

# Transforming Postsecondary Education with Service Design: Engaging with Colleges in the Greater Toronto Area (GTA)

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# Abstract

Service Design has emerged as a powerful tool in recent years to improve the experiences of users in both the private and public sector. This paper explores the potential of Service Design to improve the experiences of learners accessing student services in colleges within the Greater Toronto Area (GTA). To achieve this, the study engaged several student affairs practitioners to understand the current approaches and challenges in the development and delivery of student services. The study generated system archetypes that aided in identifying patterns and behaviours influencing service development. The findings indicate that there is no standard approach to developing student services, and several systemic obstacles impede student-centred service development. This paper puts forth a series of evidence-based recommendations, inviting the student affairs community to explore Service Design as part of their practice.

**Keywords:** student affairs, Service Design, systems thinking, system archetypes, higher education, postsecondary education, Colleges, student services

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# Terminology

**Actor:** Human or non-human entity playing a role in a given system.

**Journey Map:** End-to-end visualization of a user accomplishing a goal.

**Learners:** Individuals of all ages who are actively engaging in learning, skill-development and self-improvement.

**Persona Map:** Tool to identify the needs, wants and feelings of a user accessing a product or service.

**Service Blueprint:** Visualization of the entire service delivery process. Includes digital and face-to-face touchpoints with the user, as well as back-end processes supporting service delivery. Can be used to identify relationships and operational efficiencies.

**Service Area:** Group of services offered by a specific team or department within a college. May exist inside or outside of a college's Student Affairs division.

**Service Design:** Interdisciplinary design method that involves collaboration with the end-user to enhance services for users and organizations.

**Stakeholder:** Individual or organization that has a stake or interest in decision-making within a system.

**Student Affairs:** Department or division of a postsecondary education institution that delivers programs and services to support student success. Also referred to as Student Support or Student Services.

**Student Programs & Services:** Services in place to support learners in, through and out of their college journey. Encompasses all activities related to these services, including programs, events, as well as learner-facing technologies such as websites, mobile applications or online portals.

**User:** Individual consuming and making use of a service. In a postsecondary education context, learners may be referred to as users when they interact with a program or service.

# Preface

The professional and personal significance of this project are deeply intertwined for me. As an Afghan-Canadian woman who is the first in her family to complete an undergraduate or graduate degree, my experiences navigating postsecondary education were often mired with barriers. Moreover, these obstacles depicted formative moments for my young adult self.

During my postsecondary learning journey, there were many ups and downs when interacting with Administration figures, Student Services and otherwise. For instance, I first sought out mental health support within my institution and rather than finding a support system, I was faced with long wait times and distant care, which only added distress to the stigma I already felt. The first time I required learning accommodations, I was left wandering between campuses and arguing with various departments, unable to find the correct staff member to provide me with the assistance and approvals I required.

However, there were positive interactions as well. One of the most prominent being, when Student Services provided me with the opportunity to connect with other Afghans on campus. This allowed me to reconnect with my roots and meet some of the most incredible individuals I had ever met, who helped shape me and contribute to my growth.

Reflecting on my time as a learner, I identified critical moments in my journey that impacted me every step of the way. As a learner who has experienced feeling lost and being bounced around from one office to another, I was convinced that there had to be a better way to service learners. In the end, it was being a first-generation learner that ultimately drew me into working in the postsecondary sector and ignited my passion for enhancing the experiences of all learners. In my seven years of working in the postsecondary education space, I interacted with innumerable learners who faced similar and complex barriers that negatively impacted their perception of postsecondary education, their satisfaction as

learners and their overall learner experience. As a Student Affairs practitioner, I found that we often lacked the right tools to support learners, facing a myriad of bureaucratic processes that are defined by hierarchical decision-making, limiting our ability to make meaningful change. In this, I was left reflecting on how learners can be centred in decision-making, how services and programs are designed with the learner in mind and how we can redesign a postsecondary education system that is inclusive of all learners.

I ultimately left the postsecondary education sector to seek out the knowledge and skills required to effect change in education, hoping to acquire new ways of developing holistic services for learners. I wanted to find the “how” to all of my questions.

More often than not, the value of students’ experiences is discounted in the postsecondary education space, and this could be easily solved using a methodology that centres on student voices, experiences, needs and challenges. When venturing into this area of research, I discovered an abundance of literature on student services and the challenges learners face when navigating and accessing these services. Despite this, current literature fails to identify ways to operationalize best practices that place learners at the centre. In addition, available resources fail to make use of design methodologies, which are arguably the most powerful tool currently available to centre services around a user.

By nature, postsecondary education institutions are well situated to engage in meaningful and effective ways of transformation; bringing together practitioners who have a commitment to continuous learning and who can engage in a productive exchange of ideas. Because of this, my hope is that Student Affairs practitioners and researchers can make use of this work to explore the applications of Service Design within student services and the sector more broadly.

# Introduction

Colleges play an integral role in Ontario's broader society, providing learners with knowledge and skills required by the labour market, as well as greater social mobility (Dennison 1995a; James, 2010). Each year, approximately 500,000 learners are served by colleges in Ontario (Colleges Ontario, 2022a). A critical component of Ontario colleges are the student services they offer to support learners. These student services not only reduce student attrition but also increase the diversity of learners in the space and prepare learners to be active participants in society (Tinto, 1993). Learners attending colleges in Ontario today hold diverse cultural and socio-demographic identities, including but not limited to international learners, 2SLGBTQ+ learners, Black learners, Indigenous learners, racialized learners, learners with disabilities, first-generation learners and mature learners (eCampusOntario, 2011; Colleges Ontario, 2022a). In addition to serving learners with complex identities, student services must adapt to the changing needs of learners resulting from geo-political crises, immigration policies, and economic instability (Office of the Auditor General of Ontario, 2021; One Voice Canada, 2021). Student services support all of these learners through their academic development and personal development challenges, and play an important role in preparing learners to be active learners in society (McInnis, 2004).

Despite the availability of programs and services meant to help learners overcome the challenges that may arise relating to their academic success, financial wellbeing, health and wellness, several learners in Ontario continue to face barriers on their learning journey (College Student Alliance, 2022b, American College Health Association, 2022; The Canadian Press, 2017; Colyar et al., 2023). These persistent barriers offer an opportunity to improve the experiences of learners by revisiting the ways in which student services are developed. To this end, this study seeks to answer the following research question: **How might colleges in the Greater Toronto Area (GTA) leverage Service Design to improve the experiences of learners?** Colleges in the GTA include Centennial College, George Brown College, Humber College, Sheridan College and Seneca College.

A review of the Ontario college system and its landscape, as well as a review of literature on the use of Service Design in postsecondary institutions, will situate the study. Next, the research methodologies will be described, including how they have been employed to gather information from student affairs practitioners working in GTA colleges to answer this question. The findings from this research study will describe current approaches to developing services for learners, existing challenges to developing these services and opportunities to enhance these services. Lastly, an analysis using system archetypes will be presented, along with evidence-based recommendations for colleges in Ontario on leveraging Service Design to enhance the learner experience.

# Context and Background

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# Why Colleges and Student Affairs

Both by mandate and necessity, Ontario colleges have come to serve an increasingly diverse student population. Now more than ever, holistic student services that meet the complex needs of diverse learners are required in Ontario colleges to ensure student success. The needs of learners have been shown to be interconnected, and learners expect their needs to be met in a personalized and seamless way (Felix & Lerner, 2017). With so many students expressing a need for support, there is a pressing need to revisit the ways in which student services are developed.

Postsecondary institutions in Ontario play an important role in generating and shaping a strong and skilled labour force. Like many of the province's long-standing institutions, postsecondary institutions have been shaped by the social and cultural context in which they were established (Ontario Colleges of Applied Arts and Technology Act, 2002; Davis, 1966; Owen, 1995; Dennison & Gallagher, 1986). As such, postsecondary institutions have inevitably been shaped by histories of systemic racism, colonialism and gender inequity that have excluded, and in some cases continue to exclude, Black learners, Indigenous learners, racialized learners, 2SLGBTQ+ learners, learners with disabilities and first generation learners (Brady, 2017; Michalski et al., 2017; Seifert & Burrow, 2013; Buchanan, 2021). Unlike universities, colleges were established to not only meet the demands of the labour market, but also to create alternative and accessible pathways to postsecondary education (Dennison 1995b; Dennison & Gallagher, 1986). Furthermore, they were built to serve a different learner and community demographic, within a different employment market and global migration context (James, 2010). Today, colleges play a central role in their respective communities as part of their mandate to serve the needs of local and diverse learners (Ontario Colleges of Applied Arts and Technology Act, 2002; James, 2010).

Student affairs (also known as student services) play a key role in allowing colleges to deliver on their mandate to serve their local communities. Student Affairs divisions provide key services that ensure the academic success of students, including academic advising, counselling, accessible learning, tutoring support and peer-mentorship (Cox & Strange, 2010; Seifert et al., 2011; CACUSS/ASEUCC, n.d.). The practice of student affairs has grown significantly over the past decade, with new and more specialized student services being offered as a result (Cox & Strange, 2010). Demand for more specialized services has come about in part as a result of student populations growing both in size and diversity. According to the Office of the Auditor General of Ontario (2021), between the 2012-13 and 2020-21 academic school years, international student enrolment in Ontario colleges increased by 342%, with colleges beginning to rely heavily on international student fees to offset the decrease in funding received from the Province of Ontario. During the 2020-21 school year, Ontario's 24 public colleges generated a total of \$1.7 billion in international student tuition fees, representing 68% of tuition fee revenue across all colleges (Office of the Auditor General of Ontario, 2021). In addition to growing international student enrolment, domestic student enrolment has also grown in diversity. In comparison to universities, colleges serve a higher percentage of low-income learners, mature learners, first-generation learners, Indigenous learners and learners identifying with a disability (Colleges Ontario, 2022a; Finnie et al., 2015; McGregor, 2021). Student services support learners through their academic experience and without these services, several learners might feel disconnected from their learning institution and even drop out (Tinto, 1993). Due to these changes in the learner population, student services will need to continue being flexible and adapt to the changing needs of students.

In *The Diversity Challenge for Higher Education in Canada*, Michalski et al., (2017) emphasize the value that diversity brings to the postsecondary education space but warns that diversity must be accompanied by services that will support students to ensure retention and minimize attrition (Dietsche, 2012; McGregor, 2021; Seifert et al., 2011; Veres, 2015). The Ontario government has dedicated

considerable efforts and funds to increase enrolment, but has been criticized for not accompanying these efforts with strategies that invest in student services and student success (McGregor, 2021; Michalski et al., 2017). International learners have reported that they continue to face academic, financial, social and health challenges throughout their academic journey. This includes barriers to accessing financial aid, experiencing food insecurity, difficulties accessing mental health support due to cost or long wait times, challenges finding safe and affordable housing and communication barriers caused by colleges failing to acknowledge the realities of international learners (CASA, 2022; Laban et al., 2020; College Student Alliance, 2022a; Gemmill, 2022; Colyar et al., 2023; Varughese & Schwartz, 2022; College Student Alliance, 2022b). Many of the stressors faced by international learners are interconnected, being driven by a combination of financial, policy, geopolitical, socio-cultural, health and wellness factors in such a way that challenges caused by one factor often exacerbate challenges related to another factor (Keung et al., 2019; Esses et al., 2018; Varughese & Schwartz, 2022). Domestic learners face their own barriers to accessing postsecondary education. Studies conducted on the experiences of learners revealed challenges that include struggling to balance competing priorities such as academic success, financial wellbeing, affordable housing and mental health. Overall, survey respondents voiced a need for greater support (College Student Alliance, 2022b; American College Health Association, 2022; The Canadian Press, 2017).

