

**Surviving and Thriving in a  
COVID-19 Remote  
Learning Context:  
A Survey of Post-Secondary  
Students and Instructors  
in Ontario**

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## **Dedication**

This report is dedicated to the students and instructors who so generously gave of their time and expertise by informing the data contained within this report.

Their discerning reflections and feedback will hopefully enhance learning within the post-secondary educational landscape in Ontario, which has forever been transformed due to the COVID-19 pandemic.



This project was funded by eCampusOntario

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**March 2021**

## ACKNOWLEDGEMENTS

The opportunity to work on this project was, in many ways, a journey into understanding the strengths and challenges of our collective remote learning environments during a global pandemic. A rare opportunity indeed. Our research team was particularly interested in this project given that many of our researchers are recent graduates or current graduate students who have been on the receiving end of the now infamous “pivot” to remote learning. What is presented herein are the fruits of our collective labour whereby we were able to capture a “snapshot” of the remote learning landscape, a landscape which has characterized teaching and learning in Ontario post-secondary institutions since March 2020. More importantly, the recommendations resultant from this research may prove to be relevant and meaningful for both college and university stakeholders moving forward in a post-COVID educational environment.

This report is the culmination of months of hard work by our team, who were dedicated to understanding the depth, scope, and textures of post-secondary education in Ontario, particularly as it relates to the challenges and opportunities brought about by the precipitous shift to remote learning.

Special thanks are attributed to Andrew Malcolm, who discovered the Student Experience Design (SXD) Lab and eCampusOntario and encouraged our team to apply for the project. We are also grateful for his initial work on the environmental scan for this report. The labour-intensive research that was undertaken could not have been executed without the discerning eyes of Anna Markov, Research Associate at the Manulife Centre for Community Health Research and Student Experience and Outreach Coordinator at the Lyle S. Hallman Faculty of Social Work. Her understanding of student needs, her research wisdom, and commitment to research excellence brought to fruition this collective enterprise. Rachel Yavnai, Research and Community Project Coordinator for the Manulife Centre for Community Health Research – our academic cat herder – was instrumental in conceptualizing and administering the survey, as well as pulling together the multiple team members and their varying contributions with legendary patience and enviable ease. Coordinating such a project with so many stakeholders is not an easy task, but Rachel’s steady hand ensured all were meaningfully engaged within the project. Dr. Michael Woodford, Professor at the Lyle S. Hallman Faculty of Social Work, generously reviewed the data collection tools at the beginning of the journey and provided support when called upon. Dr. Karun Karki surrendered much of his December break analyzing the quantitative data in order that we might complete the report in the timelines allotted to this project. We are grateful to both of our quantitative consultants for their attention to detail and discerning feedback.

I am especially thankful for all the hard work conducted by Master of Social Work (MSW) students Brittany Bruce, Rachel Estok, Victoria Dickson, Sheila Mirafzal, and Laura McMaster for their diligence in contributing to various aspects of the research process. While students were centered at the heart of this research journey, I would be remiss if I were not to acknowledge the symbiotic relationship that exists between learner and instructor. As such, while the focus of the project is to enhance support for student learners, this can only occur when those commissioned to administer said learning are also supported in their efforts to teach.

Finally, I am deeply thankful to the SXD Lab for believing that our team could carry through the laborious work of conducting a large, provincial survey during a global pandemic. As evidenced by the data collected, the team did not disappoint. I believe this is due, in large part, to their

deep investment as remote learners and instructors. Given the context and limitations of this research project, we nonetheless believe that what we have unearthed may be relevant to our committed SXD Lab ambassadors and members of our supervisory research group – Chris Fernlund and Julie Huh – with whom we cultivated an online Zoom relationship and who were consistently supportive in all aspects of the roll out of this project. It is hoped that the results of this snapshot of remote learning in Ontario post-secondary institutions will help the SXD Lab and eCampusOntario continue supporting students to not only survive remote learning, but thrive within human-centered, technology-enabled solutions in a post-pandemic educational environment.

Respectfully,

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## EXECUTIVE SUMMARY

This research project examined many of the effects on teaching and learning at several Ontario post-secondary institutions due to the COVID-19 pandemic. A total of 793 participants (611 students and 182 instructors) from across Ontario participated in the study, providing their perspectives on the current remote post-secondary educational landscape. Findings from this research shone a spotlight on the teaching and learning opportunities created for both instructors and students, as well as the challenges and needs experienced in the transition to remote learning.

While the pivot began in March 2020, this particular research project provides a snapshot of the unique experiences and perceptions of students and instructors as institutions transitioned to remote learning in the Fall of 2020 in a more measured and deliberate capacity. Given our collective immersion and resignation within the realities of the pandemic on how education was and is now delivered, it is the hope that findings from this research and the recommendations provided herein serve as a starting point for conversations regarding the future of post-secondary education and remote learning in a post-COVID world.

In our proposal to the Student Experience Design (SXD) Lab and eCampusOntario, our research team proposed to investigate the following:

- **Which aspects of online learning do students and educators identify as most helpful and/or challenging in the online student learning experience?**
- **What gaps do students and educators identify as influencing the teaching and learning experience?**
- **What recommendations can be gleaned to optimize wraparound supports for online learners?**

In our journey through this project, our team understood that it was a frenzied chore in March 2020 for university and college administrators and instructors to pivot to remote learning modalities. Ultimately, what has emerged from this report are narratives of both unmitigated challenges and unanticipated positive outcomes garnered from this transitional experience. The report findings highlight important factors that impact online learner experiences, including **academic factors** (i.e., aspects related to course design; instructor-specific factors; class engagement; concerns regarding the perceived quality of learning; interest in the course; and opportunities for skill development) and **non-academic factors** (i.e., difficulties learning from home; impacts on mental health and wellbeing; flexibility, independence, and access to learning; comfort and convenience of learning from home; opportunities to connect with peers; use of student supports/institutional resources; and feedback solicitation).

Overall, the findings suggest that there is no one-size-fits-all approach to learning online. Learning is a textured experience between student and educator. College and university administrators and instructors should not be the only stakeholders meaningfully responding to heterogenous student needs; other institution stakeholders must also be responsive, such as campus service providers, peer mentors, student experience coordinators, and community connectors. According to our findings, while students overwhelmingly felt supported and

engaged by their instructors, there is room for a holistic and coordinated approach to remote teaching and learning. With the help of the provincial government, policymakers, students, and staff, an environment can be created to foster academic success. Students are needed in key stakeholder roles to infuse their expertise into the development and sustainability of supportive educational measures. They must be thought of not just as consumers in the educational system, but stakeholders that shape the ongoing evolution of the post-secondary experience. Additionally, equitable resource allocation amongst instructors must be a priority in order to deliver high-quality, responsive, and engaging remote education for post-secondary students.

The findings also revealed the inherent strengths in remote teaching and learning that were not initially evident. Neurodivergent, mature, and other equity-seeking students identified helpful aspects of online learning that in-person learning did not provide, thus highlighting opportunities for growth in all areas of education. Additionally, findings suggest that students and instructors value academic factors differently, which can be seen in the discrepancy of survey respondents; while students and instructors agree that interest in the course and course design are important factors in a student's online learning experience, they disagreed on factors such as classroom environment and available supports for students. Discrepancies such as this are useful in understanding how to best allocate time and resources in online teaching and what instructors can prioritize for an optimal remote classroom.

From these findings, we have conceptualized the following recommendations:

1. **Enhanced institutional and departmental supports for instructors.** Throughout this research, students repeatedly highlighted instructor-specific factors – instructor support, availability, technological skills, and flexibility, instructional design, and classroom engagement – and the significant impact that their instructors had on their academic experience and overall student experiences. To best meet student needs and create pedagogical environments that are aligned with these beneficial factors, it is imperative that instructor capacity and resources are considered. Typically, much of the onus is put on instructors to support student learning and engagement inside and outside of the classroom. These expectations, however, must be supported by increased financial and human resources and the provision of necessary pedagogical tools.
2. **Flexible, engaging, realistic, and student-centered instructional and course design.** Students identified aspects related to instructional and course design as one of the key factors impacting their experience as online learners. The primary themes discussed by students were as follows: the organization and accessibility of course materials and the learning platform, the assessment methods used in class, the workload, the methods of course delivery and types of learning tools offered, as well as the course expectations. Diverse perspectives and preferences were expressed by students, making it clear that pedagogical methodologies need to be enhanced to provide opportunities for personalized, customizable, and flexible student-centered pedagogy that meet diverse student needs.
3. **An infusion of an equity, diversity, and inclusion (EDI) lens into the requirements and practices of remote learning and teaching.** Creating online learning environments that infuse principles of equity, diversity, and inclusion (EDI) into their content and course delivery is crucial for ensuring an equitable educational experience for all students. When sustaining remote education practices beyond transitional measures, intentional efforts must ensure accessibility through design which includes



closed captions, audio supports, as well as provisions for educational design professionals to develop accessible courses from the ground up. Beyond accessibility, remote learning must recognize the diverse needs and realities of students and what disparities and barriers exist for students that may hinder their learning; requirements of studying from home have placed these EDI considerations at the forefront of online teaching and learning pedagogy.

4. **Coordinated, accessible, wraparound student-centered supports and services.** Student supports and services must go beyond academically-focused resources and also prioritize student mental health, student experience, and peer-to-peer connections. Many students identified screen fatigue, the impacts of remote learning on physical and mental health, difficulties balancing school and life, and lack of interaction with peers as significant challenges in their experience as online learners. These challenges necessitate an exploration of the institutional supports available to students to support them as remote learners, particularly throughout the pandemic.
5. **Enhanced investments in student experience, community building, and peer-to-peer programming.** Despite opportunities for social connections outside of the classroom, many students explained that, with increasing workloads and responsibilities, they struggle to find the time to attend such programming or do not know how to access these opportunities. Nonetheless, students' need for interactions with peers, both inside and outside of the classroom, is evident. The development of student experience roles, community connectors and other peer support roles is encouraged for all post-secondary institutions in order to enhance the student learning experience.
6. **Development of practice guidelines, best practices, and evaluation and quality assurance mechanisms for remote course delivery.** Findings illustrated significant variability in the expectations and requirements asked of students, as well as the extent of flexibility and accommodations offered. This highlights the need for the development of clear practice guidelines and quality benchmarks in order to ensure consistency in course design and requirements. Additionally, students' dissatisfaction with elements of their education and learning experience necessitates the development and implementation of evaluation and quality assurance mechanisms embedded into distance education systems. These include meaningful and intentional efforts to engage stakeholders – including students, instructors, and staff – to collaboratively design evaluation mechanisms and practice guidelines.
7. **Continued creation of knowledge, collaboration, and information sharing of best practices in online education.** It is imperative that knowledge regarding the best practices and opportunities within remote learning continues to be explored, researched, and shared through meaningful collaborations between stakeholders within Ontario post-secondary institutions. Knowledge dissemination through conferences, virtual online education hubs, and the creation of a provincial association for student experience and community connectors are suggested avenues of exploration. Lastly, it is recommended that resources are allocated for the continual evaluation and study of online education, including cross-sectional and longitudinal studies of student and instructor experiences of remote learning.

## INTRODUCTION

The global pandemic has revolutionized the post-secondary educational landscape in Ontario irrevocably. COVID-19 necessitated an immediate transition to a remote format of teaching and learning; this institutional repositioning has been ongoing ever since. Located in the Lyle S. Hallman Faculty of Social Work at Wilfrid Laurier University in Kitchener, ON, members of our core research team directly observed the impact of remote learning on instructors and students alike. The research conducted within our team had to also pivot, as did all our ongoing community engagement projects. Academic life continued, albeit completely transformed; it became evident that the emergency remote learning methods implemented in the Spring would be here to stay.

While gearing up for the Fall 2020 semester, our team responded to an invitation by eCampusOntario and the Student Experience Design (SXD) Lab, soliciting the efforts of those interested in exploring the current realities of online learners and educators in Ontario. Being immersed in the field ourselves, this seemed to perfectly marry our interests and expertise. Our proposed project was subsequently chosen by the funder, who shared our preoccupation for what this project could mean for learners and educators. Our team circulated an online survey, which collected quantitative and qualitative data from students and instructors at several post-secondary institutions in Ontario to shape the development of this report. The resultant data has informed the recommendations for online learning wraparound strategies to support students and instructors both in the current educational environment and beyond.

What follows is a brief literature review to provide context for online and remote teaching and learning pedagogy, the data methods and collections achieved through the project, and our proposed recommendations.

# LITERATURE REVIEW

## **Brief Context of Distance Education and Online Student Learning**

Distance education is not a new phenomenon; its antecedents date back almost 300 years (Kentnor, 2015). It is a learning modality whereby the student and the instructor are physically apart (Haughey, 2013). Generally speaking, distance learning allows students to learn anywhere, anytime and at their own pace (Haughey, 2013). It is a learning modality that traditionally has attracted mature students due to competing life demands and the flexibility to learn anytime (Kizilcec & Halawa, 2015). It is also amenable to those individuals living in remote or northern communities. Due to the COVID-19 pandemic, nearly 1.6 billion learners worldwide have been compromised based on statistics provided by school closures (Schrumm, 2020). Therefore, almost all academic institutions immediately transformed their learning modalities into a remote/online format to allow students to continue their studies.

In a non-crisis environment, high quality virtual learning allows students to collaborate and communicate with peers and instructors, and potentially identify with new social and academic communities at their institutions (Bryd, 2016; The Globe and Mail, 2020). This online interaction assists many students in feeling a sense of belonging, resulting in a willingness to support peers, share with others, and feel responsible to their learning groups (Bryd, 2016). Evidently, due to the COVID-19 pandemic, many post-secondary students enrolled have experienced remote learning; however, they report varying levels of satisfaction within this experience. The following section will explore specific student experiences with online learning and outline supports as identified in the literature. It is important to note that, for the purposes of this literature review, the term “distance education” refers to various modalities of offering courses outside the parameters of the traditional classroom. Historically, correspondence courses were centered as the privileged learning method, followed by teleconferencing, videoconferencing, and finally the development of online courses. When the pandemic necessitated the pivot from face-to-face classes, the terminology of “remote” learning was adopted by many academic institutions. In this report, the data gathered will focus on “remote” teaching and learning, however the scholarship often utilizes the term “distance education” as a reference to its history prior to 2020. Furthermore, we use the terms “synchronous” and “asynchronous” to refer to courses taught in real-time and at one’s own pace, respectively.

## **Online Student Experience and Support**

Several research articles our team reviewed outlined that students enjoyed online learning when online content was engaging, provided student autonomy, had short or minimal lectures, and guidelines from the instructor were clear (Bernier, et al., 2016; Lee, 2010; Lee et al., 2015; Robinson & Hullinger, 2008; The Globe and Mail, 2020; Thompson & Martin, 2015). Mgutshini (2013) also shared that students felt higher satisfaction in online learning environments, as their ideas and opinions could be shared equally. These students expressed that in-person class discussions were often dominated by louder, more expressive students (Mgutshini, 2013).

Thompson & Martin (2015) share the “flipped learning” style, where students take part in active learning rather than listening or watching lectures. Thompson & Martin (2015) state that flipped learning allows students to gain a deeper understanding of the course material, as they may review it at their own pace. These authors found that most students enjoyed this style of

learning, as it was engaging and effective (Thompson & Martin, 2015). However, their research also found that student evaluations indicated that students would have preferred face-to-face learning, rather than having the online component; this may be due to students struggling with independent learning (Thompson & Martin, 2015).

Technical difficulties were noted in numerous academic articles as a challenge to online learners (Public Health Agency of Canada [PHAC], 2020; Kizilcec & Halawa, 2015; Lee, 2020), and that that distance education requires personal digital devices as well as a strong internet connection (Schrumm, 2020). Students who lack access to a personal device or internet, such as those living in rural areas, living in precarious situations, or living in a lower-income household can be negatively affected (Schrumm, 2020; The Globe and Mail, 2020). In addition, Kizilcec & Halawa (2015) outline that many international students struggle with connectivity issues and, as a result, may disengage in learning. Students have different learning needs, and equitable access to devices and internet need to be considered when offering distance education courses, particularly when not supplemented with in-person education (PHAC, 2020). Lee (2010) highlighted that service quality was necessary for motivating students to stay engaged and have a positive online learning experience. Therefore, it may be necessary for institutions to provide tools for students who are experiencing accessibility issues when enrolled in distance education courses, especially when learning remotely is the only option available (Schrumm, 2020).

Different scholars suggested that distance education courses limited the development of some skills that students in face-to-face classes would build (Robinson & Hullinger, 2015; Schrumm, 2020). In one article, students believed that online or distance education courses did not enhance their speaking and presentation skills, as all work was completed through written assignments (Robinson & Hullinger, 2015). Schrumm's (2020) work highlighted that distance education courses often fall short in allowing students to develop socio-emotional abilities such as active listening, critically thinking, and speaking. Therefore, it is important for distance education courses to ensure that there are projects or course work developed that helps in the enhancement of these skills.

With regards to critical supports for online learners, Robinson & Hullinger (2008) reported that students who were taking distance education courses felt they had to work harder on their online classes, whereas Kizilcec & Halawa (2015) outlined that distance education students experienced challenging time-related issues, were unable to meet deadlines, and the courses required too much of their time. Pather et al. (2020) suggested that for a distance education course to be successful for students, instructors and peers need to be present for students to remain engaged. Further, Thompson & Martin (2015) outline that students prefer to be taught by the same instructor for the entire course, indicating, that students want to feel a connection to their instructor. In addition, it is important to recognize that there are different learning needs and requirements for students, and that online experiences should offer a level of personalized education through varying digital tools (Schrumm, 2020). Lastly, to succeed in an online learning environment and remain resilient, PHAC emphasizes the need for students to have access to comprehensive mental health supports (2020).

