered charity, recognized this disparity and requested partnerships with PSIs across Canada. The Child Welfare PAC (n.d.-b) noted the need for a care specialist for prospective students raised in the care system. This care specialist aided in navigating the transition from underage care to independent living, which included championing a special intake bursary to offer free tuition for these individuals (Child Welfare PAC, n.d.-c, para. 1; Samson & April, 2021, para. 1). There were six partnered PSIs out of 25 in BC (Child Welfare PAC, n.d.-c., para. 3). Sadly, there were zero PSI partnerships in three provinces and three territories. These PSIs promoted the values of inclusion, diversity, and equity through this choice and reduced funding barriers to a select group of students. StudentAid BC (2022) offered $5,500 per program year to former youth in care students between 19 and 24 years old (para. 1; see also StudentAid BC, n.d.). In 2008, Prime Minister Harper was the last to provide additional funds to provinces at the federal level to support PSE core costs (Austin-Smith, 2020, para. 7;

CAUT, 2021a, p. 10). Educators and policymakers have a responsibility to develop solutions for these critical problems.

After the pandemic started, the unemployment rate in Canada rose from 5.1% in January 2020 to 9.4% in January 2021 (Matias et al., 2021, para. 5). Many researchers agreed the COVID-19 pandemic accelerated change (Macklem, 2021, pp. 1, 3, 7, 9; Matias et al., 2021, para. 1; Tobin & Sweetman, 2020, para. 1). Governments looked to PSIs to respond quickly by educating the workforce, thus lowering unemployment rates to generate tax revenue. However, with tuition fees rising and access to funding becoming more complex, PSIs struggled to meet these demands.

Postpandemic Postsecondary Funding

Institutions noted a significant decline in Canadian and international student enrolment following the onset of the COVID-19 pandemic, which worsened the existing funding challenges for PSIs. Over time, PSIs had become increasingly reliant on international student revenue to offset shortfalls in government funding flows and domestic tuition sources.

In Budget 2021 (Government of BC, 2021), $32 million was allocated for PSE, with $15 million of this budget designated for microcredentialing, work-integrated learning, and short-term skills training, and $17 million towards expanding access to skills training by partnering with Indigenous communities and organizations (see also Government of BC, n.d.). Similarly, since the onset of the 2020 worldwide pandemic in Canada, the federal and other provincial governments have contributed funds to initiatives similar to those of the BC Government (Colleges Ontario, 2020, para. 4; Hon, 2021, para. 5–9). Governments anticipated that this would help quickly prepare the workforce to meet the industry's needs (Colleges Ontario, 2020,

para. 3). Some PSIs would allow these credentials to count towards a full degree if individuals wished to pursue one.

In 2020, the Ontario provincial government, in response to pressures placed on PSE by the COVID-19 pandemic, announced plans to invest $59.5 million to expand microcredentialing (Colleges Ontario, 2020, para. 1; Government of Ontario, 2020, para. 9; "New Funding," 2020, para. 1). Microcredentialing aligned with the federal government's wish to help those impacted by unemployment gain the experience to return to the workforce quickly.

Prospective students, current students, and PSIs all faced the shared crisis of the COVID-19 pandemic. The costs associated with the pandemic response have placed unexpected pressures on the public purse for the foreseeable future. Given the economic downturn, provinces and territories faced additional system stresses, including extraordinary pressure on student funding. RRUSS faced additional challenges in serving students during the COVID-19 pandemic. At the same time, the demand to operate in a knowledge economy, the shift from traditional to future work, and evolving industry needs were becoming increasingly urgent.

Weingarten and Hicks (2018) called on PSIs to focus on outcomes in all performance instruments (p. 501). The resources (inputs) that go into PSE include money, faculty, and students. The outputs were, therefore, the graduates and research publications. Outcomes also included the benefits that result from the PSE, such as jobs for graduates, increased taxation revenue, discoveries, and their application representing the impact of the PSE system on individuals in society. As Canada proceeds with the country's economic recovery, educators and policymakers need to learn from past major events to minimize the negative impact.

Impacts of Major Events on Postsecondary Education Budgets

I reviewed the literature for effective solutions to interruptions in the flow of capital for funding PSE. The pandemic has not been the only external crisis which has impacted PSIs and PSE through the years. Students, faculty, and staff across Canada and beyond Canadian borders have been impacted when natural disasters have struck, including the 2013 flooding in Calgary ("Calgary Flooding," 2013, para. 1; City of Calgary, n.d. para. 2), the 2016 fires in Fort McMurray (Public Safety Canada, 2016, para. 2), the 2019 Hurricane Dorian in Nova Scotia (Snoddon, 2020, para. 6), the 2011 North Carolina tornado (Cappucci, 2020, para. 5), and the 2015 Nepal earthquake (Rafferty, 2022, para. 1). Other impacts have stemmed from industrial accidents or acts of terrorism, such as the Montréal massacre at Ecole Polytechnique in Canada in 1989 (Lanthier, 2012). PSIs needed to be agile to embrace the changes necessary to ensure that the academic standard of education was maintained when schedules were interrupted by disasters.

The stability of funding contributed to the ongoing international competitiveness of Canadian PSE and provided the necessary education for the future of work. Following the New Zealand earthquake sequence of 2010 to 2013, Haiti in 2010, and Japan in 2011, Pawson (2016) considered the necessity and the importance of approaching pedagogic practices in innovative ways, such as classes without borders, considering alternatives to campus learning, and putting in place community-based learning practices (p. 15). Ramaley (2014) expressed a similar view when he stated, "The academic community and the world at large" (p. 7) must come together to form new relationships that will enable us to solve problems for higher education. To think systemically, Stroh (2015, pp. 2–35) and Weisbord (1992, p. 33) further supported the

importance of bringing a diverse group of stakeholders together to allow for big-picture understanding. Ideas such as these might be required to unearth new pathways to reduce barriers and increase access for all Canadians to PSE.

Pawson (2016) reflected on Kropotkin's (1902) seminal work, *Mutual Aid,* and considered how Kropotkin viewed cooperation as a method of societal advancement. Kropotkin advocated for an education that included not only books but experiential learning through observation and participation. The Canadian government recommended the current pedagogic model be more interactive. During this transitional phase, the 20th-century education model of onsite learning still influenced policymaking and interpretation. Regarding the research question, consideration must be given to whether changing the education model impacts the fee structure for students and how it will reduce funding barriers, positively or negatively.

Statistics Canada (2020a) conducted a 2-week crowdsourcing data collection of 100,000 postsecondary students to explore the impacts of the COVID-19 pandemic on postsecondary students. The study determined participants' perceptions of the amount of disruption. Trades, services, and health care fields were most affected (41–56%) due to the lack of in-class labs and fewer job placements, which affected hands-on learning required for these fields (Doreleyers & Knighton, 2020, p. 3). For most learners (17–45%), some or all their classes moved online, and 7% of these learners could not finish courses due to a combination of their learning styles, lack of appropriate tools, or an unsuitable home-learning environment (Doreleyers & Knighton, 2020, p. 4). However, Doreleyers and Knighton's (2020) study revealed many learners found online delivery advantageous, and some stated it was preferable. With this online delivery model rolled out, and the initial costs disbursed, a much-needed review of current costs for PSE was required.

Examining which costs were eliminated, which redundancies were uncovered, or the expenditures found to be reduced during the pandemic period, and considering which other funds were eradicated would assist in evaluating future funding models to ensure affordable tuition for learners.

Deshmukh (2021), an architect who designed campus buildings, researched the globe to ask if the COVID-19 pandemic had eradicated the need for the campus with the shift to online learning (p. 131). Like Deshmukh, Tishchenkova et al. (2021), wondered about the impact on higher education spaces in a postpandemic world (p. 16). Deshmukh concluded COVID-19 did not eliminate the need for campuses or classroom space. Deshmukh continued that what was envisioned for the PSI campus 10 to 15 years from now has become the new normal and that PSIs that are forward-thinking will create a space that is agile, multifunctional space, with tech-enabled infrastructure to address any disruptive changes (p. 144). Malaguzzi (1994), founder of the Reggio Emilia approach (p. 55), claimed the classroom or environment was like the third teacher in how it shapes collective experience (Strong-Wilson & Ellis, 2007, p. 40). This new environment, which includes the capability of recording hybrid classes with the use of technology such as computers with Microsoft Teams, might offer students some PSE financial relief.

The hybrid teaching models allow students the choice to go to the physical classroom, attend online in real-time, or access course content later, such as a class recording, providing much-desired flexibility for the learner. Hybrid teaching models also provide an opportunity to meet the needs of students in new and creative ways, understanding that online learning is not considered a substitute for in-class learning (Lewis & Burrell, 2023, pp. 48, 59). In Canada and

the UK, since COVID-19, the discovery and use of "flipping the classroom" (Khan, 2011, 11:05) design has advanced students' learning. Students view and process material online or outside of the classroom and then go to class to apply their learning. In-class teaching provides opportunities for instructors to discover where students may have difficulties and to adjust course materials and teachings immediately (Shboul et al., 2023, p. 3; University of Waterloo, n.d., para. 3). Exploration of the administrative cost burden for these various modes of delivery will need to be examined. The efficiencies found in this examination could pass savings onto students.

In his 2005 article, Watkins asserted there was a role for distance education in disaster planning, especially when campuses must close (p. 31). The technology available now offers education continuity for students displaced by PSI closures. Many may argue that technology can positively impact learners' educational needs when a PSI's closure has negatively impacted them. Mackey et al. (2012, pp. 124, 131) argued that technology is not the sole solution; rather, curricula should undergo redesign and planning for times of crisis. Some researchers asserted technology was merely a tool to deliver content, but learning included components of emotional, social, and experiential elements not easily delivered through online means (Garcia, 2023; UNESCO, 2023, para. 1). Mackey et al. (2012, p. 131) argued the need for planning for these inevitable shifts; however, consideration should also be given to the experience, outcomes, and the adaptive capacity of the course offering.

Equally important, consideration for marginalized students should include the impact of online technology and concern for those who lack access to the necessary technology. Following Watkins's (2005, p. 31) suggestion that PSI had plans for various emergency scenarios, decisions

should detail lines of accountability and liability, examining the expectations stakeholders have of the government, educators, and the community to tackle these matters.

Day et al. (2021) indicated PSIs moved to online learning with relative ease during the pandemic (p. 10), but the studies did not consider the extra time and costs required to make this transition happen, such as computers, monitors, webcams, ergonomic equipment for staff and faculty home offices; facilities cost for delivering said items; overtime for information technology staff required to be on hand for student, staff, and faculty support. Time will tell if PSI cost recovery was successful and if that recovery reduced infrastructure costs. Innovative solutions were necessary because simply resorting to increased student tuition fees or funding support from the federal or provincial government may not have been a viable solution.

In July 2021, *Maclean's* magazine noted that UNESCO suggested that the worldwide educational disruption, caused by the COVID-19 pandemic, will have more severe long-term impacts than the pandemic itself (Subramanian, 2021, p. 4). The COVID-19 pandemic also revealed education inequalities that were not fully addressed. The marginalized learner continued to be affected the most (United Nations Educational, Scientific, and Cultural Organization, 2021, para. 2). Deshmukh's (2021, p. 136) and Day et al.'s (2021, p. 10) views coincided with those of marginalized individuals who were at a more significant disadvantage with online learning during times of PSI crisis. Despite the Canadian federal government offering the CERB to Canadian and international students, a survey conducted at 64 PSIs across Canada revealed 75% of students still had financial concerns about paying rent, groceries, other bills, and upcoming tuition (Bogart, 2021, para. 1; Quinn, 2020, p. 2; UCRU, 2020, p. 2). In addition, many were unaware that they owed taxes on this funding, which could potentially lead to additional debt.

Other impacts from shifting from a face-to-face PSI experience to a virtual setting created an intangible loss of networking, friendships, community, structure, and support. Ease of technology use, access to proper devices such as computers, webcam, wi-fi, broadband, and physical space to enable concentration created additional barriers to some students. Some impacts were financially quantifiable; others, like computer fatigue, were not. Di Pietro (2018) demanded PSIs pay attention not only to the socioeconomic factors that arise out of natural disasters but the academic impact (p. 62). Di Pietro focussed on the 2009 L'Aquila earthquake in Italy and the multiyear interruption it created to come up with his findings. Di Pietro noted performance decline at the University of L'Aquila was consistent with students exhibiting posttraumatic stress disorder, psychological and health problems, and survivors showing poor concentration, anxiety, and depression. The Italian university took measures to mitigate dropouts, including a fee exemption for 3 academic years, discounts on study-related equipment, textbooks, free public transportation, and having institutions contribute donations to pay for additional scholarships (Di Pietro, 2018, p. 63). Canadian Institute for Health Information (2019) estimated approximately 11.6% of Canada's gross domestic product was represented by health expenditures in 2019 (p. 4). In contrast, CAUT (2021b) noted federal spending on PSE was "stagnant at .2 per cent of GDP" (para. 1). Canadian federal and provincial government policymakers might wish to contemplate using a similar model to the University of L'Aquila for fee exemptions and discounts.

Veletsianos et al. (2020) surveyed 273 faculty and administrators across Canada for their perspectives "on whether they are optimistic or pessimistic about the future of higher education over the next two years" (p. 3) after the impact of the pandemic. The results showed 41% of

faculty and 55% of administrators were optimistic (Veletsianos et al., 2020, p. 3). However, similar the CFS's (2016, pp. 5–10) findings, individuals responding to Veletsianos et al.'s (2020) survey also expressed concerns about funding cuts that impacted enrolment, student fees, debt for Canadian and international students, and inequities for students. Subsequent research further revealed that many authors agreed with Veletsianos et al. that PSE was vital for economic recovery as it serves as a valuable service of developing skills and knowledge (CFS, 2016, p. 6). Therefore, expanding the quality and access to online learning created a more diverse student learning experience (CFS, 2016, p. 6).

Summary

The review of the literature on funding for PSE in Canada and the impacts of major events on PSE budgets clarified how the economy, along with federal and provincial government decisions and agendas, significantly influence the amount of funding available to Canadian students (Blom et al., 2015, pp. 1, 5, 11; Graves & Kuehn, 2022, p. 1; Hyder & Gilliam, 2015, para. 1; Lalonde & McKean, 2017, p. 82; Weingarten & Hicks, 2018, p. 501). Recessions, competing governmental policies and agendas, and insufficient financial resources available to meet the diverse needs of Canadians highlight the need to explore ways to reduce financial barriers for Canadians attending PSIs (Bonham, 2017, para. 9; Brennan et al., 2021, p. 902; Di Matteo, 2017, pp. 34, 66; Kronick et al., 2020, para. 3; Matias et al., 2021, para. 1; Mueller & Harrison, 2021, p. 31; Usher, 2018c, para. 5, 7, 11). The literature revealed a history of significant economic impacts on PSE funding due to catastrophic events, followed by a trickle-down of negative financial effects on students ("Calgary Flooding," 2013, para. 1; Public Safety Canada, 2016, para. 2; Snoddon, 2020, para. 6). Furthermore, the literature provided insights into

changes in conditions for student lending, given the prolonged change and challenges observed in other countries following major economic or climatic events (CFS, 2016, pp. 5–10; Statistics Canada, 2020a; Veletsianos et al., 2020, p. 3). In the next chapter, I review methods and methodology I used to undertake this project.

Chapter 3: Methodology

The methodology used for this thesis was a form of action-oriented research, described as the action research engagement model (Rowe et al., 2013, p. 25). In this chapter, I detail the appreciative approach I integrated with action-oriented research and the mixed methods used to capture data from the participants in the survey and virtual world café. I then outline the methodology and methods used to analyze the data collected, followed by a description of participants and an overview of how the study was conducted. I conclude with an examination of validity procedures, ethical implications, and an explanation of how this research will contribute to practice for RRUSS and benefit students.

Methodology

Kurt Lewin (1946, p. 34), in his seminal research, defined action research as an emergent process that involves the researcher in problem-solving real-life situations in a continuous and participative process where change is desired (Adelman, 1993, p. 7; Bradbury, 2015, p. 574; Coughlan & Coghlan, 2002, p. 225; Ferrance, 2000, Introduction section, para. 2; Greenwood & Levin, 2007, pp. 7–8). Action research has been widely used in education and drives professional and institutional change. The benefits of action research include increased engagement by target stakeholders, reflection, communication, networking, cooperation, and commitment to the process of the action. Action research also looks to improve the current situation by "shaping future vision, aspiration, and commitment" (Bradbury, 2015, p. 574), but it is not intended to develop new theories or discover new facts.

Action research can focus on immediate, meaningful improvements that positively impact the organization. It is a good methodology to use when a researcher "seeks a deeper

understanding and [wishes] to explore the nuances of experiences not available through quantification" (Darlaston-Jones, 2007, p. 25). The rationale for using an action-research approach is to discover a practical problem solution that enables researchers and participants in the community to work collaboratively to identify social change opportunities. Further, action research is conducted in present or real-time and generally written as it unfolds, whereas traditional research is typically written retrospectively (Coughlan & Coghlan, 2002, p. 226). Practitioners can address concerns through discussion, inquiry, and reflection as part of the research components (Ferrance, 2000, Introduction section, para. 2).