While the strong demand for various forms of learner support may suggest a high utilization rate for student services within Ontario colleges, evidence suggests otherwise. Learners in Ontario colleges appear to be underutilizing the support services available to them (Dietsche, 2012; Veres, 2015). A survey of over 47,000 Ontario college learners finds that only half of learners who express a need for support services on campus actually make use of the support services offered by their college (Dietsche, 2012). A case study surveying over 2,400 learners at Niagara College finds that, while the majority of learners believes support services are important, only a fraction of learners actually makes use of these support

services (Veres, 2015). Low utilization of student services in this study was most common among male students and students holding part-time employment (Veres, 2015). Learners continue to face adversity as part of their academic journey, despite the availability of student services. With such pressing needs for support from learners, there exists an important opportunity to better meet the needs of learners and improve their experiences by revisiting the ways by which student services are developed.

# Shifting to a Service Mindset

The past few decades have been marked by an economic shift away from the delivery of products and towards the delivery of services, with services now making up more than 70% of the Canadian economy (Global Affairs Canada, 2018). This includes private sector services, such as finance and insurance, as well as public sector services like education. Despite our world having become much more service-dominated, many organizations continue to view the services they offer as products. Among them are postsecondary institutions, who continue to view themselves as producers of goods in the form of academic programs (Osborne et al., 2013; Ostrom et al., 2011a; Ostrom et al., 2010b; Trischler & Scott, 2016).

Admittedly, this product-oriented approach is not ubiquitous in Ontario colleges. A HEQCO (2011) consultation of student affairs professionals in Ontario colleges and universities identified two forms of structures within these institutions: “student-focused” and “institutions-focused” structures. Service-oriented approaches appear to be more prevalent in areas of colleges that might be labelled as “student-focused” (Seifert & Burrow, 2011). However, the “institution-focused” structures within a college, like those responsible for recruitment or the delivery of academic programming, appear to adopt a more product-oriented approach. For departments falling under “institution-focused” structures, student success is often viewed as being the responsibility of other areas of the institution (Seifert et al., 2011).

As a guide to differentiating products from services, Moritz (2005) identifies six key features of services. He explains that:

1. Services cannot be touched or consumed, making them intangible;
2. The delivery and use of a service typically happens at the same time;
3. Because services are not tangible, they cannot be stored, suggesting that they are easily accessible and lose value when they are not in use;
4. Services are not owned and cannot be transported to one’s physical location;
5. Services are made up of multiple touchpoints over a span of time, making them complex;
6. The quality of a service is difficult to measure and is usually measured through a qualitative lens.

All six of these characteristics can be seen in the services delivered by postsecondary institutions, especially student services. As an example, academic advising provides learners with information, resources and guidance as they make academic and career choices (Fricker, 2015; CACUSS/ASEUCC, n.d.). Academic advising is intangible, cannot be stored, and cannot be owned by any individual accessing the service. The delivery and the use of academic advising take place at the same time, and it involves multiple touch points between learners and advisors. This service and many others offered by colleges can be categorized as services.

There is insufficient evidence linking the product-oriented approach of postsecondary institutions to the challenges faced by Ontario college learners seeking student services. However, the adoption of a more service-oriented approach by postsecondary institutions would open the door for the use of Service Design as a valuable tool for improving student services and addressing the needs of learners.



# Why Service Design

Service Design has emerged as a powerful methodology in recent years to improve the experiences of users accessing services in both the private and public sector. In Canada, much research has been conducted to highlight the value of Service Design in improving public services, most notably in the health sector (Hulsey & Zawislak, 2022; Ontario Palliative Care Network, 2017). Service Design is fundamentally used to enhance the development and delivery of services through co-design. The method is multidisciplinary and collaborative, bringing together approaches from different areas of design. Service Design is also meant to adapt to the needs of the organization within which it is being used, uncovering opportunity areas, core problems and holistic solutions. Ultimately, Service Design aims to improve the quality of a service by including multiple stakeholders in the design process and by understanding their various interactions in the delivery of the service (Bitner et al., 2012; Moritz, 2005; Trischler & Scott, 2016).

It is important to note that Service Design is also grounded in the perspectives of the user and most importantly consists of an ongoing process (Ostrom et al., 2010b; Moritz, 2005). Moritz (2005), whose definition of Service Design is among the most widely accepted ones, states the following:

*“Service Design helps to innovate or improve services to make them more useful, usable, desirable for [users] and are efficient as well as effective for organizations. It is a new holistic, multi-disciplinary, integrative field”(p. 4).*

In the historical and contemporary literature on the development and creation of student services, learners are rarely mentioned to be part of a co-design process. Admittedly, learners are often engaged in a consultative capacity, completing annual surveys to report on experiences and participating in institution wide consultations (Humber, 2022; American College Health Association, 2022; Sullivan, 2010). However, there remains limited documentation on the co-design of student services in Ontario colleges.

All of this highlights an opportunity for institutions to co-design with learners, as learners are valuable experts in their own experiences. Service Design as a methodology could provide student affairs professionals with the tools required to transform their student services. In turn, improved student services would contribute to student success in the classroom and increase graduate employability, along with contributing to learner self-efficacy, confidence, well-being and social connection. The improved support offered to learners could reduce student attrition, and even drive enrollment (Stephens, 2015; Dietsche, 2012; Keith, 2005; Russel, 2010; Drea, 2004). In short, improving student services with Service Design could help Ontario colleges achieve their mandates on all fronts.

# Framing the System

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# Understanding the Origins of Ontario Colleges & Student Affairs

Ontario's public postsecondary education system has existed for decades and has undergone various periods of rapid transformation, often triggered by external socio-political, economic and technological factors. The foundations of the postsecondary system can be traced back prior to World War II (WW2), at which time postsecondary education was closely tied to the activities of the church and later influenced by Euro-centric school systems (Dennison & Gallagher, 1986). As a result of industrialization and urbanization following WW2, the demand for postsecondary education grew alongside the government's need to establish a skilled workforce to sustain the provincial economy. Soon enough, Ontario's college system was born.

The earliest forms of the Ontario college system can be traced back to the 1960s with the establishment of the province's first college in 1966 (Dennison & Gallagher, 1986; Centennial College, 2023a). Colleges in Ontario aimed to provide learners with the relevant skills to prepare them for the workforce (Dennison, 1995b; Dennison & Gallagher, 1986). It is important to note that, to this day, colleges and universities differ greatly from one another. Universities were historically autonomous and had more control over the development of their learners, placing an emphasis on the development of research (Dennison, 1995c). Colleges, on the other hand, were regulated by and accountable to the provincial government and to the public. Program requirements and curriculum were only a few aspects of what was overseen by the Province of Ontario rather than the colleges themselves (Owen, 1995; Dennison & Gallagher, 1986). Colleges in Ontario continued to grow and become increasingly centralized bodies with a greater level of accountability to the provincial government, citizens, and the communities within which they were located. As a result, colleges have had to learn to adapt to meet the needs of their local communities (Dennison, 1995a; Dennison, 1995d; Owen, 1995; Ontario Colleges of Applied Arts and Technology Act, 2002).

Complimenting the delivery of academic learning, student affairs were developed to provide holistic support through the delivery of programs and services that underpin student success inside and outside the classroom (Cox & Strange, 2010; CACUSS/ASEUCC, n.d.). The existence of departments responsible for student affairs can be traced back to the 19th century (Seifert et al., 2011). Student Affairs departments within Canadian colleges were focused on meeting the diverse needs of their student populations from the onset (James, 2010; Dennison & Gallagher, 1986). Student affairs in the first Canadian colleges offered academic services, counselling services and financial advising (James, 2010; Dennison & Gallagher, 1986). Throughout the years, student affairs grew in structure, became more professionalized and began playing an important role in the postsecondary education space (Tamburri, 2021; James, 2010; Cox & Strange, 2010).

# Current State of Colleges in Ontario & Student Services

The current postsecondary education system in Ontario is generally complex. It is made up of both public and private institutions, governing bodies, as well as independent organizations, all with the shared purpose of producing graduates that will successfully enter the workforce and serve as active members of society (Office of the Auditor General of Ontario, 2021; James 2010; Ontario Colleges of Applied Arts and Technology Act, 2002). Today, Ontario has 24 publicly-assisted colleges that offer a variety of certificate, diploma, degree and apprenticeship programs across various fields, such as Applied Arts, Technology, Business, Health Sciences, Human Services, Hospitality, Tourism and many others (Office of the Auditor General of Ontario, 2021). The purpose of colleges in Ontario is defined by the Ontario Colleges of Applied Arts and Technology Act (2002):

*“to offer a comprehensive program of career-oriented, postsecondary education and training to assist individuals in finding and keeping employment, to meet the needs of employers and the changing work environment and to support the economic and social needs of their local and diverse communities (p.1).”*

As mentioned in earlier sections, colleges in Ontario hold an additional component to their mandate. In contrast to universities, the Act specifically mentions “local and diverse communities” as the constituents that colleges are meant to serve. This suggests that colleges are ultimately meant to be institutions that are actively engaged in supporting the social and economic development of communities and the learners within them (Ontario Colleges of Applied Arts and Technology Act, 2002).

Colleges fall within the provincial purview, specifically under the Ministry of Colleges and Universities (MCU). The MCU holds a variety of responsibilities that include but are not limited to policy development, distribution of provincial funding, providing financial assistance through the Ontario Assistance Student Program (OSAP) and granting degrees. Some of these responsibilities are delegated to adjacent provincially funded organizations that work at arms length of the MCU and help inform decisions surrounding developing policy, research, quality assurance and granting degrees (Ministry of Colleges and Universities,

2023; Office of the Auditor General of Ontario, 2021). Each college in Ontario is governed by a Board of Governors (BoG) made up of internal and external community members accountable to the MCU. The role of the BoG is to provide fiduciary oversight, while also ensuring that the strategic and institutional priorities of the college are being met (Ontario Colleges of Applied Arts and Technology Act, 2002; Davis, 1966; Office of the Auditor General of Ontario, 2021).

Colleges are held to greater levels of accountability than other postsecondary institutions in Ontario and have mechanisms in place to assure the quality of programs delivered as a public service. Colleges in Ontario are held to their Strategic Mandate Agreement, an agreement between the MCU and each public college to ensure colleges are delivering on their mandates. Colleges are assessed against 10 performance-based metrics that will determine up to 60% of provincial funding provided to each institution by 2024-25 (Office of the Auditor General of Ontario, 2021; Peters, 2021). In addition to being held to their Strategic Mandate Agreements, colleges are also assessed on the quality of their academic programs. This assessment may be conducted by regulating bodies for specific programs (e.g., Nurses of Ontario) or in the form of larger quality assurance reviews conducted through the Ontario Quality Assurance Services and the Postsecondary Quality Assessment Board, that review the quality of non-degree and degree programs (Office of the Auditor General of Ontario, 2021; Klassen, 2012). More so than student services, academic programs offered in Ontario colleges have various mechanisms, frameworks and requirements in place to ensure their quality and to assess their delivery within the institution (Office of the Auditor General of Ontario, 2021; CQAAP, 2022; Klassen, 2012). Colleges are held accountable to program standards developed and reviewed regularly by the MCU to inform curriculum and ensure that college graduates develop necessary skills (Ministry of Colleges and Universities, 2022). Most of these frameworks place an emphasis on the quality assurance of academic programs, with limited mention or regulation of the development and delivery of student services.

To date, student services continue to play an important role in colleges in Ontario, providing learners with both support and co-curricular learning opportunities alongside their academic learning. Student affairs services can look different depending on the institution and there is limited publicly available information on the organizational structures of student services. A summary of available programs and services based on publicly available data is outlined below.