## Remote Teaching Transition: COVID-19 Context

To create a learning environment that remote students can thrive in, it is important to thoughtfully review and engage with existing best practices while also being mindful of the unique COVID-19 situation that characterizes the current academic reality. While it was not possible to seamlessly transition to remote learning during this period, the information provided in this section serves to establish the available foundational knowledge since remote post-secondary education in Ontario is ongoing.

The COVID-19 pandemic challenged educators to transition to a remote teaching environment quickly and efficiently, often with limited resources available to facilitate this pivot. Many instructors and administrators have shared with the research team that this was not, by any means, an easy feat. While each institution adapted, some authors have found a few recommendations that can make the process not only better for instructors, but for students as well moving forward (Best Practices and Pitfalls, 2020; Blended Online Learning, 2020; O'Malley, 2017; Pather et al., 2020). Pather and colleagues (2020) outline the six (6) "C's" for remote teaching; these include change and flexibility, clear communication, clarifying expectations, community care, constructive new material, and continuity planning. This model has potential to be adapted for further utilization in remote and online learning modalities.

In addition, a number of authors outline that successful online courses incorporate face-to-face teaching and student communication as much as possible (Bryd, 2016; O'Malley, 2017; Teaching and Learning Services, 2020). O'Malley (2017) shares that to engage students, courses should not have long lectures, and instead focus on video and/or audio clips, hands-on exercises, and student discussions. The author also outlines that any information presented should be done in 10-minute increments to keep students engaged and interested (O'Malley, 2017). O'Malley (2017) highlights that discussion groups should be a maximum of ten (10) students, and that class sizes should be kept small, between 20-30 students. Similarly, Teaching and Learning Services (2020) of McGill University highlights the importance of offering opportunities of learning to students in a variety of ways, such as breaking up long lectures and providing activities between them (The Globe and Mail, 2010).

Both Bryd (2016) and Teaching and Learning Services (2020) share that creating a remote course where there is a sense of community and well-being is important. Bryd (2016) outlines that any asynchronous classes must consider factors such as "transactional distance, social presence, social equality, small group activities, group facilitation, teaching style and learning stage, and community size" in order to create a community for students and the instructor in the course.

Lastly, in order for courses to transition to a remote environment, it is important for instructors to be flexible in times of change (Logel et al., 2020; Teaching and Learning Services, 2020). Instructors can offer students choice in assignments, grade distribution, and evaluation or rubric schemes; these choices allow students to better manage their course load and can promote wellbeing (Teaching and Learning Services, 2020). In addition, Logel et al. (2020) urge instructors to extend deadlines, offer alternate assignments, and allow students to have the option of choosing to receive credit/no-credit or percentage-based grading. In addition, it is important for instructors to be aware of equity challenges that their students may be facing in an online environment (Logel et al., 2020; The Globe and Mail, 2020). Many students do not have

the technology at home for online learning, may live in precarious situations, or have a disability that impacts their capacity to learn online (The Globe and Mail, 2020). If instructors want students to be successful, they should offer those students assistance and considerations as best they can (Logel et al., 2020).

We are acutely aware that the bridge between theory and practice was rendered most difficult by the multiple complexities that COVID produced. Many academics and administrators would say that the pivot, while most difficult, has led – ironically – to pathways of flexible and creative teaching and learning. The following sections will highlight some of the strengths and challenges of this pivot.

## METHODS

COVID-19 shaped the rollout of this research from beginning to end; as such, it was an exceptional time to conduct research of this scale. From this project's inception to conclusion, all activities – including study conceptualization, survey development, participant recruitment, data collection, analysis, and knowledge dissemination – occurred online. The reality of this research was an ongoing response to the global pandemic, which informed and influenced every step of the research process. The strategies implemented through our methods reflect this terrain.

Our research team and SXD Lab colleagues met virtually throughout the duration of the project, from September 2020 to March 2021, where ideas were shared and avenues for research recruitment strategies and knowledge mobilization were explored. To begin, succinct literature scans and reviews were conducted to prepare a foundational understanding of the existing context and best practices in the areas of the history of distance education, online student learning, online student experience and support, and best practices in the transition to remote learning. Subsequently, an environmental scan was conducted to identify existing online supports and resources made available to students on post-secondary institution websites across Ontario. The information gathered from the literature scans, literature reviews, and environmental scan clarified research objectives, informed the design of the survey and focus group questions, and provided a snapshot as to the Fall 2020 remote learning response from dozens of post-secondary institutions in Ontario. Consultation with Dr. Michael Woodford was sought to provide feedback on survey design.

Consequently, two surveys were created to capture the current unique perspectives and remote learning experiences of students and instructors. Both surveys included a combination of quantitative questions (i.e., Likert scales, ranking, multiple choice, and matrix tables) and qualitative questions (i.e., long-answer text responses). At the end of each online survey was an invitation to a focus group, where participants could indicate their interest and be selected through a random numbers generator to take part in the second stage of the research. An incentive in the form of a raffle was utilized for the survey, and participants had the option to enter their email for a chance to win one of three monetary prizes.

Ethics approval was sought through the Research Ethics Board (REB) at Wilfrid Laurier University to ensure that the research project and tools developed – including surveys, consent letters, and recruitment messaging – were ethically sound. Once ethics approval was received, recruitment efforts were initiated.

For this study, convenience sampling was conducted because a readily accessible, comprehensive list of post-secondary students, administrators, and instructors in Ontario does not exist. Recruitment involved outreach to an online network of student groups and educators across various post-secondary educational institutions throughout Ontario, including through online public channels and listservs. The research could not conduct in-person outreach on campuses due to mandated pandemic-related restrictions, school closures, and the current reality of remote-only education. Efforts were made to reach out equitably to all colleges and universities in Ontario, however, due to the organic reach of recruitment through social networks

and existing contacts, certain post-secondary institutions were over- and under-represented in the resultant data.

The student survey contained 110 questions, estimated to take 30-40 minutes to complete. The survey was divided into five main sections: eligibility screening, demographics, transitional programming, academic online learning experiences, and non-academic online experiences. The academic online learning experiences section asked questions regarding classroom experiences, opportunities to interact with peers, online class processes, and instructor-specific factors. The non-academic online experience section asked students to reflect on their use and experience with non-academic online student services.

The instructor survey contained 63 questions, estimated to take 20-30 minutes to complete. The survey was divided into four main sections: eligibility screening, demographics, online teaching experiences, and the instructor perspective on non-academic online student experiences. The online teaching experiences section asked instructors about their current courses, experiences interacting with students online, use of technology, and perception of institutional support. The non-academic online student experiences section asked instructors about their perception of student needs in relation to non-academic online student services.

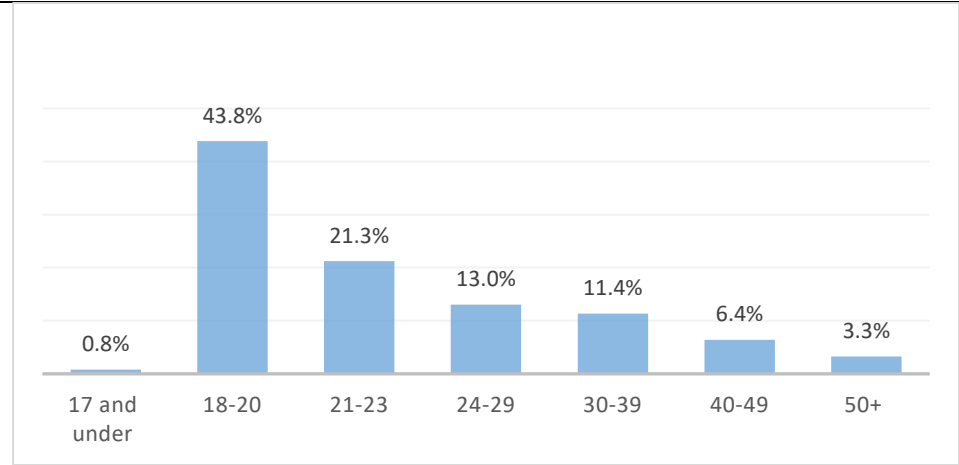
The survey opened on November 18, 2020 and closed on December 7, 2020. Upon closure, data analysis was performed by members of the research team using SPSS. Consultation was sought from Dr. Karun Karki to run analyses on the quantitative portions of the surveys. Simultaneously, analysis was conducted by research team members to determine themes within the qualitative responses.



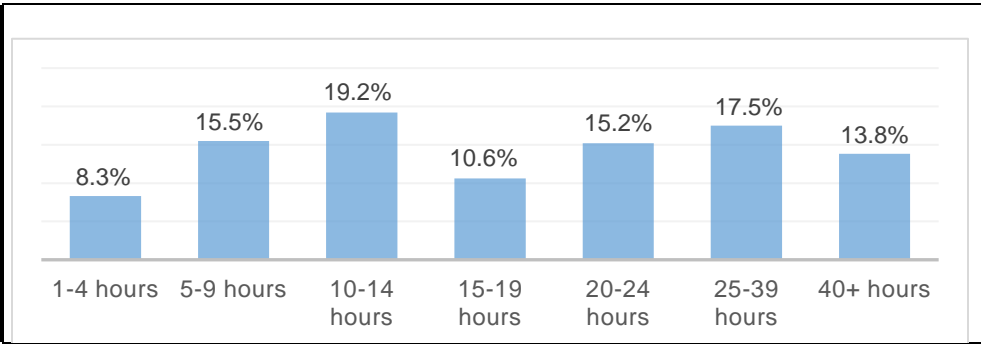
# DEMOGRAPHICS

A total of **611 students** and **182 instructors** from post-secondary institutions across Ontario participated in the study. Participants' demographic information is presented in the tables below.

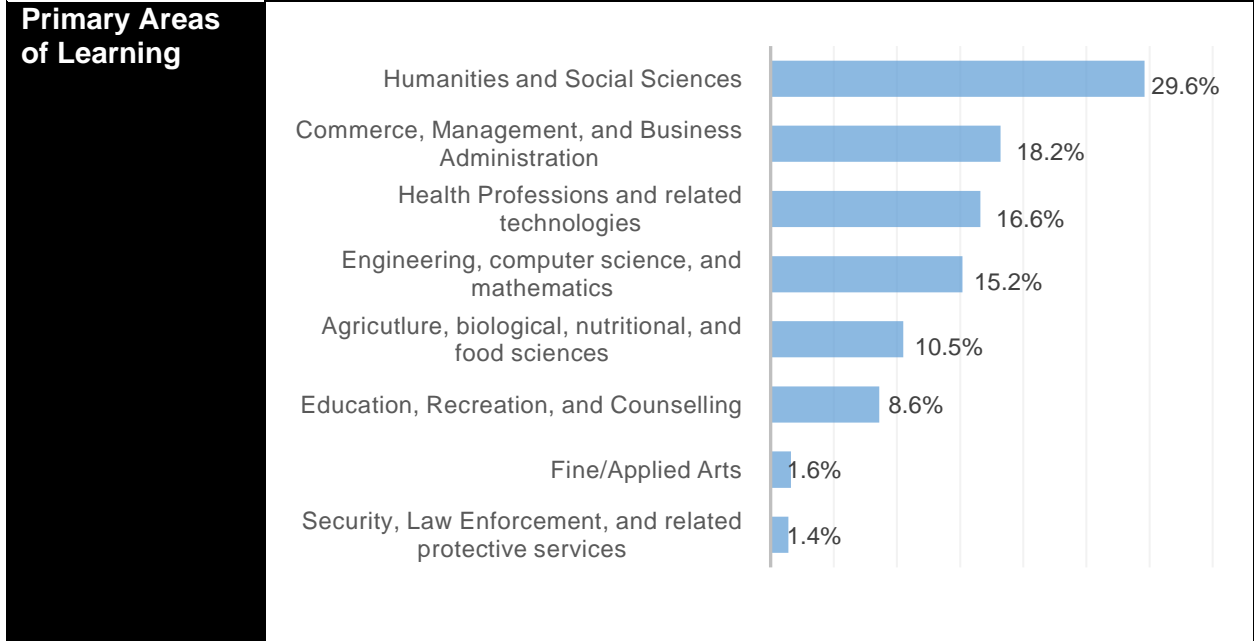
**TABLE 1: DEMOGRAPHIC INFORMATION FOR STUDENTS**

Students																	
<b>Average age</b>	25.3																
<b>Minimum age</b>	17																
<b>Maximum age</b>	67																
<b>Student Age Groups</b>	 <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <caption>Student Age Groups Data</caption> <thead> <tr> <th>Age Group</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>17 and under</td> <td>0.8%</td> </tr> <tr> <td>18-20</td> <td>43.8%</td> </tr> <tr> <td>21-23</td> <td>21.3%</td> </tr> <tr> <td>24-29</td> <td>13.0%</td> </tr> <tr> <td>30-39</td> <td>11.4%</td> </tr> <tr> <td>40-49</td> <td>6.4%</td> </tr> <tr> <td>50+</td> <td>3.3%</td> </tr> </tbody> </table>	Age Group	Percentage	17 and under	0.8%	18-20	43.8%	21-23	21.3%	24-29	13.0%	30-39	11.4%	40-49	6.4%	50+	3.3%
Age Group	Percentage																
17 and under	0.8%																
18-20	43.8%																
21-23	21.3%																
24-29	13.0%																
30-39	11.4%																
40-49	6.4%																
50+	3.3%																
<b>Gender Identity</b>	76.5% – Woman 22.4% – Man 1.1% – Trans/non-binary																
<b>Sexual Orientation</b>	73.1% – Heterosexual 21.1% – LGBTQ+ 5.8% – Prefer not to answer																
<b>Disability Status</b>	Of the participants that identified they had a disability: 73.6% – Emotional/mental health 12.0% – Neurodevelopmental/cognitive 7.7% – Learning disability 6.7% – Physical disability/condition																
<b>Person of Colour</b>	26.5% persons of colour																
<b>Type of Community</b>	43.1% – Urban 45.6% – Suburban 11.3% – Rural																
<b>Dependents Under 18</b>	12.0% – Yes Number of dependents: <ul style="list-style-type: none"> <li>• 35.0% – 1</li> <li>• 46.0% – 2</li> <li>• 13.0% – 3</li> <li>• 6.0% – 4 or more</li> </ul>																
<b>Caregiver</b>	8.4% caregivers																

<p><b>Type of Institution</b></p>	<p>A pie chart showing the distribution of students by institution type. The University category is represented by an orange slice and accounts for 83.8% of the total. The College category is represented by a blue slice and accounts for 16.2% of the total.</p> <table border="1"> <thead> <tr> <th>Institution Type</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>University</td> <td>83.8%</td> </tr> <tr> <td>College</td> <td>16.2%</td> </tr> </tbody> </table>	Institution Type	Percentage	University	83.8%	College	16.2%																																											
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<p><b>Year of Study by Level of Education</b></p>	<p>A grouped bar chart titled "Year of Study by Level of Education". The y-axis represents the percentage of students (0.0% to 90.0%). The x-axis represents the year of study (Year 1 to Year 6 or higher). The legend includes Bachelor's (blue), Masters (orange), Doctorate (grey), College Diploma (yellow), Post-graduate diploma (dark blue), and Professional certificate (green).</p> <table border="1"> <thead> <tr> <th>Year of Study</th> <th>Bachelor's</th> <th>Masters</th> <th>Doctorate</th> <th>College Diploma</th> <th>Post-graduate diploma</th> <th>Professional certificate</th> </tr> </thead> <tbody> <tr> <td>Year 1</td> <td>22.0%</td> <td>38.0%</td> <td>60.0%</td> <td>55.0%</td> <td>58.0%</td> <td>80.0%</td> </tr> <tr> <td>Year 2</td> <td>25.0%</td> <td>58.0%</td> <td>20.0%</td> <td>33.0%</td> <td>41.0%</td> <td>16.0%</td> </tr> <tr> <td>Year 3</td> <td>27.0%</td> <td>0.0%</td> <td>20.0%</td> <td>10.0%</td> <td>0.0%</td> <td>0.0%</td> </tr> <tr> <td>Year 4</td> <td>21.0%</td> <td>0.0%</td> <td>0.0%</td> <td>0.0%</td> <td>0.0%</td> <td>0.0%</td> </tr> <tr> <td>Year 5</td> <td>5.0%</td> <td>4.0%</td> <td>0.0%</td> <td>1.0%</td> <td>0.0%</td> <td>0.0%</td> </tr> <tr> <td>Year 6 or higher</td> <td>1.0%</td> <td>0.0%</td> <td>0.0%</td> <td>1.0%</td> <td>2.0%</td> <td>4.0%</td> </tr> </tbody> </table>	Year of Study	Bachelor's	Masters	Doctorate	College Diploma	Post-graduate diploma	Professional certificate	Year 1	22.0%	38.0%	60.0%	55.0%	58.0%	80.0%	Year 2	25.0%	58.0%	20.0%	33.0%	41.0%	16.0%	Year 3	27.0%	0.0%	20.0%	10.0%	0.0%	0.0%	Year 4	21.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Year 5	5.0%	4.0%	0.0%	1.0%	0.0%	0.0%	Year 6 or higher	1.0%	0.0%	0.0%	1.0%	2.0%	4.0%
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<p><b>Employment Status</b></p>	<p>8.4% working while attending school</p> <p>For students who stated that they were working while attending school, the average number of hours of work per week was as follows:</p>																																																	