The action research engagement model is derived from the action research methodology (Rowe et al., 2013, p. 25). Action research methodology differs from pure (basic or fundamental) research it seeks to solve an immediate, specific issue. In contrast, pure research, a type of scientific research, aims to improve and develop theories by discovering new or existing knowledge.

I used the action research engagement model in this project to build out the research in the following ways: (a) stakeholders were involved through the world café and invested in the engaged inquiry; (b) stakeholders had the opportunity to consider other viewpoints, obtain new perspectives, be open to alternative ideas, and share their thoughts; (c) findings from stakeholders' input allowed for additional insight, forming recommendations that anticipate assisting both students and the PSI in moving forward with urgency to address the challenges facing RRUSS and the student; and (d) strategies were assessed to form recommendations on the critical areas within the findings. The action research engagement model provided an appropriate

framework for this project, allowing RRUSS and its stakeholders to engage in RRUSS's mission and purpose (Appendix D) to reduce student barriers.

My rationale for using an action-oriented research methodology with an appreciative lens was to allow stakeholders to contribute their thoughts and ideas surrounding the primary question and subquestions. This provided the platform for contributions to practical solutions that RRUSS can consider implementing. In addition, it offered the opportunity for growth in my ability to identify, analyze, and amalgamate research.

Appreciative inquiry is a lens that focuses on the positive within the organization and its people with the intent to define the change within the organization (Bushe, 2012, p. 14; Stavros et al., 2018, pp. 2, 67). Focusing on the PSI's strengths to bring about change helps engage stakeholders in a nonthreatening way, creating an environment that evokes trust and builds relationships through conversation. Cooperrider (n.d.; see also Cooperrider et al., 2008), the forefather of appreciative inquiry, along with Stavros et al. (2018), defined appreciative inquiry as "a cooperative coevolutionary search for the best of people, organizations, and the world, through asking questions that strengthen a system's capacity for change" (p. 3). Appreciative inquiry interventions also focus on the speed of imagination and innovation. The underlying assumption with appreciative inquiry is that the topic "is a solution to be embraced rather than a problem to be solved" (Cooperrider et al., 2008, p. 5) while conducted through the 4D-cycle of "discovery (exploring what the best is), dream (what might be), design (what should be), and destiny (how to make it happen)" (p. 5). Appreciative inquiry is versatile and works well as a group method, which allows for utilizing a smaller representation of the larger group or using whole system engagement (Bushe, 2012, p. 13).

Appreciative inquiry is a strengths-based approach to change (Cooperrider, 2017, p. 82), allowing individuals to identify and expand on what is already working in the system. However, this approach does not address issues such as a lack of communication or other organizational challenges. Rather, it focuses on "generative" thinking, encouraging all stakeholders to connect, further enhancing growth and development. When people feel more positive or less threatened, they are more open and creative in their thinking and ideas (Isaacs, 2001, p. 712). If individuals feel less threatened, they may be more vulnerable. Brown (as cited in Walters, 2012) stated, "Vulnerability is the birthplace of innovation, creativity and change" (para. 1), which is the root of innovation. Applying appreciative inquiry is best suited to cultures in which positive thinking aligns with social and emotional values. Appreciative inquiry can be used to generate a collective agreement, defining what people want to achieve together and providing enough structure and energy to mobilize action in support of those agreements. When generative thinking occurs, many problems can be resolved.

I used an appreciative inquiry lens with a mixed-method approach because it allowed me to analyze both qualitative and quantitative data, thereby comparing "the numbers and the words" (Saldaña & Omasta, 2018, p. 161). According to Saldaña and Omasta (2018, p. 265), and supported by Creswell and Plano Clark (2011, p. 273), this combination can confirm or contradict the findings of outcomes. Creswell and Plano Clark further noted a survey with open- and closed-ended questions qualifies as mixed-method research as it collects both qualitative and quantitative data (p. 276). The approach is also considered mixed methods when qualitative data are collected and analyzed by developing themes and counting words, as this involves both qualitative and quantitative data analysis. Although I considered undertaking multimethod

research, which involves using multiple qualitative and quantitative methods in a meta-analysis (Goemans & Spaniel, 2016, p. 25), I ultimately did not select that approach for this study. Multimethod research requires separate qualitative and quantitative methods, whereas the mixed-methods approach integrates both types of data. In my inquiry, I used surveys to capture quantitative data and a virtual world café to gather qualitative data. I found the mixed-methods approach appropriate for my project, as it required coding the data to determine the frequency of responses and trends, providing a comprehensive analysis that aligned with my research objectives.

Data Collection Methods

I used a virtual world café and a survey to gather data for this inquiry. This section defines and substantiates the methods in the literature regarding data collection. This section also explains the rationale for selecting these methods and why they were suited to this research.

Virtual World Café

A world café enables many people to come together to enable the collection of qualitative data (Löhr et al., 2020, p. 1). This method was conceptualized initially to take place in a physical space; however, because of COVID-19 pandemic social distancing guidelines in place at the time, Microsoft Teams was utilized to conduct a virtual world café (Doreleyers & Knighton, 2020, p. 4; Government of Alberta, n.d.; RRU, n.d.-a, para. 1).

A world café is a session that lasts at least 1.5 hours, for a group of 12 or more that is led by a host who encourages everyone's participation in a large group dialogue to share knowledge and ideas (Brown et al., 2005, p. 5; the World Café, n.d., para. 1). The facilitator welcomes and introduces a group of people who have gathered to converse on a specific topic for an allotted

time (Brown et al., 2005, p. 5). The host presents a question (or questions) to discuss and then the group is broken into smaller groups in virtual breakout rooms or smaller tables. After the allotted time (around 20 minutes), the groups are reconfigured into new groups (Löhr et al., 2020, p. 10). During each round, participants harvest the group's collective thoughts (Pagliarini, 2006, pp. 266–268). Tools for capturing data include flip charts, graphics, or notes (Krohn, n.d., p. 1). Google Docs, recordings, or uploading drawings are mechanisms that can capture virtual world café ideas. The composition of the smaller groups changes throughout the world café resulting in multiple perspectives that create new ideas. The world café stimulates iterative thoughts, ideas, and suggestions by mixing participants several times. After this mixing, the group reconvenes to the larger group context and, through dialogue, ideas are funnelled down to the principal foci or thematic emphasis (Löhr et al., 2020, p. 10; Whybrow et al., 2011, p. 79).

My rationale for using a virtual world café as a data collection method was to gather informed insights about barriers to funding and policy solutions. This world café not only stimulated deep thought, diverse ideas and creative solutions, but the insights which came out of it further support RRUSS's goal of minimizing student barriers. This outweighed disadvantages that can be associated with a world café, such as the difficulty to record and report on discussions, and facilitator, venue, or transcriber costs.

Online Survey

The second method employed was an anonymous electronic online survey using the SurveyMonkey (n.d.) electronic platform. A survey allows researchers to sample a group of individuals by asking one or more questions about their thoughts, ideas, and opinions on a specific subject matter to gather feedback and for the researcher to obtain insights in a relatively

short timeframe (McClave et al., 2018, p. 16; Saylor Academy, 2012, pp. 2–3). Surveys are versatile, allow for a large amount of data to be obtained, and are generally not as cost-prohibitive as individual interviews (Saylor Academy, 2012, pp. 2–3).

Surveys can be beneficial to a researcher. Various survey types can be conducted, such as random, cluster, geographical, and cross-sectional data (McClave et al., 2018, p. 18). A stratified target survey was utilized to research a specific audience. Stakeholder groups were identified and RRUSS coordinated the dissemination of the survey to the targeted audience.

Prior to proceeding, it was vital for the inquiry team members and me to identify concerns related to surveys and consider how to overcome these concerns to obtain authentic feedback. As survey items can be ignored or answered partially, we provided the opportunity for participants to self-select and receive questions pertinent to their participant group identity. Standardized questions can be inflexible and may limit additional insights offered by respondents; therefore, we constructed questions that drew on participants' firsthand experiences and included a variety of question types, such as multiple choice and fill in the blank, with additional comment space to provide a variety of opportunities for participants to offer broader insight. Once the survey was sent out, the questions could not be changed, so we scrutinized and adjusted the questions until we were satisfied with the results prior to sending.

After deliberation, my inquiry team and I decided that the advantages of utilizing a survey outweighed any disadvantages. It was relatively easy to disseminate and gather a wide range of information quickly. It provided the opportunity for numerous Canadians to conveniently participate and share their thoughts knowing their responses were anonymous.

Project Participants

Taking a modest view of the RRUSS stakeholder group for the 2020 calendar year, the number of primary and secondary individuals and organizations was an estimated 19,750, excluding the international stakeholder group. Primary stakeholders included 4,125 full- and part-time Canadian resident students, plus an unknown number of potential students. Secondary stakeholders included approximately 14,625 Canadian resident alumni, as well as active employer funding sponsors, donors who supported the foundation through financial aid, and organizational partners who offered work experience. To draw a sample for this inquiry, RRUSS, on my behalf, simultaneously notified approximately 4,500 primary and secondary potential participants from their contact lists that they could participate in the virtual world café (Appendix G) and online survey (Appendix H).

In total, 17 individuals attended the virtual world café, and 117 individuals completed the survey. Due to the anonymizing of identities it is possible that some participants may have taken part in both. To participate, a potential participant had to be a Canadian resident and a past, present, or potential stakeholder. Stakeholder participation was limited to individuals who met the criteria for the stakeholder groups and the *Tri-Council Policy Statement's* (Canadian Institutes of Health Research et al., 2018) ethics requirement of a minimum of 18 years old.

I used a stratified random sample to select the participants for the virtual world café. This method allows researchers to obtain a sample population representing the studied population and divide it into subgroups called strata to provide a test group (Lind et al., 2018, p. 219; McClave et al., 2018, p. 18). I assigned 40 places to the primary stakeholder group—current and potential

students. The remaining 20 places were reserved for secondary stakeholders. I accepted participants on a first-come basis according to their stakeholder group.

I used a quota sample for the survey. Sharma (2017) stated quota sampling aims to end up with a sample of strata groups studied proportional to the population (p. 751). Ochoa and Porcar (2018, p. 486) and Sharma (2017, p. 752) agreed quota sampling is appropriate to pair with random stratified sampling. Both samplings were representative of a specific population, cost-effective, quick, and used for either qualitative or quantitative data collection. The survey used for this research prompted participants to reflect and share their knowledge through answering open-ended and closed questions (Appendix E) on their lived experience of postsecondary education. All survey responses were accepted without a minimum or maximum number if they met the above criteria.

Table 2 summarizes the participation rates of the stakeholder groups participating in the survey and world café methods. It shows high participation rates from the primary stakeholder group, including current and prospective students. The virtual world café predominantly consisted of secondary stakeholders who were alumni, PSI partners, and RRU staff. Table 2 reveals the minimal representation of student perspectives in the virtual world café, which I discuss further in the Limitations section in Chapter 4.

Table 2

Stakeholder Roles for the Survey and Virtual World Café Methods June 2021

Method	No of Participants and Role
Survey	107 students (88 current, 11 prospective, 8 alumni) 1 donor 1 organization partner 5 RRU staff 3 PSI partners
World café	14 full-time PSI employees 1 part-time PSI employee 1 full-time middle school employee 1 current student

Note. PSI = postsecondary institution; RRU = Royal Roads University

Inquiry Team Members

My five-member inquiry team helped manage both survey methods. The team members were selected based on their (a) knowledge, (b) skill set, (c) abilities, (d) commitment, (e) enthusiasm for this project, (f) ability to work collaboratively, (g) respect for ethics, and (h) understanding of the importance of the learning process. The team members included one professional facilitator, two RRU alumni, and two coworkers. Members assisted with creating research questions, transferring survey items to the SurveyMonkey (n.d.) platform, assisting with data analysis, and providing technical support. The team practiced facilitating the virtual world café and breakout room management.

Study Conduct

I began by confirming inquiry team members' participation with a letter of agreement (Appendix F). RRUSS assisted me in reaching potential participants for both data collection methods through its monthly electronic newsletter called RRU *Events and Opportunities*

Newsletter and stakeholder email contacts. This messaging indicated potential participants had an opportunity to participate in the virtual world café (Appendix G) and a survey (Appendix H) with the research information letter embedded (Appendix I). Interested individuals reached out to me through a project-specific email address to confirm their interest in participating and a Microsoft Teams link was sent after receipt of the consent form.

I placed participants who responded to the call for an invitation to the virtual world café on one of two lists depending on the stakeholder group they represented and in the order they responded. The lists had 40 places available for the primary stakeholder group and 20 places for the secondary stakeholder group.

I arranged for the virtual world café to be hosted by a professional facilitator who was also one of my inquiry team members. Since 20 stakeholders did not volunteer within the initial 7-day period, RRUSS sent a follow-up reminder request for participation. After an additional 7 days, the participant threshold to conduct the virtual world café was met and undertaken. Once the virtual world café was completed, I reviewed the video recording and transcription, analyzed the data, summarized the findings, and aligned the survey questions. An inquiry team member and I assigned an alphabetic code to each virtual world café participant's quotes to conceal their identity when cited (e.g., vWC-A).

The RRUSS team resent the survey invitation link a second time through the monthly RRU *Events and Opportunities Newsletter* with the invite to the virtual world café. Secondary stakeholders from the RRUSS contact list received an email invitation from an RRUSS team member. The email contained an Online Survey Preamble with an Information Letter (Appendix

J) that included an embedded link to access the survey. All 117 stakeholders who responded to the call for survey participants were accepted.

One of the inquiry team members uploaded the survey using the questions (Appendix K) created. The survey consisted of open- and closed-ended questions and took an average of 20 minutes to complete. The SurveyMonkey (n.d.) platform aggregated and anonymized the data. The survey platform also assigned each respondent a random 11-digit number (e.g., 12345678910), in order to protect the anonymity of participants. When using these codes for citing individual comments I added an "R" before the identification number (e.g., R12345678910).

Data Analysis and Validity

After conducting the virtual world café and the survey, I compared the two data sets. I collated participants' responses based on question response categories, then organized the data and compared the findings with the literature discussed in Chapter 2. I clearly and concisely identified similarities, differences, and possible gaps between this literature and the findings. Next, I reported this information to the RRU leadership team with RRUSS. I analyzed and validated the data using three criteria: code validation, data range validation, and data type validation. Each of these criteria is detailed in the sections that follow.

Data Analysis

The evidence was considered, grouped into categories, and noted for any emerging patterns. After I analyzed the relationships between the data and the inquiry questions, I confirmed the content was accurate, current, relevant, and reliable. Using a Microsoft Excel spreadsheet, one of my inquiry team members and I grouped each of the virtual world café

responses under a corresponding subquestion. Due to the spoken nature of the virtual world café, I captured participants' responses individually, noting exceptions to the standard responses. These individual findings and exceptions allowed for critical thinking and were the stimulus to further understand the inquiry findings.

Once I had merged the categorizations of both data sources (the survey and virtual world café), I used Microsoft Excel to build a structure to formalize the findings for presentation, including the comparison to the literature examined, and finally the data unique to the research. Next my inquiry team member and I examined the gathered qualitative and quantitative data from the survey and virtual world café. Once both sets of data were accumulated, we colour coded the data to methodize and categorize the information captured (see Figure 3). This helped to visualize all the responses to the primary and subquestions. The coding process involved labelling and organizing the data into themes and relationships based on the number of occurrences. We considered what insights could be gathered from the text and how the data answered the questions posed. We looked for the relationships and the impact on the questions, and then for trends and patterns, transforming the raw data resulting in a deeper understanding of its relevance and meaning.

Major and minor categories arose from the results. My inquiry team member and I quantified and qualified participants' responses according to the categories arising from the data (i.e., funding barriers, mitigation strategies). Minor categorizations arose due to the layered nature of the survey structure. By comparing the two data sets, commonalities and outliers surfaced. This structure was then subsequently used to formulate the insights for the development of the findings and conclusions, which I present in Chapter 4.

Figure 3

Sample Data Analysis Spreadsheet Showing Responses Categorized by Subquestions

1. What barriers to funding Canadian postsecondary education have stakeholders experienced before and during the Covid-19 pandemic?	2. What barriers could be mitigated to enable all Canadian students to afford to attend Royal Roads University if they meet the entrance	3. What steps might be taken to enable Royal Roads University Student Services to better support the financial needs of students?
Respondents from the vWC also indicated barriers for PSE as food, family, cost of living, housing, technology, internet and wi-fi access	In the past NB and now SK have free tuition for their provintial residents with retention criteria	Follow up with students who don't finish their programs by the department to try to understand some of the factors that might have played into their decision of not completing
Loan barrier lack of colateral didn't want to have a co-signer or have no one available to offer that support	Education is evolving into a method of delivery that is unaffordable. This is both a barrier and solution. RTOL	Social media to scholarship
Part-time student status though it is full-time	We can do this and here's how are going to be different and were not going to lean on you. In fact, the original pitch will be self sustaining. I get the point where	Know where the need is, we just don't have enough money to support it to fill those gaps. ** How would a rebust endowment fill that gap - see discussion
Children at home - focus divided between work, their schooling and child care	Delivery redesign was an experiment	Fund raising - bringing certain philanthropist to the table

Note. In this figure, yellow represents general barriers for postsecondary education, brown represents financial barriers, orange represents responses related to family responsibilities, and blue represents recommendations for improvements through strategic partnerships.