Based on a scan of Centennial College, George Brown College, Humber College, Seneca College and Sheridan College, the following were identified as commonly offered services in Ontario colleges. Service areas listed were also informed by Canadian Association of College & University Student Services (CACUSS), National Association of Student Personnel Administrators (NASPA) and other literature on student services. Each website was scanned for relevant student services that were then mapped to a service area. A total of 7 core service areas were identified and illustrated in Table 1, though it should be noted that the services within a given service area may be offered by several different departments across an institution. (Centennial College, 2023b; Centennial College, 2023c; George Brown College 2023a; George Brown College, 2023b; Humber College, 2023a; Humber College, 2023b; Seneca College, 2023a; Seneca College, 2023b; Sheridan College, n.d.a; Sheridan College, n.d.b; CACUSS/ASEUCC, n.d.; Wesaw & Sponsler, 2014; James, 2010; Seifert et al., 2011).

**Table 1. Service Areas and Programs Offered by Colleges**

Service Area	Student Programs & Services
Academic Support	Academic Advising, Career Services, Co-operative Education, Libraries, Learning Support & Strategies
Campus Life (also referred to as Student Life)	Chaplaincy, Commuter Student Programs, Leadership Development, Mentorship Programs, Orientation & First-Year Experience, Service Learning/Community Engagement, Student Communications, Student Life, International Student Services
Health, Wellness & Accessibility	Accessibility/Accommodation Services, Athletic & Recreation, Counselling Services, Health Care Services, Health and Wellness Promotion, Sexual Violence Prevention & Education
Equity, Diversity & Inclusion-related services	Indigenous Student Services, Equity, Diversity and Inclusion Services
Ancillary Services	Conference Services, Food Services, Housing, Residence Life, Student Government
Registrarial Services	Financial Aid, Admissions & Recruitment, Registrar's Office
Student Safety	Student Conduct, Campus Safety & Security
Other (uncategorized)	Assessment, I.T. Services

The aforementioned scan confirmed that the departments and divisions responsible for a given service area vary widely from one institution to another. Despite this, these services are nearly always managed, developed or delivered by student affair practitioners. These practitioners include counsellors, coordinators and advisors (CACUSS/ASEUCC, n.d.; James, 2010; Seifert & Burrow, 2013).

# Actors that Shape the Ontario College System

There are several different actors that shape and influence the Ontario college system. Each plays a key role, and many interdependencies and relationships exist between these actors. Secondary research on the postsecondary education space surfaced key stakeholders and actors that influence student services specifically. The list of actors outlined in figure 1 is not exhaustive, but it does include key actors in the development of student services.

The first tool used to conduct this stakeholder analysis is the Onion Diagram of System Stakeholders below, adapted from Alexander (2004). Each circular ring of the stakeholder diagram focuses on a different layer of actors and reflects the proximity to learners and to the services that are offered to them. While learners are at the core of the Onion Diagram, the outer layer identifies peripheral factors that influence and drive the need for student services. It should be noted that the diagram below outlines the key stakeholders of the Ontario college system specifically as it relates to student services. It does not consist of a stakeholder map of the Ontario college system as a whole and excludes several actors as a result.

**Users (first layer)** - At the core of this diagram are the learners attending colleges in Ontario. These learners hold diverse, cultural, socio-demographic identities that are intersecting and ever-evolving. This includes but is not limited to, International learners, 2SLGBTQ+ learners, Black learners, Indigenous learners, racialized learners, learners with disabilities, first-generation learners and mature learners (eCampusOntario, 2011; Colleges Ontario, 2022a). A report by eCampusOntario (2021) highlights that postsecondary institutions will continue to become more diverse, and that these institutions will need to adapt to the evolving needs of learners. Learners are actively navigating the postsecondary space and are engaging with the services in place to support them. They are the ultimate end-users of student services.

**College Organizations (internal, second layer)** - This layer includes actors that play a role in the development, delivery or oversight of student services. These individuals consist of student affairs staff, namely faculty, support staff and administration staff, who are responsible for the various service areas identified in the previous section. Administration staff are responsible for setting the departmental vision, allocating resources and establishing partnerships, which are key to ensuring that the enhancement of learner success is a shared objective outside of student affairs departments (Sullivan, 2010). Support staff are primarily responsible for the development and delivery of student programs and services, interacting with learners directly to offer services such as counselling, financial aid, career services and housing support (CBC, 2011; CEC, n.d.). While instructional faculty may not be directly involved in the development of most student services, they play a critical role in referring students to these services and sometimes even supporting students in moments of crisis themselves (Seifert & Burrow, 2011). Some faculty roles, however, such as librarians, are directly involved in the development of academic student services, such as research support, online academic literacy skill building, and access to resources (Colleges Libraries Ontario, 2020). Alongside student affairs staff are the internal governing bodies of colleges, overseeing the business and academic operations of their respective institutions (Ontario Colleges of Applied Arts and Technology Act, 2002; Davis, 1966; Office of the Auditor General of Ontario, 2021). Given the role played by stakeholders in the College Organization layer of the Onion Diagram, these actors can be viewed as highly influential in the system within which student services exist.

**College Ecosystem (external, third layer)** - The College Ecosystem layer includes external governing bodies and organizations that may impact or influence the second layer of the diagram. Organizations and governing bodies within this layer can shape best practices of service delivery, assess the quality of services or determine the distribution of funding (Office of the Auditor General of Ontario, 2021; CQAAP, 2022). These stakeholders include student affairs organizations (e.g., CACUSS), government agencies (e.g., Higher Education Quality Council of Ontario) and quality assurance bodies (e.g., Ontario College Quality Assurance Bodies) (CACUSS/ASEUCC, n.d.; Office of the Auditor General of Ontario, 2021).

**Broader Environment (fourth layer)** - The outer layer depicts the drivers of demand for student services, which have direct and indirect impacts on the broader system and its learners. Political factors including geo-political crises and political instability abroad, as well as national immigration policies, which have a direct impact on actors across the Ontario college system (Beattie, 2021; Office of the Auditor General of Ontario, 2021; One Voice Canada, 2021; Balintec, 2022). Several economic factors impact the financial security of learners, which has a cascading effect on housing and food security and can impact the overall health and wellbeing of learners (One Voice Canada, 2021; Jenkins, 2022; Silverthorn, 2016; Beeston, 2016). Other economic factors contribute to labour market disruptions in an already competitive employment market (Colyar et al, 2022). Cultural factors, such as cultural norms and family expectations, place pressures on learners and organizations in the system (One Voice Canada, 2021). Each of these drivers lead learners to utilize student services and place pressure on surrounding areas of the Ontario college system.

**Figure 1. Onion Diagram of Key Actors and Stakeholders in Ontario Colleges**

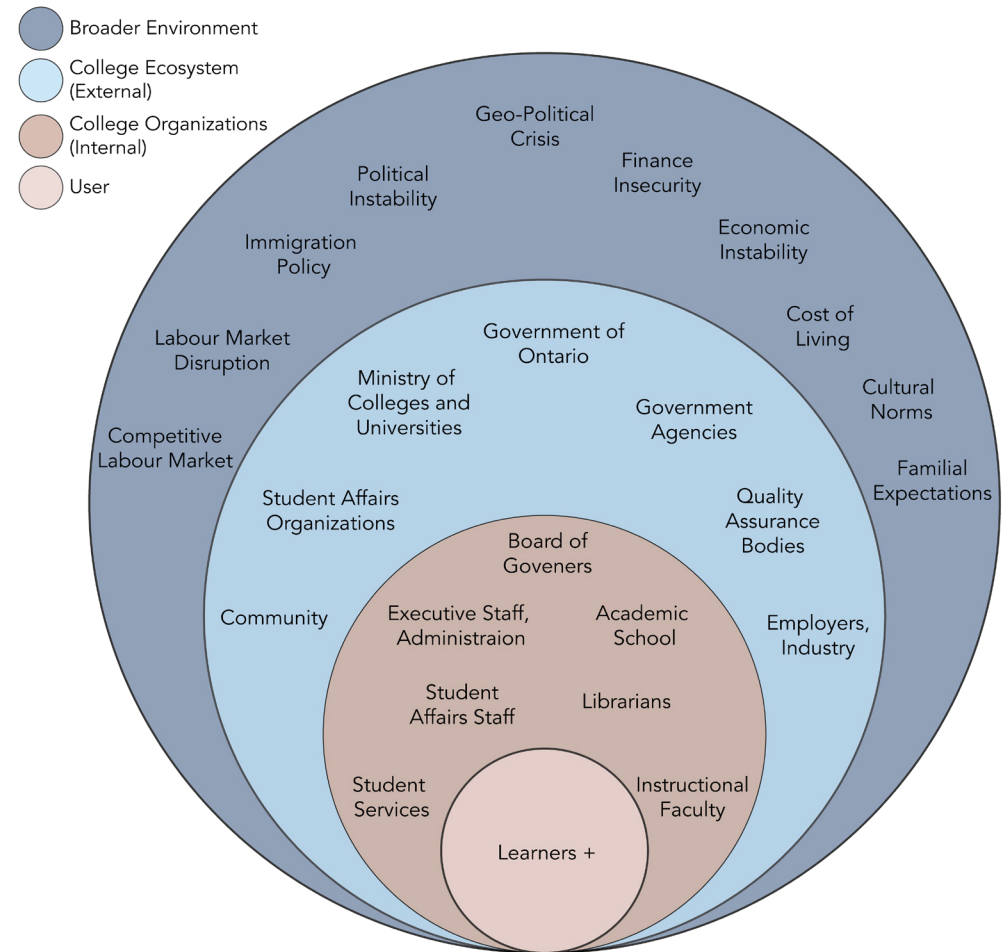
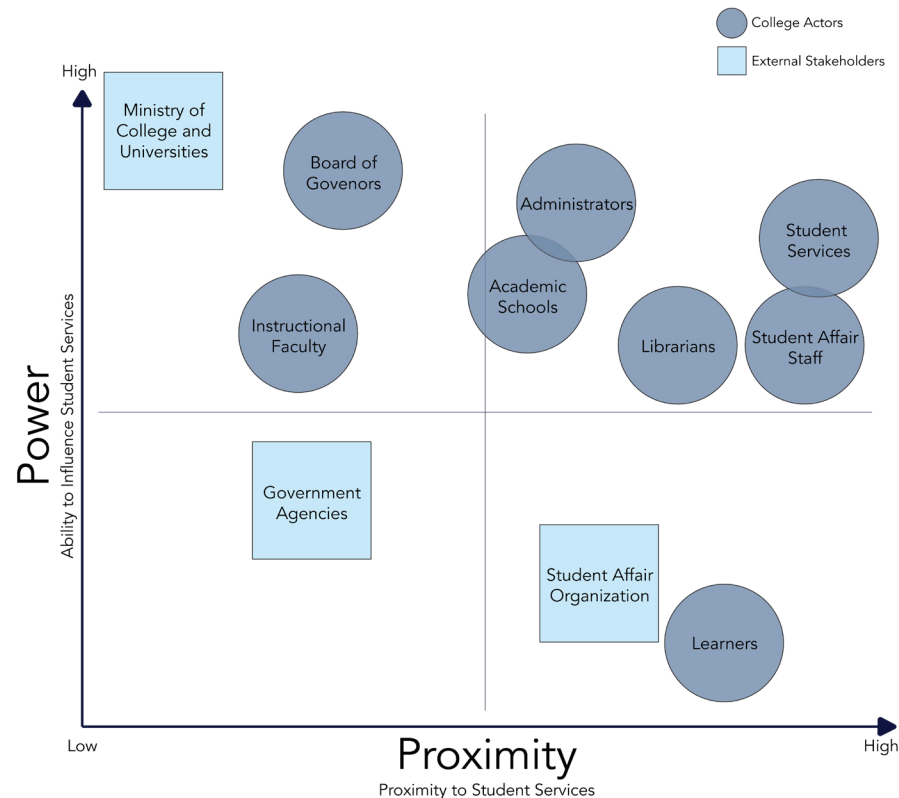




Figure 2 is a stakeholder map that adds an additional layer of insight to the Ontario college system by plotting system stakeholders based on their proximity to student services and their power within the system. Here, power is defined as the ability to influence and change student services. The map is divided into four quadrants, with stakeholders in the bottom-left quadrant holding the least power and being furthest removed from student services, and stakeholders in the top-right quadrant holding both power and proximity to student services. Internal stakeholders and college actors are shown in navy blue (circle), while external stakeholders and actors are shown in light blue (square).