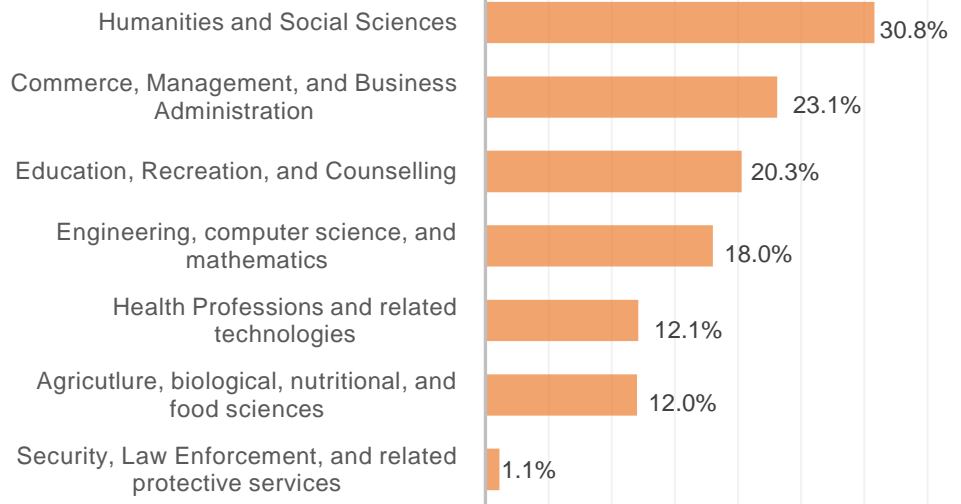
<b>International Student</b>	8.0% international students
<b>First Generation Student</b>	22.0% first-generation students



**TABLE 2: DEMOGRAPHIC INFORMATION FOR INSTRUCTORS**

Instructors													
<b>Average age</b>	49.6												
<b>Minimum age</b>	26												
<b>Maximum age</b>	78												
<b>Instructor Age Groups</b>	<table border="1"> <caption>Instructor Age Groups</caption> <thead> <tr> <th>Age Group</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>26-39</td> <td>2.3%</td> </tr> <tr> <td>30-39</td> <td>16.6%</td> </tr> <tr> <td>40-49</td> <td>26.3%</td> </tr> <tr> <td>50-64</td> <td>48.6%</td> </tr> <tr> <td>65+</td> <td>6.3%</td> </tr> </tbody> </table>	Age Group	Percentage	26-39	2.3%	30-39	16.6%	40-49	26.3%	50-64	48.6%	65+	6.3%
Age Group	Percentage												
26-39	2.3%												
30-39	16.6%												
40-49	26.3%												
50-64	48.6%												
65+	6.3%												
<b>Gender Identity</b>	66.3% – Woman 28.7% – Man 2.3% – Trans/non-binary												
<b>Sexual Orientation</b>	76.1% – Heterosexual 10.6% – LGBTQ+ 13.3% – Prefer not to answer												
<b>Disability Status</b>	Of the participants that identified that they had a disability: 42.9% – Physical disability/condition 28.5% – Emotional/mental health 20.1% – Learning disability 8.5% – Neurodevelopmental/cognitive												
<b>Person of Colour</b>	18.2% persons of colour												
<b>Type of Community</b>	55.2% – Urban 32.6% – Suburban 12.6% – Rural												
<b>School Affiliation</b>	54.0% – Full-time faculty 46.0% – Contract faculty												
<b>Years of Teaching Experience</b>	<table border="1"> <caption>Years of Teaching Experience</caption> <thead> <tr> <th>Experience Range</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>4 years or less</td> <td>17.1%</td> </tr> <tr> <td>5-9 years</td> <td>22.7%</td> </tr> <tr> <td>10-14 years</td> <td>22.1%</td> </tr> <tr> <td>15-19 years</td> <td>21.5%</td> </tr> <tr> <td>20 years or more</td> <td>16.6%</td> </tr> </tbody> </table>	Experience Range	Percentage	4 years or less	17.1%	5-9 years	22.7%	10-14 years	22.1%	15-19 years	21.5%	20 years or more	16.6%
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**Primary Area of Teaching**



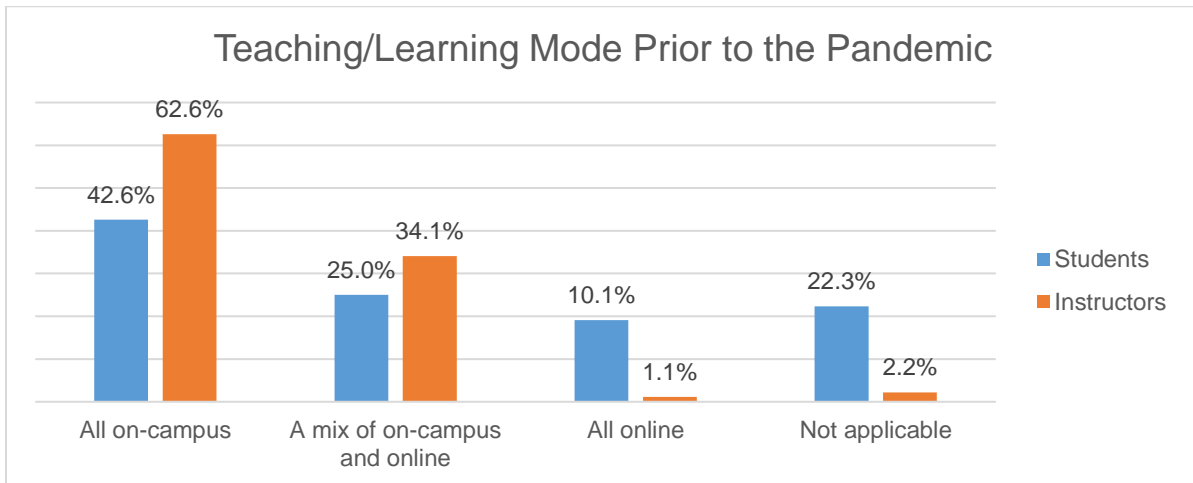
# FINDINGS

## Teaching and Learning Prior to the Pandemic

Both students and instructors were asked about their learning and teaching experiences prior to the pandemic, including the mode of learning/teaching, including experiences with online learning/teaching, and the number of courses and amount of time spent on schoolwork/class preparation prior to the pandemic. Some of these questions were also asked in the context of the Fall 2020 semester to examine whether differences between these factors pre-pandemic and in the Fall 2020 semester existed. These findings are presented below.

### LEARNING/TEACHING MODE PRIOR TO THE PANDEMIC

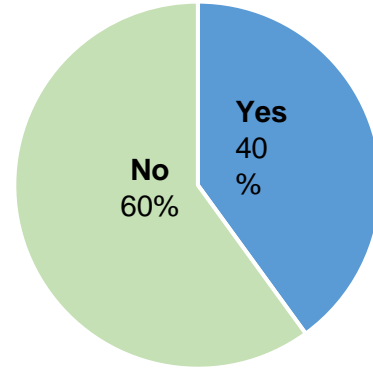
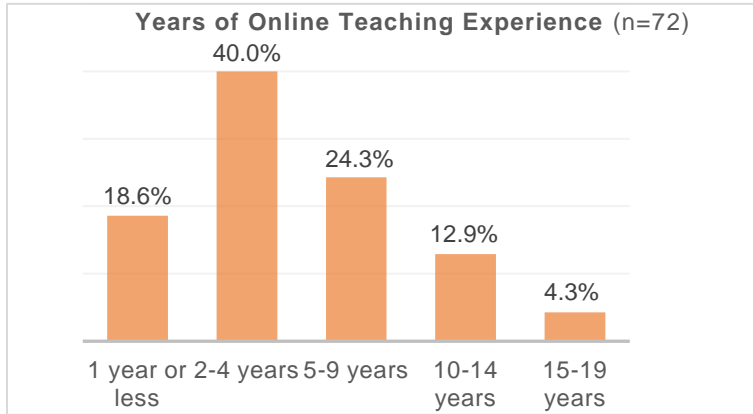
When asked what learning/teaching mode students and instructors, respectively, were primarily engaged in prior to the pandemic, the most common response for each group was “all on campus” (42.5% of students and 62.6% of instructors). While 10.1% of students indicated that prior to the pandemic they were learning fully online, only 1.1% of instructors stated that they were teaching fully online prior to the pandemic.



### ONLINE TEACHING EXPERIENCE PRIOR TO THE PANDEMIC:

Instructors (n=181) were also asked about their experience teaching online prior to the pandemic. The majority of instructors (60%) stated that prior to the pandemic, they have not taught online, while 40% stated that they have taught online prior to the pandemic.

Of those who said that they have had experience teaching online prior to the pandemic (n=72), the largest groups (40.0%) had 2-4 years of experience with online teaching, followed by 24.3% who had 5-9 years of experience, 18.6% who had 1 year or less of experience teaching online, 12.9% who had 10-14 years of experience, and 4.3% who had 15-19 years of online teaching experience.

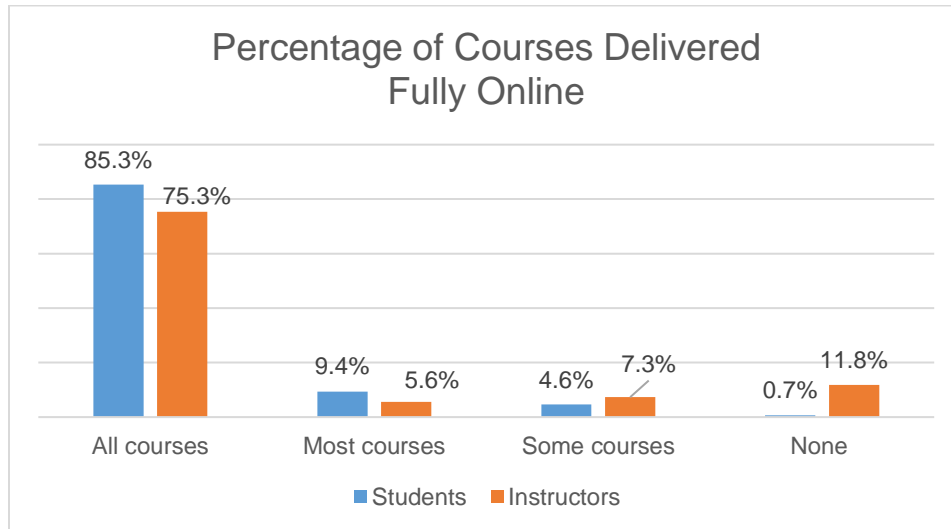


## The Remote Learning and Teaching Landscape in the Fall 2020 Semester

Students and instructors were asked about the remote learning environment in the Fall 2020 semester, including what mode of learning was delivered in their institution (i.e., fully online, fully in-person, or a mix of online and in-person) at that time, how online learning was delivered (i.e., through synchronous, asynchronous, or a mix of synchronous and asynchronous instruction), and what the average class sizes were.

### MODE OF COURSE DELIVERY

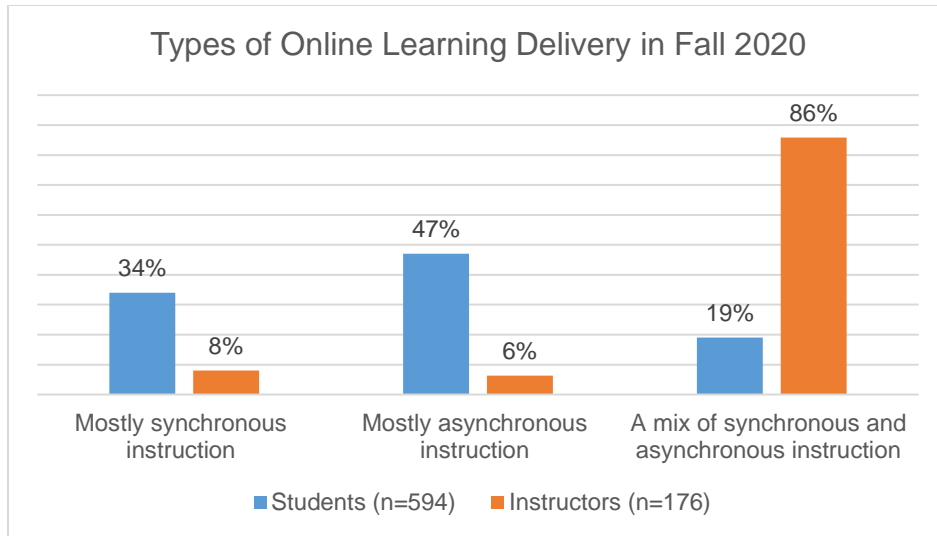
When asked about the mode of delivery of the courses that students and instructors were taking or teaching in the Fall 2020 semester, respectively, the majority of both students (85.3%) and instructors (75.3%) indicated that all of their courses were delivered fully online. Fourteen percent of students and 12.9% of instructors stated that most/some of their courses were being delivered fully online. While 11.8% of instructors said that none of their courses were delivered online (i.e., all in-person), only 0.7% of students indicated that they had exclusively in-person courses.



### TYPE OF ONLINE LEARNING CURRENTLY DELIVERED IN INSTITUTION

Students and instructors were also asked to indicate what types of online learning they were primarily engaged in during the Fall 2020 semester. While student responses varied, with most students (47%) stating that they were engaged in mostly asynchronous online learning, followed by 34% indicating that they were enrolled primarily in synchronous instruction, the majority of instructors (86%) stated that they were engaged in a mix of synchronous and asynchronous instruction.

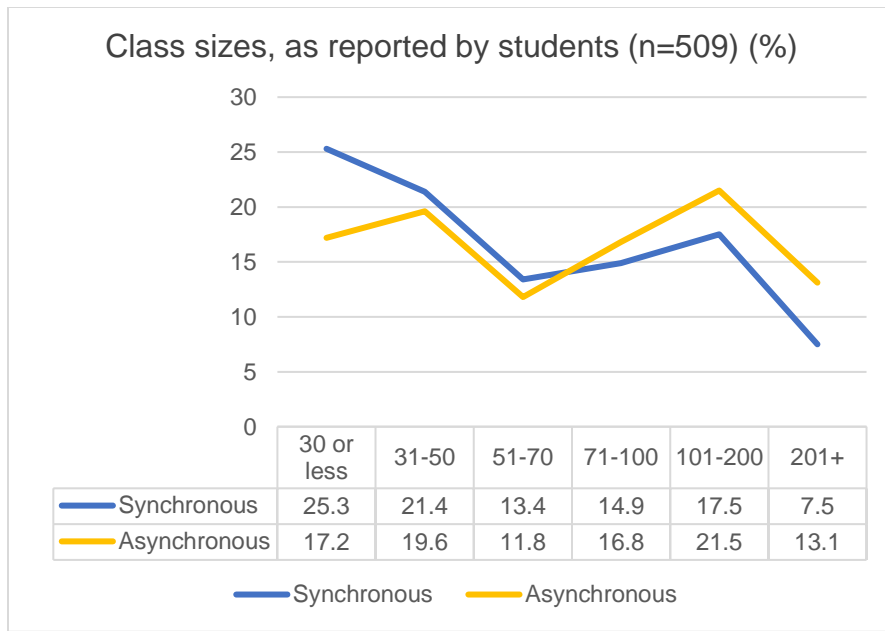




**AVERAGE CLASS SIZES**

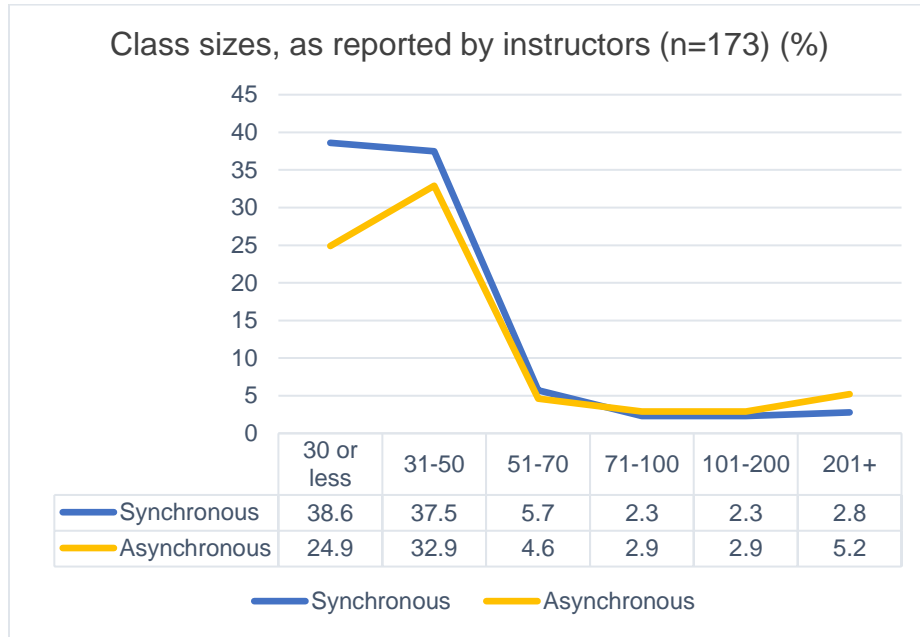
Students and instructors were asked to indicate what the average class sizes in both their synchronous and asynchronous courses were.

**STUDENTS:** Most of students stated that the average class size of their asynchronous classes was either 30 or less students or 31-50 students (25.3% and 21.4%, respectively). For asynchronous courses, most students indicated classes sizes of over 100 students (101-200, 21.5%; 201+ 13.1%).



**INSTRUCTORS:** Most instructors stated that the average class size of their synchronous classes was either 30 or less students or 31-50 students (38.6% and 37.6%, respectively). In regard to asynchronous classes, the numbers were similar; most instructors stated that their average class sizes were either 31-50 students or 30 or less students (32.9% and 24.9%, respectively).

In terms of average class size and delivery mode, for classes with 100 or more students, more student respondents reported participating in asynchronous classes (34.6%) than synchronous classes (25.0%). The same pattern is found for classes with 71-100 students, but it reverses for classes with 70 or less students. Among instructors, respondents indicated that synchronous classes were more common than asynchronous classes with average class size of 70 or below (81.8% vs 62.4%), but the pattern reverses for average classes of 71 or more students (synchronous 7.4% versus asynchronous 11.0%).