Data Validity

To ensure the validity of the data captured in the virtual world café, the facilitator brought the participants back to the collective group after they responded to each question (Appendix K). This allowed the facilitator to verify the raw data captured in Google Docs and ensure the inquiry team member breakout group hosts accurately recorded participants' thoughts. The facilitator joined the three breakout groups for a check-in throughout the process. If necessary, additional

details were included. This process fostered stakeholder engagement in the decisions and allowed the opportunity to confirm the accuracy of the shared data. After the virtual world café, the participants had an opportunity to connect with an inquiry team member to share additional insights that they did not reveal earlier.

To ensure the validity of the data captured in the survey, my inquiry team and I carefully designed the questions. To avoid ambiguity or bias, we used simple, clear language. We included a combination of multiple choice, open-, and closed-ended questions. We considered various distribution channels and survey platforms and selected SurveyMonkey (n.d.). The Ethics Review committee reviewed and granted permission to proceed with the survey. Next, my capstone partner sent out the invitation to participate in the survey. Once the data collection was completed, the inquiry team assisted me in analyzing and interpreting the data.

Data Code Validation and Analysis

I analyzed the data from the virtual world café and the survey through coding, a process in which a word, phrase, or sentence was identified that captured the essence of the data (Saldaña, 2016, p. 67) or one idea relevant to the research question. I then identified and categorized the data to determine the findings' themes and to identify patterns and gaps. This approach allowed me to compare the findings to current literature and served as a foundation for my recommendations.

Data Type Validation and Analysis

With my inquiry team, I reviewed transcripts and recordings of the virtual world café, survey data results including graphs, notifications to stakeholders, and financial documents, and significant findings were noted and sourced. These concepts were applied through triangulation,

a process in which a researcher uses at least three types of data sources or methods to test validity by comparing and converging information for an overall understanding of an issue (Saldaña & Omasta, 2018, p. 99).

Data range validation and analysis. While the virtual world café inquiry questions had some similarities to the survey questions, the nature of the style of inquiry for the group method lent itself to asking an open-ended question. The open-ended responses provided the participants with the opportunity for creative and cocreative collaboration and consensus making. The data reduction and coding method utilized for the survey and the virtual world café enabled convergent and divergent data to provide pathways to shared experience and unique outliers.

According to Erickson (as cited in Saldaña & Omasta, 2018, p. 247), qualitative methods in research possess a key assertion supported by subassertions that are connected through key statements. This narrative approach to condensing data keeps the analyst grounded in the particulars of the data while suggesting more general applications.

Ethical Implications

Researchers and institutions must "apply the ethical principles and the articles" (Canadian Institutes of Health Research et al., 2018, p. 3) of the *Tri-Council Policy Statement* (TCPS) that Canada's three federal research agencies created, and which provide the ethical standard for the involvement of human participants. In this section, I focus on the key principles of respect for persons, concern for welfare, and justice (Canadian Institutes of Health Research et al., 2018, p. 6), which helped me address conscious and subconscious biases that had the potential to influence the research findings.

Respect For All Persons

To meet the TCPS principle of respect for persons (Canadian Institutes of Health Research et al., 2018), I provided sufficient details about the study, its benefits, and risks through a research information letter (Appendix I), allowing participants to make an informed decision about participation. To mitigate any perception of coerced input, all invitations to potential participants noted their right to autonomy and the individual's capacity to choose to participate.

All participants provided informed consent and were aware their participation was voluntary. The facilitator informed all attendees that their personal information would be kept confidential. I ensured the virtual world café facilitator communicated in both written (Appendices G and L) and verbal formats to advise participants that they could decline without adverse effects. These steps reduced the risk that individuals would feel uncomfortable declining the invitation to participate.

Concern for Welfare

By outlining the risks and benefits of participation, I empowered research participants to provide informed consent, which follows the principle of concern for welfare (Canadian Institutes of Health Research et al., 2018, p. 28; IDEO, 2015; p. 16; Saldaña & Omasta, 2018, p. 192). I considered mental, physical, and socioeconomic concerns for both methods and ensured safeguards were in place. My mitigation tactics were to engage a diversified group of inquiry team members and to assign participants to groups in which there would be no power-over relationships. To avoid lost time for work or study, I limited the time participants committed to both the virtual world café and survey. Finally, to reduce potential health risks during the pandemic, I conducted the world café virtually.

Justice

Participants were included based on the "criteria that are justified by the research question" (Canadian Institutes of Health Research et al., 2018, p. 28) to ensure and address equity issues, as seen in Appendices G, H, I, and L. I required each participant sign the Research Consent Form for the virtual world café (Appendix L) before engaging in the research study. I addressed factors such as the age of consent and cognitive capacity in these forms to safeguard potential risks to the vulnerable populations. The survey preamble also indicated parameters for involvement (Appendix J). I ensured the invitation to participate was distributed to the identified primary and secondary stakeholder groups to achieve a balanced representation for perspectives (Saldaña & Omasta, 2018, p. 192). The letters explained that participants could leave without consequence or discrimination during the process, but their anonymous data could not be extracted from the whole data set. Any possible perception of a power imbalance between the researcher and participant was another concern for justice. RRUSS sent the invitation to participate in the survey and virtual world café to approximately 4,500 primary and secondary potential participants. The inquiry team members provided additional support for the participants to alleviate any concerns outlined in the research consent letters and give as many people as possible an equal opportunity to participate in the inquiry.

Contribution and Application

This research project has sparked increased and continued engagement and dialogue between RRUSS, its stakeholders, and other PSIs, with the opportunity to collaborate, contribute, and explore ideas across sectors. The inquiry outcomes, including the research findings and the

recommendations that arose from them, may influence RRUSS decision making in both the short and long term.

The importance of addressing funding barriers in Canada is far-reaching. The *Concise Canadian Oxford Dictionary* (Pontisso & Barber, 2005) defined the *ripple effect* as the continuous result of an action (p. 1160). Kotter's (2007) "eight steps to transforming an organization" (p. 99) is comparable to the ripple effect. These research findings provide PSE with the ripple effect of new knowledge in the form of (a) employment opportunities, (b) increased income, (c) enhanced skill sets, and (d) intellectual capital. The further rippling societal benefits, which education brings, are reduction in (a) poverty, (b) crime, (c) violence, (d) adverse health, (e) underemployment, and (f) economic decline (Government of Canada, 2016, Chapter 2, para. 13). The barriers identified by this research will potentially influence PSIs and policymakers on funding matters, assist in implementing new practices, and help access funding in a postpandemic world.

Summary

In this chapter, I discussed the methodology, data collection methods, project participants, study conduct, data analysis and validity, as well as ethical implications. By conducting an ethical research project and being mindful of the process, this research will be part of the solution for driving sustainable change. With the publication of this research, these findings will be available for participant review. Chapter 4 presents the project findings, conclusions, and the scope and limitations of the inquiry.

Chapter 4: Inquiry Project Findings and Conclusions

In this chapter, I present the main findings from the research followed by conclusions, which I compare and contrast with the literature (Chapter 2). This chapter ends with a summary of the scope of limitations of the inquiry.

Study Findings

In this section, I present four findings identified from the research:

1. There are three main barriers to funding PSE.
2. Traditional and nontraditional funding methods were used to mitigate funding barriers for PSE.
3. Participants discussed six systemic obstacles to PSE relating to governmental and institutional supports.
4. Students have found innovative ways to overcome barriers to achieve their PSE goals.

A review of the research question and subquestions helped me work with my inquiry team to contextualize the findings and draw comparisons and conclusions from the research. As noted in Chapter 3, to ensure anonymity and confidentiality, I used identification numbers (e.g., R12345678910) to cite material from the surveys, and participant codes (e.g., vWC-A) to credit excerpts from the virtual focus group.

Finding 1: There are Three Main Barriers to Funding PSE

Participants clearly indicated that barriers impeded their educational progress. Those who reported they had experienced barriers were invited to provide more than one response to survey questions, revealing several insights. Of the 117 survey participants, 100 shared responses that revealed three primary challenges: family obligations and responsibilities at 25%, salary and

other related hardships at 15%, and borrowing challenges, such as earnings over-limit threshold at 13%. Additionally, 12% of respondents did not meet the criterion for funding. The remaining 35% respondents (a) were enrolled in their program part time in a full-time program, (b) reported their existing debt ratio disqualified their application, (c) identified as a higher needs candidate, and (d) were disqualified due to the specific criteria of the award.

Of the 117 survey respondents, 106 weighed in on the topic of hardships that they experienced during and after their studies. These hardships impacted participants two ways, with 52.8% experiencing hardships while obtaining PSE and 22.1% continuing to experience hardships after obtaining their PSE. A repetitive theme throughout the survey was the necessity for extraordinary sacrifices to obtain their PSE. Two thirds of participants indicated they or a family member had to forego essentials. Half of this group indicated that during their studies food was limited, with 35.7% indicating housing was impacted, and 28.6% of participants noting that recreational activities, trips, and extracurricular activities for children were affected. Specifically, 47.4% of the survey participants asserted family obligations had impacted their ability to obtain PSE.

Participants noted other obstacles such as paying for utilities and clothing essentials. One survey participant reported, “I had to take on extra jobs to make ends meet” (R12754743216), while another noted, “There are students from low-income families or single-parent families struggling to pay for food and housing” (R12746784905). This same participant stated, “Often the cost of tuition is covered, but accommodation, food, clothing, and travel are not” (R12746784905). Participants also verbalized other hardships, such as the burden of the cost of childcare, paramedical costs, and effects on mental health. One of the organizational partners

corroborated these findings, adding that they have seen the barriers students face obtaining PSE, and observed these conditions worsening during the COVID-19 pandemic.

Participants also described several funding challenges they faced while pursuing their PSE. The survey provided insights into the particular challenges and the rate of incidents experienced by participants. Due to their funding barriers, 68.2% of the surveyed participants indicated that PSE was postponed for themselves or those for whom they bore responsibility.

The virtual world café participants discussed additional barriers which exposed additional hardships before and during the COVID-19 pandemic, including the lack of democratized technology, internet, and wi-fi access. Participants reported no infrastructure in some rural communities, further exacerbating existing barriers. Some indicated workplace demands and obligations were a challenge, and others reported health concerns. Participants also noted that prescription coverage was an issue, and "there was not enough support as a student with disabilities" (R12753050305). One survey respondent noted,

> My mental health in undergrad significantly impacted my marks. I didn't know enough at the time to know that. I was not in a good position to get into grad school afterwards without life experience or the funds to go back to school to augment my undergrad marks. (R12758779617)

Personal income and earning potential were also seen as obstacles that hindered participants' ability to obtain PSE and impacted career advancement. The complexity of this situation was voiced by a virtual world café respondent when they explained their challenges in this way:

> I don't get any funding from work. I have a low wage. A job requirement is to obtain my master's to keep my position, but I must drain my savings. I was lucky I had [money] in the bank and could do it. (vWC-F)

Several participants described challenges that they and their family experienced due to their inability to self-fund their education. Of these participants, 93.3% reported these barriers had already impacted their career opportunities. Only 13.3% of participants indicated no long-term financial hardship resulting from their pursuit of their PSE. Although 64.3% of the participants met the experience requirements for a position for career advancement, they were eliminated from being considered because of the lack of credentials.

The survey and the virtual world café participants recorded several obstacles, financial and nonfinancial, which resulted in the noncompletion of their PSE. A virtual world café respondent stated, "An added complexity is the difficulty to choose a career that is still viable into the future and that can carry the burden of debt" (vWC-J). They continued to discuss the "psychological barriers to engaging in PSE due to staggering debt load and concerns on how to pay it off" (vWC-J) and the "real earning potential resulting from that education" (vWC-J).

Survey and virtual world café participants offered their perspectives on the barriers to obtaining PSE specific to academic and funding criteria. Attending school was not financially feasible for families with poor credit ratings and others who could not obtain loans. A respondent posited,

> Educated Canadians with better-paying jobs . . . pay more taxes . . . thus using fewer social supports. Better educated Canadians have fewer health problems and [divert] less

> health care dollars [that can support postsecondary funding] . . . that repays the government in multiple ways. (R12746784905)

A lack of collateral or a cosigner to obtain a loan was another funding barrier. Many have no support, and others did not have a bank account. Virtual world café participants described academically qualified individuals who, because they had no funding, had to seek education opportunities elsewhere and did not return to Canada.

The pandemic revealed that the bricks and mortar infrastructure of PSIs were a significant cost burden in the student funding challenge. Despite the shift to remote learning, these costs remained part of the fee structure and lending criteria for students. Virtual world café participants discussed that education was devolving into an unaffordable delivery method. Real-time-online and anytime-online delivery could be a solution for reducing excess student costs. Institutions prepared to provide PSE delivery in innovative ways may be positioned to disrupt PSE in the long term, necessitating a reconsideration of funding criteria.

Moreover, potential students have found delays in pursuing PSE mean they could face curriculum restructure. A virtual world café participant stated,

> [Students] are working on trying and earning money to go back to school so that they can have better jobs, [but] the interest is accruing on those loans, and when they return, sometimes the credentials no longer match the program they were attending, or the costs have increased. (vWC-K)

The virtual world café participants substantiated what the survey respondents had shared. For example, one survey participant stated, “The DocSocSci program is not eligible for BC government loans because a comparable course is not offered on campus. As I work full time—

despite the $40,000 per year tuition—I exceed the usual student grant/loan opportunities" (R12755562734).

Finding 2: Traditional and Nontraditional Funding Methods Were Used to Mitigate Funding Barriers for PSE

On the survey, I asked participants to define the successful methods of funding that they tried to utilize or obtain for PSE. Of the 285 responses received, the highest weighting at 16.1% of respondents indicated savings, followed by government loans at 12.6%, awards at 11.9%, credit cards at 11.2%, school bursaries at 9.1%, and 8.4% personal line of credit. The remaining responses were a mix of employer-sponsored, student line of credit, family and friends, loans, mortgages, registered retirement savings plans, and registered education savings plans (RESPs). Participants provided additional detail about their funding methods, including a return of service agreement with the employer, several part-time jobs, and veterans' affairs benefits. Two participants indicated support from their Indigenous funding sources. One stated, "Fully funded streams for Black, Indigenous, and people of colour and women—my current education at RRU is funded by my Indigenous community" (R12755482196).

The survey asked participants about their success–failure ratio. Of the 99 participants, 82% successfully obtained funding for PSE. Those who were declined provided insight into their challenges. Of the remaining 18.0% who were denied funding, 37.7% indicated they had earnings over the limit threshold, 28.3% were disqualified due to the award's criteria, 18.3% had an existing debt ratio which disqualified their application, and 16.7% said a candidate with higher needs was selected.

Two respondents with varied results detailed their experiences with government and regulated savings as sources of potential funding sources for PSE. A respondent indicated they received $1,200 in funding from their organization but did not qualify for grants or awards as a nonresident of BC (R12753991021). Another respondent indicated they attempted to utilize their locked-in retirement account without success (R12742450991).

A virtual world café participant revealed many students are playing a game with the Ontario Student Assistance Program:

> I don't know if you've heard of it, but what [students] will do is that they sign up for the four courses. They wait for the OSAP [Ontario Student Assistance Program] clearance to come through, and then they drop [a course or courses] to ensure that they can be successful because they know… then they're guaranteed the money so they can focus on those credits, without having the risk of failing or starving. (vWC-L)

Participants of the virtual world café also discussed using RESPs to fund their education. This spurred another conversation about systemic funding structures and other support mechanisms necessary to enable students to succeed in their pursuit of PSE.

Finding 3: Participants Discussed Six Systemic Obstacles to PSE Relating to Governmental and Institutional Supports

Federal Support. The government's intended use of the RESPs was to be a savings vehicle for PSE. However, world café participants noted that it disproportionately benefits people and affluent families who already have the capacity to save for PSE. They discussed the need to reevaluate the impact of poverty and how governments might provide the child tax credit with a top-up for children who fall within a specific low-income criterion. Such a program could

allow impoverished students to accumulate funds in a registered plan like a traditional RESP. Withdrawals would be restricted solely to the student for their educational pursuits or ceded back to the government if they do not enrol at a PSI.

Provincial Support. The participants from the virtual world café discussed other provincial funding strategies to support PSE and help retain the younger demographic of residents. The participants cited, “In the past, New Brunswick and now Saskatchewan provincial government bodies offer free tuition for their provincial residents with retention criteria” (vWC-D; vWC-F; vWC-L).

Interministerial Support. Both survey and virtual world café participants noted resources and supports such as prescription coverage, medical plan, mental health support, and guidance would have been beneficial to support the pursuit of PSE. This discussion opened the conversation for PSIs to communicate the availability of funding, insurance, and support already available in the institutional setting.

PSI Support. Participants discussed the need for more transparent communication as potential students and their families transition into the PSE environment. During the virtual world café, participants identified understanding the language or jargon of PSE as an obstacle, discussing the necessary comprehension level required to benefit from the guidance on PSIs’ websites, brochures, and other promotional material. Inviting potential and current students to information sessions and focus groups would be beneficial in providing insight into wording and navigation. Additionally, helping students apply for funding that already exists requires assisted navigation. One virtual world café respondent stated, “Applying for scholarships is just too tedious [and] too time-consuming, and I just find that it is another full-time job” (vWC-G).