**Figure 2. Ontario Colleges Actors Map**



The position that each actor and stakeholder holds within this map paints a clearer picture of the role they play in the Ontario college system as it relates to student services. Firstly, government agencies can be found in the bottom-left quadrant, holding the least power and being furthest removed from student services. Next, learners can be found in the bottom-right quadrant, as they are closest to student services, but do not have the same ability to influence these student services in comparison to other stakeholders. In the top-left quadrant are the Board of Governors and the MCU, which hold higher levels of power in the Ontario college system, but are the furthest removed from student service delivery. Lastly, it is the staff working in Student Affairs departments that fall into the top-right quadrant, holding both power to influence student services and proximity to these services and their end-users.



# Review of Literature on Service Design in Postsecondary Education

# Review of Literature

The review of literature is based on an assessment of existing scholarly articles, journals, news articles and textbooks found on Ontario colleges and student affairs. Combinations of the following keyword searches were used when scanning for literature: Service Design, participatory design, blueprinting, journey design, service development, program development, program assessment, student development, student affairs program development, student service development, Ontario colleges and Canada. Due to the limited literature on service development within Ontario colleges and postsecondary institutions, the review of literature was also expanded to include the United Kingdom, United States and Australia. The literature review identified existing gaps in the literature on program and service development in student affairs that informed the direction of this research.

A large portion of the literature found was related to student development theory in the development of programs and services for students. Student development theory is a framework commonly employed by student affairs professionals, providing a holistic and theoretical understanding of how learners grow, as well as how they are impacted by their environment as they progress through their learning journey (Strange, 2010; Kazmi, 2010; Patton et al., 2016; Holmes et al., 2004; Greenberg, 1999). Student development theory is referenced often in available literature as a tool leveraged by student affairs practitioners when developing student programs. Sheridan College appeared to be the only GTA College in the available literature to directly reference their use of student development theory in their work to enhance their first-year experience program (Coulter et al., 2019).

In addition to student development theory, the use of assessment and evaluation was also cited as a framework used to improve existing offerings. Within the context of student affairs, assessment and evaluation is understood as being the process of gathering information with the purpose of analyzing and identifying insights in order to ensure quality of programs offered within an institution (Sullivan, 2010; Henning et al, 2016). Assessment is a cyclical process that ultimately serves to monitor the effectiveness and assure the quality of a

program or service being delivered. The last stage of the assessment cycle consists of applying learnings in the next iteration of program delivery (Henning et al, 2016). Obtaining feedback on a program or service that has been delivered not only serves to enhance program development, it also supports student affairs professionals when advocating for funding and holds them accountable to meeting the program learning objectives (Henning et al, 2016).

Overall, the use of Service Design in the available literature was scarce. Literature on the use of Service Design to enhance student experience was predominantly found in the United Kingdom, Australia and the United States (Baranova et al., 2011; Bitner et al., 2012; Roberts, 2022; Trischler & Scott, 2016). This included the use of service blueprinting, one of the many tools falling under the umbrella of Service Design, to enhance the experiences of learners, staff and faculty. As an example, the University of Derby in the United Kingdom engaged with over 100 learners and staff to develop a blueprint on the enrolment and registration process for learners (Baranova et al., 2011). In the United States, a student affairs practitioner leveraged service blueprinting to map out student services at a university, engaging with staff members and departments to create 114 service blueprints (Bitner et al., 2012; Roberts, 2022). In both examples, authors outlined the benefits of service blueprinting as an approach that encourages cross-collaboration across organizational silos. This approach places learners at the center of student services while taking into account the challenges faced by the institution, the biggest being resourcing (Baranova et al., 2011; Bitner et al., 2012; Roberts, 2022).

Another example of the use of Service Design is a study conducted on the experiences of international learners relocating to university campuses in Australia (Trischler & Scott, 2016). The study leveraged a variety of Service Design methodologies, including persona mapping and journey mapping. The researcher worked closely with key stakeholders from across the institution, including learners, to better understand the end-to-end journey, while identifying critical moments in their journey for the institution to enhance (Trischler & Scott, 2016).

Despite the limited literature on the use of Service Design within the postsecondary sector, Service Design has emerged as a powerful method in recent years to improve the experiences of users in both the private and public sector. In Canada, much research has been conducted to highlight the value of Service Design in improving public services, most notably in the Health sector (Hulsey & Zawislak, 2022; Mucz & Gareau-Brennan, 2017; Ontario Palliative Care Network, 2017). Research on the applications of Service Design have also predominantly been conducted in universities rather than colleges. There has been limited documentation of the use of Service Design in both universities and colleges in Canada as literature found predominantly focuses on other regions where Service Design is already being explored as a method.

#### **Gaps in Literature:**

The literature review ultimately uncovered several gaps in knowledge on this research topic. Currently, there is limited documentation on how services are developed within colleges in Ontario. While there is some literature on the use of theoretical frameworks and assessment frameworks that provide insightful context, research on these topics within an Ontarian context remains limited. Lastly, research on the use of Service Design in postsecondary education is generally scarce in both the Canadian and international context.

#### **Research Objectives:**

This research aims to contribute to existing literature by exploring the current processes, methods and tools used by student affairs practitioners when developing and enhancing student services in colleges in Ontario. This research also explores the potential of leveraging Service Design within a Canadian context and determines new ways for student affairs practitioners to develop, enhance and inform their practices by using a Service Design approach.

The research questions guiding this study are the following:

#### **Primary Research Question:**

- How might colleges in the GTA leverage Service Design to improve the experiences of learners?

#### **Secondary Research Questions:**

- What are the current approaches and methods used by colleges in the GTA to create programs and services?
- What are the challenges that colleges in the GTA currently face when creating student-centric services?
- What opportunities exist within the current system to enhance the development of programs and services for learners in GTA colleges?

# Methodology and Approach

# Research Approach

As outlined above, this study seeks to explore current practices on how programs and services are developed at colleges in the GTA, as well as how Service Design can be leveraged to improve the overall student experience. Given the objectives of this study, a qualitative approach was chosen to uncover insights on how programs and services are developed and the experiences of student affairs professionals when developing a program or service.

As part of this approach, student affairs practitioners were recruited in one of two ways. Firstly, student affairs practitioners were recruited through an open call to the general public, which required the completion of a screener questionnaire to ensure participants met specific criteria. Secondly, additional research participants were introduced to the study through a snowball (or network) approach, which involved reaching out to specific individuals to either serve as participants or recruit qualified participants (Tenzek, 2017). All recruited participants were screened to ensure they met the following criteria:

- Worked at a college in the GTA in the last year;
- Developed or oversaw programs and services for students;
- Were experienced with collaborating with other departments across their college.

This study did not require that participants have a prior understanding of Service Design. Recruited participants who met the above criteria were asked to participate in a one-hour, virtual, semi-structured interview. Participants were asked a specific set of questions, with various additional follow-up questions based on their answers (Appendix A). As part of these questions, participants were asked how they develop student programs and services and what their thoughts are on the Service Design methodology and tools (e.g. journey mapping, persona mapping, service blueprint). The long format of interviews allowed for a deep understanding of how programs and services are currently being developed in GTA colleges and explored the potential ways in which Service Design could be used to develop student programs and services.

# Study Sample

The participants for this study consisted of sixteen (16) student affairs practitioners working across Centennial College, George Brown College, Humber College, Seneca College and Sheridan College. Participants included both administrative and support staff in these colleges. Study participants also had an array of experiences working in colleges outside of the GTA, as well as in the university sector. Some of the recruited student affairs practitioners had been working in the field for as long as 50 years. All participants were currently or recently involved in the development of student services in GTA colleges. Participants had experiences in developing programs and services in Career Services, Library & Learning Services, Registrarial Services, Student Life and Student Wellness departments.

# Study Limitations

Despite an extensive literature review and rich feedback from study participants on the current practices within Student Services departments in GTA colleges, this study is not without limitations. The following limitations were identified in the development and execution of this study.

**Sample Groups** - Due to time constraints, this study only sought to interview student affairs professionals. This was justified by the core role these individuals play in the development of student services in GTA colleges. However, this study would have benefited from consultations with other participant groups. Incorporating the perspectives of learners would have allowed for a deeper understanding of their experiences using student services. In turn, this may have pointed to additional opportunities for improvements to student services development using Service Design. Furthermore, engaging with experts in the field of Service Design, specifically in the public sector, could have provided deeper insights on best practices and highlighted challenges the postsecondary space should anticipate as it relates to the adoption of Service Design. Lastly, engaging with student affairs organizations and quality assurance bodies to learn more about the technical nuances related to developing student services could have also positively contributed to the insights outlined herein.

**Accessibility and availability of literature** - Due to resource limitations, access to research materials was predominantly limited to open-source databases and publicly available information on the postsecondary education space. Some existing materials on approaches to developing student services may not have been included in the earlier literature review as a result. As outlined in earlier sections, there was a limited amount of literature on the use of Service Design within colleges in Canada.

**Qualitative Approach** - This study took on an exploratory approach, focusing on what tools, processes and methodologies are employed in the development of student services. As a result of this exploratory approach, this study did not quantitatively capture the prevalence of any given tool, process or methodology over another in the development of student services in colleges in the GTA.

# Research Finding and Sense-Making



# Service Development and Perspectives on Applications of Service Design

Data collected from interviews were anonymized and explored through an inductive thematic analysis in which participant responses were grouped to identify common themes and patterns. This approach was chosen to allow for the exploration of participants' responses without imposing a framework through which ideas should be interpreted, allowing instead for themes to emerge naturally and drive the overall findings of this study (Mihai, 2022). Findings from this analysis are presented as common themes. No quotations of participant responses were used to avoid identifying any specific individual. The titles held by participants are referred to in general terms (e.g. administration staff and support staff) throughout this paper for the same reason.

## **Theme 1: Roles and Organizational Structures Influence the Development of Programs and Services.**

### **Reporting Structure of Student Services**

Notable differences pertaining to reporting structures and student services arose in conversations with participants. Nearly all participants emphasized the impact that organizational structures have on the development and delivery of student services. Administration staff highlighted that the hierarchical placement of Student Affairs divisions is usually indicative of the importance allotted to student services within a given organization. Support staff shared the impacts that organizational structures may have on cross-collaboration in the development and delivery of student services. Most participants noted that their institutions have either undergone recent organizational shifts or were currently undergoing some sort of organizational restructuring.

Another structural difference between GTA colleges is the various titles held by those at the helm of Student Affairs divisions. Two out of the five GTA colleges do not have a Dean of Students, opting instead to have an Associate Vice President (AVP) of Students. Notably, Centennial College and Humber College have both combined the roles of AVP and Dean of Students. Some participants noted that the AVP title added importance to the Dean of Students role, which may in turn

allow the role to further support organizational decision-making and the overall direction for student success.