## Learning and Teaching Amidst the Transition to Remote Learning due to COVID-19

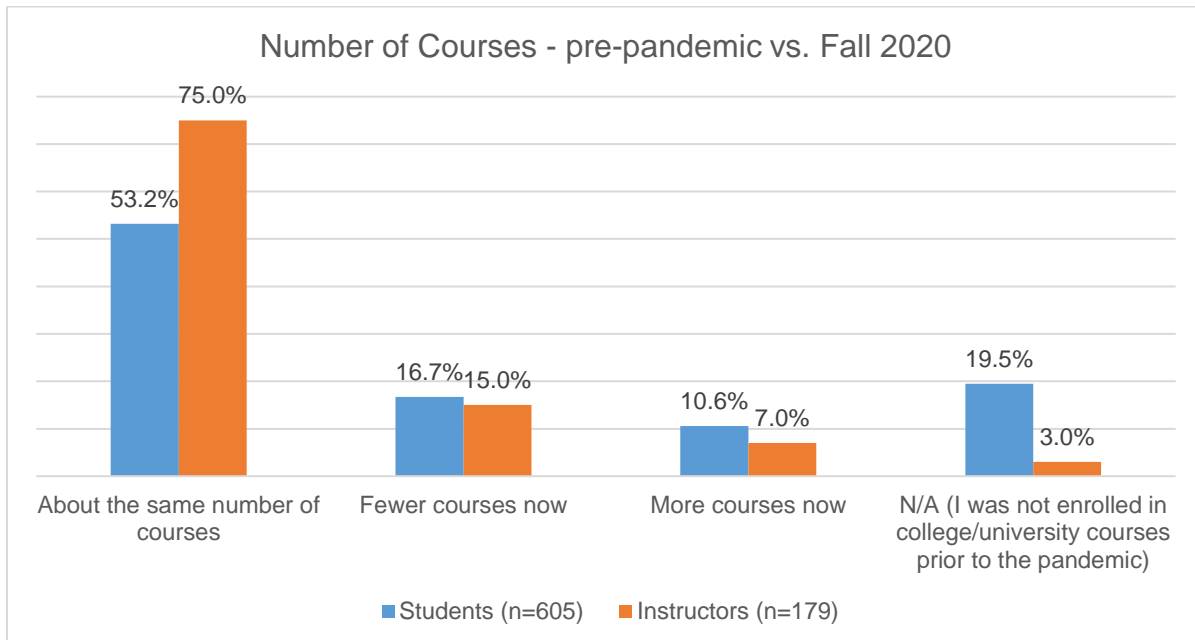
Students and instructors were asked about their learning and teaching experiences both pre-pandemic and during the Fall 2020 semester in order to assess whether the transition to remote learning due to COVID-19 had an impact on factors such as number of courses enrolled in/taught, average time spent on schoolwork/course preparation, and the overall experience of learning and teaching. Additionally, both students and instructors were asked questions regarding the availability and helpfulness of the training and resources offered by their institution, if any, to support the transition to remote learning and teaching. Findings are presented below that assess whether differences exist in those factors between pre-pandemic and Fall 2020. Other findings summarize the supports available during the transition.

### IMPACT ON LEARNING AND TEACHING

#### NUMBER OF COURSES ENROLLED IN/TAUGHT PRE-PANDEMIC VERSUS IN FALL 2020

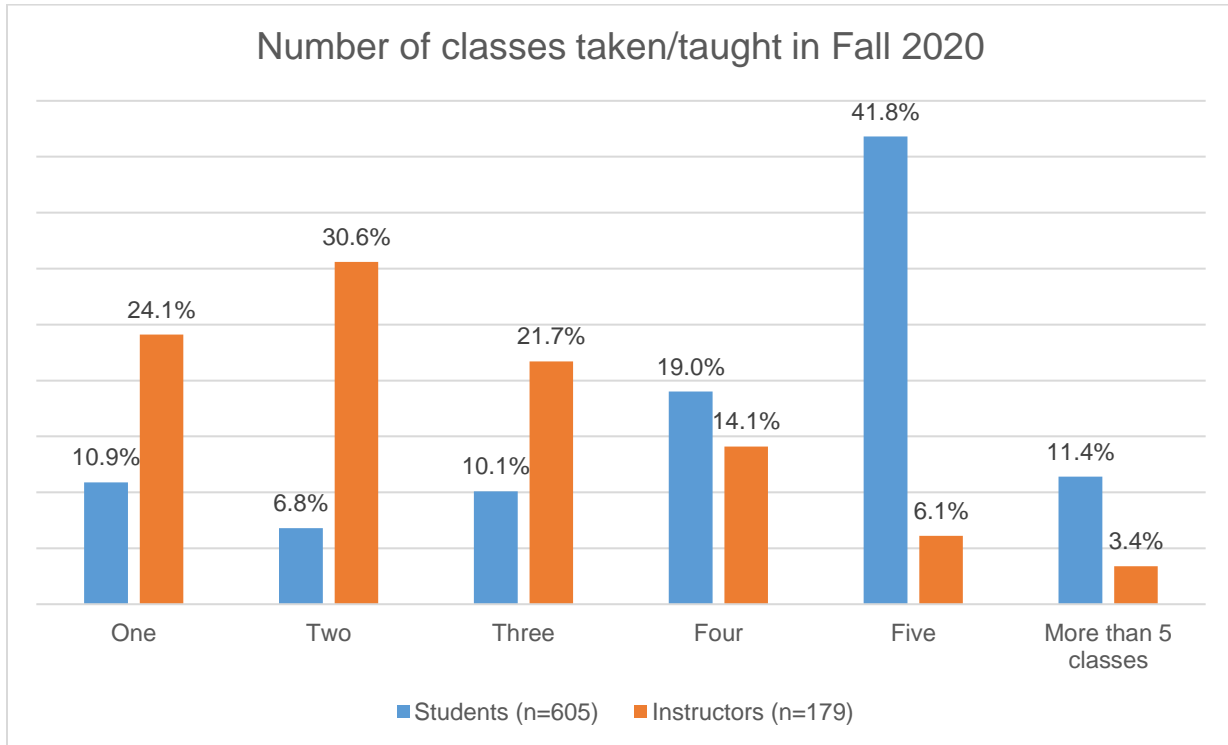
Students and instructors were asked whether the number of courses they were enrolled in/teaching changed in the transition to remote learning due to the pandemic.

The majority of both students/instructors – 53.2% and 75.0%, respectively – indicated that they were enrolled in/teaching about the same number of courses in the Fall 2020 semester as pre-pandemic. A similar percentage of students (16.7%) and instructors (15.0%) stated that they were taking/teaching fewer courses in Fall 2020 compared to prior to the pandemic. A smaller percentage (10.6% of students, and 7.0% of instructors) stated that they were taking/teaching more courses in Fall 2020 compared to prior to the pandemic.



In follow-up to the previous question, students/instructors were also asked to indicate the number of courses that they were enrolled in/teaching. Most students (41.8%) were enrolled in five courses; 19.0% were enrolled in four courses; a similar percentage of students were enrolled in one, three, or more than five courses, 10.9%, 10.1%, and 11.4%, respectively, and 6.8% were enrolled in two courses. Unlike students, the majority of instructors stated that they

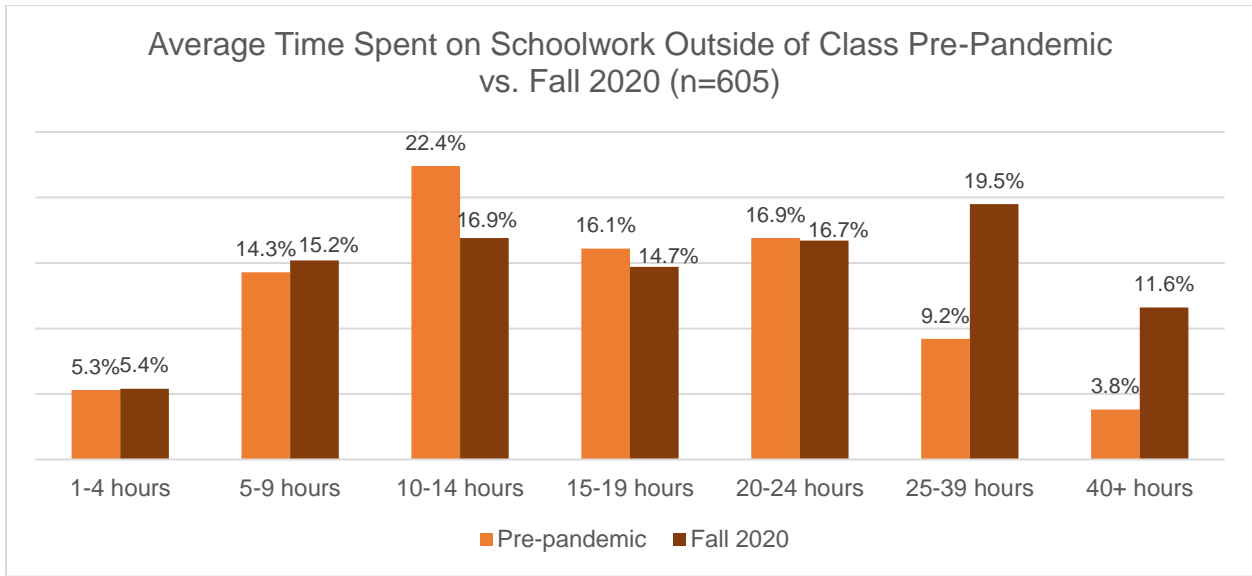
were teaching either two courses or one course (30.6% and 24.1%, respectively); 21.7% were teaching three courses, 14.1% four courses, 6.1% five courses, and 3.4% more than five courses (3.4%).



**AVERAGE TIME SPENT ON SCHOOLWORK/CLASS PREPARATION PER WEEK PRE-PANDEMIC VERSUS IN FALL 2020**

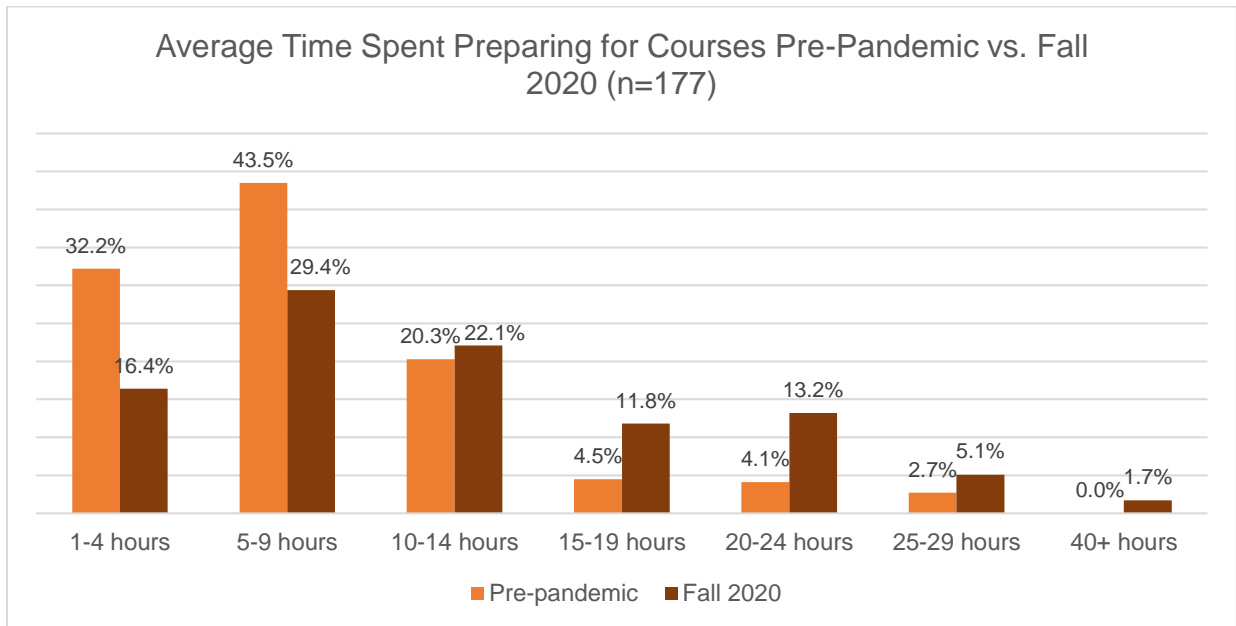
Both students and instructors were asked to reflect on the average amount of time that they spent on schoolwork/preparing for classes, both pre-pandemic as well as in Fall 2020.

**STUDENTS:** When comparing the average amount of time that students were spending on schoolwork outside of class prior to the pandemic with the amount of time spent in the Fall 2020 semester, results show that more students reported spending 20 or more hours on schoolwork since the transition to remote learning due to the pandemic. Specifically, prior to the pandemic, most students (**58.1%**) spent approximately between 1 and 19 hours per week on schoolwork (5.3% 1-4 hours, 14.3% 5-9 hours, 22.4% 10-14 hours, and 16.1% 15-19 hours), while **29.9%** spent 20-40+ hours on schoolwork per week (16.9% 20-24 hours, 9.2% 25-39 hours, and only 3.8% 40+ hours). In contrast, in the Fall 2020 semester, **52.2%** of students spent 1-19 hours per week on schoolwork, while **47.8%** reported spending 20-40+ hours on schoolwork. Although only 9.2% and 3.8% of students stated that they were spending 25-39 hours and 40+ hours, respectively, on schoolwork per week prior to the pandemic, these numbers increased considerably in the Fall 2020 semester (19.5% and 11.6%, respectively). This finding is also supported in the qualitative responses that students provided, whereby one of the most significant concerns identified by students was the increase in workload since transitioning to remote learning. This is discussed further in later sections.



**INSTRUCTORS:** Correspondingly, instructor responses showed that in Fall 2020, they were spending, on average, more time preparing for their classes than prior to the pandemic.

Prior to the pandemic, most instructors (**75.7%**) spent on average 1-9 hours preparing for courses, with the maximum amount of time spent being 25-29 hours per week (2.7%). In contrast, at the time of the survey during the Fall 2020 semester, most respondents were spending more on class preparation. During the Fall semester, **45.8%** of instructors reported spending 1-9 hours per week preparing for courses versus **52.2%** spending anywhere from 10-29 hours a week preparing for courses. Further, 1.7% of instructors indicated spending 40+ hours a week preparing for their courses. As displayed in the graph below, the number of instructors who were spending 15-19, 20-24, and 25-29 hours per week preparing for their courses, increased by 7.3, 9.1, and 2.4 percentage points respectively, compared to prior to the pandemic.



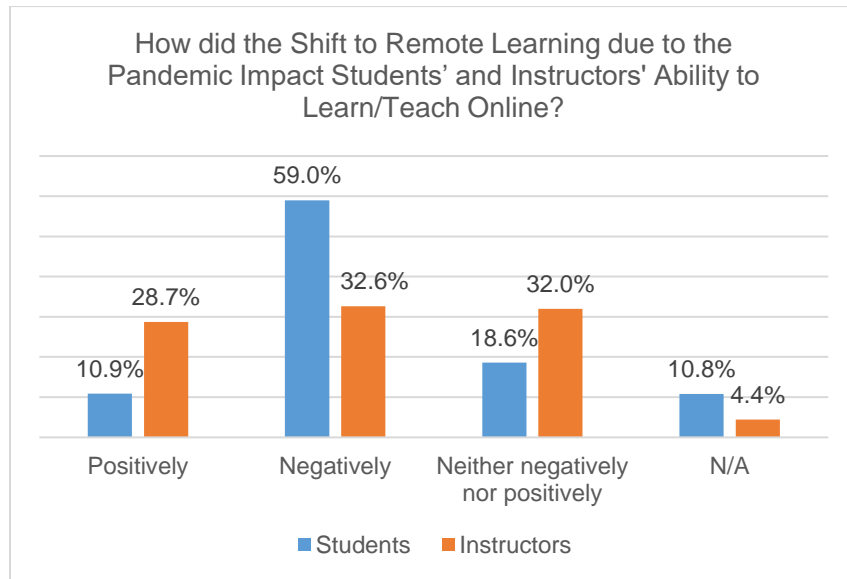
**IMPACT OF THE SHIFT TO REMOTE LEARNING ON ABILITY TO LEARN/TEACH ONLINE**

Both students and instructors were asked to reflect on how the shift to online learning/teaching due to the pandemic impacted their ability to learn/teach online.

**STUDENTS:** The majority of students (59%) stated that the shift to online learning due to the pandemic negatively impacted their ability to learn online. Only 10.9% of students stated that this shift positively affected their learning.

**INSTRUCTORS:** Instructor responses to this question varied considerably compared to the students' responses. Nearly one-third of the instructors stated that the shift to online learning due to the pandemic has negatively affected their ability to teach online. A similar percentage of instructors (32%) stated that this shift neither positively nor negatively impacted their ability to teach online, and 28.7% indicated that the impact was positive. It is important to note that a statistically significant difference existed in responses between full-time faculty and contract faculty. That is, compared to full-time faculty, more contract faculty indicated that the shift to remote learning either "positively impacted" (full-time 24.5%; contract 32.9%) or "neither positively nor negatively impacted" (full-time 29.6%; contract 35.4%) their online teaching ability. More full-time faculty indicated their ability to teach online was negatively impacted compared to their contract peers (full-time 43.9%; contract 19.5%).

These findings may suggest that more students perceive the shift to remote learning due to the pandemic as having a negative impact on their ability to learn compared to the perceived negative impact among instructors in terms of their ability to teach online.