Personal Support. Survey participants indicated the personal supports they did receive and the other supports they would have found beneficial. Of the participants, 77% responded they had access to a computer, while 66.7% said they had stable wi-fi. Additionally, 64.4% of participants had both family and a support group with 56.3% specifically saying they had financial means or support from a life partner, and 54% of participants reporting support from friends. Finally, 23.0% of participants reported receiving some form of organizational support.

As for what additional supports would have been beneficial during their pursuit of PSE, the majority of participants (59.3%) indicated that time to study was one of their top concerns. Another 40.7% of participants stated they would have benefited from having a mentor. Participants also noted in equal measure that stable or affordable Wi-Fi, housing, childcare support, access to a computer, food, and accessibility supports were concerns. Finally, participants also said alumni and graduate associations could provide further needed support.

Virtual world café participants said having a formal process of following up with students from each department who did not finish their programs would be beneficial to understanding the barriers that may have played into their decision not to complete their program.

Alternative Supports. Discussions during the virtual world café also explored alternative funding methods, including access to endowment funds. One of the participants proposed a robust endowment fund to fill the funding gap required to support a greater number of students. This suggestion stimulated further conversation around the possibility of both alumni and philanthropic fundraising efforts to bolster the endowment capacity.

Finding 4: Students Have Found Innovative Ways to Overcome Barriers to Achieve Their PSE Goals

Participants in both the survey and virtual world café were asked to provide insights into their innovative methods of achieving PSE goals. Of participants, 43% indicated they had to ladder (i.e., use strategic steps to achieve goals) their program enrolments to afford their educational pursuits. Participants demonstrated how they effectively utilized laddering. This staged effort was displayed in creative forms such as (a) completing a semester of school, then stopping to work a semester to build up enough money to continue the next semester, (b) completing a certificate to enable them to make more money than a high school certificate, work the following year obtain their diploma, work generally making more money to go back to school for their degree, (c) working in an industry that would allow academic credentials for their work experience, and (d) aligning with PSIs that would allow transfer credits from other institutions. People who laddered their education did so because they experienced barriers and employed strategies to overcome those barriers. Notably, participants experienced an average of 4.5 starts and stops to obtain their PSE.

Participants proposed providing quicker turnaround times for students to obtain certification. However, new and innovative delivery methods conflicted with PSE's current and future state. The current workplace requires academic programming designed to address the need for advancement to remain competitive.

Findings from the virtual world café suggested microcredentialling would acknowledge the skills and experience learners already possessed. Participants argued that reducing red tape to enable students to transfer Canadian credentials between universities and colleges offers a

possible solution to the student, PSIs, and the workplace. An early innovation implemented by RRU was the introduction of focused programming for working professionals. The assumption was that this target market could afford the cost of education and that many employers would be paying the cost of the education, but the survey found only 4.1% of participants had employer support. Nevertheless, employers continue to call for employees to have specific educational backgrounds. Virtual world café participants questioned whether employers now prefer potential and current employees to possess a future-forward set of credentials that align with workplace and market demands.

Participants cited new tax incentives and amended criteria required for assistance to support these efforts. Virtual world café participants stressed the need to make people aware of the ability, if they are employed, to amend their TD1 personal tax credit return status to classify themselves as a student and reduce their tax at source. Participants also questioned if tax incentives would be enough to address the systemic funding challenges. In light of the COVID-19 pandemic, they further insisted that expanding the dialogue around whether to continue the long-standing model of bricks and mortar in the delivery of education was necessary. They further argued that this model functions as a sunk cost fallacy that should be challenged to secure the future of PSE.

Participants stressed the importance of allowing students' voices to be heard, with their feedback captured through ongoing and open dialogue. The research revealed the importance of including students as fellow thought leaders to address the design and demands of education, the workplace, and policy.

In summary, feedback gathered from survey and virtual world café participants resulted in four study findings. These findings, combined with the literature reviewed, helped establish the inquiry conclusions, which I present in the following section.

Study Conclusions

I conducted this inquiry to explore the following main inquiry question: How might creating an opportunity for stakeholders to dialogue about funding enhance Royal Roads University Student Services' purpose of reducing barriers for Canadian students? Throughout this study, I explored the following subquestions:

1. What barriers to funding have Canadian postsecondary education stakeholders experienced before and during the COVID-19 pandemic?
2. What barriers could be mitigated to enable all Canadian students to afford to attend Royal Roads University if they meet the entrance requirements?
3. What steps might be taken to enable Royal Roads University Student Services to better support the financial needs of students?

Drawing from the insights gained and the data gathered in the virtual world café and survey, as well as a comprehensive review of existing literature reviewed in Chapter 2, I developed four conclusions:

1. Three main categories of barriers hinder funding Canadian PSE.
2. All barriers could be mitigated with the appropriate infrastructure.
3. A holistic approach is needed to enable RRUSS to better support students' financial needs.
4. Dialogue among stakeholders exposes barriers and identifies solutions.

The conclusions provide an understanding of the complexities and potential solutions for the purpose of reducing funding barriers for Canadian students. I discuss each conclusion in detail in the sections that follow.

Conclusion 1: Three Main Categories of Barriers Hinder Funding Canadian PSE

This conclusion relates to Finding 1 and addresses the main inquiry question and Subquestion 1. In considering the data gathered from the virtual world café and survey, I noted three main categories of barriers: the conflict between family financial needs versus PSE costs, insufficient student income to meet PSE costs, and the challenge of balancing basic living expenses while pursuing PSE.

The findings in this research study have captured funding obstacles unique to individuals, compared to the literature review, which spoke primarily to institutional barriers. Participants reported significant struggles with the costs of childcare, housing, purchasing food, mental health issues and the impact of insufficient income on their educational pursuits and career advancement. Funding policies and lending criteria that do not accommodate the actual financial realities students face create further complications.

The tools and solutions to address and mitigate funding barriers for Canadian students to attend PSE are shown to be complicated, and misaligned. I define misalignment as a set of funding criteria that limits access based on the location of delivery and circumstances. For example, federal and provincial government loans not being available to all who seek them creates inequitable access to education. StudentAid BC (n.d.) determines the amount of student financial assistance available by the student's assessed need, whether they have dependents, the length of their study period, and the maximum amounts set by the Canada Student Financial

Assistance Program and by StudentAid BC. Additionally, other criteria that may limit access to PSE are the expectations of contributions from parents, spouse/partner. Similarly, scholarships, bursaries, and awards were available but with similar parameters, which left many with no funds. In 2020, the federal and provincial governments temporarily suspended student barriers such as loan interest, commencement of loan payments, forgiveness of loans, and loan support despite delivery modality, which helped reduce student financial barriers.

However, with the pandemic PSE environment, the necessity and willingness for change saw an abrupt acceptance of the change in funding criteria and the temporary availability of government funding for both PSI and students. While the literature focused on the macroeconomic impacts of funding barriers of PSE (Blom et al., 2015, pp. 1, 5, 11; Bonham, 2017, para. 9; Graves & Kuehn, 2022, p. 1), the findings indicated the microeconomic demands of funding PSE impacted individuals. These macro- and microlevel complexities suggested no single predetermined strategy or solution intervened in these systems. The need for reevaluating funding criteria to reflect the diverse socioeconomic backgrounds of students is a theme also supported by Berger et al. (2009), who discussed the broader economic impacts of such barriers.

Conclusion 2: All Barriers Could Be Mitigated with the Appropriate Infrastructure.

This conclusion addresses Finding 2 and answers the main inquiry question and Subquestion 2. The research findings support the need for infrastructure that could mitigate barriers so Canadian students can afford PSE. The complexities of the funding system, which include competing government priorities such as health care and environmental concerns, increase the challenges faced in securing educational funding. Offering government interest-free loans, grants, and bursaries available to all who seek them could create equitable access to

education in Canada. Collaboration between the Government of Canada and all provincial or territorial governments that offer student grants and loans needs to occur. The literature indicated measures had been employed in European countries to ensure students could continue with their PSE in times of crisis (Di Pietro, 2018, p. 63). These supports include free transportation, deferral of loan payments until the student is settled in a job, and coverage of textbook costs, transportation, and living expenses. Global educational models from countries like Denmark and Finland, which provide free PSE, could serve as benchmarks for Canadian policy reform. Such comparisons highlight potential improvements while reinforcing the call for a standardized approach to PSE funding across Canada to all Canadian students, as by the CFS (2021).

In my research, participants indicated scholarships, bursaries, loans, and awards parameters were too restrictive and limiting. The process of seeking and applying for this assistance was viewed as similar to applying for a full-time job, with the received reward disproportionate to the effort. PSI should form more proactive partnerships with government bodies, banks, housing associations, and food vendors to have a one-stop solution for students entering the PSI. Future students would benefit from implementing a navigation system that streamlines and assists with the application process for funding and provides direct access to living expenses. Centralization of PSI funding would benefit students by reducing barriers to funding and living expenses.

A promising example of how a misalignment was mitigated occurred in August 2020 when full-time PSE programs were not provided with a full-time loan or funding support as the programs did not align with federal and provincial government mandates that required at least one of the programs be offered in a traditional (face-to-face) setting. The BC Government

realigned this mandate for RRU in August 2020, although not for other PSIs in the same situation (K. McLeod, personal communication, July 9, 2020).

The Government of Saskatchewan (2021b) undertook mitigation efforts by offering free tuition to citizens of their province with a student commitment to living and working in the province after graduation for a minimum of 5 years (para. 2). This innovative approach keeps educated individuals in the province and starts building a taxation base. This example could support discussions with the provincial ministry in BC about existing programs or creative ideas for Canadian PSI and RRU.

Conclusion 3: A Holistic Approach is Needed to Enable RRUSS to Better Support the Students' Financial Needs

This conclusion stems from Findings 3 and 4 and answers the main inquiry question and Subquestion 3. The study suggests addressing students' financial needs requires a holistic approach beyond traditional funding. Participants employed various strategies to navigate the financial challenges to obtain PSE, indicating resilience that must be supported through more integrated and student-focused financial services. The CFS (2021) lobby document offered multiple solutions for the government to consider, including standardized PSE funding and subsidies, which would help alleviate financial barriers for Canadian students seeking PSE (p. 7). This approach should incorporate federal, provincial, and interministerial collaborations to fund students and reduce the bureaucratic barriers that currently hinder student success.

Participants deployed various mitigation tactics to address the individual challenges of funding misalignment of student finance from Canada student loans, provincial loans or bursaries, scholarship limitations, or traditional lending sought. The research aligns with existing

literature in that students relied on multiple income sources to fund their PSE (Indspire, n.d., p. 5; Policy Options, 2007, p. 3). The findings added to the existing literature in that those participants contributing to the survey indicated they had laddered their education by settling for a lesser certificate, which allowed them to make more money and save funds to be able to go back to school. Participants also indicated they would start and stop their PSE throughout the semesters to enable them to work and afford more schooling.

These barriers cannot be considered in isolation. For example, participants identified having income levels that were inadequate to cover the basic cost of living expenses even though their income was considered too high for the policy criteria set for student grants and loans. This illustrates the misalignment between students' needs and the financial aid policies federally, provincially, and within the university. It also goes against the Council of Ministers of Education, Canada's (n.d.) mandate for accessible and affordable access to PSE (para. 3). Mitigation of the misalignment is critical for reducing students' funding barriers to attend PSE.

Conclusion 4: Dialogue Among Stakeholders About Funding Exposes Barriers and Identifies Solutions

This conclusion relates to Findings 3 and 4 and responds to the main inquiry question and Subquestion 3. The dialogues among stakeholders highlighted throughout this study have proven essential in identifying and addressing funding barriers. These discussions highlighted the challenges students face, including the psychological impacts of financial strain (BC Federation of Students, 2020, para. 3; CFS, 2021, p. 4; Malcolmson & Lee, 2004, p. 16). and the systemic complexities of funding models. By encouraging ongoing dialogues, RRUSS can better align its services with its students' actual needs, thereby enhancing its support systems' effectiveness.

In addition, PSI stakeholders reported PSIs must navigate a complex infrastructure to obtain federal and provincial funds for PSE. PSIs present their budgets for wages and other costs, while governments set and relay the parameters for both the timing and tuition allowances. All of this influences the cost of tuition and, ultimately, the student's ability to obtain PSE. Candid dialogue and exchange are vital components to developing solutions to students' funding challenges.

Stroh (2015, pp. 2–35) and Weisbord (1992, p. 33) supported studies gathering diverse thoughts, opinions, and ideas from various stakeholders. For RRU to retain its leading-edge advantage, the institution should do the same annually or biannually through a focus group or hybrid world café. This would allow stakeholders to engage in dialogue and offer input for solutions on reducing barriers to PSE. The findings suggested RRU urgently consider additional flexibility and affordability to compete and redefine its mission of innovative educational leadership. Hybrid sessions allow flexibility in how students experience the program and residency and reduce funding barriers. The findings indicated some students opted not to take a program because of strict requirements and related costs. Creating both an RRU graduate association and an alumni association would be beneficial for facilitating partnerships with individuals and organizations. Students want to be heard through lobby efforts, the structure of funding design, and fostering partnerships.

In summary, these conclusions underscore the critical role of stakeholder engagement in identifying and overcoming barriers to funding in Canadian PSE. The conclusions drawn from this study reflect the specific context of RRUSS and provide valuable insights that could influence policy and practice across similar institutions nationally and internationally. Moving

forward, these conclusions guided the development of actionable recommendations detailed in the final chapter of this thesis, aimed at an inclusive, accessible, supportive educational environment that removes funding barriers for all students.

Scope and Limitations of the Inquiry

I undertook this research project with an aim to explore ways to reduce funding barriers for Canadian students at Canadian PSIs using RRU as a case example. When considering the validity of this study, limitations must be acknowledged. The first limitation concerned the virtual world café because it was held during work hours. Due to the 3.5-hour time commitment, some individuals could not participate. Limiting factors included (a) the inability to obtain time off from classes or work, (b) the inability to utilize vacation time, (c) conflicts between time zones, (d) scheduling conflicts due to unexpected mandatory meetings, (e) sickness, and (f) family emergencies. Additionally, on May 27, 2021, the media announced that the remains of 215 children were found buried at the Kamloops Indian Residential School (Dickson & Watson, 2021). Given that June is National Indigenous History Month, and National Indigenous Peoples Day is on June 21, many individuals, understandably, who were committed to taking part in the virtual world café chose to stand in solidarity, support, and grieve together with their Indigenous friends, colleagues, and community members.

A broader diversity of primary and secondary responses for both research modalities would have provided greater insight into stakeholder perceptions and perspectives. From the primary stakeholder group, potential and prospective student voices were underrepresented, which created a limitation. Not identifying all concerns or issues was a risk resulting from my research due to the underrepresentation of some stakeholder groups. With valuable insights and

information needed to answer the primary questions and subquestions missing, the results may provide an inaccurate portrayal of the main concerns. This was a missed opportunity to improve on the needed outcomes and possibly address secondary concerns.

Singularly, women's voices were heard during the virtual world café, while other genders were absent. The demographic results demonstrated a predominately female perspective across the survey. Table 3 indicates the gender demographics of stakeholders of all research participants.

Table 3

Gender Demographics of Stakeholders of Research Participants for June 2021

Stakeholder Type	Female	Male	Nonbinary	Prefer Not to Say	Transgender
Current	69	16	2	2	1
Potential	12	5	3	0	0
Past	9	0	0	1	0
Virtual World Café	17	0	0	0	0

Also missing from the participants were (a) representatives of government, (b) RRU executive, (c) RRU board, (d) RRU faculty, (e) community partners (regional community, Esquimalt, and Songhees First Nation community members), and (f) the Department of National Defence. Of the 17 virtual world café participants, 15 people worked in the postsecondary field. Although rich dialogue occurred and the participants were passionate about the subject matter, unfortunately, there were no participants from the broader, secondary stakeholder pool. Hence, the results did not yield diverse feedback, essential perspectives, and insights.

Another limitation was that some participants did not answer all relevant questions to the survey for their stakeholder group. Common limitations when conducting a survey include

participants not answering truthfully and misunderstanding or misinterpreting a question as intended, which can skew results. Additionally, survey fatigue may have occurred for some participants. Lastly, numerous questions resulted in a flood of data that needed to be analyzed, interpreted, and correctly integrated with the virtual world café results, and due to time restraints and this inquiry being my first undertaking as a primary researcher, it is possible that some nuances or important insights may not have been fully captured or explored in the final analysis.

Summary

In this section, I presented the four findings derived from the survey and virtual world café data as well as four conclusions grounded in the findings and the literature reviewed in Chapter 2. I closed the chapter with a discussion of the scope and limitations of the inquiry. In the final chapter that follows, I provide the recommendations, organizational implications, and implications for future inquiry.