In regard to the organizational location of student services within these institutions, most student services were consistently clustered under the Student Affairs (often referred to as Student Success) divisions of these colleges. Some student services had historically moved in and out of Student Affairs divisions, including Careers & Cooperative Education services, as well as Library Services. Other student services were consistently located outside of Student Affairs divisions in each institution. Student-facing services offered by I.T. departments, customer service (e.g., call center), digital technology and marketing and communications were all located outside of the Student Affairs divisions.

### **Responsibilities Vary and Involve Different Proximity to the Learner**

When sharing key tasks and responsibilities related to their roles, there was a clear delineation between the responsibilities of administration staff and support staff among participants, illustrated in table 2. The roles held by administration staff and support staff could be grouped into learner-facing and non-learner-facing roles. Learner-facing roles consist of roles in which staff are directly engaging with learners. Non-learner-facing roles consist of roles in which staff are not working directly with learners. The learner-facing or non-learning-facing attribute of their positions appeared to be central to how participants viewed their roles within their respective institutions. Participants utilized this attribute to describe their proximity to learners and their needs.

**Table 2. Roles and Responsibilities of Student Affairs Practitioners and Proximity to Learners**

<b>Role</b>	<b>Proximity to learner</b>	<b>Responsibilities</b>
Administration - Executive	Non-learner-facing  Lower levels of interaction with learners, higher levels of interaction with staff and other internal stakeholders.	Handle complex cases on learners that have been escalated; Set priorities & strategic direction of programs and services; Allocate budget; Direct programs and services.
Administration - Management (e.g., Directors & Managers)	Non-learner-facing  Lower levels of interaction with learners, higher levels of interaction with other executive members, academic staff (e.g., program chairs, deans) and their own respective teams.	Handle complex cases on learners that have been escalated; Actively build and maintain relationships across college divisions; Support staff who are managing programs; Direct programs and services.
Administration - Support Staff (e.g., Assessment Coordinators, Communication Coordinators)	Non-learner-facing  Indirectly impacting learners, but working predominantly with stakeholders across the college (e.g., faculty, support staff). Only work with learners as needed.	Develop and deliver programs for faculty and staff who are learner-facing; Actively build and maintain relationships across college divisions; Enhance existing programs within portfolios using an assessment framework.
Support Staff (e.g., coordinators, advisors)	Learner-facing  Programs delivered within a given service area are directly provided to learners.	Deliver programs and services to learners; Support and guide faculty with learner-facing initiatives; Actively build and maintain relationships across college divisions; Enhance existing programs within portfolios using an assessment framework.

## Theme 2: Current Approaches and Methods to Program and Service Development Vary Widely.

### Various Approaches and Methods to Create a Program or Service

As part of the interview process, participants outlined the ways in which student programs and services are developed, walking through their preferred approaches, practices, tools and methods. Services appeared to be generally divided into long-standing, traditional service areas (e.g., counselling, academic services) and new service areas, which include programs that have been developed much more recently (e.g., peer mentorship, first generation programs). New programs and services were noted to be developed in four ways:

1. Program development as a result of government grants or grants provided by a provincial organization, in which guidelines for the development of the program or service are usually outlined by the grant itself;
2. Program development as a result of directives that “comes from the top,” with executive leadership calling for a net new program in a specific service area and informing the program direction;
3. Program development (including events and workshops) as a result of an unmet learner need identified by learner-facing staff, usually referred to as a gap in student services;
4. Program enhancement through feedback received from various formal and informal sources.

### Identifying Gaps in Services

Participants shared that gaps in student services are identified in a variety of ways and are often the drivers for the development of new programs or changes to existing services. All participants stated that anecdotal data from staff is one of the primary ways by which gaps are identified, referencing on-the-ground observations from support staff and faculty members in direct contact with learners. Complaints and direct feedback from learners themselves were another common means by which gaps in services were identified. In addition to these

informal mechanisms, several formal feedback mechanisms were highlighted by participants, such as year-end surveys, program assessments, focus groups, as well as other institution-wide assessment initiatives. Gaps could also be identified using sources outside of their college, such as government reports and newly published research.

Inconsistencies emerged in the answers of participants as it related to the stakeholder group who most often identified gaps in student programs and services. Most support staff participating in this study stated that new programs tended to be prescribed by college leadership and usually tied into the institution’s strategic objectives. In contrast, participating administration staff generally noted that gaps in student programs and services were brought to their attention by both leadership and support staff.

### Problem Definition

Once a gap has been identified among an institution’s student services, few steps appear to be taken prior to the development of a new program or service. Some participants stated that they would take stock of existing programs and services at their college before beginning with program development. Most participants in administrative positions noted that they would assess the resource requirements of a new program or services to determine whether offering the program or service would require additional resources and funding. Few participants stated that they would run stakeholder consultations to further define the problem at hand and understand the needs of learners prior to program development. Furthermore, few participants noted validating the gap through other data sources within the institution. Overall, measures to define the gap in student services appear somewhat sparse and inconsistent across GTA colleges.

### Solutioning

Participants shared a variety of different ways by which programs and services are developed once a gap in student services is identified. Some participants stated they would engage in brainstorming sessions with the staff on their teams.

Various ideas to address the gap in question would be exchanged as part of these sessions, with the ultimate solution being determined by way of consensus.

Other participants noted that they would either come up with their own ideas or develop programming around an idea shared by learners. In general, approaches to solutioning around a gap in student services varied across participants and were not guided by a standard framework, especially in regard to the degree of consultation with learners and other staff members.

### Planning & Developing

Participants varied in their approaches to service development once a solution to a gap in student services had been determined. Some participants noted that when developing a program or service, they would start by identifying its ideal state and work backwards to identify the components of the service. Others noted that they would instead start by mapping out the components of the service, such as its location, purpose and core activities. Several participants shared that they would identify resources required for the program (e.g., staffing, funding, materials) as part of the program development process. They may reach out to other departments to pool resources and find ways to collaborate on the program or service.

Most participants would also ensure that the program or service could be connected to the college's institutional priorities and strategic goals. Participants stated that they would establish learning outcomes and develop metrics to determine the service's success, with attendance, engagement and learning metrics being the most commonly mentioned metrics. Ultimately, these participants sought to ensure that quality assurance data for the program would be available to ensure it could be improved over time. While most participants noted that they would establish metrics and learning outcomes for their program or service, few mentioned the use of specific frameworks such as Canadian Association of College & University Student Services (CACUSS) competencies, Council for the Advancement of Standards in Higher Education (CAS) competencies, National Association of Student Personnel Administrators (NASPA) competencies, program matrix, outcome matrix, situational analysis or student

development theory.

Participants specifically noted that they would consider who the program or service should be catered to and where within the student journey the program or service should be offered. To this end, many participants concerned themselves with positioning the program or service at a point in the student journey that would minimize barriers for learners and ensure cohesiveness with the overall student experience. Some also noted that, at times, they may draw inspiration from similar programs offered at other colleges, while also engaging with other practitioners to learn about lessons learned from other programs and services. The involvement of learners in the program development process depended largely on access to learners and resourcing. Some participants shared the value of having student staff and co-op students on their teams to offer feedback throughout the program development process. All in all, few participants stated that learners are consistently included in the service development process. However, the use of pilots to test new programs and services and get preliminary insights and feedback on their potential success were noted at two out of the five GTA colleges.

When speaking to whether or not they had identified a standard approach to service development, participants stated that processes could vary widely from one student affairs practitioner to another. While participants had their set way of developing programs, they acknowledged that their approach is not standard across their institution.

## Theme 3: Structural Barriers Hinder the Development of Programs and Services.

### Silos and Duplication of Programs

Several participants stated that organizational silos within their respective institutions posed a challenge when developing programs and services. Participants discussed disconnects between various areas at their college and mentioned difficulties fostering collaboration between them. Many participants

also noted that staff turnover related to the COVID-19 pandemic had caused an erosion of relationships between departments. This made it more challenging to identify the right stakeholder to involve in the development process for a given program or service. Some participants noted that in some cases, departments would opt to work on their own rather than collaborate with another department.

Participants generally recognized that each student affairs practitioner has their own specialization and that this can impact their ability to holistically approach issues that affect learners in multiple areas of the college. Nevertheless, most participants noted that efforts were being made by their respective institutions to promote cross-departmental collaboration.

A related challenge identified by participants included not having access to a centralized list of existing programs and services at their institution. This made it difficult to avoid duplication of programs and services from occurring. Participants also stated that this made it difficult to keep track of existing gaps in programs and services raised to leadership, as well as which key stakeholders to work with.

### **Bureaucracy and Outdated Systems and its Impacts on Services**

Participants with administration roles discussed bureaucratic challenges related to resourcing when developing programs and services. Most participants noted a decrease in funding over the last several years. Those in charge of program delivery stated that reduced funding had impacted the incentives that would be typically provided to learners (e.g., food, giftcards, branded items) to garner engagement. Several participants highlighted that funding pressures on their departments have made it increasingly difficult to develop compelling business cases for new and existing programs and services. In turn, this made it challenging to ensure sufficient resources are in place for programs and services to remain effective and impactful.

Other challenges identified by participants included outdated technologies impacting the delivery of programs and services. Participants specifically remarked that technologies such as older enrolment management systems, messaging

systems and course registration systems impacted the learner experience. Outdated backend systems also prevent a seamless experience for learners and cost-prohibitive upgrades to these systems make it challenging to develop business cases for improved digital experiences.

Participants shared that insufficient data infrastructure posed difficulties when determining how to promote programs and services among learners, as well as whether to deliver services through in-person, hybrid or hyflex models. As a result, a trial-and-error approach is taken, determining the best mediums through which specific programs and services are delivered.

### **Servicing Learners can be Reactive and Impact Resources**

Participants identified challenges related to reactive programming when a proactive approach to planning for programs and services could be more effective and less time consuming. They found that programs and services were sometimes developed to meet newly identified learner needs without consideration for the pressures these programs and services may place on existing resources. While staff may be happy to take on new programs and services, they often find themselves under-resourced and unable to take a strategic approach to program development. In some cases, participants felt that under-resourcing affected their ability to seek out feedback from learners on programs and services. Participants voiced that while a proactive approach may be more difficult to implement, it would allow them to better address gaps in programs and services as they arise. Participants noted that the summer semester was often less busy due to the learner intake cycle and allowed for this kind of planning to take place.

**Theme 4: Current Applications of Services Design to Develop Programs and Services are Present but Sparse.**

**Familiarity with Service Design**

As part of the interview process, participants were asked whether or not they were familiar with Service Design. Table 3 summarizes participant responses to this question.

**Table 3. Participant familiarity with Service Design**

Familiar with Service Design	Participants
Yes	1
Somewhat	2
No	13

**Infrequent Applications of Service Design**

Upon stating their degree of familiarity with Service Design, participants were provided with a definition of Service Design and a summary of commonly used tools within the field of Service Design. Several respondents recognized some of these tools, and some shared their use of design thinking and human-centered design as part of their work. Participant responses suggested the use of journey mapping, service blueprinting or persona mapping at four colleges in the GTA to understand the needs of learners and their overall journey. Some participants identified persona mapping as a user experience (UX) method, while others identified it as a Service Design method. Participants stated that they had witnessed these methods be employed by both student affairs practitioners and external consultants. Those who had personally used persona mapping shared

that it had provided them with a deeper understanding of learners’ needs and experiences, and helped build empathy. As for the use of journey mapping, participants familiar with this tool found that it had provided them with more clarity on where their programs may fit within the overall learner journey and how they may ensure that they are meeting learner needs.