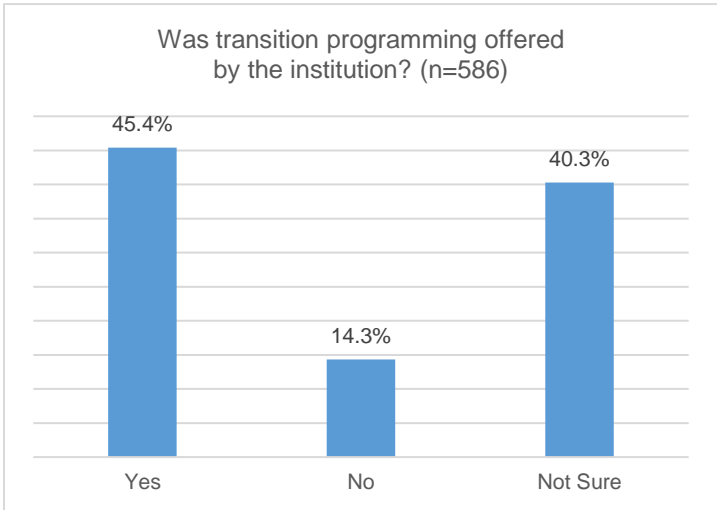


**SUPPORTING STUDENTS AND INSTRUCTORS DURING THE TRANSITION TO REMOTE LEARNING**

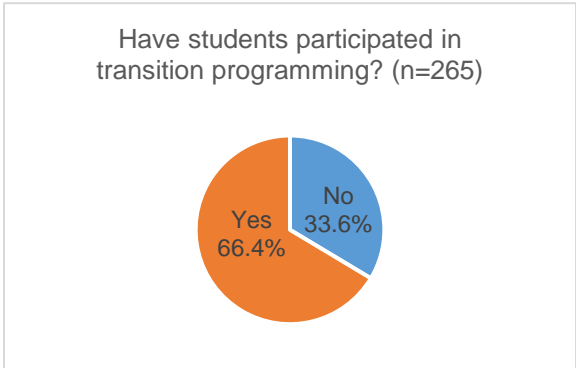
**TRAINING FOR ONLINE LEARNING/TEACHING**

**STUDENTS:**

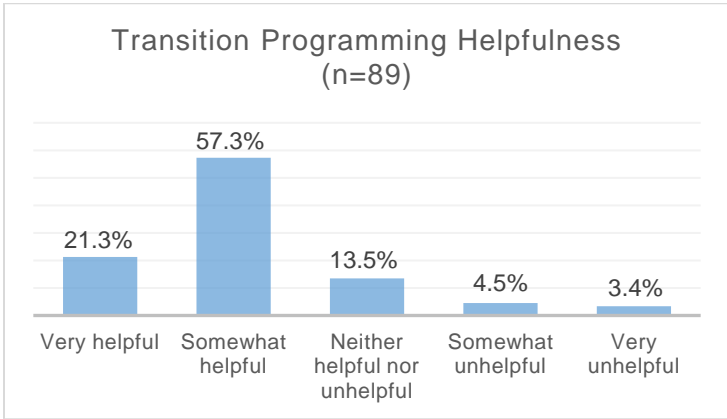
Students were asked whether their institution offered programming specific to transitioning to remote learning (e.g., an online module, video session about learning strategies for remote learning). Most students (45.5%) stated that their institution offered such programming, and 14.3% stated that they were not offered such programming. Interestingly, almost half of the sample (40.3%) stated that they were not sure whether their institution offered such programming or were not aware of this programming.



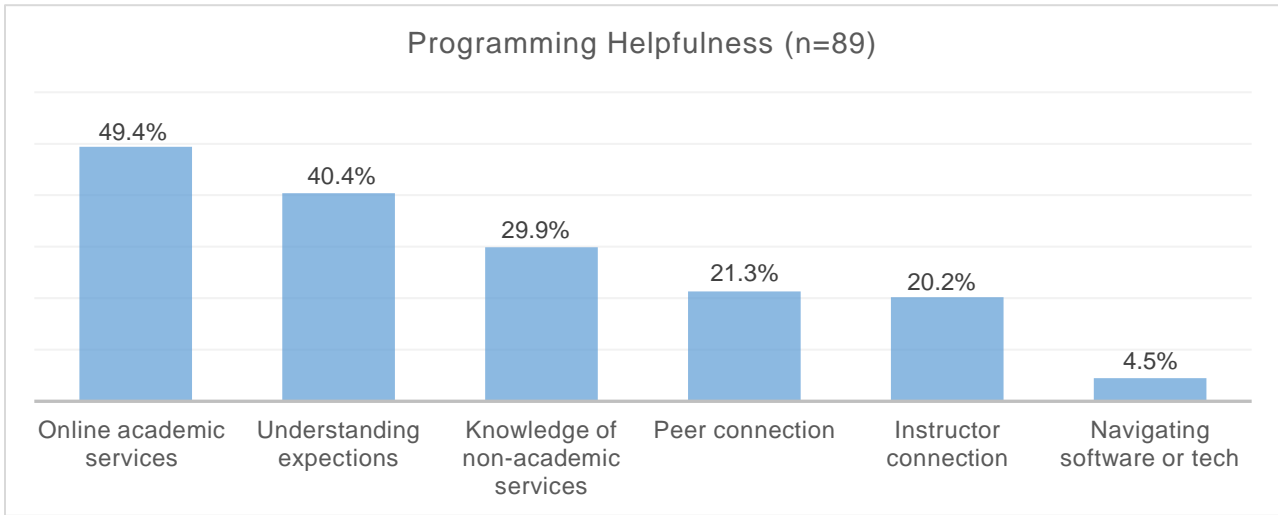
Those who said 'yes' to having transition programming offered by their institution, were asked whether they participated in this programming. The majority of students (66.4%) stated that they have participated in the programming, while 33.6% stated that they have not.



In follow-up, those who stated that they have participated in transition programming offered by their institution were asked to rate the helpfulness of the programming they attended. As shown in the graph on the right, the majority of students who participated in transition programming found it either very helpful (21.3%) or somewhat helpful (57.3%). Only 4.5% and 3.4% students found such programming somewhat unhelpful or very unhelpful, respectively.



Students identified a number of ways in which the programming was helpful to them. Most students (49.4%) indicated that the programming allowed them to learn more about online academic services; 40.4% stated that the programming helped them understand expectations; 29.9% indicated that the programming enhanced their knowledge of non-academic services; 21.3% stated that they were able to build peer connections through programming; 20.2% stated that they were able to build connections with instructors through programming; and, 4.5% stated that programming helped them navigate software or technology.

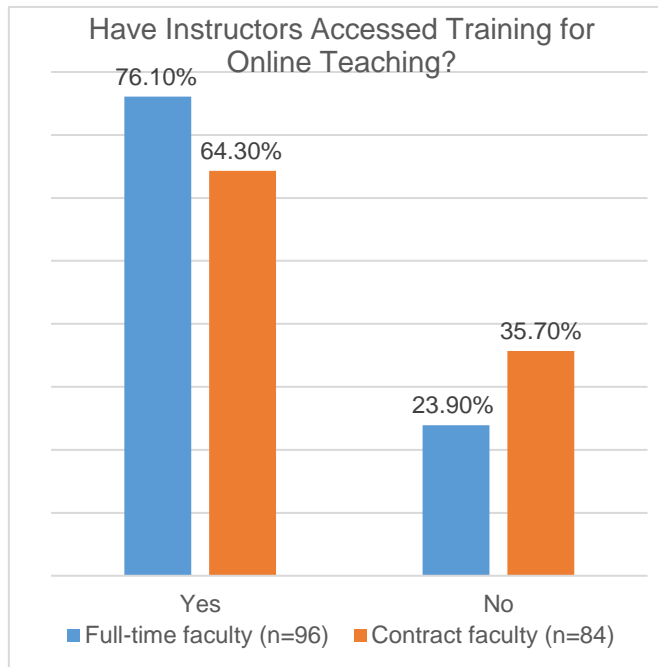


**INSTRUCTORS:**

Instructors were also asked whether they have accessed any training for online teaching. The majority of instructors (76.1% full-time faculty and 64.3% contract faculty) indicated that they accessed training for online teaching.

In follow-up to this question, instructors were asked to qualitatively provide examples of the type(s) of training that they have accessed. The six most common methods of training identified from participant responses were:

- (1) Webinars;
- (2) Training for and/or via Zoom;
- (3) Independent research to better understand online teaching and use of online platforms;
- (4) Courses or workshops offered by the institution;
- (5) Professional development; and,
- (6) Previous education or training within the field of distance education/previously acquired resources for teaching online.

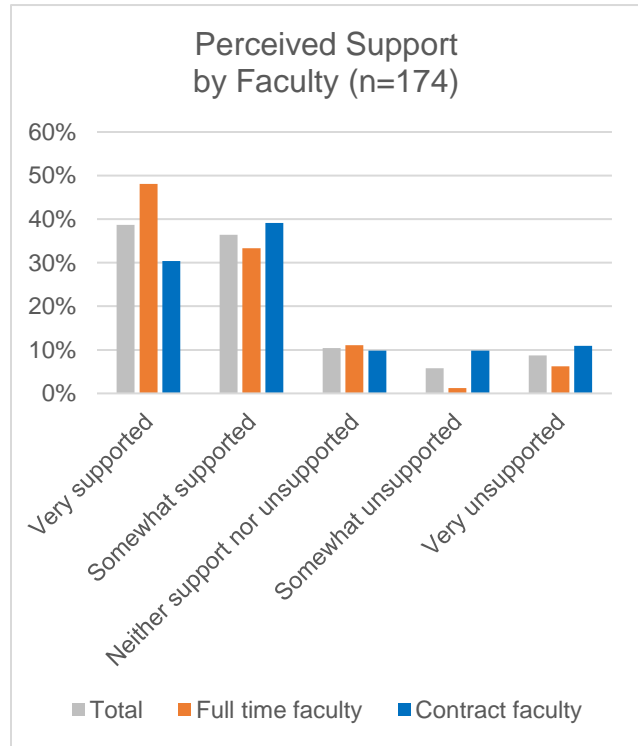
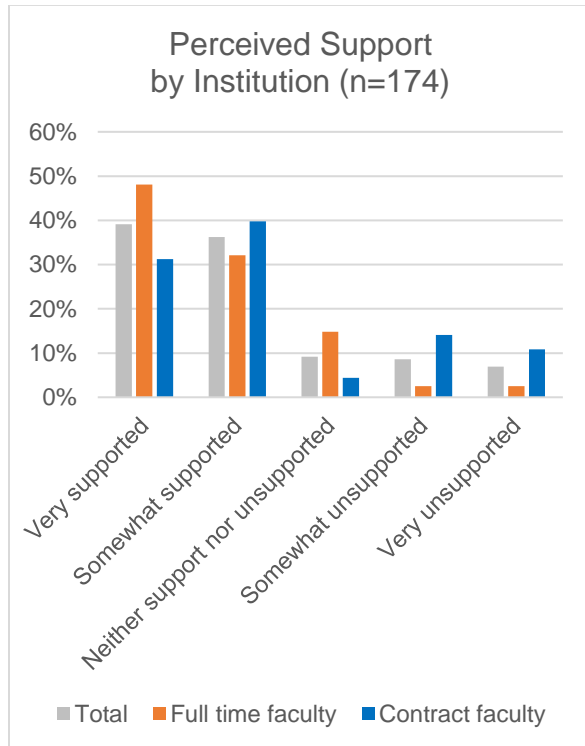




**PERCEIVED SUPPORT BY INSTITUTION AND FACULTY/DEPARTMENT**

Instructors were asked how supported they felt by both their institution and their faculty/department to teach in a remote learning environment. The majority of instructors stated that they felt either very supported or somewhat supported by both their institution (39.1% and 36.2%, respectively) and by their faculty/department (38.7% and 36.4%, respectively). A smaller percentage of instructors indicated that they felt either somewhat unsupported or very unsupported by their institution (8.6% and 6.9%, respectively) and by their faculty/department (5.8% and 8.7%, respectively).

When this question was analyzed by instructor employment status with the institution (i.e., full-time or contract faculty), differences between the responses of both groups emerged. While 80.2% and 81.4% of full-time faculty reported that they felt very/somewhat supported by both their institution and their faculty, respectively, 71.0% and 69.5% of contract faculty stated that they felt very/somewhat supported by their institution and their faculty/department, respectively. Similarly, compared to only 5.0 % and 7.4% of full-time faculty who stated that they felt somewhat/very unsupported by their institution and their faculty/department, respectively, 24.9% and 20.7% of contract faculty stated that they felt somewhat/very unsupported by their institution and their faculty/department, respectively.



As a follow-up question, instructors were asked an open-ended question regarding the types of supports, if any, they received during the transition to online learning. Based on the responses, a number of themes were identified, including: (1) toolkits, training, courses, and workshops; (2) check-ins and formal and informal supports from colleagues; (3) technology and IT assistance; (4) webinars; (5) technology, internet loans, or funding; (6) software access or licensing; (7) extra preparation time; and (8) inadequate support.

- (1) **Toolkits, trainings, courses, and workshops** – This was the most prominent theme. Instructors outlined that several training options were provided that they could utilize to

prepare for online teaching. One participant expressed that there were, “many trainings offered multiple times; individual consultations with platform expertise; teaching strategies via [teaching resource centre], “training [was delivered] by folks who were just learning themselves so was of minimal benefit”.

- (2) **Check-ins and formal and informal supports from colleagues** – A number of instructors shared that they participated in check-ins with supervisors and/or peers, which allowed them to receive valuable support from their colleagues. One instructor outlined that, “[...] the faculty has hosted many check-ins and opportunities to discuss challenges and strategies to improve the transition to online instruction”.
- (3) **Technology and IT assistance** – Many instructors noted the assistance they received from their IT departments. Most comments were positive, and instructors were overall satisfied with the response times and effective solutions offered by their IT department.
- (4) **Webinars** – A number of instructors identified that they were provided access to webinars to assist with the transition to remote learning.
- (5) **Technology, internet loans, or funding** – A number of instructors identified that they were offered technology, internet connectivity, or funding by their institution in order to support their work remotely as needed.
- (6) **Software access or licensing** – A few instructors noted that they were given access to software or licensing which supported them in teaching online.
- (7) **Extra preparation time** – A number of instructors also stated that they were provided with extra time to prepare and update courses which helped make the transition to online teaching smoother.
- (8) **Inadequate support** – A number of participants identified that they received “inadequate support” and an “overwhelming amount of resources”, which often was counterproductive to the purpose of the resources. These instructors outlined that they either did not feel they received adequate supports from their institution, or that the supports offered were too overwhelming or inaccessible. One instructor stated, “a lot of tutorials and supports that I didn't access frankly because they were too many, too varied, and from too many different sources - not hard to find but hard to select”. Another instructor outlined that there was, “lots of information on teaching virtually, a bit overwhelming number of resources”.

## WHAT FACTORS IMPACT STUDENTS' EXPERIENCE AS ONLINE LEARNERS?

Students and instructors were asked a number of quantitative and qualitative questions regarding the academic and non-academic factors related to students' experience as online learners and the factors contributing to student satisfaction with their online learning experience. Overall, the findings highlighted the importance of both academic (i.e., factors relative to the instructor, course design, the mode of learning, etc.) and non-academic factors (i.e., supports offered by the institution, opportunities for engagement with peers, home and personal factors, etc.) in determining students' satisfaction with online learning. The combination of findings from the quantitative and qualitative portions allows for a comprehensive understanding of the importance of each factor, as well as the specificities and preferences of students. This section provides a summary of both data types and is divided into academic and non-academic factors.

### Academic Factors

A number of factors related to academic aspects of student learning experience were explored both quantitatively and qualitatively, including the factors related to course design, instructor-specific factors, classroom engagement, and students' interest in the course. This section starts with an overview of the academic factors that have been identified by students and instructors as most important for students' experience as online learners, and continues with an in-depth examination of each of the factors and how they relate to student satisfaction with online learning.

#### WHAT ARE THE MOST IMPORTANT ACADEMIC FACTORS WHEN IT COMES TO STUDENTS' EXPERIENCE AS ONLINE LEARNERS?

Both students and instructors were asked to rank order from most important to least important, the factors that, in their view, impact students' online learning experience. While some responses were the same (i.e., instructor availability) or similar, many items were ranked quite differently between the two groups, demonstrating that there are differences between the perceptions of students and instructors about the factors that most significantly impact students' online learning experience. This may create differences between students' and instructors' expectations as well as a misalignment in which aspects of course design are emphasized by instructors compared to what students' value, highlighting the importance of exploring these factors.