Chapter 5: Inquiry Implications

Through the engagement in dialogue with RRUSS, the research inquiry team, and the RRU stakeholders, I derived four findings and four conclusions from the input stemming from the survey and virtual world café as well as the literature reviewed. This chapter fuses all the work completed to date. The research examined potential outputs and ways of empowering knowledge mobilization. From these considerations, I put forward study recommendations and a plan for organizational implementation. I also detail the organizational implications for RRUSS and the systemic impacts for current and future implementations. Lastly, I summarize the thesis and all the key elements.

This research explored the following question: How might creating an opportunity for stakeholders to dialogue about funding enhance Royal Roads University Student Services' purpose of reducing barriers for Canadian students? To answer this, an exploration with RRU stakeholders took place, including three subquestions:

1. What barriers to funding have Canadian postsecondary education stakeholders experienced before and during the COVID-19 pandemic?
2. What barriers could be mitigated to enable all Canadian students to afford to attend Royal Roads University if they meet the entrance requirements?
3. What steps might be taken to enable Royal Roads University Student Services to better support the financial needs of students?

Outputs and Knowledge Mobilization

I generated the following outputs from this research: (a) processes that may support engagement and help shape and enhance stakeholder relationships with RRUSS and (b) written

and verbal reports to my partner that reflected stakeholders' responses that represented the opinions and experiences of the various RRUSS communities; a collection of potential funding barriers and solutions for stakeholders, RRUSS, and PSIs; and the impact of pre- and postpandemic funding opportunities.

To support partner engagement, I presented interim findings from the virtual world café and survey to the RRUSS Director to demonstrate how RRUSS could mobilize processes and strategies to help students navigate the system supporting their financial needs. A prerecorded final presentation will be disseminated to RRUSS and RRU executive team members upon completion of this thesis.

Study Recommendations

Based on the findings and conclusions presented in Chapter 4, I put forward four recommendations:

1. In alignment with the values and mission of RRUSS, convene diverse stakeholders at an annual hybrid world café to discuss pressing concerns facing RRUSS.
2. Establish an RRU task force comprising RRUSS stakeholders to advance recommendations for actionable solutions for RRUSS.
3. Elect task force members from the participants present.
4. Ensure task force members meet monthly to advance the recommendations into actionable solutions for RRUSS.

Recommendation 1: In Alignment with the Values and Mission of RRUSS, Convene Diverse Stakeholders at an Annual Hybrid World Café to Discuss Pressing Concerns Facing RRUSS

A world café enables people to come together to dialogue and share ideas (Brown et al., 2005, p. 5; Löhr et al., 2020, p. 1; The World Café, n.d., para. 1). The early observations from a gap analysis identified barriers facing PSE. A matrix structure was used to observe intersections and identify gaps between stakeholders and the system. This assisted with the identification of gaps in the postsecondary ecosystem. The matrix used allowed me to identify that the voices of students and other stakeholders in PSE were missing from the system.

The engagement of a broad set of diverse stakeholders to join in regular yearly hybrid world café meetings can help RRUSS keep a pulse on the pressing concerns facing RRUSS's stakeholders to address issues in a timely manner. "Getting the whole picture requires the whole system" (Weisbord, 1992, p. 10) placed in a setting that allows dialogue to occur, as each stakeholder holds "a piece of a complex puzzle" (p. 11) because complexity demands diversity of input.

A hybrid world café will allow for stakeholder input, help garner trust, and build and cultivate relationships. Listening and dialoguing will enable participants to capture diverse perspectives and insights. This study gathered a wealth of information from knowledgeable stakeholders in a relatively short period of time. Specifically, the findings from this study provided contextual and historical perspectives about funding barriers facing RRUSS students and considered various alternative approaches for consideration. A hybrid world café will offer stakeholders an environment that allows for more informed decision making to work towards strategies, solutions, and goal setting to assist RRUSS in reducing funding barriers for students.

To help deliver this recommendation, the next recommendation seeks the involvement of the RRU graduate community.

Recommendation 2: Establish an RRU Task Force Comprising RRUSS Stakeholders to Advance Recommendations for Actionable Solutions for RRUSS

As part of RRU curriculum requirements, I recommend select graduate student programs participate and be engaged in a RRUSS annual hybrid world café (as noted in Recommendation 1) by (a) creating the overarching question and subquestions for the annual hybrid world café, (b) drafting and finalizing invitation letters for RRUSS to forward to perspective participants, (c) developing and delivering the annual hybrid world café meeting, (d) analyzing results, (e) introducing findings, (f) providing conclusions that stem from the findings, (g) preparing recommendations that should be submitted to RRUSS and the task force, and (h) identifying the scope and limitations. This recommendation evolved from learning obtained from my Master of Arts in Leadership course work, particularly RRU's (n.d.-b) engaged and action-oriented learning and teaching method of course and program delivery as well as my review of relevant literature.

Providing a live case study learning opportunity for master's students (i.e., Master of Arts in Leadership, Master of Business Administration, and Master of Arts in Global Leadership), the instructors or facilitators could instruct students to develop an overarching question and three to five subquestions to capture diverse inputs that address complex PSE challenges. These questions could be used during a hybrid virtual world café to RRUSS in achieving its mission of reducing student funding barriers. As noted in Chapter 2, researchers discussed the pros and cons of appreciative inquiry (Bushe, 2012; Cooperrider et al., 2008; Stavros et al., 2018). During this

research, an appreciative inquiry lens was used as a theoretical tool to design the question sets, and I recommend RRUSS continue with that practice. The RRUSS team can select the most appropriate questions submitted by participants.

This research delivers on a plan that provides a structure for action. The Recommendation 1 supports additional integrated learning for master's students in various programs. However, this recommendation also provides master's students with opportunities for a meaningful contribution to the university as they consider how they might bring their knowledge and expertise to the funding barrier challenge. Potentially, students from the Advanced or Executive Coaching Program can compete for the role of facilitator or cofacilitator for the hybrid world café meeting with the support of the instructors or facilitators. The facilitator must clearly define a hybrid world café, explain expectations, and outline the purpose of the gathering to participants. Before the hybrid world café, table or group leader hosts will also need to be selected from one of the applicable master's courses. These individuals can contribute by ensuring participants stay on topic, prompt discussion by posing stimulating questions if needed, and take notes of participants' suggestions. These table or group leader hosts can also record the sessions. All students from the class can participate and write up their impressions and insights as an assignment. These can be submitted or presented to RRUSS.

Depending on the schedule and how the courses line up, another master's class can be assigned to analyze the information obtained, produce findings and conclusions, and propose recommendations. Findings from the research support this recommendation by participants, indicating that involving students and other stakeholders in the process could mitigate barriers.

I recommend participants of the annual hybrid world café meeting engage in dialogue and provide further input from the questions identified by the master's students. As previously noted, RRUSS will complete a selection process to determine which overarching and subquestions should be used. Engaging in dialogue, the participants will provide their input to develop a central thesis and then democratically elect a task force. The task force will move forward with operationalizing the chosen themes and strategies that emerged during the annual hybrid world café meeting and were approved by the RRUSS manager or director. Allowing stakeholder groups to participate in discussions can build stronger relationships and is a key leverage point with systems change (Meadows, 2008, p. 13). Stroh (2015, p. 18) indicated, for complex issues to be solved, understanding the system is necessary. To drive change and to benefit from multiple contributions, dialogue must occur between all individuals and stakeholder groups.

Allowing individuals to participate will enable RRUSS to confirm the funding initiatives that are currently working and determine which initiatives may be barriers. Bringing many educated minds together encourages participants to build off each other's ideas, with one identifying an issue and another bringing their expertise to share solutions. At this time, the table or group leader hosts will gather participants' collective responses, key ideas, insights, and action items and then share these with the larger group.

This recommendation evolved from the literature and the research findings that suggested ongoing, consistent feedback was beneficial for a nimbler process for creative and solution-based approaches. Findings from the research further supported this recommendation as participants suggested ongoing relationship-building opportunities, requests for their voices to be heard in

surveys, forums, virtual coffee shops, and partnerships with internal and external stakeholders. As well, the findings recommended the establishment of a graduate and alumni association.

This can allow RRUSS to become even more proactive in problem solving by enhancing relationships that can extend throughout the year with the task force's involvement (Recommendation 4), who can take the initiative for recommendations on problem resolutions. This mechanism that is being built creates a feeder structure, from engaging the students, the task force, the alumni association, and an endowment structure.

Recommendation 3: Elect Task Force Members from the Participants Present

Hedley et al. (2003) asserted, "People will support what they help to create" (p. 174). This recommendation is supported by the contributions of the participants of the virtual world café, who suggested that a committee be formed to bring forward change. Specifically, the participants offered that a group would further explore how other countries were able to provide free PSE and consider the feasibility of this concept in Canadian PSE. The participants of the survey and the virtual world café highlighted the benefits of breaking down preexisting silos within PSE. Engaging diverse members of the stakeholders to serve on the task force will enable the group to expose PSE complexities. One challenge may be lack of student commitment to participate on a task force due to the inherent costs, such as time, despite the potential to contribute and generate great ideas. The task force would have to develop clearly described roles and duties for their work and divide the workload equitably. Focusing on solutions for barriers identified by the key stakeholder group should support all stakeholder investment.

RRUSS has four distinct areas of responsibility (Appendix D) demonstrated in its mission and purpose statement. Supporting over 35,000 stakeholders (McLeod, 2020) and functioning

with limited staff (Appendix C), RRUSS does not have the capacity to take on additional projects. Allowing a task force to be elected from the hybrid world café RRUSS stakeholder group and reporting to the RRUSS Director or Manager (a) creates ownership of the projects that are identified and set out, (b) promotes stakeholders to have stronger ties to RRUSS and the university, (c) allows stakeholders to feel valued and heard, and (d) alleviates the sole responsibility for discovering and addressing student funding concerns for RRUSS.

The task force members should (a) represent the diversity of RRUSS stakeholders, (b) contain no more than 12 members who the hybrid world café participants elect, and (c) be committed to delivering actionable results by working together for the causes identified by the hybrid world café participants and supported by RRUSS to implement change. Electing the task force membership serves to cement the ownership of the process.

It is important to recognize that some change projects may take a few months to complete, while others may take multiple years. Elected task force members will commit to serving a 1-year term and can continue with 1-year terms until the original goals are accomplished. Incoming members may be elected to replace outgoing members to continue to deliver on the mandate. The task force members will be invited back to provide a progress update until they accomplish or put to rest all their goals. Each year, a new task force will be elected to execute that current year's objectives.

Understanding how competing agendas or policies arise might help to garner solutions. One example illuminated by this research was a misalignment between student loan needs and government loan criteria. Insights into other stakeholders' perspectives can expand the thought process and the evolution of possible resolutions. This could eliminate some of the current

pressures and demands on RRUSS staff. This task force could complete projects that RRUSS would like to tackle but lack the workforce and time to devote to those areas, which ties into the final recommendation.

Recommendation 4: Ensure Task Force Members Meet Monthly to Advance the Recommendations into Actionable Solutions for RRUSS

Once elected, task force members should meet within 2 weeks to define their roles, responsibilities, and accountabilities. The task force mandate requires that the members be hands-on to drive change to reduce funding barriers for RRU students. They will acknowledge that they represent the university and act according to RRU's values. The RRUSS director or manager will approve and communicate which recommendations, if any, that RRUSS wishes the task force committee to proceed with and which are high priorities to action. Task force members will set the agenda for meetings, determine timelines and milestones, and plan how they will accomplish their objectives by setting realistic and incremental goals.

The task force will be expected to report back with their monthly minutes to keep the RRUSS director or manager informed of progress. A year-end report will be provided to the RRUSS director or manager at the annual hybrid world café. One task force member will attend and represent the group at the hybrid yearly world café meeting. Any openings for replacing a task force member can be presented to the larger group for election.

This constitutes the life cycle of continuous mission-focused dialogue with all stakeholder groups for RRUSS that have been identified in the research. Contemplating the learning obtained from Lewin's (1946) seminal work (i.e., unfreeze, change, refreeze) to that of the action research cycle, plan (identify or inform), act (collect and question), observe (analyze),

and reflect (evaluate and implement), ties directly to these recommendations (O'Byrne, 2016). Lewin's (1946) force field analysis model provides a practical framework for RRUSS as they face challenging decisions.

Organizational Implications

The recommendations outline how the organization, RRU students, and the task force can blend knowledge and insights to drive the innovation necessary to break down barriers to funding. These recommendations offer engaging opportunities for RRUSS stakeholders to impact change specific to the funding barriers affecting RRU students. They provide the opportunity to implement the action research engagement model to plan (identify or inform), act (collect and question), observe (analyze), and reflect (evaluate and implement) on each step and stage (O'Byrne, 2016). Similarly, the recommendations allow RRUSS to apply an appreciative inquiry lens to ascertain what is being done well and then build on it.

Throughout the data analysis, I conferred with one member of my inquiry team weekly, either in person or through Microsoft Teams, to discuss the implications of the findings and draft conclusions. Once the findings and conclusions were drafted, McLeod and I met to discuss the recommendations and implications through Microsoft Teams meetings. McLeod and I discussed the sequence, viability, and chronological order of the recommendations as well as the following inquiry implications:

1. The virtual world café proved to be a feasible tool for addressing RRUSS challenges.
2. Virtual world café integration into curriculum offers real-world learning.
3. The virtual world café creates an ongoing mechanism that engages the three main stakeholder groups.

4. Developing an ongoing task force will leave a collaborative, experiential learning, and skill-building legacy.
5. The task force may provide pathways to critical partnerships.

Inquiry Implication 1: The Virtual World Café Proved to be a Feasible Tool for Addressing RRUSS Challenges

Significantly, the COVID-19 pandemic has underscored the ability of other PSIs to transition towards online delivery models of education, impacting the niche delivery and specialization that RRU has prided itself on. It will require a diversity of input and skills, expertise, and influence from each stakeholder group to provide insights into how RRU can deliver on its unique opportunity of creative and innovative education that it has prided itself on.

The virtual world café proved to be a feasible tool for use by RRUSS in addressing existing and future challenges. The virtual world café model was employed during this research project and proved valuable and robust in capturing stakeholder thoughts, contributions, and insights. This model is flexible in its use in many RRU department areas. RRU's reputation for collaborative solutions finding and educational methods is represented as a deliverable in this research project. The design of the recommendations is laid out with a view of the resource limitations of the RRU staff and faculty.

Moreover, from these contributions, RRUSS may find the opportunity to develop new or niche PSE delivery methods that meet the needs and demands of the 21st-century workplace. RRU's success in online learning has made it a leader in graduate education; however, the COVID-19 pandemic has accelerated the disruption of PSE. The further implication of remaining silos may have a substantial and long-ranging impact on the program's originality and

delivery at RRU. Engaged and committed changemakers may arise due to the opportunity for dialogue and learning that students will undertake.

While overcoming funding barriers to PSE was the originating concept for this research, the research revealed a broad field of obstacles with both a traditional and unexpected nature. Additionally, the research also revealed emerging barriers to education. Some of these barriers were specific to the COVID-19 pandemic, but others were particular to the rapidly emerging demands of industry and government that require a quicker turnaround time for students to be prepared by PSIs to enter the workforce. More responsive, collaborative, and cocreative program design and development might be an important way to keep pace with PSE's changing demands and expectations.

Integrating a hybrid world café as a live case study into the master's course curriculum would be beneficial. The research project also demonstrated that it was resource efficient as transcriptions of the conversations yielded rich dialogue and contextual understanding from participants' perspectives who drew on experience and knowledge within PSE.

Inquiry Implication 2: Virtual World Café Integration into Curriculum Offers Real-World Learning

There are three main implications for the organization resulting from recommendation two, which proposes the involvement of graduate students in the hybrid world café to address student funding barriers. First, adding this initiative into RRU graduate students' curriculum will provide an opportunity to prepare master's students by offering a mini live case study example, which may help them with parts of their engaged leadership project or thesis. Next, this will allow student contributions for RRUSS to draw from the expertise of mid- and senior-level

professionals. Finally, the findings and recommendations represent a resource-efficient consultative process for the university to collect input from various diverse stakeholders to contribute to collective knowledge.

Inquiry Implications 3: The Virtual World Café Creates an Ongoing Mechanism That Engages the Three Main Stakeholder Groups

The reconvening of the group creates an ongoing mechanism that engages the three main stakeholder groups (the students, RRUSS, and the task force in the broader stakeholder community). It is essential to build lasting relationships and trust to stimulate candid conversations. Further, these conversations help to outline strengths, opportunities, aspirations, and results so this task force can act as a proxy for stakeholders, speaking to the current and future needs and desires of PSI and PSE. The implications of engaging a broader representation throughout the conversations mean that the hybrid world café breaks down the silos of the stakeholder groups and specialties over time. The significance of the three proceeding implications is primarily relational. Building a cohesive alumni population provides the students and stakeholders with a meaningful network. Additionally, it provides RRU with a team of skilled individuals who have collaborated to problem solve, expanded their skills in governance, and who understand the challenges and barriers facing students, PSE, and PSIs.

Inquiry Implication 4: Developing an Ongoing Task Force Will Leave a Collaborative, Experiential Learning, and Skill-Building Legacy

In regard to the development of a task force, RRUSS stands to benefit (a) a committed group of contributors representing the stakeholder group, (b) the building of connection and network amongst the alumni that mirrors the successful connection and network building of

other larger financially robust PSIs, (c) the building of leaders amongst the alumni that creates an opportunity for succession planning within that alumni network, and (d) the credibility of the presence of a task force to approach outside external stakeholders such as government to address some of the barriers and to discuss the development of future planning for PSE.