**Theme 5: Student Affairs Practitioners Recognize the Potential of Service Design, but Foresee Barriers to Implementation.**

**Perceptions of Applying Service Design**

After being provided with a definition of Service Design, participants were asked about their perspectives on the potential of Service Design methods applied in a student affairs setting. In addition, they were asked about the challenges they anticipate would need to be resolved in order to put Service Design into practice in their respective institutions. Overall, participants stated that Service Design had familiar elements, with some noting that they felt they were already unknowingly incorporating elements of Service Design into their work. Participants recognized that Service Design methods provided more structure and a framework to better see the entire learner journey, understand learner needs and make informed decisions. When talking about Service Design tools, participants noted that these tools could also support decision-making. In addition to being able to view the learner journey as a whole, participants discussed the possibility of using Service Design methods to humanize the learner experience and explore service areas from the learner’s point of view.

**Capacity & Resourcing**

Participants noted that current program cycles, where programs are delivered every semester, made it difficult to slow down and plan ahead. They suggested that this pace of program delivery offered little bandwidth for staff to make use of methods like Service Design. Some participants remarked that certain learner



journeys (most notably the journey of international learners) are constantly changing. This made it difficult to find time for strategic planning given the constant effort required to keep up with constant change. In light of the resource constraints already faced by some participants, some wondered whether the benefits of leveraging Service Design could be justified given the potential time and effort associated with using such a method.

### Support from Leadership & Change Management

Participants shared that in order for Service Design methods to be successfully implemented, support from leadership would be required. Without buy-in for these methods from a staff with sufficient authority in the organization, the adoption of Service Design would be limited. In order for Service Design to be adopted as a set of methods, a leadership-induced shift in organizational culture may also be required to change the ways in which programs and services are being developed and enhanced. Ultimately, a broader change management exercise may be required.

Many participants discussed both top-down and bottom-up approaches to introducing Service Design to their respective institutions. Regardless of which approach might be adopted, participants recognized that Service Design would need to be introduced in a way that is non-threatening to support staff and provides them with the tools and resources necessary to make full use of Service Design methods. Some participants suggested introducing Service Design within one department to start, and iterating on successes within that department to demonstrate the value of the methodology. To add, participants expected potential resistance from some staff to a new methodology without any prior communication and information on Service Design. Participants suggested that strong communication on how Service Design is to be implemented and what it will look like for the organization would be beneficial.

### Education & Capacity Building

Participants with support staff positions stated that in order for them to make use of Service Design, they would need to be empowered by their manager to seek out professional development related to Service Design. Participants noted that they would want this professional development to cover how to use Service Design tools. Several participants also expressed an interest in having an expert available to help them gain a baseline understanding of Service Design and how it may or may not impact their roles. In addition, these participants noted existing constraints on their time and capacity, highlighting again the value of having the support from a Service Design expert that could guide them.

Participants who had engaged with Service Design previously noted that having dedicated resources to put Service Design methods into practice may be beneficial. They suggested having “innovation teams” or “Service Design experts” that could be responsible for the implementation of Service Design practices across different areas of the institution. These participants also highlighted the importance of considering how Service Design should be introduced within their colleges. They expressed that if introduced carelessly, some college staff may feel that Service Design initiatives are taking away from their jobs. Lastly, they identified a risk related to Service Design only being superficially adopted by departments.

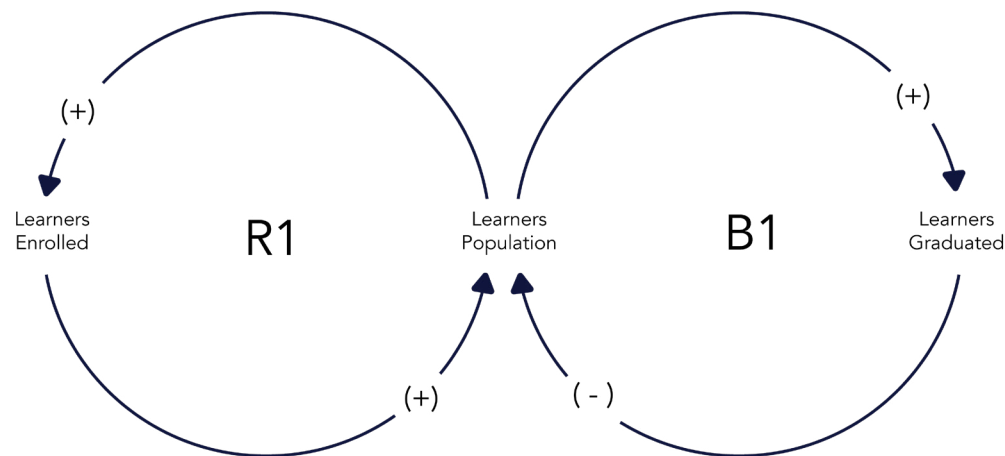
Overall, several methods, processes and challenges were identified by participants when discussing their current approaches to developing programs and services. The findings from interviews served to inform the development of a series of system archetypes to further illustrate the challenges that student services face in GTA colleges.

# From Findings to Insights: System Archetypes as a Method for Sense-Making

This section outlines key insights surfaced using a systems thinking approach to gain a deeper understanding of patterns of behaviour in the development of programs and services in GTA colleges. Meadows (2008) defines a system as “an interconnected set of elements that is coherently organized in a way that achieves something” (p. 11). Identifying the components of a system and the relationships between them can provide further insights on their purpose or function.

Of the array of available tools used to analyse systems, system archetypes were selected to provide a deeper understanding of patterns of behaviour within GTA colleges, while also diagnosing challenges from the findings (Kim, 1992). Braun (2002) describes system archetype as common “patterns of behavior that emerge from the underlying system structure” (p. 25). They can help diagnose recurring challenges within a system and suggest effective remedies that take into account the structural constraints faced by the system. To illustrate patterns of behaviour within a system, system archetypes are represented in the form of causal loop diagrams. Simply put, causal loop diagrams illustrate the effects that one part of a system can have on another part of the system (Betley et al., 2021). These effects are represented in the forms of arrows, as shown in figure 3.

**Figure 3. Example of a Causal Loop Diagram for College Enrollment**



An arrow accompanied by a plus (+) sign indicates that an increase in the first part of the system will result in an increase in the second part of the system. An arrow accompanied by a minus (-) sign indicates that an increase in the first part of the system will result in a decrease in the second part of the system. As an example, the causal loops in figure 3 illustrate a basic system where an increase in enrollment results in an increase in the learner population, while an increase in graduations results in a decrease in the learner population.

For the purposes of this study, two specific system archetypes were identified and help illustrate challenges within GTA colleges: the Fixes that Fail archetype and the Growth & Underinvestment archetype (Kim, 1992). These were built upon by using research findings and existing literature on student services. These system archetypes were developed to introduce three phenomena observed within GTA colleges as it relates to the development of student service:

1. Inconsistent approaches that fail to meet the needs of learners;
2. Reactive programming and pressure on resourcing;
3. Perception of student services and downstream impacts.

## Inconsistent Approaches that Fail to Meet the Needs of Learners

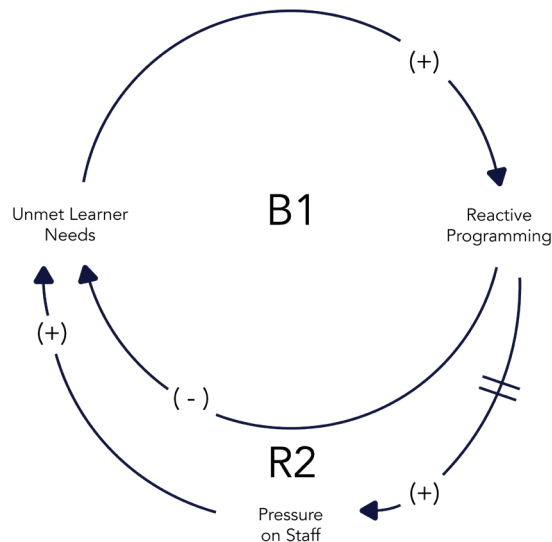
Approaches to developing and enhancing programs and services largely vary from one student affairs practitioner to another. The approaches that practitioners choose can be based on a number of factors, as practitioners have varying degrees of expertise in student affairs and access to different knowledge and tools (e.g., student development theory, assessment and evaluation). Approaches differ across practitioners within the same institution, confirming that there is no set standard way of approaching the development of new programs and services. Of the tools and methods used by practitioners to develop programs and services, only some Service Design methods were used. These were usually accompanied by cross-collaboration and further problem framing through the use of informal and formal sources of data. However, one of the most common tools mentioned by study participants is program assessment to identify new gaps and inform changes to existing programs. Despite there being multiple mechanisms by which



informal and formal data is used, there appears to be few mechanisms that centralizes and triangulates metrics. Learners are not typically part of the design process of a solution that is meant to meet their needs. Instead, they typically identify the problem and have the program delivered to them. Learners who work in student service areas such as co-op students or interns may be asked to validate an idea that is created by staff, but are still not part of the solutioning process.

The dynamics outlined above can be captured in a single system archetype - Fixes that Fail. The Fixes that Fail archetype illustrates a system dynamic in which a problem symptom repeatedly arises and is promptly alleviated through a temporary measure (Kim, 1992). In time, the unintended consequences of the temporary measure emerge, causing the original problem symptom to re-appear with possibly greater severity. From there, the temporary measure is employed yet again and the Fixes that Fail cycle repeats itself. Kim (1992) notes that Fixes that Fail archetypes most commonly appear in situations in which the problem symptom is particularly bothersome, causing the actors within the system to rush to address it, often without reflection on the consequences of their fix.

**Figure 4. Fixes that Fail Archetype | Failing to Meet the Needs of Learners through Program Changes**



The Fixes that Fail archetype in figure 4 highlights the immediate effects and the ripple effects of developing programs and services without sufficient involvement from learners. In this archetype, unmet learner needs are identified and institutions address these needs by developing new programs and services, or by changing existing programs and services. If programs are developed too quickly and without sufficient involvement from learners, ripple effects can emerge at a later date in the form of further unmet learner needs.

How institutions go about developing new programs and services in this archetype influences the degree to which identified learner needs are met. As discovered in this study, GTA colleges often face several challenges when involving learners in the service development process. In many cases, the only learners involved in the service development process were learners hired as interns or co-op students. In addition, few institutions use pilots to obtain early feedback on new programs within service areas prior to launch. As a result, much of the input obtained at the solutioning stage of developing a new program incorporates limited insights on learners. In the immediate, learner needs are met by a new program or service or through a change to existing programs or service offering. However, the perspectives and needs of learners who were not incorporated into the service development process are overlooked. In turn, this leads to the needs of these excluded learners being unmet, causing the cycle to repeat itself.

#### Critical Moments to Influence Change

To overcome the ripple effects observed in a Fixes that Fail archetype, Kim and Anderson (2011) recommend “look[ing] for connections between the unintended consequences and the fundamental causes of the problem symptom” (p. 15). In the case of this specific archetype, a connection emerges between the failure to consider the experiences of some learners and their unmet needs. Although regular assessments can allow for learner voices to inform program enhancements and new programming, other complementary approaches can take into account the holistic learner journey. Bitner et al., (2012) notes that:

*“[learners] have key roles to play in co-creating the value they ultimately experience or make use of. In the context of higher education, this means that colleges and universities exist to serve [learners], communities, and society at large. Further, unless value is created for and with [learners] first, there can be no value to communities, society at large, or the future. Value is co-created by [learners], not delivered to them, and it is the role of administrators, educators, policy-makers, and managers to facilitate this educational value co-creation.” (p. 40)*

Service Design can be leveraged as a methodology to incorporate multiple stakeholders in the service development process. It can be used to understand the end-to-end learner journey and co-design with learners so that they can be involved in shaping their experiences (Baranova et al., 2011).