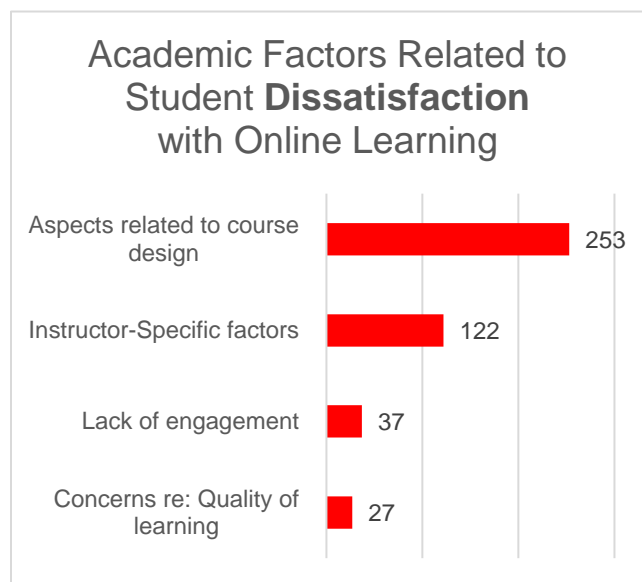
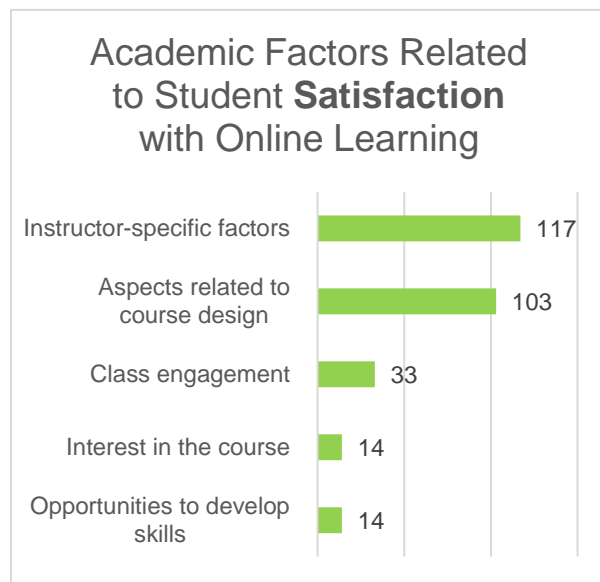
Student Ranking	Instructor Ranking
(1) Classroom environment	(1) Interest in the course
(2) Interest in the course	(2) Level of engagement in the course
(3) Supports available to students	(3) Course design
(4) Course design	(4) Instructor supportiveness
(5) Instructor availability	(5) Instructor availability
(6) Course expectations	(6) Classroom environment
(7) Instructor supportiveness	(7) Course expectations
(8) Level of engagement in the course	(8) Deadline flexibility
(9) Deadline flexibility	(9) Supports available to students

Overall, students identified that the classroom environment was the most important factor in their online learning experience; this factor was ranked 7<sup>th</sup> by instructors. Interest in the course was identified by students as the 2<sup>nd</sup> most important factor for their online learning experience, and this factor was also ranked high by instructors. Although instructors ranked supports available to students as the least important (9<sup>th</sup>) factor for student learning, students ranked this factor 3<sup>rd</sup>, highlighting the importance of both academic and non-academic student supports for students' own experience as online learners. Course design and deadline flexibility were ranked similarly by both students and instructors. While instructors identified students' levels of engagement in the course as the 2<sup>nd</sup> most important factor, students ranked this as 8<sup>th</sup>. Interestingly, many of these factors were also brought up by students in the qualitative sections of the survey, however emphasis on their importance differed slightly.

As will be demonstrated later in this section, while aspects related to the course design were the number one factor noted by students as contributing to dissatisfaction with their online learning experience, this factor was ranked 4<sup>th</sup> in the quantitative ranking above. Similarly, while deadline flexibility and level of engagement in the course are factors that were commonly cited by students as related to both their satisfaction and dissatisfaction with online learning in the qualitative questions, these factors are ranked last (8<sup>th</sup> and 9<sup>th</sup>) in the level of importance.

**WHAT ACADEMIC FACTORS ARE RELATED TO STUDENT SATISFACTION WITH THEIR ONLINE LEARNING EXPERIENCE?**

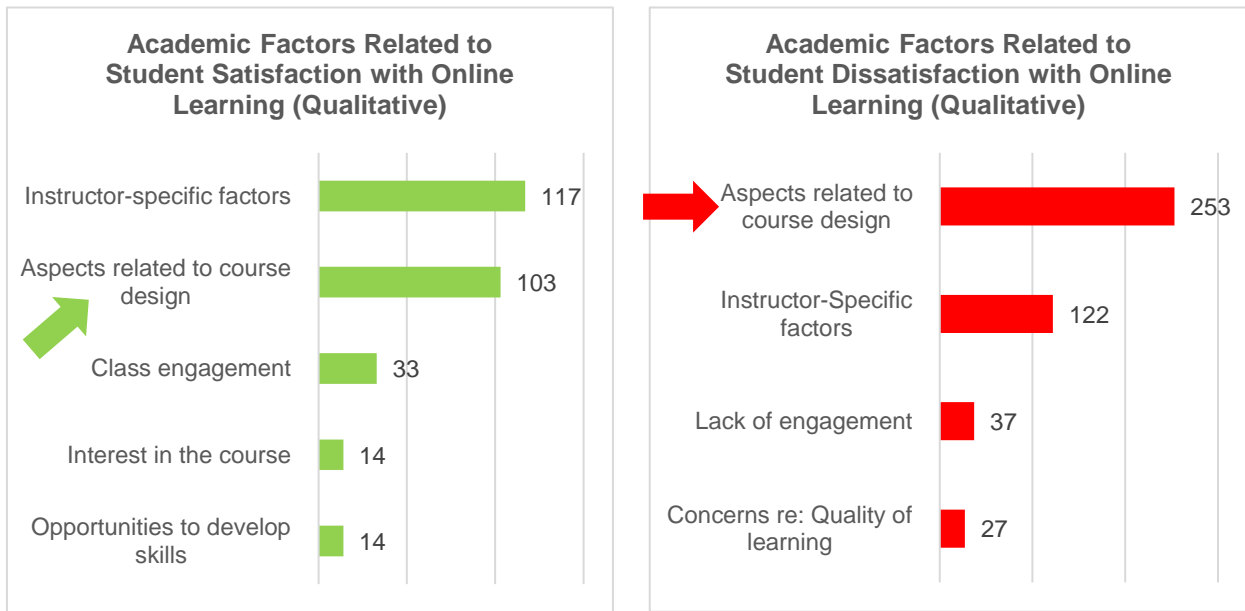
Students were asked to qualitatively reflect on the factors that lead to their (dis)satisfaction with their online learning experience. The main themes that emerged from student responses were (1) aspects related to course design; (2) instructor-specific factors; (3) course engagement; (4) level of interest in the course; (5) the perceived quality of learning; and (6) opportunities for skill development. Most factors had both satisfactory and unsatisfactory aspects, all of which are presented below. Findings from the qualitative questions that students were asked about academic factors that impact their learning are also presented in this section to support the quantitative findings and provide an understanding of what students' experiences of these factors were *overall*, and how important these factors to student learning.



As demonstrated in the graphs above, students identified a number of academic factors that impacted their satisfaction with their online learning experience. A detailed description of the findings that emerged relative to each factor is provided below.

**(1) ASPECTS RELATED TO COURSE DESIGN**

The most commonly cited factor relating to students’ dissatisfaction with their online learning experience and the second most cited factor relating to satisfaction with online learning were aspects related to the course design, including: a) organization and accessibility of course materials and the learning platform; b) the assessment methods used in courses; c) increased workload; d) methods of course delivery; e) types of learning offered; and f) course expectations. Interestingly, while the qualitative responses highlighted this factor as one of the most important factors related to student satisfaction with their learning, as seen earlier, quantitatively, this factor was ranked 4<sup>th</sup> out of 9 by students in terms of importance for student learning. The subthemes that emerged, which are related to aspects of course design, are explained in detail below.



**a) ORGANIZATION AND ACCESSIBILITY OF COURSE MATERIALS AND THE LEARNING PLATFORM**

Participants discussed a number of aspects related to the organization and accessibility of course materials and the learning platform as satisfactory and unsatisfactory, including organization of the online learning platform, recorded lectures, online access to course materials, and additional resources for learning.

**SATISFACTORY**

- General organization of the online learning platform**

Participants who were satisfied with the overall organization of their courses and the learning platform, indicated that they found their courses to be well-organized, user-friendly, and that the learning materials, assignment submissions, course schedules, and instructors’ contact information were easy to find and navigate for “all technical skill levels”. A few participants noted

that they felt the course design was “done thoughtfully” and worked well with the nature of the course. Others noted that they felt the course load and the division of learning modules was manageable. One participant identified the consolidation of all materials in one place as beneficial: “It was very helpful to find [the materials] all in one place. Also, the [course schedule] was a helpful guideline of progression of knowledge”.

- **Recorded lectures**

Many participants discussed the benefits of having recorded lectures, whether in a synchronous or an asynchronous mode of course delivery. Participants stated that the availability of recorded lectures provided them with multiple benefits, including: the option to go over the material in case they missed something in class, to make up a missed class, to take notes at their own pace and pause lectures as needed without fear of missing anything important, and to take breaks when needed. One participant explained how the flexibility of offering recorded lectures benefited their learning:

*“For in person lectures, you would have to go along with the speed of the instructor if you don’t understand something you cannot come back to listen to it again. You will just have to move on and sometimes because you haven’t understood the materials before the rest of the class you feel lost”.*

Another participant explained that recorded lectures being accessible at all times allowed them to catch up if they had to miss a class to take care of their mental health:

*“Course content and lectures are accessible at all times [...] Mental health issues arise and it is reassuring to know that even if I cannot dedicate time at a specific time, I will still be able to catch up. This is not possible for in person instructors that move quickly in a chronological order”.*

A few other participants stated that recorded lectures allowed them to balance their competing demands and responsibilities, as they were able to still review the material if they missed class for responsibilities such as work, childcare, or an emergency situation. Lastly, one participant noted that as there may often be internet and connectivity issues, therefore having recorded lectures makes the material more accessible to students.

- **Online access to course materials**

Online access to course materials was also identified as a beneficial element of online learning. Participants stated that having course-related materials (i.e., course textbook, lectures, syllabus, and lesson notes) as well as external materials (i.e., the ability to research information online) all in one place was convenient and helpful for their learning. Others discussed the helpfulness of instructors posting class materials before class, including posting slides in the beginning of the week, which, participants noted, gave them time to review content and write notes ahead of time to prepare for class.

- **Additional resources for learning**

A few participants stated that they found the extra resources and materials that their instructors provided interesting and beneficial to learning. Examples included detailed lecture slides, extra resources, additional readings, and videos. One participant noted that having those additional resources furthered their understanding of the course material and interest in the course, which increased their engagement and motivation.

**UNSATISFACTORY**

In contrast, participants who were not satisfied with this aspect of their courses noted that they found the course materials and course system to be inaccessible, disorganized, or difficult to navigate. Commonly cited concerns were a lack of audio in lecture recordings, non-descriptive and disorganized course notes, confusing formatting, illegible/difficult to read materials, confusing layout, poor audio/video quality, and missing materials. A number of participants also mentioned that they did not have access to materials as recordings or notes were not posted by instructors, which hindered their ability to review and understand the material. Overall, inaccessible materials caused participants to feel confused and less prepared for the course and exacerbated stress.

**b) ASSESSMENT METHODS**

Responses related to assessment methods discussed aspects that characterized both satisfactory and unsatisfactory experiences. Participants discussed factors such as the type of assignments and assessment methods used and the aspects of each that determined whether participants were satisfied or dissatisfied with their courses.

**SATISFACTORY**

Participants who were satisfied with the assessment methods used in their courses noted that they felt the evaluation and assessment structure was fair and manageable. Others noted that they felt that assignments were “practical”, “engaging”, “real-world examples”, and helping to prepare them for future work. A few participants also commented on the clarity of expectations and instructions. Lastly, numerous participants commented on the type of assignments that contributed to their satisfaction. The majority of those who commented on this topic preferred assignments, short papers, or take-home midterms rather than exams, which they stated were less stressful and made the workload more manageable. There was variation in terms of preference for group work, with some stating that they enjoyed group discussions and assignments due to the ability to interact with peers, while others expressing their dissatisfaction with group work due to challenges with scheduling and coordinating online.

**UNSATISFACTORY**

Participants who expressed dissatisfaction with this aspect of the design of their courses characterized a number of specific factors that made this experience unsatisfactory, including use of proctoring and testing software, the amount of discussion posts and participation activities required, and requirements for group work.

- Testing software and proctoring**

The most commonly expressed concern was regarding the use of online proctoring and testing software. A number of participants explained that the use of this testing software included the requirement to be filmed during exams, which necessitated them to minimize any movement, to produce additional documentation or print documents that needed to be presented, to scan their room, not being able to return to previous questions, and other “intense exam guidelines”. The use of such software for testing was identified by many participants as “concerning” for a number of reasons. The most commonly cited reasons for the dissatisfaction with this software were concerns regarding invasion of privacy as well as the discomfort, stress, and anxiety that those additional testing requirements produced for students who may already be experiencing anxiety. One participant explained that this process, “undermines students’ ability to be

successful” due to increased anxiety, which leads to unfavorable performance and is an “inaccurate representation of the student’s knowledge”. Other participants expressed that beyond the anxiety caused by this type of proctoring, many students have been “flagged for cheating” for reasons such as looking away from the screen to reduce screen fatigue, moving in their chair, having noise in the room, or moving their eyes/hands.

A few responses also mentioned that differing speeds of internet and challenges with technology – such as those commonly experienced by students in rural communities – made the use of this software challenging and had significantly negative consequences for students, such as a missed exam or inability to complete all the questions on time. One student expressed that, at times, they felt that such strict requirements took the focus away from the learning process: “It gets to a point where the students are more stressed and concerned about the rules in place when administering the exam than the actual content itself. This is not how an online environment should be especially during a global pandemic.” Another student asked the following question: “is academic misconduct a bigger priority than mental health?”, expressing that they have been negatively impacted by this process, both academically and in terms of their wellbeing.

- **Discussion posts/participation marks**

A number of participants stated that they felt there were “too many participation marks” or requirements, including discussion posts, in-class discussion activities or breakout rooms, or “constant prompts for students to turn their cameras on”. One participant noted that they felt graded participation contributed to “unnecessary stress and a sense of privacy violation”. Another participant expressed that they felt discussion posts were “usually useless” and were like “shouting into a void”, as they felt the engagement with other students was not meaningful and was mostly done to “meet a deadline” rather than for the purpose of discussion or learning.

- **Group work**

While group work was identified by some students as positive, the majority of participants commonly categorized group work as an unsatisfactory assessment method. Many participants noted that their main concern with group work was difficulty contacting peers and scheduling meeting times, particularly when classes were asynchronous and student schedules varied significantly, and, in some cases, students were located in different time zones. Additional concerns included additional time spent “troubleshooting technical difficulties”, increased time required for assignments, and added stress and pressure when “someone is not pulling their weight”. A number of participants shared the observation that the number of group projects and requirements increased since the transition to remote learning, which contributed to an overall increased and more demanding workload. One participant also shared that having limited interactions and engagement with peers and only in a virtual format made it challenging for them to feel comfortable working with their group. Another participant shared that group work caused them significant anxiety, which negatively impacted their learning overall.

### **c) Increased Workload**

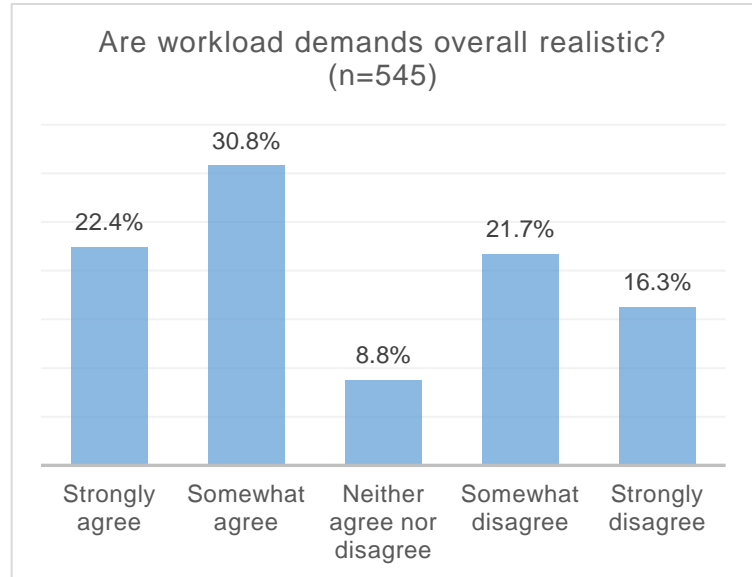
#### **UNSATISFACTORY**

Heavy workloads and high expectations for grading and deadlines was the most commonly cited concern relative to students’ online learning experience, highlighted in over 95 responses. Participants described their workload as “unachievable”, “impossible”, “ungodly”, “overwhelming”, “draining”, “extreme”, “unreasonable”, “bombarded”, “ridiculous”, “24/7”, “never-



ending”, “too much”, “too heavy”, “excessive”, “constant”, “unrealistic”, “a race”, and “information overload”, among other adjectives. Participants discussed that, compared to in-person learning, they felt their workloads significantly increased since the transition to online learning. As stated earlier in this report, more students are spending greater hours per week (i.e., 20 hours or more) on schoolwork outside of class in the Fall 2020 semester compared to before the pandemic and the shift to remote learning.

When asked whether students thought their workload demands were overall realistic, the majority of students strongly agreed or somewhat agreed that the workload demands were overall realistic (22.4% and 30.8%, respectively). However, a notable percentage of students somewhat disagreed (21.7%) or strongly disagreed (16.3%) with the statement. This finding suggests that student experiences and perceptions varied, likely due to factors such as the number of courses that students were enrolled in, whether they had caregiving/parenting responsibilities and/or employment commitments, as well as their year of study. While the quantitative data is helpful in assessing the overall perception of students regarding workload demands, the qualitative data presented here may suggest how influential this factor could be in shaping students’ online learning experiences and, in many cases, how demanding the workload could be for students’ academic performance and mental health/wellbeing.