An additional benefit of forming the task force is that this allows this group to build on discussions on the development of an endowment fund that meets the aspiration of delivering accessible, equitable, and diverse opportunities. Moreover, while the other implications speak to the educational components, this one responds to the need for innovative funding solutions for the near term. Further, it is proof of the value that stakeholders bring for their time spent sharing their ideas, thoughts, and insights to assist in the betterment of RRUSS. Knowing that the recommendations they contributed will be actioned on for further consideration and implementation addresses what the research found: stakeholders wished for their voices to be heard.

Reflecting on the virtual world café during the research process demonstrated the viability of this model for addressing the challenges of the changing PSE landscape and environment. One of the limitations experienced during the research, and one that should be considered when forming the task force, is ensuring the diversity of stakeholders within the group. The virtual world café drew on the expertise of PSE experts who were also students, which provided a more internal perspective of PSE. Including external stakeholder participants would provide a broader and potentially more robust scope of understanding out-of-the-box solutions and perspectives on the future of learning. It may assist in the development of new approaches or educational delivery.

The other research implication resulting from the study is the clear understanding that the current delivery model has been forever changed because of the COVID-19 pandemic. Ongoing contributions from task force members and student contributors will be necessary to fully understand the impact of this change. The virtual world café model also demonstrated that stakeholders wanted to contribute and appreciate being heard in the conversation about the future of PSE and the challenges and barriers surrounding PSE in the future. Further research may consider the delivery design and the rethinking of the student as a customer and a learner.

Inquiry Implication 5: The Task Force May Provide Pathways to Critical Partnerships

The task force will have regular check-ins that allow RRUSS to monitor milestones and maintain the mission and accountability for topic clarity. Timely reporting enables the stakeholders and RRUSS to observe the output and contributions in the task force deliverables. The research recommendations arising from the task force work have the potential to identify further research prospects that could be unknown challenges not yet recognized by RRUSS and may represent new opportunities for RRUSS and PSE.

Implications for Future Inquiry

The initial study set out to discover solutions for funding barriers. During this research, numerous barriers beyond funding were uncovered and prohibitive and might impact society adversely in ways that have known and unknown effects. These impacts include, but are not limited to, economic, social and sustainability. Further investigation would be recommended to address the intersectionality of internal and external matters affecting funding.

To address the challenges of the 21st century and beyond, equity, inclusion and diversity are key focuses that PSIs are incorporating as fundamental for forward-thinking design.

Currently, there is a vast gap between the desire and the delivery of this aspiration. The current delivery of funding falls short for students or potential students facing extreme challenges such as hearing loss, underprivileged, physiological, economic, and social barriers. Future studies will be required.

The broader systemic challenges facing society and the students of the 21st century require the participation of all capable internal and external stakeholders to help solve the limitations to obtaining PSE based on economic, geographic, or accessibility issues. Government resources are already being stretched to the limit. Expectations of the government to save the day are unlikely to meet future demands. The COVID-19 pandemic demonstrated how allocated funds and proposed provincial and federal budgets were set aside in favour of supporting PSIs. Circumstances like the COVID-19 pandemic, economic disturbances, and uncertainty due to wars around the world, like Russia and Ukraine, represent further challenges to the sustainability of the existing PSE model. Disruption to the current model should be anticipated.

A further implication of the research, which could be explored further, suggests that education no longer has the return on investment it once did. Limited salaries make it questionable for students to continue with education, especially when it takes multiple years to pay off student debt. The research revealed the complexity of the externalities and demands, such as the COVID-19 pandemic, climate change, government funding restrictions, and change of priorities, which all conflict with the increased demands on PSE to deliver future-forward skills and training required to address these exact demands. The time of students being able to take education for education’s sake, exclusively for knowledge enrichment, has passed.

Further, the constraints of course delivery taking between a two-to-four-year time block without earning is no longer a realistic endeavour. Considerations for future program design, such as microcredentialing and transfer credits, are more important than ever as students shop for skills that can weave together their education and experience. Unless innovative ideas come forth to resolve funding barriers for students to access PSE, PSIs' foundational principles such as equity, diversity, and inclusion will only be an aspirational concept. When social, economic, or physical impairments occur, it places an unwarranted disadvantage for these individuals to access PSE at a disproportionate rate which will then be unfairly fenced in by limitations of accessibility.

Another area for future inquiry has come up very recently for how governments deal with student debt. In Canada, the federal government has decided to remove the accumulation of interest on student loans. Across the border, the president of the United States initially attempted to forgive student loans of up to $20,000 for many students (McNair & Winters, 2023), but when the plan was blocked by the federal Supreme Court, a new plan was announced that included curbing interest accrual. It is still not known whether that plan will succeed, but certainly further research is needed on both sides of the border to determine if these measures help graduates manage their debt.

Thesis Summary

To summarize, the work of this thesis requires a reacquaintance with the overarching question of how dialogue can assist RRUSS in addressing and enhancing its purpose of reducing funding barriers for students. To encourage dialogue, I conducted a survey and virtual world café, with a range of questions presented to stakeholders. I arranged for a facilitator to conduct

the virtual world café, and this group session had a narrow group of stakeholders in attendance. I then researched literature on funding for PSE in Canada and the impacts of crisis and major events on PSE budgets. The overall process involved assessment, reflection, analysis, and consideration of the material to understand further implications and opportunities from the COVID-19 pandemic on PSE. I presented the conclusions, recommendations, and implications based on the literature and findings.

The findings revealed a multitude of funding barriers that prohibited or made it difficult for individuals to attend PSE. Participants identified that funding solutions could be implemented at the personal, government, and university levels and that innovation was necessary to achieve PSE. As such, I developed four conclusions that stemmed from the four study findings.

Dialogue and diversity of thought were essential for cocreating solutions. The use of a hybrid world café and the introduction of the task force through the recommendations of this study represent practical actions to the conversation and dialogue required to address the disruptive challenges and opportunities that face PSE.

In this thesis project, I first sought to identify funding barriers for students seeking PSE; the COVID-19 pandemic influenced the study in unanticipated ways. Similarly, the COVID-19 pandemic has and will continue to impact PSE in ways that have not yet been defined. The long-lingering effects of years of declining systemic funding, coupled with the current crisis, represent risks at a scale that are profoundly challenging to mitigate. Mitigating the funding barriers for students and increasing the support for the financial needs of students requires extensive collaboration and dialogue to navigate the complexities revealed in the thesis study.

To summarize the concepts presented in Chapter 5, I brought forward four recommendations, offering practical applications derived from the involvement of RRUSS, my research partner, the literature, and findings, and captured in resource-efficient, enriched, and inclusive tactics and actions designed for implementation by RRUSS. The use of the virtual world café proved effective in engaging stakeholders in dialogue about how to address the barriers to funding. The virtual world café is a viable method to examine a deeper understanding of the systemic barriers and barriers that existed pre-and post- COVID-19 pandemic to test the assumptions of design and delivery of PSE.

System theory suggests the most effective intervention in a system is to bring change to the paradigms supporting feedback loops within the system (Meadows, 1999, 2008). PSE must consider a lateral look at other industries that have experienced significant disruption, like the hospitality, entertainment, and taxi industries. Large-scale systems and incumbents have been impacted and overtaken by the combination of technology, skill, and nimbleness that arose from a shift in their paradigm of delivery and design.

RRU has a rare opportunity to take the lead at this pivotal moment, as it did in 1995, leading with online education. Once again, the university can come together to engage in meaningful dialogue about how RRU meets the educational needs of students navigating the demands of a 21st-century workplace and beyond. Bold and candid dialogue is the way forward to discovering the self-determined, disruptive innovations necessary to fulfill RRUSS's purpose. That is how RRU will empower future students to turn the key and open the door to postsecondary education.

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Appendix A: Board of Governors

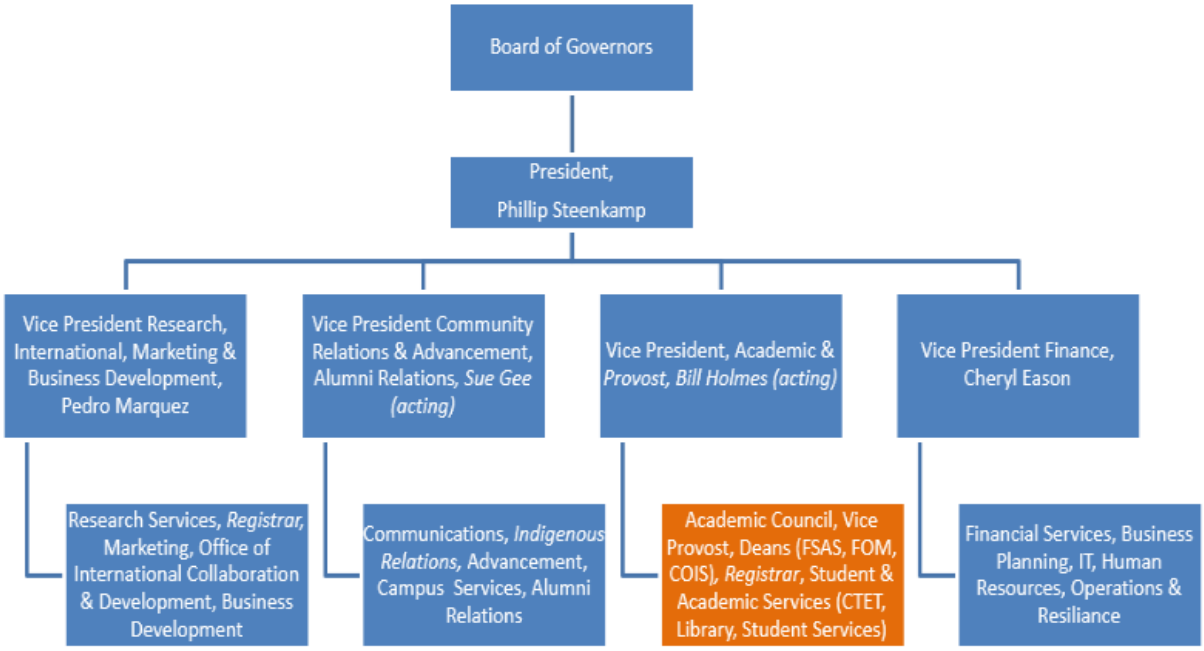
The Board of Governors of Royal Roads University was established by an Act of the B.C. Legislature, the Royal Roads University Act, on June 21, 1995.

The Act provides that there shall be a Board of Governors of the university composed of:

1. **The president,**
2. **A professor elected by the professors,**
3. **Up to six persons appointed by the Lieutenant Governor in Council,**
4. **A student elected by the students,**
5. **An employee who is not a professor elected by the employees of the university who are not professors,**
6. **Up to two persons, who are not employees of the university, appointed by the board.**

Note. From *Administration & Governance by* Royal Roads University, n.d. (https://www.royalroads.ca/governance).

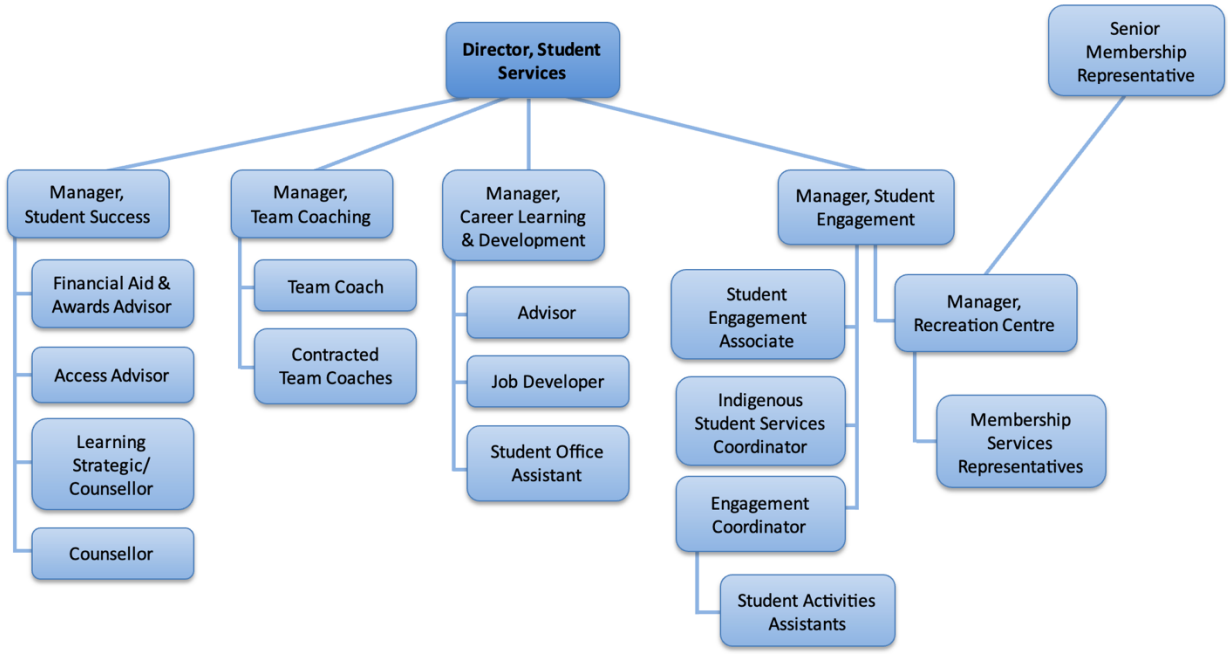
Appendix B: Royal Roads Governance and Executive Structure



Note. COIS = College of Interdisciplinary Studies; CTET = Centre for Teaching & Educational Technologies; FOM = Faculty of Management; FSAS = Faculty of Social and Applied Science; IT = Information Technology.

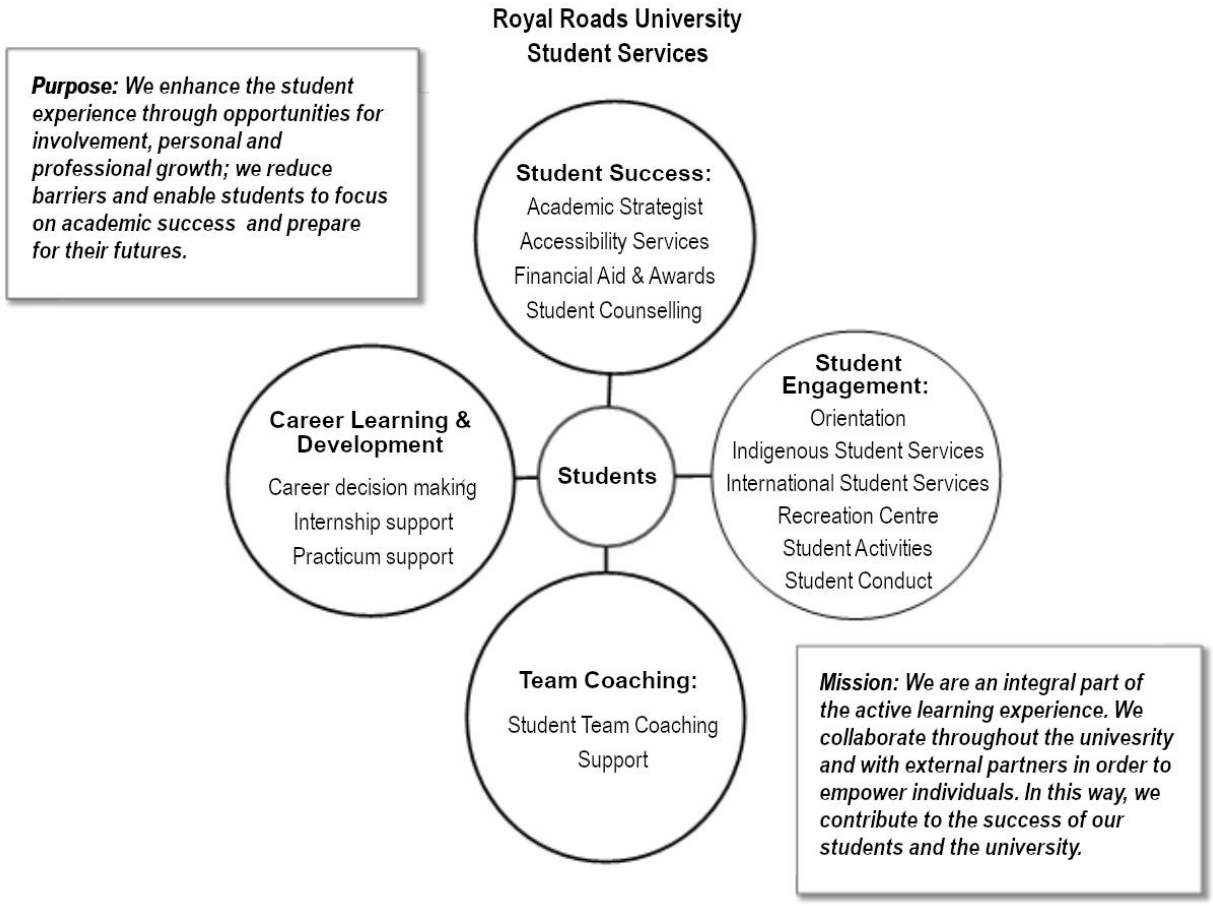
From *Royal Roads Governance and Leadership Structure*, by K. McLeod, 2020, unpublished internal document, Royal Roads University. Reprinted with permission.