### Reactive Programming and Pressure on Resourcing

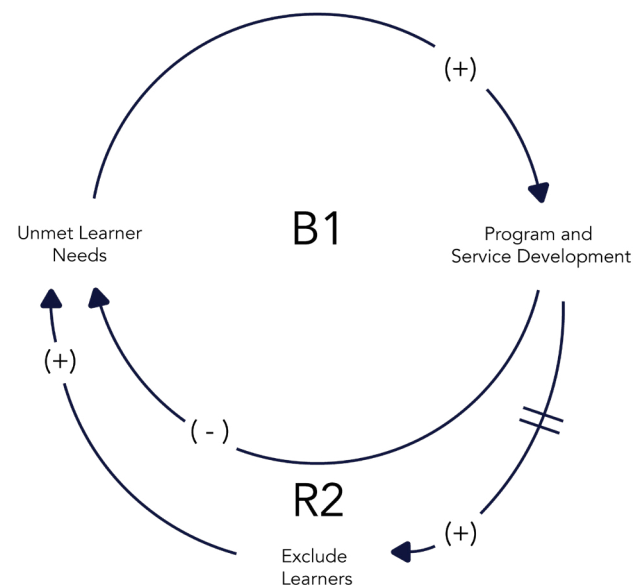
Participants appeared to label approaches to developing student services as being either reactive or proactive. A reactionary approach to developing student services may seek to promptly solve for the immediate problem that has been expressed by students, with limited involvement from various stakeholders. While this approach may address the gap at hand, this study found that it may impact overall resourcing and capacity among student affairs staff.

Based on participant responses in this study, reactive approaches may be a result of top-down instructions for the development of student programs and services without sufficient assessment of whether the identified gap in services warrants a new program or service. This reactionary approach to program development may lead to duplication of programs and services altogether. In turn, duplication of programming contributes to exacerbating existing silos between departments instead of encouraging collaboration on program and service development.

Existing research by Seifert et al. (2011) suggests that collaboration is more likely to occur when staff have existing relationships with others in different divisions and departments. However, the COVID-19 pandemic appears to have eroded many of these existing relationships, which may explain downstream impacts

on collaboration. Based on participant responses, there was no central inventory of student programs and services and their responsible departments identified, limiting potential for collaboration when gaps are identified.

**Figure 5. Fixes that Fail Archetype | Reactive Programming and Pressure on Resourcing**



The Fixes that Fail archetype shown in figure 5 highlights the immediate effects, as well as the ripple effects, of reactive programming within GTA colleges. In this archetype, unmet learner needs are identified by leadership or by support staff through existing feedback mechanisms. Student Affairs departments react to meet these unmet needs by developing new programs and services or by making changes to existing programs and services. This is generally done in a reactive manner, with limited involvement from learners. As found in this study, student affairs practitioners often struggle to identify whether there is a program or service in place to meet a need due to lack of accessible information about

programs and services across the organization. Furthermore, student affairs practitioners often develop services in a silo due to challenges collaborating with other departments. The weak relationships between departments due to staff turnover tend to exacerbate this issue. To add, funding pressures on departments pose barriers to the prompt addition of resources to support new programs and services, causing them to deliver more programs and services with the same resources.

Due to the above, reactive programming appears to have two impacts within this system. On the one hand, the newly developed or updated program or service meets the immediate needs of learners, providing a quick relief. In addition, assessment frameworks are put in place to allow for future learner feedback to be gathered and to monitor the program or service against its objectives. On the other hand, reactive programming appears to have a delayed impact on student affairs staff in the form of pressure on capacity to deliver student services. While a quick solution may have been developed, the underlying problem related to learner needs may persist or worsen over time, which may have additional consequences and present itself elsewhere in other spaces.

In the worst of cases, it may even affect the institutions' reputation. Because the new program or service was developed without taking stock of existing programs and services in the institution, duplication of programs and services occur. This causes staff to deliver more programs and services than required (or expected), which impacts the time and energy available for them to meet needs of learners through existing programs and services. This ultimately leads to new issues in which the needs of learners are unmet, causing the cycle of reactive programming to start again.

### Critical Moments to Influence Change

Kim & Anderson (2011) identify several strategies that may be employed to overcome the challenges posed by a Fixes that Fail archetype. Providing student affairs practitioners with the tools and visibility required to avoid duplication of programming and increase cross-departmental collaboration could reduce

pressures on staff and could avoid unintended consequences that come about from reactive programming. This could be done by leveraging Service Design to develop service blueprints across the institution, providing student affairs staff with a clear view of what programs and services are currently available to meet the needs of learners. (Bitner et al., 2012; Roberts, 2022; Baranova et al., 2011). Service blueprints are a tool that encourages teams to cross-collaborate to address identified problems holistically. By mapping out key touchpoints and identifying learner needs and the interactions between stakeholders (e.g., faculty, staff, leadership staff), blueprints help further refine the underlying problem. They also help identify opportunities to address the needs of learners holistically, while also meeting the priorities of the institution and identifying what resources are required to address the problem at hand (Bitner et al., 2012; Roberts, 2022; Baranova et al., 2011).

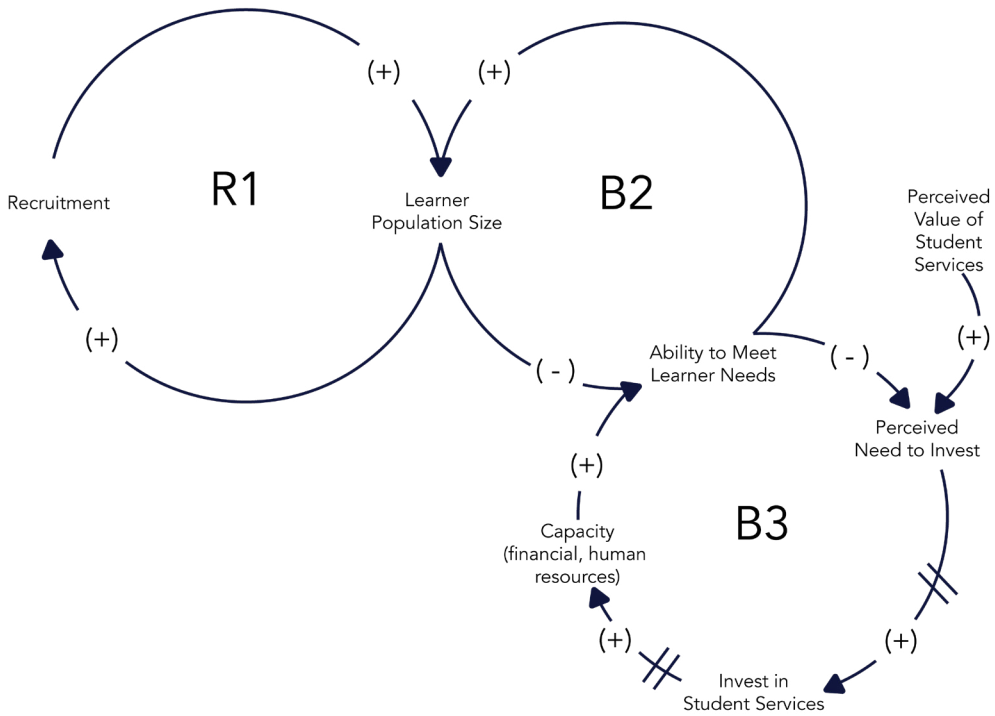
### Perception of Student Services and Downstream Impacts

Based on the insights shared by study participants, it appears that underinvestment in student services has had a negative impact on holistically meeting the needs of learners, in spite of growing enrollment. This is consistent with remarks made by Colleges Ontario (2022b), highlighting that full-time enrolment growth has far outpaced the moderate increases in provincial funding to colleges in Ontario. The reasons for this underinvestment in student services could potentially be explained by the lack of data infrastructure and strong assessment frameworks in place to showcase the value of student programs and services. Insufficient data to showcase the value of student services may impact existing funding structures, or business cases for new programs and services. Participants named several means by which data on student programs and services were collected, both informally and formally. However, few mentioned how this data was leveraged to produce reporting that illustrates the importance of services and their impact on student success. Additionally, in absence of strong reporting, this data may not ultimately inform resourcing decisions made by senior leaders within an institution.

A valuable system archetype for understanding the dynamics of underinvestment

in student services is the Growth & Underinvestment archetype. This archetype captures the tension between growth and the pressures it places on performance (Kim, 1992). As a given system undergoes growth, the resources in place to support that growth become less and less effective, causing performance to fall. The system is then forced to choose between investing in the resources required for it to continue growing, or hold off. If investments are delayed, performance continues to fall, eventually affecting growth. Kim (1992) remarks that in several cases, the diminishing effectiveness of the existing resources is used to justify delaying the necessary investments in these resources..

**Figure 6. Growth & Underinvestment | Perception on Student Services and Downstream Impacts**



The Growth & Underinvestment archetype shown in figure 6 illustrates how growth in enrollment can place pressures on student programs and services, and in turn contribute to recurring underinvestment in them. As a college invests in its recruitment efforts, its student population size is expected to grow. In turn, having a greater number of learners at the college contributes to greater demand for support services and programs, thus adding pressure on student affairs professionals working to support a larger student population. The ability of existing student programs and services to meet the needs of learners is directly impacted as a result. The relationship between the number of learners at a given institution and the institution's ability to meet learner needs through student programs and services requires further research to be validated. Despite this, available metrics show rising enrollment in GTA colleges over the past decade and low utilization of student services during the same period (Dietsche, 2012; Veres, 2015). While this suggests a possible negative relationship between enrollment and student services utilization, further research would be required to confirm this relationship.

When the effectiveness of student programs and services in meeting learners' needs decreases, the perceived need to invest in student services increases. This archetype illustrates that this perceived need to invest in student services can be managed in one of two ways, both of which depend on the perceived value of student services within the institution. If the perceived value of student services is high, then investments in student services may eventually take place, giving student affairs practitioners access to more resources. In turn, this increases their ability to meet student needs through programs and services, which reduces attrition and positively contributes to the size of the student population. However, if the perceived value of student services is low, then reduced investment into student services eventually takes place, which further limits the resources available to student affairs practitioners. This then reduces their ability to meet learner needs, which increases attrition and decreases the size of the student population.

Based on the insights shared by study participants, the latter scenario better depicts the current dynamics at play in GTA colleges. Several participants shared

that funding in student services at their respective institutions appeared to have been decreasing over the past years, despite rising enrollment. Further, some participants emphasized how challenging it was to develop compelling business cases for additional funding due to complex bureaucracy and limited access to necessary data.

Critical Moments to Influence Change

The Growth & Underinvestment system archetype highlights a clear reinforcing loop that should be closely investigated to improve student success: an increase in the perceived value of student services causes an increase in investments in student services, which causes an increase in student success, which increases the perceived value of student services, and so on. Service Design can help increase the impact and effectiveness of student programs and services in a variety of ways to drive the perceived value of these services within the institution. While colleges may not view customer service as being a high priority for them, Keith (2005) emphasizes the ways in which a client-centric approach is critical for colleges to adopt if they wish to drive enrollment and access funding. Moritz (2005) identifies a variety of ways in which Service Design can do exactly this:

- **Greater impact using existing resources** - Service Design can support colleges by informing how existing resources should be maximized to increase efficiency when learners access services.
- **Increased efficiency** - Incorporating Service Design tools into program and service development can provide a deeper understanding of learner needs, surfacing ways in which these needs can be met without additional resourcing.
- **Student experience as a differentiator for the institution** - Shaping service experience with the learners who use them throughout the design, development and execution of a program can ultimately drive enrollment.

This being said, sufficient data infrastructure is critical to capture the necessary data to showcase the impact of student services. Study participants echoed the fact that this data is critical to accessing funding for student services. Regardless of the actual impact of student programs and services, quantitative

and qualitative measures of this impact are necessary to ensure student services remain constantly supported.