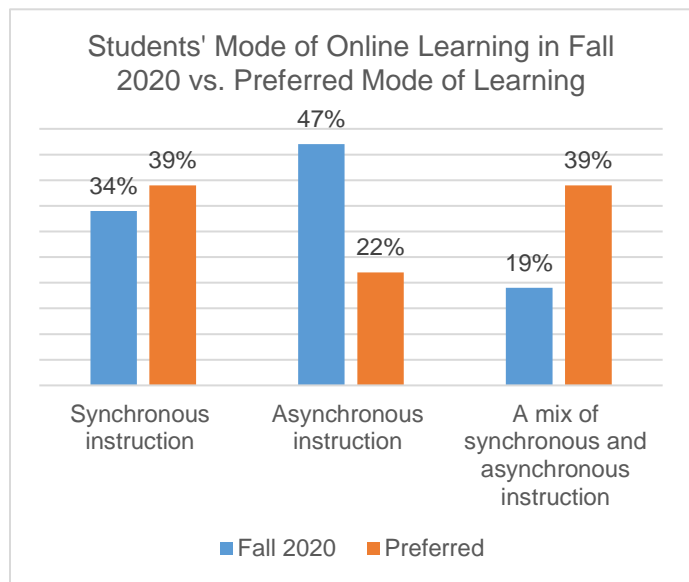


A number of participants stated that they felt the extra work has been given, “to compensate for not being in person”, or “supplement class time”, which they felt was, “doing the opposite of helping” and causing students to feel that they were not learning as much as they would have liked to. Another participant noted that they “have had more work this year than ever”. Others highlighted the increased number of readings, smaller and more frequent assignments, participation and discussion requirements, and group assignments. A number of participants highlighted that, in addition to increased workloads relative to increased demands for group work, they were spending more time trying to coordinate with group members which was challenging. In addition to an increase in the number of assignments, participants also highlighted that multiple assignments were frequently due the same week, with some quizzes expected to be completed over the weekend, and, in many cases, major projects due at the same time. Others also noted that certain lecture times doubled, that instructors frequently went over the scheduled lecture time, and that students were expected to watch 2-3+ hours of lecture/films preparing for courses which was not the case with in-person learning. A number of participants noted that on an average day, they spent over 10-15+ hours online attending classes and/or working on schoolwork. This was also echoed in the quantitative findings discussed in previous sections, which showed that students were spending upwards of 40+ hours a week outside of class on schoolwork.

Participants stated that these increasing demands caused them to spend a significant amount of time per week focusing on schoolwork, feeling that they were “constantly playing catch-up”, were “constantly behind”, or feeling that they were “drowning” and “overloaded” with information and expectations. Many stated that this caused them to feel overwhelmed and unmotivated, increased stress, and significantly impacted their mental health, in addition to causing significant fatigue from increased screen time. One participant also stated that they felt they “never have time to rest” due to the frequent deadlines, which further exacerbated their feelings of stress and burnout. Another participant stated that they felt the significant increase in workload prevented them from engaging in events or meeting other students outside of class, which caused them to feel a lack of involvement and engagement with the student community. A number of participants expressed that they felt that their grades have significantly gone down this year, which they have attributed to increased stress and overwhelming workloads. Others explained that an increased workload reduced their ability to focus on their studies and to “enjoy the process of learning” as well as to produce “high quality work”, as they felt they were more focused on getting assignments done and meeting deadlines than learning the material. One participant stated that they were “simply meeting deadlines and hoping for the semester to be over soon”.

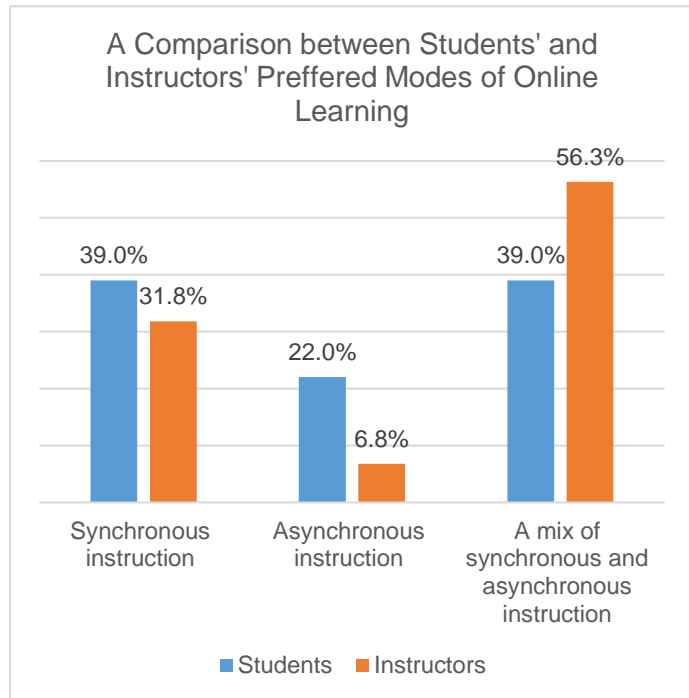
**d) Method of Course Delivery**

As discussed earlier in this report, students were asked to indicate if their current instruction during the Fall semester involved mostly asynchronous instruction, mostly synchronous instruction, or mostly a mix of synchronous and asynchronous instruction. While the majority of students (47%) were enrolled in mostly asynchronous online courses in the Fall 2020 semester, only 22% of students identified asynchronous learning as their preferred mode of learning. Inversely, though 19% of students indicated that their courses were delivered using a mix of synchronous and asynchronous instruction, 39% of students indicated that this was their preferred method of online course delivery. Lastly, while 34% of students were enrolled in mostly synchronous online courses, 39% indicated that this was their preferred method of instruction. Comparing between all modes of instruction, synchronous instruction and a mix of synchronous and asynchronous instruction were nearly equally preferred over asynchronous instruction.



Interestingly, instructor preferences for mode of course delivery were similar to those of students, but more instructors preferred a mix of synchronous and asynchronous online course delivery than synchronous instruction (56.3% versus 31.8%, respectively). Only 6.8% of instructors, compared to 22.0% of students preferred asynchronous online course delivery.

These results were also echoed in participants' qualitative responses. Students discussed a number of satisfactory aspects of the various modes of learning. While some participants categorized certain aspects of asynchronous learning as satisfactory, the majority of participants described this mode of learning as unsatisfactory, citing a number of factors that contributed to students' dissatisfaction with asynchronous learning. Overall, preferences and responses identified through both the quantitative and the qualitative data varied, highlighting the individuality and uniqueness of student preferences and needs for their learning.



## • SYNCHRONOUS

### SATISFACTORY

Participants highlighted a number of ways in which synchronous learning was beneficial to them. Some of the benefits identified included having scheduled, predictable times for lectures, which helped them to maintain a structure and routine and allowed them to interact live with peers and instructors and feel engaged in the course. As one student explained, being able to have live discussions during class helped with their understanding of the material and maintaining a schedule:

*“Being able to have a conversation with the class during live meetings greatly helps in understanding concepts and learning from different perspectives. Live meetings also imitate in-class learning in some way and also keep you in check with real-time expectations (e.g., coming to class on time and appropriately, an incentive for coming to class)”.*

## • ASYNCHRONOUS

### SATISFACTORY

A few participants stated that they were satisfied with multiple aspects of asynchronous methods of learning. Some of the benefits cited were flexibility and the ability to plan and manage own schedule, learn at their own pace, and the ability to review the material as many times as necessary. One participant explained how asynchronous learning allowed them to take breaks when needed:

*"I enjoy having control and flexibility regarding when to complete my work with the asynchronous delivery of my classes. For example, I am typically given a range between 12 hours to a week to choose to complete timed tests and quizzes, depending on the course. This gives me the opportunity to complete my work in accordance with my schedule, and to take mental health breaks when needed, without feeling guilty or stressed about it. I also enjoy having pre-recorded lectures that let me pause and take breaks when needed".*

One participant also stated that asynchronous learning reduced the overwhelm of seeing many "boxes" on the screen or getting distracted by others in the class, which helped them stay focused. Despite these comments, a large majority of participants discussed the unsatisfactory aspects of asynchronous learning, which are discussed below.

### **UNSATISFACTORY**

Many participants expressed dissatisfaction with the independent and asynchronous aspects of their learning. Participants stated that courses were often designed in ways which allowed for minimal interaction with instructors, had no live lectures, and which required independent learning such as review of modules and the textbook. Participants commonly expressed that they felt that they were, "teaching [themselves] everything". A number of participants expressed their dissatisfaction with having to "pay to attend school to read books and teach myself content from books". This process was identified by participants as stressful, time-consuming, "not actually learning and grasping the material", and frustrating, particularly considering their expectations that classes would be different. One participant expressed that this challenge was exacerbated by the lack of interaction with peers and the instructor, causing them to be "struggling alone through questions at home", which they found "time-consuming" and "anxiety-inducing". Other participants also stated that they felt like they were not "actually learning the material" due to the focus on completing assignments and tests and self-teaching, as expressed by this participant: "makes me feel like I am an assignment doer, [rather than] a student".

Participants also stated that this format added stress, required more time, reduced motivation and engagement, and caused worse academic performance, which was not reflective of students' efforts, particularly due to difficulty understanding the material, as demonstrated in this response: "I am left to try and decipher information that is entirely new to me all on my own. I am performing so much worse than other years because this format is ridiculous". Participants expressed the desire of having live lectures, or at least having opportunities to interact with the instructor and ask questions such as through seminars, review sessions, or office hours.

### **• MIX OF SYNCHRONOUS AND ASYNCHRONOUS**

#### **SATISFACTORY**

A number of participants expressed their satisfaction with courses that incorporated a mix of synchronous and asynchronous activities. Participants highlighted that this method of delivery allowed them to enjoy the benefits of both, including being able to have flexibility and work at their own pace via asynchronous aspects of learning, while also being able to get prompt clarification, and engage and interact with instructors and peers via synchronous elements of the class. The following response demonstrates how both elements contributed to this student's learning experience:

*"My experience with online learning has been quite refreshing as I have the flexibility to stay on track with the asynchronous classes in a way that was limited prior to my online*

*experience [...] Most of my profs this year post the lecture material as a recording [...] so if I am doing poorly I can plan to go over the lectures when I am feeling well enough to actively engage with the material. They also provide live zoom discussions for questions so there is the possibility to get any clarification that would typically be given in person”.*

**e) TYPES OF LEARNING OFFERED**

**UNSATISFACTORY**

Numerous participants expressed that they felt that online learning and the types of learning offered (i.e., mostly visual and auditory) did not adequately meet their learning needs the same way that experiential/in-class learning would. A number of participants indicated that they were tactile learners, and felt that they were missing the practical and experiential learning experiences such as participating in a lab or “physically holding something”. A few other participants noted that, as visual and auditory learners, taking courses with independent learning that did not have lectures from an instructor made it more difficult for them to remain engaged and focused and made it more difficult for them to understand the material.

Many participants also noted that they felt they were “missing out” on the experiential and practical aspects of their learning, including labs, human research, hands-on experience, and in-person field placements, all of which were not possible in their online courses. A shared sentiment commonly expressed by participants was a concern regarding whether their education, which was lacking important hands-on aspects of learning, prepared them for post-graduation and jobs in their field of study, including social work, music, biology and other sciences, and automotive technologies and trades. This is echoed in this participants’ response: “I don’t feel like I am being prepared for actual work once I leave the program. It is not very practical nor am I able to apply it to my own interests”. A few participants also expressed feeling that they did not have opportunities to develop other skills, including social skills, presentation skills, and other skills that would be helpful “in the real world”.

**f) COURSE EXPECTATIONS**

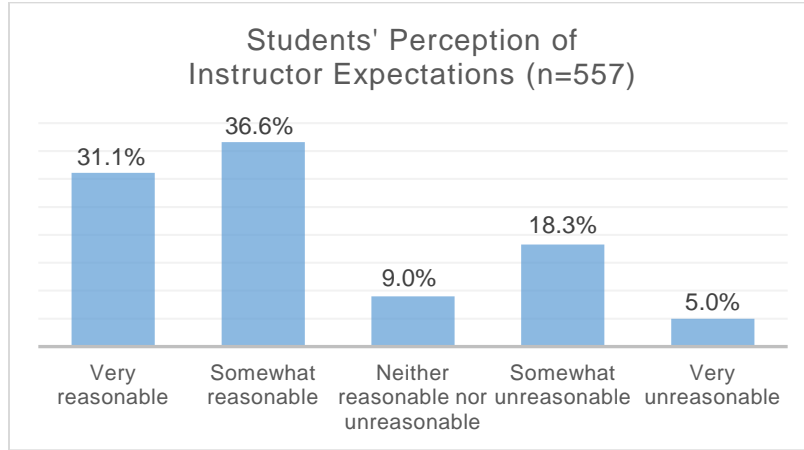
**UNSATISFACTORY**

The last factor relative to course design that was related to student satisfaction was unclear expectations. Students ranked this factor as 6 out of 9 in importance to student learning.

A number of participants stated that they felt that some of their courses had unclear instructions and expectations for assignments, learning objectives, and/or formats, all of which characterized unsatisfactory experiences with course expectations. Participants noted that this often led to confusion, poor grades, or difficulty preparing for exams or assignments. One participant stated that they “feel constantly confused”, and that the decreased engagement with peers and instructors compared to in-person learning reduced the ability to have check-ins and reminders, making course organization of even greater importance.

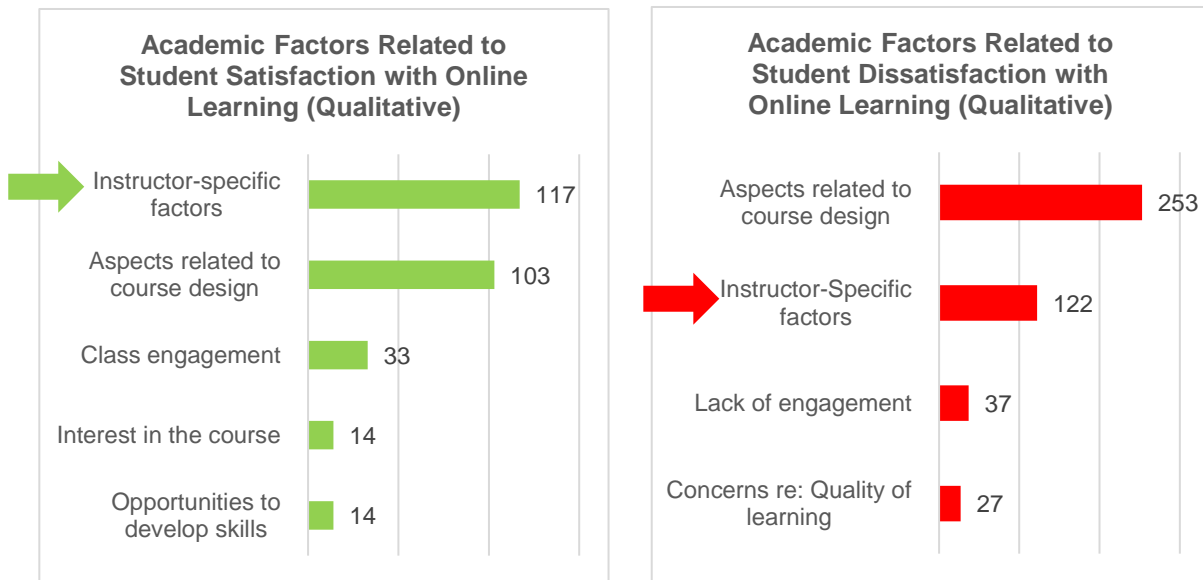
Student Ranking in Order of Importance (Quantitative)	
1.	Classroom environment
2.	Interest in the course
3.	Supports available to students
4.	Course design
5.	Instructor availability
6.	Course expectations
7.	Instructor supportiveness
8.	Level of engagement in the course
9.	Deadline flexibility

When students were asked how reasonable they believed their instructors' expectations to be, the majority of students indicated feeling that their instructors' expectations were either very reasonable or somewhat reasonable (31.1% and 36.6%, respectively). Nearly one-quarter of students felt that instructors' expectations were unreasonable (somewhat unreasonable, 18.3%; very unreasonable, 5.0%).



## (2) Instructor-Specific Factors

Findings from the qualitative questions revealed that instructor-specific factors were the most commonly cited factors related to student satisfaction, and the second most commonly cited factor related to student dissatisfaction with online learning. Despite these findings, quantitatively, students ranked instructor-related factors as 5<sup>th</sup>, 6<sup>th</sup>, and 9<sup>th</sup>, out of 9 factors, in terms of importance to their online learning experience. Participants discussed a number of instructor-specific factors related to their satisfaction with online learning, including a) instructor supportiveness; b) instructor availability; c) instructor flexibility; and d) instructor's technological skill, which are discussed in detail below.