Appendix C: Royal Road Student Services Organizational Chart, Fall 2020



Note. From *Royal Roads Student Services Organizational Chart*, by K. McLeod, 2020, unpublished internal document, Royal Roads University. Reprinted with permission.

Appendix D: Royal Roads University Student Services Mission and Purpose Statement, Fall 2020



From *Royal Roads University Student Services Mission and Purpose Statement*, by K. McLeod, 2020, unpublished internal document, Royal Roads University. Reprinted with permission.

Appendix E: Survey Questions

General questions (all survey participants) – demographics.

1. Which term would you use to describe your gender identity?

- ○ Male
- ○ Female
- ○ Nonbinary
- ○ Prefer not to answer
- ○ Prefer:

2. Are you employed?

>logic applied – No answer, go to question 4

- ○ Yes
- ○ No

3. Employment Status. Check all that apply.

- ☐ Full time
- ☐ Part time
- ☐ Casual

4. Have you obtained any postsecondary education?

> logic applied – No answer, go to question 7

- ○ Yes
- ○ No

5. To afford your educational pursuits did you have to ladder your program enrollments to achieve your educational end-goal?

> logic applied – No answer, takes you to question 7

- ○ Yes
- ○ No

6. How many times have you started or restarted each of the following types of postsecondary education programs? Check all that apply.

Trade	O, 1, 2, 3, 4, 5, 6
Certificate	O, 1, 2, 3, 4, 5, 6
Diploma	O, 1, 2, 3, 4, 5, 6
Degree	O, 1, 2, 3, 4, 5, 6
Undergrad	O, 1, 2, 3, 4, 5, 6
Masters	O, 1, 2, 3, 4, 5, 6
Doctorate	O, 1, 2, 3, 4, 5, 6
Other	O, 1, 2, 3, 4, 5, 6

7. Did/have you experienced funding barriers for obtaining postsecondary education for yourself?
> logic applied – No answer, takes you to question 10

- ○ Yes
- ○ No

8. Did a lack of funding prevent you from taking your postsecondary education?
> logic applied – No answer, takes you to question 10

- ○ Yes
- ○ No

9. If yes, what was your major barrier(s) in obtaining funding? Check all that apply.

- ☐ Salary
- ☐ Program classification (part-time even through it was a full-time program)
- ☐ Exceeded criteria for funding
- ☐ Lack of criteria for funding
- ☐ Earnings over limit threshold
- ☐ Higher need candidate selected
- ☐ Existing debt ratio disqualified application
- ☐ Disqualified due to the criteria of the award
- ☐ Family obligations/responsibilities
- ☐ Other (please specify)

10. Are you responsible to fund other family member's postsecondary education?
> logic applied – No answer, takes you to question 19

- Yes
- No

11. If yes, has this impacted your ability to obtain postsecondary education funding for yourself?
> logic applied – Yes answer, takes you to question 13

- Yes
- No

12. Did/have you experienced funding barriers to obtaining postsecondary education for a person(s) you are responsible for?
> logic applied – No answer, takes you to question 19

- Yes
- No

13. If yes, what was your major barrier(s) in obtaining funding? Check all that apply.
> logic applied – Any response then takes you to question 12

- Salary
- Program classification (part-time even though it was a full-time program)
- Exceeded criteria for funding
- Lack of criteria for funding
- Earnings over limit threshold
- Higher need candidate selected
- Existing debt ratio disqualified application
- Disqualified due to the criteria of the award
- Other (please specify)

14. Was postsecondary education postponed for you or the person(s) you are responsible for, due to funding barriers?
> logic applied – No answer, takes you to question 17

- Yes
- No

15. If yes, did it impact career opportunities?
> logic applied – No answer, takes you to question 19

- Yes
- No

16. How so? Check all that apply.

- Lack of credential for applying for job position
- Have met the experience requirements but eliminated due to lack of credential
- Other (please specify)

17. Did you and/or your family forgo essentials for postsecondary education?
> logic applied – No answer, takes you to question 19

- Yes
- No

18. If yes, what? Check all that apply w

- Food
- Heat
- Hydro
- Housing
- Other (please specify)

19. Have you taken postsecondary education and had to leave prior to graduation?
> logic applied – No answer, takes you to question 21

- Yes
- No

20. If yes, why? Check all that apply.

- Financial
- Family
- Health
- Work
- Grades
- Other (please specify)

21. Were there other circumstances that prevented you from taking/completing your postsecondary education?
> logic applied – No answer, takes you to question 24

- Yes
- No

22. If yes, which ones? Check all that apply.

- Family
- Health
- Workplace demands/obligations
- Language
- Geographic location
- Accessibility
- Other (please specify)

23. What resources or supports would be/have been beneficial for you to obtain your postsecondary education? Check all that apply.

- [ ] Editor
- [ ] Accessibility support
- [ ] Mentor
- [ ] Alumni association
- [ ] Graduate association
- [ ] Stable or affordable Wi-Fi
- [ ] Computer
- [ ] Web camera
- [ ] Time to study
- [ ] Housing
- [ ] Food
- [ ] Childcare support
- [ ] Other (please specify)

24. How can the government incent individuals and organizations to support educational funding?

- [ ] Tax breaks
- [ ] Grant support
- [ ] Loan support
- [ ] Prefer not to answer
- [ ] Unsure
- [ ] Other (please specify)

25. Would tax incentives drive funding flows that could support the cost of postsecondary education?

- [ ] Yes

- [ ] No

26. What hinders the government from proceeding with these ideas?

- [ ] Competition for funds
- [ ] Insufficient funds
- [ ] Policy choices
- [ ] Prefer not to answer
- [ ] Unsure
- [ ] Other (please specify)

27. What benefits do countries like the United Kingdom, Netherlands Norway, and Denmark enjoy that offer postsecondary education to their citizens for free?

- [ ] Increased health
- [ ] Lower inequality
- [ ] Career satisfaction
- [ ] Lower crime
- [ ] Unsure
- [ ] Other (please specify)

28. What would be required to implement that in Canada?

- [ ] Prefer not to answer
- [ ] Unsure
- [ ] Other (please specify)

29. What type of stakeholder are you of Royal Roads University?

- [ ] Past stakeholder

- [ ] Current stakeholder
- [ ] Potential stakeholder

30. How do you describe the type of stakeholder you are/have been? Check all that apply.

- [ ] Current student > logic applied – check here will take you to question 31
- [ ] Alumni > logic applied – check here will take you to question 31
- [ ] Prospective student > logic applied – check here will take you to question 31
- [ ] Organizational partner (work experience and/or practicum, professional accreditation body) > logic applied – check here will take you to question 57
- [ ] Board member > logic applied – check here will take you to question 53
- [ ] RRU executive team > logic applied – check here will take you to question 53
- [ ] RRU staff > logic applied – check here will take you to question 53
- [ ] RRU faculty > logic applied – check here will take you to question 53
- [ ] Government body (municipal, provincial, federal) > logic applied – check here will take you to question 64
- [ ] Postsecondary institution partner > logic applied – check here will take you to question 53
- [ ] Community partner (regional community, Esquimalt, and Songhees First Nation community members) > logic applied – check here will take you to question 53
- [ ] Department of National Defense > logic applied – check here will take you to question 57
- [ ] Donor > logic applied – check here will take you to question 69

31. Indicate if you are a student that is a:

- [ ] Canadian citizen
- [ ] Canadian permanent resident
- [ ] Landed immigrant
- [ ] International student >logic applied – check here will disqualify page and take you to thank you and end of survey

☐ None of the above >logic applied – check here will disqualify page and take you to thank you and end of survey

32. Are you currently obtaining your postsecondary education?

○ Yes

○ No

33. What precipitated your decision to obtain postsecondary education when you did? Check all that apply.

☐ Wage increase

☐ Job advancement

☐ Personal growth

☐ Professional growth

☐ Career change

☐ Family encouragement/expectation

☐ Status

☐ Cost of education was covered

☐ Other (please specify)

34. What was/is your # 1 goal for obtaining your postsecondary education? Check all that apply.

☐ Wage increase

☐ Job advancement

☐ Personal growth

☐ Professional growth

☐ Career change

☐ Recognition from family

☐ Status

☐ Other (please specify)

35. Did/do you have support while attending postsecondary education?
> logic applied – No answer, takes you to question 37

- Yes
- No

36. What support did/do you have while attending your postsecondary education? Check all that apply.

- Financial
- Family
- Life partner
- Friends
- Organization support
- Church
- Support group
- Stable Wi-Fi
- Affordable Wi-Fi
- Computer
- Web camera
- Other (please specify)

37. What method(s) of funding did you or try to utilize to obtain your postsecondary education? Check all that apply.

- Government loan
- School bursary
- Awards
- Student line of credit

- [ ] Personal line of credit
- [ ] Credit cards
- [ ] Loans
- [ ] Mortgage
- [ ] Savings
- [ ] RSP's
- [ ] RESP's
- [ ] Family/friend
- [ ] Employer sponsored
- [ ] Other (please specify)

- [ ] None of the above > logic applied – check here will take you to question 40

38. Were you successful in obtaining this funding?
> logic applied – Yes answer, takes you to question 40

- ○ Yes
- ○ No

39. Why were you declined this funding? Check all that apply.

- [ ] Earnings over limit threshold
- [ ] Higher need candidate selected
- [ ] Existing debt rations disqualified application
- [ ] Disqualified due to the criteria of the award
- [ ] Other (please specify)

40. Did obtaining your postsecondary education create a financial hardship?
> logic applied – No answer, takes you to question 43

- ○ Yes, while obtaining postsecondary education

- Yes, after obtaining postsecondary education
- No

41. If so, how?

- Food
- Housing
- Medication
- Other (please specify)

42. For how long?

- 1-5 years
- 6-10 years
- 11+
- Little to no hardship

43. Did you receive financial support from your organization for your educational pursuit? > logic applied – No answer, takes you to question 45

- Yes
- No

44. Which of the following organizational support(s) did you receive for your educational pursuit? Check all that apply.

- Time off with pay for study
- Time off without pay for study
- Time off with pay for residency
- Time off without pay for residency
- Tutor support
- None

☐ Other (please specify)

45. Did you look for any of the following funding supports? Check all that apply.
> logic applied – No answer, takes you to question 47

☐ Awards
☐ Internal scholarships
☐ External scholarships
☐ Grants
☐ Bursaries opportunities
☐ No
☐ Other (please specify)

46. Did you find what you needed?
> logic applied – Yes answer, takes you to question 48

○ Yes
○ No

47. If no, why not?

48. Did you apply for any of the following? Check all that apply.
> logic applied – No answer, takes you to question 50

○ Awards
○ Internal scholarships
○ External scholarships
○ Grants
○ Bursaries

- No
- Other (please specify)

49. Were you successful?
> logic applied – Yes answer, takes you to question 52

- Yes
- No

50. If no, why not?

51. What hindered you from applying for internal or external sources of funding? Check all that apply.

- Disqualified due to the criteria of the award (age, sex, race, marital status)
- Time limitations
- Difficulty navigating the system
- Other (please specify)
- None of the above

52. What tools would have assisted you in applying for funding? Check all that apply.

- University resource
- Online tool
- Assistance
- Other (please specify)

53. Do you feel that the alumni association could support Royal Roads University Student Services?

> logic applied – No answer, takes you to question 55

- ○ Yes
- ○ No

54. In what ways? Check all that apply.

- ☐ Alumni scholarships for potential students
- ☐ Cultivating funding alternatives
- ☐ Legacy gift planning
- ☐ Serving as an advisor for student support
- ☐ Advisor for endowment strategies
- ☐ Lobby for policy change
- ☐ Create partnership opportunities with organizations
- ☐ Mentorship
- ☐ Other (please specify)

55. Do you feel that a graduate student association could support Royal Roads University Student Services?
> logic applied – No answer, takes you to the end of the survey with thank you

- ○ Yes
- ○ No

56. In what ways? Check all that apply.
> logic applied – Check answer, takes you to the end of the survey with thank you

- ☐ Informal social and networking opportunities
- ☐ Cultivating funding alternatives
- ☐ Lobby for policy change
- ☐ Create partnership opportunities with organizations
- ☐ Mentorship

- [ ] Other (please specify)

57. Do you have a program in place to support postsecondary education funding for Canadian students?
> logic applied – No answer, takes you to question 59

- ○ Yes
- ○ No

58. If yes, what does it cover? Check all that apply.

- [ ] Use of technological resources
- [ ] Time off with pay for study
- [ ] Time off with pay for residency
- [ ] Travel costs
- [ ] Accommodation costs
- [ ] Food costs
- [ ] Tuition costs
- [ ] Textbook costs
- [ ] Administration fees
- [ ] Time off without pay to take residency
- [ ] Other (please specify)

59. If no, would your organization be willing to support any of the following? Check all that apply.

- [ ] Use of technological resources
- [ ] Time off with pay for study
- [ ] Time off with pay for residency
- [ ] Travel costs

- [ ] Accommodation costs
- [ ] Food costs
- [ ] Tuition costs
- [ ] Textbook costs
- [ ] Administration fees
- [ ] Time off without pay for residency
- [ ] Other (please specify)

60. Does your support meet the needs of the pandemic, 21st century, student?
> logic applied – No answer, takes you to question 62

- ○ Yes
- ○ No

61. In what way(s) does it meet these needs?

62. What is needed to overcome these barriers?

63. In what ways do you feel that you can help eliminate funding barriers for Canadians to attend postsecondary education?

64. Are you aware of the current funding flows and structures of postsecondary education?

- ○ Yes
- ○ No

65. Are you aware of any barriers/limitations for Canadian students to obtain postsecondary education?
> logic applied – No answer, takes you to question 67

- Yes
- No

66. Please explain.

67. Did these funding barriers occur prior to COVID-19?

- Yes
- No
- Unsure > logic applied – check here, takes you to the end of the survey with thank you

68. Since COVID-19, are these limitations considered:

- More
- Less
- The same
- None of the above

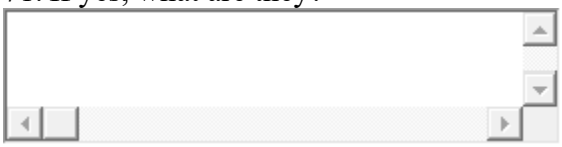
Please explain.

69. When donating to postsecondary institutions, do you place restrictions on your gift?

- Yes
- No > logic applied – check answer, takes you to question 72
- Not applicable > logic applied – check answer, takes you to question 72

70. If yes, why?

71. If yes, what are they?



72. Would you be interested in funding projects, building an endowment, offsetting costs, other? > logic applied – No answer, takes you to question 74

- Yes
- No

73. If yes, check all that apply.

- Funding projects
- Building an endowment
- Offsetting costs
- Other (please specify)

74. Are you satisfied with your donor engagement?

- Yes
- No

75. Why?

76. Do you consent to submit your responses?

- Yes > logic applied - Yes answer goes to Thank you.
- No > logic applied – No answer removes data from being part of the survey.

Thank you for your time answering these questions. Your response may contribute to eliminating funding barriers for Canadians to attend postsecondary education? If you have any further comments or questions please reach out to [email address].

Opportunity

- Are you in a position of influence within your organization?
- Would you be interested in working with alumni or partners to build relationships for establish and grow and endowment fund?
- Would you be willing to be a part of (a) a promotion or (b) council that would promote leadership giving portfolio program?

If so, reach out to [email address].

Appendix F: Inquiry Team Member Letter of Agreement

In partial fulfillment of the requirement for a Master of Arts in Leadership degree at Royal Roads University, *Nadine Penalagan* (the student) will be conducting an inquiry study at Royal Roads University Student Services on*: Purpose, Partners, and Purses: Removing Barriers in Funding Postsecondary Education.*

The student's credentials with Royal Roads University can be established by contacting the Program Head, Dr. Kathy Bishop, at [email address].

Inquiry Team Member Role Description

As a volunteer Inquiry Team Member assisting the student with this project, your role may include one or more of the following: providing advice on the relevance and wording of questions and letters of invitation, supporting the logistics of the data-gathering methods, including observing, assisting, or facilitating a virtual world café, taking notes, transcribing, reviewing analysis of data, transfer survey items to the SurveyMonkey platform and/or reviewing associated knowledge products to assist the student and the Royal Roads University Student Services change process. During this activity, you may be privy to confidential inquiry data.

Confidentiality of Inquiry Data

In compliance with the Royal Roads University Research Ethics Policy, under which this inquiry project is being conducted, all personal identifiers and any other confidential information generated or accessed by the inquiry team advisor will only be used in the performance of the functions of this project and must not be disclosed to anyone other than persons authorized to receive it, both during the inquiry period and beyond it. This agreement covers recorded information in all formats. Personal identifiers include participant names, contact information, personally identifying turns of phrase or comments, and any other personally identifying information.