Table 4 illustrates a summary of the challenges identified by these system archetypes, their impacts on student services and opportunities to leverage service design.

Table 4. Summary of Challenges and Opportunities to Leverage Service Design

Challenge	Impact	Opportunities for Service Design
Inconsistent approaches that fail to meet the needs of learners	Misalignment between learner needs and available programs or services. Lagging feedback from learners instead of upfront input.	Identify gaps in a holistic manner across various stages of a learner’s journey. Involve learners in the problem framing and the co-design of programs and services.
Reactive programming and pressure on resourcing	Duplication of programs and services. Expansion of workloads beyond planned departmental capacity. Depletion of existing staff resources.	Encourage cross-departmental collaboration to address problems holistically. Utilize Service Design tools such as service blueprints to map out key touchpoints with learners.
Perception on student services and downstream impacts	Devaluation of student programs and services. Financial pressures on Student Affairs departments.	Support business cases for resource allocation. Increase the efficiency and impact on the overall learner experience. Effectively translate the value of student services.

# Recommendations and Conclusion

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# Evidence-Based Recommendations for Leveraging Service Design

Embracing Service Design holistically within student services could provide learners with a frictionless experience while considering all of the touchpoints that make up their journey. Several existing uses of Service Design tools have been revealed through this research. These tools are currently being leveraged as a way for practitioners to establish frameworks and methods to communicate challenges faced by learners when accessing and navigating services. Based on the learnings and challenges shared by student affairs practitioners, as well as existing literature, this section provides a series of evidence-informed recommendations for the Ontario college sector to leverage Service Design.

## **Invest in the resources and capacity**

Service Design requires upfront resource investment to build capacity within student affairs and to ensure it is implemented and adopted effectively within college institutions. This will likely take the form of new roles within institutions, as well as training for those in existing roles.

**Establish Service Design and design-related roles in student affairs** - Over the years, specializations within student affairs and student development have emerged, including specialties in health and wellness, admissions, financial aid and housing (Tamburri, 2021; Cox & Strange, 2010). There is an opportunity to formalise Service Design as a practice in student affairs and create roles that enable individuals to be dedicated to introducing cohesive Service Design across the institution. Roles requiring individuals to be experienced in the development and execution of learner related programming exist, but there is a need for design-related roles to solidify the consistent and permanent use of Service Design across student services. Ultimately, it is important to build up long-term institutional capacity for Service Design through new roles to effectively make use of this methodology.

**Invest and build the capacity for Service Design** - Based on this research, student affairs practitioners are often looking for ways to build upon the practices and methods they use when developing student programming. It would be valuable to

provide practitioners with professional development opportunities to learn about Service Design, its benefits and applications. This would enable practitioners to not only champion the tool, but also look for opportunities to leverage Service Design within their own practice and across the institution.

## **Find Consistency in Leveraging the Use of Service Design Tools**

There are a variety of Service Design tools that could be used in GTA colleges. Several student affairs practitioners have used them on a variety of projects, but it would be beneficial for Service Design tools to be used consistently and built into existing program and service development practices. Three Service Design tools that can be leveraged to support student services are persona mapping, journey mapping and service blueprinting. Using a combination of Service Design techniques will allow for a deeper and more holistic understanding of learner experiences (Trischler & Scott, 2016). To add, the use of some of these tools can provide college administrators with an understanding of processes and their impacts. This could support existing quality assurance reviews such as the College Quality Assurance Audit Process (CQAAP), and equip administrators with a holistic view on how their programs are running. It could also support the alignment of student services with academic program outcomes and the effectiveness of student services on the overall learner experience.

**Understand learners through the use of personas** - Colleges can unlock a far deeper and actionable understanding of the needs of learners by creating learner personas and identifying what learners are feeling, thinking and experiencing. Through qualitative interviews with learners, practitioners could develop persona maps to gain a better understanding of learners' lived experiences rather than focusing on learner experiences as it related to a specific isolated incident (Trischler & Scott, 2016).

**Map out the journey of learners** - Leverage journey mapping to gain an understanding of the end-to-end learner journey, from the moment they first learn about the college to the moment they graduate. This will provide



administration with a view of the processes and experiences learners are feeling, thinking and doing, as well as identify critical moments, such as barriers or moments of friction in the journey (Trischler & Scott, 2016; Rains, 2017). This will inform areas of opportunities for student affairs to enhance the learner experience to set the college apart from other institutions (Trischler & Scott, 2016; Rains, 2017).

**Develop a service blueprint** - Service blueprinting is a powerful technique that provides a detailed and layered view of a service and how it is being delivered. It is often referred to as a “silo-breaking” tool, as it provides a detailed view of service delivery and brings together various stakeholder groups as part of the service blueprint development process (Baranova et al., 2011; Ostrom et al., 2011a). Stakeholders across the institution learn from each other as they develop a series of blueprints to map out a given service and understand its learner-facing components (e.g., accessing their timetables, campus services), non-learner-facing components (e.g., backend technology, data management systems) and supporting processes (e.g., student records, human resources, marketing and communications). Research conducted on this tool notes that blueprints need to be updated consistently, especially when new changes have been implemented (Bitner et al., 2012; Roberts, 2022; Stephens, 2015; Ostrom et al., 2011a).

**Find opportunities to co-design with learners** - Learners do not appear to be often involved in the process of designing their service experience, and instead are asked for their input after the service development process. Involving learners as co-creators in Service Design activities or service development more generally can ensure that services are truly developed for the learners that are accessing them (Bitner et al., 2012; Trischler & Scott, 2016).

**Focus on one department and grow** - Existing literature on the use of service blueprinting in postsecondary services recommends focusing on using the tool in one department at first (Bitner et al., 2012; Roberts, 2022). This helps individuals focus on building the capacity to develop service blueprints without the complexities added by interplays with other departments. Participants in this study echoed this sentiment, recommending that Service Design tools be introduced to one department at first. This department could in turn become a champion for Service Design approaches and serve as a proof of concept for the value of Service Design in student affairs.

**Incorporate Service Design as a strategic goal and institutional priority** - As part of their process, student affairs practitioners noted the importance of tying student programs and services to institutional priorities and strategic goals. It is important that the priorities that inform the enhancement of student services be grounded in Service Design language so as to support the use of Service Design tools. Co-designing with learners, cross-collaborating with departments, understanding the end-to-end student journey are all Service Design techniques that should be incorporated into the institution’s priorities to ensure that all relevant stakeholders are embracing a Service Design mindset.



# Implications for Further Research

This study is among the first explorations of the use of Service Design in the development of student services. Its findings capture how services are currently developed by student affairs practitioners and indicate that the use of Service Design techniques are somewhat present within the sector currently. More broadly, this research highlights important opportunities for Service Design to be leveraged by bringing together stakeholders to develop and enhance services for learners.

Throughout this study, practitioners demonstrated great interest in learning about best practices for developing student programs and services, and showed a desire to know how services can be enhanced further. To add, literature on research, methods, and practices within a Canadian context appear to be limited, with several study participants mentioning that they sometimes take inspiration from student affairs in the United States. There is an abundance of opportunities to continue engaging with practitioners on this topic and to do more research that focuses on student services within a Canadian context.

To this end, recommendations for further research include: applications of service blueprinting, journey design and persona mapping within Canadian colleges, the impacts of Service Design on Canadian colleges' various service areas, as well as the effectiveness of Service Design in Canadian colleges. Other recommendations for further research unrelated to Service Design include: the role and impact of Dean of Students in student services, the impacts of organizational changes within Canadian colleges, the role of external student affairs organizations in the development of services, the effectiveness of student development theory, learning outcomes, the impact of centralized (as opposed to decentralized) departmental structures related to student services and assessment and evaluation in Canadian colleges.

# Conclusion

This study set out to explore how colleges in the GTA might leverage Service Design to improve the experiences of learners by engaging with practitioners who oversee or develop student programs and services. By analysing the findings through a systems lens, system archetypes helped identify patterns of behaviour that impact service development. These system archetypes informed a series of recommendations for practitioners in the sector to leverage and implement Service Design. This study revealed that Service Design tools such as service blueprints, journey maps and persona maps are currently being used sporadically throughout colleges in the GTA. It finds that there is no standard way of developing student services among student affairs practitioners. Practitioners appear to face a variety of challenges when developing student services, including difficulties collaborating with other departments, siloed approaches to program development, rigid pre-existing processes and outdated technology. Study participants noted that the chosen approach to develop a program or service can vary depending on how the program or service is being funded and on who is instructing that the program or service be developed. Practitioners also cited a variety of approaches that inform the development of programs, such as ensuring that programs have learning outcomes, grounding programs in institutional priorities and measuring program success through an assessment framework.

Because there appears to be no standard way to develop and enhance programs and services, Service Design can play a valuable role in ensuring that services are being offered holistically and consider the needs of all learners by involving them in the service development process. Service Design can also equip student affairs practitioners with tools to be less reactive in their program development, allowing them to develop programs and services without duplicating efforts. It can also provide tools to departments to make their programs and services more effective, as well as better highlight the value of their programs and services to learners and decision makers within the institution.

To reap the benefits that Service Design can offer, colleges in Ontario will likely need to invest in both short-term and long-term solutions. Institutions will have to invest in the learner experience by ensuring that services are being offered in a cohesive manner. Leveraging Service Design will require embedding Service Design language into colleges' strategic plans, as well as upfront investment in the resourcing required to build up institutional capacity to put Service Design into practice. Student affairs practitioners can then begin to further leverage Service Design tools to identify problems with programs and services and address them in a holistic manner. With tactful incorporation of Service Design into their existing practices, colleges in Ontario could set themselves apart as destinations for learning that provide a holistic experience for all learners.

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# Appendix

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# Appendix A - Interview Questions

Table outlining main questions and follow-up questions asked during semi-structured interviews.

Key Questions	Probes and Potential Follow-ups
Q1 Can you tell me a bit about your current role at the College?	1.1 What are some of the key tasks you do in your role? 1.2 Does your role involve working directly with students?
Q2. What programs and services are currently offered by your department to students?	2.1 Where does your department currently sit in the organization?
Q3. What if any other areas of the College that run similar programs and services?	3.1 What has your experience been like when collaborating with other departments?
Q4. How do you go about making decisions around what programs/services need to be developed?	4.1 Are students involved in the development process? 4.2 Describe to me the steps that you would take? For example, who tells you what you need to make a program. Maybe choose a program you've developed in the past and walk me through the steps of doing it. • Follow-up - Is that typical of how all programs are developed? 4.3 What methods/tools do you use when developing programs and services? 4.4 When programs are developed how are existing programs taken into account? 4.5 What factors do you consider when developing programs and services?
Q5. Can you walk me through your typical process for developing a program or service?  Follow-up: What are some of the challenges you face when designing programs and services?	5.1 What was your experience like using Service Design? 5.2 How have you been involved? 5.3 What do you think about the outcome of using Service Design? 5.4 What does Service Design entail & how would you define it?
Q6. Are you familiar with a design practice called Service Design? If yes, follow-up on experience with Service Design. If no, introduce the Service Design	Provide definition: "Service Design helps to innovate (create new) or improve (existing) services to make them more useful, usable, desirable for clients and are efficient as well as effective for organizations. It is a new holistic, multi-disciplinary, integrative field (Moritz, 2008)
Q7. Based on what I shared with you, I'm curious to hear your thoughts on the potential of applying Service Design to develop student service and programs? Q8. What are some of the challenges you anticipate would need to be resolved in order for you to be able to use Service Design? Q9. What conditions need to be in place in order for Service Design to work at your College?	How do you envision Service Design working at your College?