Bridging Student's Potential or Actual Ethical Conflict

In situations where potential participants in a work setting report directly to the student, you, as a neutral third party with no supervisory relationship with either the student or potential participants, may be asked to work closely with the student to bridge this potential or actual conflict of interest in this study. Such requests may include asking the Inquiry Team Advisor to send out the letter of invitation to potential participants, receive letters/emails of interest in participation from potential participants, independently make a selection of received participant requests based on criteria you and the student will have worked out previously, formalize the logistics for the data-gathering method, including contacting the participants about the time and location of the virtual world café or focus group, with the selected participants (without the student's presence or knowledge of which participants were chosen) using the protocol and questions worked out previously with the student, and producing written transcripts of the virtual

world café or focus group with all personal identifiers removed before the transcripts are brought back to the student for the data analysis phase of the study.

This strategy means that potential participants with a direct reporting relationship will be assured they can confidentially turn down the participation request from their supervisor (the student), as this process conceals from the student which potential participants chose not to participate or simply were not selected by you, the third party, because they were out of the selection criteria range. Inquiry Team members asked to take on such 3rd party duties in this study will be under the direction of the student and will be fully briefed by the student as to how this process will work, including specific expectations and the methods to be employed in conducting the elements of the inquiry with the student's direct reports, and will be given every support possible by the student, except where such support would reveal the identities of the actual participants.

Personal information will be collected, recorded, corrected, accessed, altered, used, disclosed, retained, secured, and destroyed as directed by the student under the direction of the Royal Roads Academic Supervisor. Inquiry Team Members who are uncertain whether any information they may wish to share about the project they are working on is personal or confidential will verify this with Nadine Penalagan, the Student.

Statement of Informed Consent:

I have read and understood this agreement.

Name: (Please Print): _____

Signed: _____

Date: _____

Please scan and send back by email to [email address] by Saturday, May 29, 2021.

Appendix G: Invitation to Participate in a Virtual World Café

Hello,

Please let me introduce myself. My name is Nadine Penalagan, and I would like to invite you to be a part of a research project that I am conducting. This project is part of a Master of Arts Degree in Leadership requirement at Royal Roads University. My credentials with Royal Roads University can be established by contacting the Program Head, Dr. Kathy Bishop, at [email address].

The title of my project is Purpose, Partners, and Purses: Removing Barriers in Funding Postsecondary Education. The purpose of this research is to explore how might creating an opportunity for stakeholders to dialogue about funding enhance Royal Roads University Student Services' purpose of reducing barriers for Canadian students?

The virtual world café is estimated to last three-and-a-half-hours on June 22, 2021, at 1 pm – 4:30 pm PDT to be facilitated through Microsoft TEAMS. As a Royal Roads University stakeholder (or potential stakeholder), you are invited to participate in this survey if you meet the participant inclusion criteria, which include being (a) a potential, current, or past student who is a Canadian or Canadian resident; or (b) an existing, potential, or past Royal Roads University stakeholder; and (c) 18 or older.

The Research Information Letter (click link or find attached) contains further information about the study conduct and will enable you to make a fully informed decision on whether you wish to participate. All documentation from this data will be kept strictly confidential. Please review this information before responding.

If you would like to participate, please confirm your interest and stakeholder type (note list above) with an email to [email address] to confirm your interest in participating. Stakeholders who respond to the call for virtual world café participants will be placed on one of two lists depending on the stakeholder group they represent and in the order they respond. The lists will have 40 places for the primary stakeholder group. These are current and prospective Canadian students. There will be 20 places for the secondary stakeholder group. These would include RRU staff, RRU alumni, funding sponsors, paid-work-experience partners, the RRU board and executive team, and government bodies responsible for PSE funding in British Columbia. The remaining volunteers will be placed on a waitlist. If any participants are unable to attend the virtual world café, the waitlisted participants will be offered the opportunity to participate in the session.

Please feel free to contact me at any time should you have additional questions regarding the project and its outcomes.

Sincerely,
Nadine Penalagan - Royal Roads University student

[email address].

Appendix H: Invitation to Participate in an Online Survey

June 8, 2021

Please let me introduce myself. My name is Nadine Penalagan, and I would like to invite you to be a part of a research project that I am conducting. This project is part of the requirement for a Master of Arts Degree in Leadership at Royal Roads University. My credentials with Royal Roads University can be established by contacting the Program Head, Dr. Kathy Bishop, at [email address].

The title of my project is Purpose, Partners, and Purses: Removing Barriers in Funding Postsecondary Education. The purpose of this research is to explore how might creating an opportunity for stakeholders to dialogue about funding enhance Royal Roads University Student Services' purpose of reducing barriers for Canadian students?

As a Royal Roads University stakeholder (or potential stakeholder), you are invited to participate in this survey if you meet the participant inclusion criteria, which includes being (a) a potential, current, or past student who is a Canadian resident; or (b) an existing, potential, or past Royal Roads University stakeholder; and (c) 18 or older.

All data will be kept strictly confidential. The Research Information Letter (click link or find attached) contains further information about the study conduct and will enable you to make a fully informed decision on whether you wish to participate.

The survey will be open from June 10, 2021, to June 24, 2021. The survey should not take any longer than 20 minutes. Information will not be downloaded until you click the submit button at the end of the survey. Completion of the online survey will indicate that you have provided informed consent.

If you have any questions or desire further information about this study, you can contact me at the email address below.

Below is the link to the online survey
[survey link]

Sincerely,
Nadine Penalagan - Royal Roads University student

[email address]

Appendix I: Research Information Letter

Purpose, Partners, and Purses: Removing Barriers in Funding Postsecondary Education

My name is Nadine Penalagan, and this research project is part of the requirement for a Master of Arts in Leadership degree at Royal Roads University. The student's credentials with Royal Roads University can be established by contacting the Program Head, Dr. Kathy Bishop, at [email address].

The purpose of this research is to explore how might creating an opportunity for stakeholders to dialogue about funding enhance Royal Roads University Student Services' purpose of reducing barriers for Canadian students?

As a Royal Roads University stakeholder (or potential stakeholder), you are invited to participate in either or both the virtual world café or the electronic online survey if you meet the participant inclusion criteria, which include being (a) a prospective, current, or past student who is a Canadian resident; or (b) an existing, potential, or past Royal Roads University stakeholder; and (c) 18 or older.

I have chosen to use two methods for data collection: a virtual world café and an online survey. The virtual world café will be the first method that will be employed. Microsoft TEAMS will be utilized to conduct the session, which will last between two – three and a half hours with a group of 12 or more participants. If we have under 12 participants, we will run a focus group.

The second method applied will be an anonymous electronic online survey using the SurveyMonkey electronic platform. The survey will consist of open- and closed-ended questions and will take no longer than 20 minutes to complete. Data will be aggregated and anonymized.

Principal question

How might creating an opportunity for stakeholders to dialogue about funding enhance Royal Roads University Student Services' purpose of reducing barriers for Canadian students?

Subquestions

1. What barriers to funding have Canadian postsecondary education stakeholders experienced before and during the COVID-19 pandemic?
2. What barriers could be mitigated to enable all Canadian students to afford to attend Royal Road University if they meet the entrance requirements?
3. What steps might be taken to enable Royal Roads University Student Services to better support the financial needs of students?

Inquiry team

I have formed a small team to assist me with this research project. This team may include colleagues from the postsecondary institution that I work at and Royal Roads University students and staff.

The inquiry team can aid in the following areas: sending electronic mail invitations to participants, acting as the point of contact for responses or withdrawals, note-taking, observations, data analysis, technology support for facilitating the virtual world café, facilitation support, and creating the SurveyMonkey survey. These individuals were selected because of their knowledge, skill set, abilities, support, and commitment to participate in this project. Each is known to work collaboratively, is ethical, and understands the importance of this learning process to achieve my Master of Leadership degree.

Benefits to participation:

By providing an opportunity for this multifaceted stakeholder group to collaboratively come together to dialogue, share thoughts, listen to ideas, explore concepts, come up with solutions and hear other voices in a way that has not been offered in the past will be a growth and learning opportunity for all involved.

Risks to participation:

The research conforms to the standard of minimal risk. Due to group participation in large group methods, it is not possible to assure confidentiality, privacy, and anonymity from the researcher, facilitators, or other participants. Participants are asked to respect the confidential nature of information discussed in the large group workshop and individuals involved in the project.

There is always a possibility that there is a power-over situation that could arise. Participants will know the identities of the other participants due to the group interaction. Participants are free to withdraw at any point, but their data will not be removed from the whole data set. Identifiers will not be included.

Power-over or conflict-of-interest situations

If a case where a power-over or conflict-of-interest situation becomes apparent, our team members will reconfigure the virtual world café home group. A power-over situation could occur during the virtual world café due to the interactive nature of the session. Further, the group configuration and the lack of anonymity within the group setting could be concerning. We will mitigate this risk by configurating the home breakout groups by their stakeholder type that is indicated on the invitation response. Whether this could be individuals who work for the same organization, with one being a supervisor to the other, or a student/instructor/or other postsecondary institution staff, that might hinder someone from dialoguing. A stakeholder can direct concerns privately to one of the inquiry team members or me.

I disclose this information here to make a fully informed decision on whether to participate in this study.

Confidentiality, security of data, and retention period

I will work to protect your privacy throughout this study. All information I collect will be maintained in confidence with hard copies (e.g., consent forms) stored in a locked location that only an inquiry team member or I will have access to. Electronic data (such as transcripts or

audio files) will be held on a password-protected computer on my home computer. Information might be recorded in hand-written format, audio or video recorded, and transcribed and, where appropriate, summarized, in an anonymous form, in the body of the final report. At no time will any specific comments be attributed to any individual unless a separate agreement has been obtained beforehand. All documentation will be kept strictly confidential. Data will be retained for up to one year after my graduation date and then be destroyed. No data will be retained pertaining to an identifiable individual who has withdrawn at any time.

For participants in the virtual world café, it is important to note that it will not be possible to keep the participants anonymous from the researcher, facilitator, or other participants. Participants will be requested to respect the confidential nature of the research by not sharing names or identifying comments outside of the group. The recording(s) will be streamed and stored on my computer.

The electronic online survey will be hosted on a platform called SurveyMonkey. This survey does not ask for personal identifiers or any information that may be used to identify you. The web company servers record incoming IP addresses of the computer you use to access the survey, but no connection is made between your data and your computer's IP address. Please note SurveyMonkey is hosted on the US online survey tool, and the information you submit may be subject to seizure by the US government under the US Patriot Act. Although the likelihood of this occurring is small, participants need to be aware of this risk. Your comments and related information will be used in a manner consistent with the privacy provisions of the Freedom of Information and Protection of Privacy Act. The security and privacy policy for the web survey company can be found at the following link: [survey link].

To conduct the virtual world café method, I will utilize Microsoft TEAMS. Data may be stored on or accessible by servers in the United States and may be subject to examination by government or law enforcement under the Patriot Act. While this likelihood is small, I am required to let you/my participants know this possible risk.

Confidentiality

The report may contain only your valuable ideas and opinions. However, no personal information such as your name or personally identifiable information will be used to attribute those comments to you.

Anonymity

Research reports from online in which there is no personally identifiable information such as the research participant's name, and there is no way to trace the responses back to the research participant.

Sharing results

In addition to submitting my final report to Royal Roads University in partial fulfillment for a Master of Arts in Leadership degree, I will also be sharing my research findings and recommendations with Royal Roads University Student Services. A summary report with

recommendations will be created, presented, and handed out to the Academic Senior Leadership Team and/or Core Senior Leadership Team. The research findings may be used for future articles, reports, workshops, and conference presentations. Stakeholders are welcome to contact me if they wish to receive the results of the aggregated data once it has been analyzed.

Consent and withdrawal procedure from the study

You are not required to participate in this research project. If you do choose to participate, you are free to withdraw at any time without prejudice. Please note your data cannot be extracted from the whole data set, but identifiers will be removed.

The project has received approval from the Royal Roads University Research Ethics Board and that any questions can be addressed to [email address].

By replying directly to the e-mail request for participation, you indicate that you have read and understand the information above.

Sincerely,
Nadine Penalagan – Royal Roads University student
[email address]

Please keep a copy of this information letter for your records.

Appendix J: Online Survey Preamble and Consent

Thank you for your interest in participating in this online survey. As a Royal Roads University stakeholder (or potential stakeholder), you are invited to participate in this survey if you meet the participant inclusion criteria, which include being (a) a prospective, current, or past student who is a Canadian resident; or (b) an existing, potential, or past Royal Roads University stakeholder; and (c) 18 or older.

All documentation from this data will be kept strictly confidential. For additional details, please click on the Research Information Letter [website link]. Please note SurveyMonkey is hosted on the US online survey tool, and the information you submit may be subject to seizure by the US government under the US Patriot Act. Although the likelihood of this occurring is small, participants need to be aware of this risk.

The survey should not take any longer than 20 minutes, depending on the level of feedback you provide. Information will not be downloaded until you click the submit button at the end of the survey. Completion of the online survey will indicate you have provided informed consent.

Sincerely,
Nadine Penalagan - Royal Roads University student
[email address]

- o I confirm that I have read the Research Information Letter by clicking to proceed with this survey. I am doing so with informed consent.

Confirmation of the informed consent will open the link to the online survey [survey link].

Appendix K: Virtual World Café Questions

- What barriers to funding have Canadian postsecondary education stakeholders experienced before and during the COVID-19 pandemic?
- What barriers could be mitigated to enable all Canadian students to afford to attend Royal Roads University if they meet the entrance requirements?
- What steps might be taken to enable Royal Roads University Student Services to better support the financial needs of students?

Thought leader stimulation discussion question set

When you think about funding Canadian students' postsecondary education, provide a list of barriers you are aware of.

If you are thinking of funding alternatives, what would they be?

Place in priority order what you feel are the most obstructive barriers to funding Canadian students' postsecondary education.

What funding obstacles existed before the pandemic, and what new challenges do they face for funding postsecondary education?

In an ideal world, how can we enable all Canadian students to obtain postsecondary education?

In your context, what changes can be pursued to enable Canadian students to obtain postsecondary education?

What do you think can be done to address funding barriers to support Canadian students?

What role could a graduate student association play in supporting Canadian student funding to support the mission of RRUSS?

What role can the alumni association play in supporting the mission of RRUSS to reduce barriers for Canadian student funding?

Would a graduate student association be beneficial for cultivating funding alternatives? How does that look?

Facilitator's outline

Opening remarks by the facilitator

1. Welcome, the introduction of inquiry team members and researcher.
   Direct concerns to ITM or researcher.
2. Review the purpose of the session.

3. Explain the procedure for a session, time expectations, and the right to withdraw.
4. Confidentiality Reminder: “what happens in …”
   Reminder about the recording.

Closing remarks by the facilitator

1. Gratitude to participants for participating.
2. What will happen to the data collected and the recording?
3. Reminder about volunteer opportunities.

Opportunity

- Would you be interested in contributing to or participating in advocacy efforts on behalf of Canadian students? If yes, please provide your name and contact details before leaving this session.
- Would you be willing to participate in forming a foundation to support the growth of endowment for RRU? If yes, please provide your name and contact details before leaving this session.

Appendix L: Virtual World Café Consent Form

By signing this form, you agree that you are over 18 and have read the Research Information Letter for this study. Your signature states that you are giving your voluntary and informed consent to participate in this project. I have your permission to use the data you contributed to my thesis final report and any other knowledge outputs (articles, presentations, etc.).

- ☐ I consent to the audio and video recording of the virtual world café being held Tuesday, June 22**,** 2021, for the use of analyzing data to include in recommendations to the Royal Roads University Student Services and for a summary report with recommendations to the Academic Senior Leadership Team and/or Core Senior Leadership Team in addition to creating my thesis.
- ☐ I consent to quotations and excerpts expressed by me through the virtual world café in this study, provided that my identity is not disclosed.
- ☐ I consent to the use of material I have contributed to and/or generated through my participation in the virtual world café to be used in this study. This may include Google Docs notes, visuals from an arts-based method, chat, pictures, etc.
- ☐ I commit to respecting the confidential nature of the virtual world café by not sharing identifying information about the other participants.
- ☐ I confirm that I have read the Research Information Letter.

Confidentiality

The report will contain only your valuable ideas and opinions. However, no personal information such as your name or personally identifiable information will be used to attribute those comments to you.

Anonymity

Research reports from online in which there is no personally identifiable information such as the research participant's name and no way to trace the responses back to the research participant.

You are <u>not required to participate</u> in this research project. If you do choose to participate, you are <u>free to withdraw</u> at any time without prejudice. <u>Please note your data cannot be extracted from the whole data set, but identifiers will be removed</u>.

I realize that you may know me and due to our collegial relationship, you may feel compelled to participate in this research project. Please be aware that <u>you are not required to participate</u> and, should you choose to participate. <u>Your participation would be entirely voluntary</u>. If you do decide to participate, you are <u>free to withdraw</u> at any time without prejudice. <u>Please note your data cannot be extracted from the whole data set, but identifiers will be removed.</u>

Name: (Please Print): _____

Signed: _____

Date: _____

To participate in this virtual world café, please sign, scan, and return this fully executed form by email to [email address] by Monday, June 21, 2021.