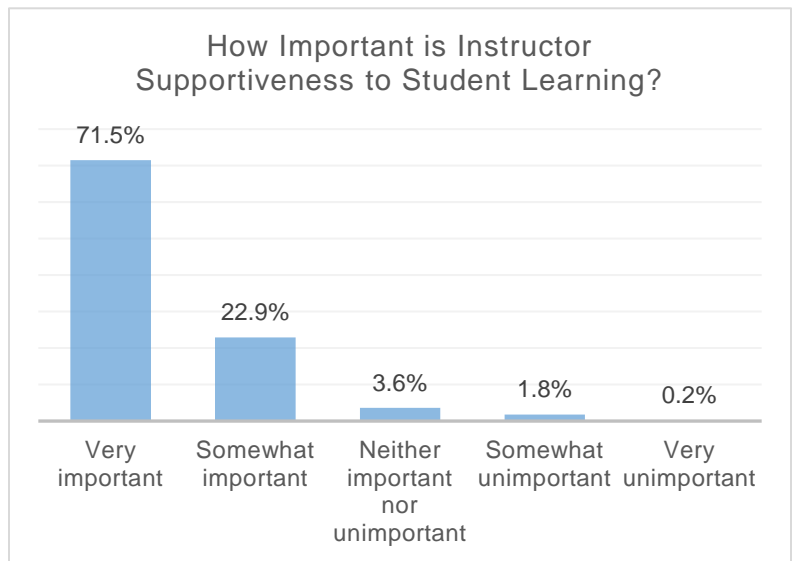


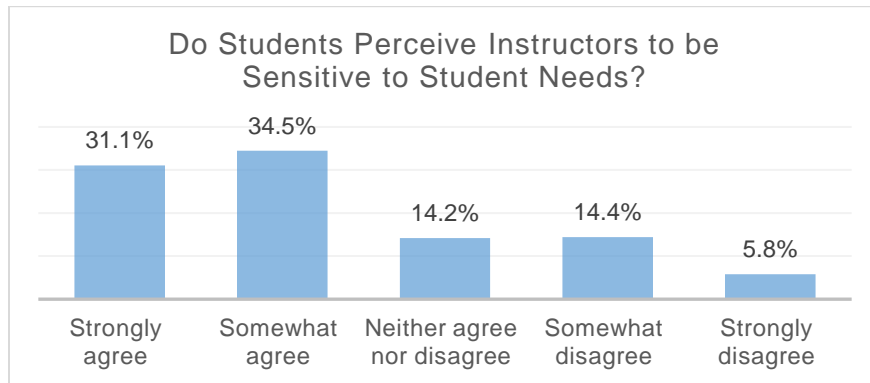
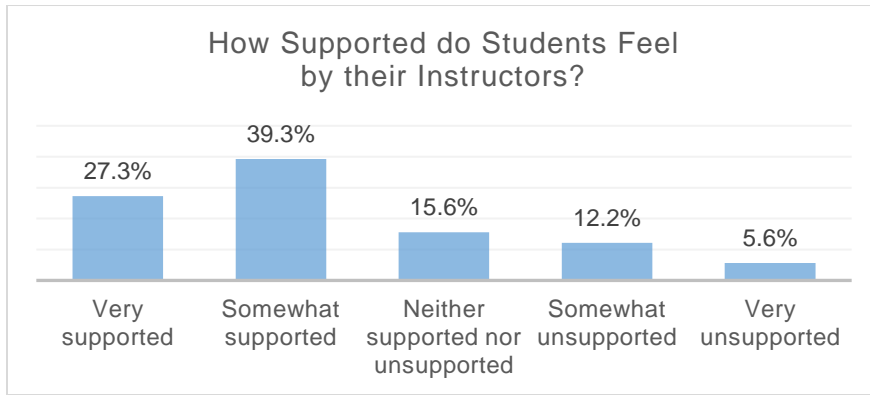
**Student Ranking in Order of Importance (Quantitative)**

- (1) Classroom environment
- (2) Interest in the course
- (3) Supports available to students
- (4) Course design
- (5) Instructor availability
- (6) Course expectations
- (7) Instructor supportiveness
- (8) Level of engagement in the course
- (9) Deadline flexibility

**a) INSTRUCTOR SUPPORTIVENESS**

In their responses, students described a variety of experiences and considerations for aspects related to instructor-specific factors that lead to student satisfaction and/or dissatisfaction with their online learning experience. While instructor supportiveness was ranked 7<sup>th</sup> out of 9 in importance to students' online learning, qualitatively, this factor was one of the most commonly discussed factors determining students' satisfaction as online learners. When asked about the importance of this factor to student learning, the majority of students (94.4%) stated that instructor supportiveness was either very important or somewhat important to student learning (71.5% and 22.9%, respectively).





While responses varied, the majority of students felt supported by their instructors, as indicated by a number of quantitative findings presented in the graphs above. When students were asked how supported they felt by their instructors, the majority of students (66.6%) stated they felt either very supported or somewhat supported (27.3% and 39.3%, respectively). Interestingly, 12.2% indicated that they felt somewhat unsupported, and 5.6% stated that they felt very unsupported by their instructors. Similarly, the majority of students, 65.6%, either strongly agreed or strongly disagreed with the statement that their instructors were sensitive to students' needs (31.1% and 34.5%, respectively). About 20% of students either somewhat disagreed or strongly disagreed (14.4% and 5.8%, respectively) with that statement (14.4% and 5.8%, respectively).

The findings below – summarizing qualitative responses from students – shed light on the factors that students identify as impactful in determining their satisfaction with their instructors' support.

**SATISFACTORY**

Participants spoke to numerous elements of instructor support which categorized instructor supportiveness as satisfactory, including creating a supportive learning environment both inside and outside of the class, feeling that instructors understand the challenges that students are going through, and being open to discussions, check-ins, and providing resources to support students. Some of the adjectives that participants used to describe their instructors included: “truly care”, “sympathetic”, “genuinely helpful”, “understanding”, “open”, “cognizant”, “amazing”, “supportive”, “accommodating”, “kind”, “approachable”, “sensitive to student needs”, “eager to help”, “awesome”, “want the best for students”, “wonderful”, “friendly”, and “responsive”, among others. A number of participants expressed that they felt their instructors understood the unique challenges that students were experiencing due to the pandemic and the transition to online



learning, which helped them feel supported and cared for in their classes, thereby increasing their confidence to succeed in the class. One participant stated that they felt their instructors' support translated into the course design and efforts of the instructors to maintain a sense of normalcy in the classroom:

*“Professors are sympathetic to the unique challenges of online learning [...] and adjust their courses to be more interactive, flexible. Less emphasis on tests and exams and more on assignments with lots of opportunities for check-ins with profs and peers (since usually we would naturally get that by being in class with other students)”.*

A few other participants shared that their instructors facilitated candid conversations about the shared experiences of the pandemic, which helped to reduce stress and increase a sense of community, as demonstrated in this response:

*“The ongoing support and understanding from my supervisors and professors have been what has kept me in this program and continuing forth. They are transparent about any uncertainties or challenges they are facing, which helps settle some of the anxiety we are experiencing around the ambiguity of the program”.*

Another participant discussed how shared experience such as challenges with technology allowed for mutual understanding and patience: “Since this is a new experience for both students and instructors, and we're all figuring it out as we go, there has been more understanding and support both ways”. One participant discussed the importance of instructors understanding that students have responsibilities and stressors other than school, particularly during these challenging times:

*“Professors are kind and understanding about the situation going on in the world and that we might have other things going on such as taking care of family members or working [...] I think they are doing a great job in trying to make sure we are still learning and setting ourselves up for success in the future”.*

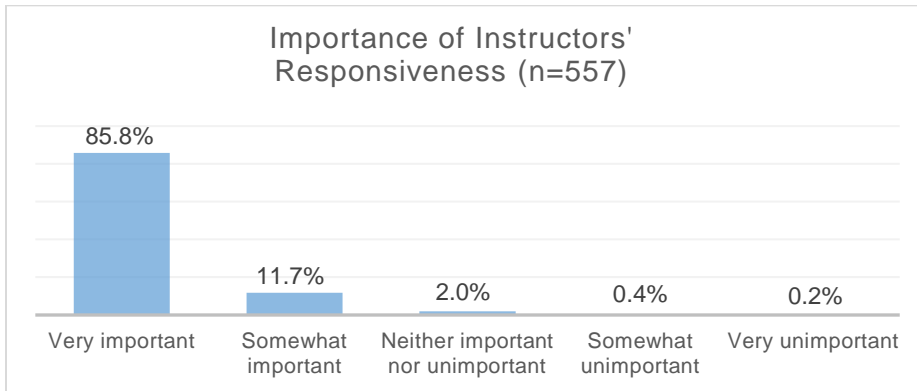
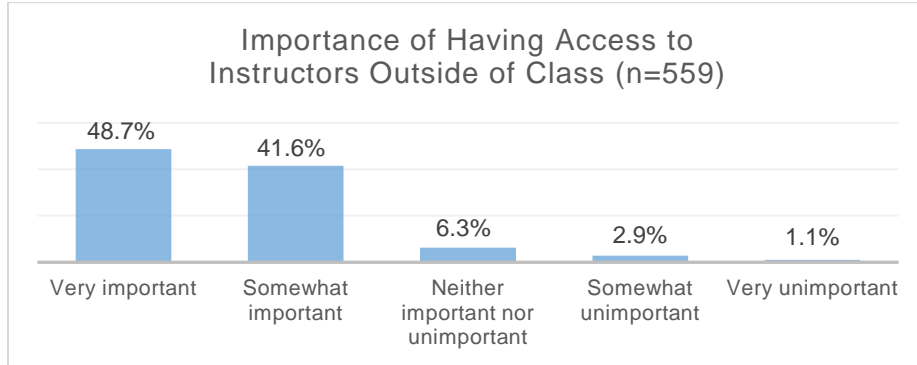
## **UNSATISFACTORY**

Participants also identified a number of factors related to instructor supportiveness which they categorized as unsatisfactory. In contrast to the overwhelmingly positive responses shared above, several participants expressed feeling unsupported and uncared for by their instructors, which, they reported, was felt through a lack of instructor understanding for the challenges experienced by students due to the pandemic and the need for flexibility, lack of checking-in with students outside of course material, lack of empathy for student challenges, or not being available to students. One participant expressed the lack of consideration by their instructors for the impacts of the pandemic: “It is as if [instructors] and those in charge at the [institution] are failing to recognize the anxiety, stress and uncertainty that we are all feeling during this time, thinking that we have more time and resources than we have”. Another participant expressed a similar sentiment: “[Instructors] don't really seem to acknowledge that we are in the middle of a pandemic and are treating the courses like everything is normal and they're teaching normal classes”.

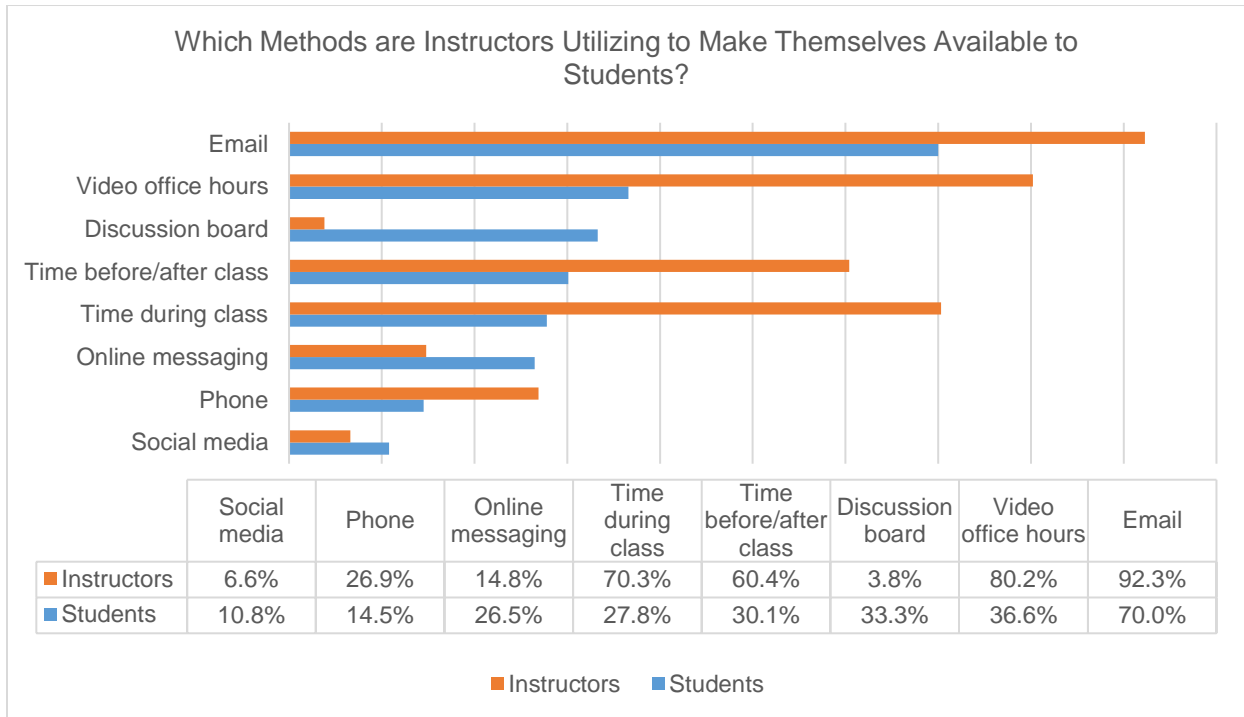
## **b) INSTRUCTOR AVAILABILITY AND APPROACHABILITY**

While instructor availability was ranked 5<sup>th</sup> out of 9 in importance to students' online learning, similarly to instructor supportiveness, this factor was one of the most common themes related to student satisfaction in the qualitative responses. A number of sub-factors were included under

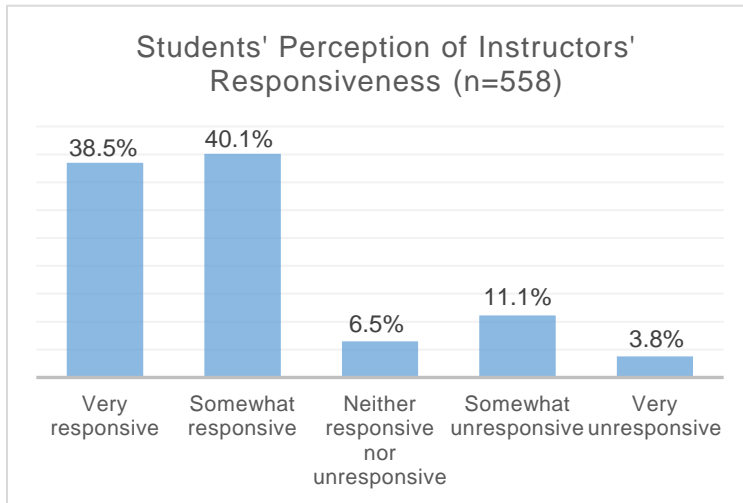
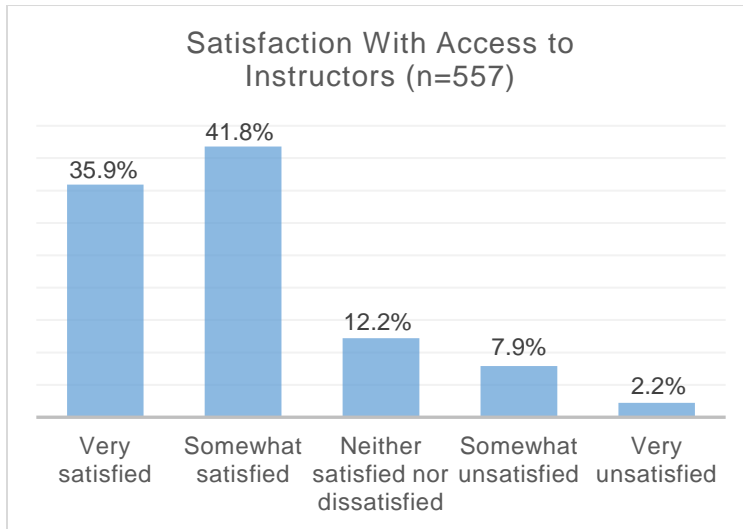
this theme, including instructor availability, instructor responsiveness, and instructor approachability. When asked how important access to instructors outside of class was to their learning, the majority of students (89.7%) stated that having access to their instructor outside of class was either very important or somewhat important to their learning (48.7% and 41.0%, respectively). When students were asked how important instructors' responsiveness was to their learning, almost all students (97.5%) indicated that this factor was either very important or somewhat important (to their learning; 85.8% and 11.7%, respectively).



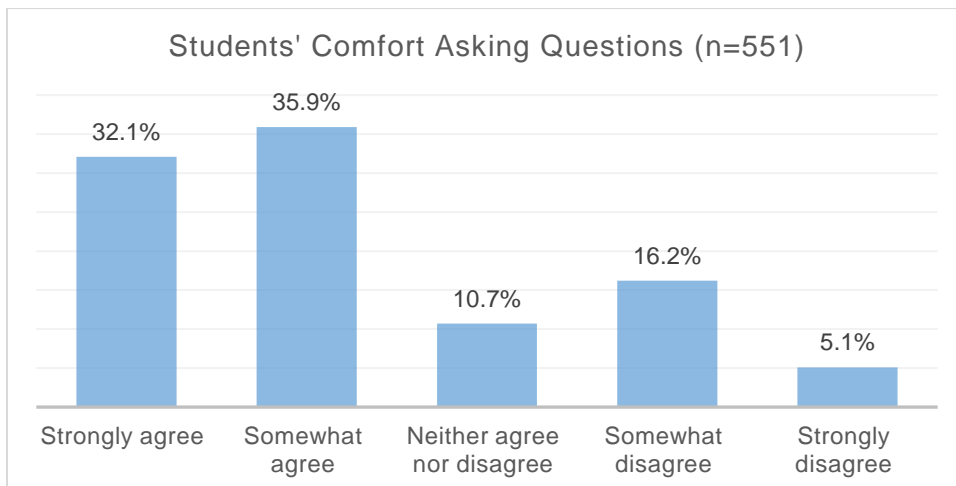
Both students and instructors were asked to comment on how instructors have made themselves available to students. Both students and instructors identified similar methods that instructors use to make themselves available to students, which include the following methods: email, video office hours, time during class, time before/after class, phone, online messaging, social media, and discussion boards. The utilization of these methods varied between what was reported by students and instructors.



Overall, the majority of students (77.7%) expressed that they were either very satisfied (35.9%) or somewhat satisfied (41.8%) with their access to their instructors. Over 10% of students stated that they were either somewhat unsatisfied (7.9%) or very unsatisfied (2.2%) with their access to their instructors. Similarly, when asked about their perceptions of their instructors' responsiveness, the majority of students (78.6%) stated that they found their instructors to be either very responsive (38.5%) or somewhat responsive (40.1%). However, almost 15% of students rated their instructors to be either somewhat unresponsive (11.1%) or very unresponsive (3.8%), which was also reflected in the qualitative responses.

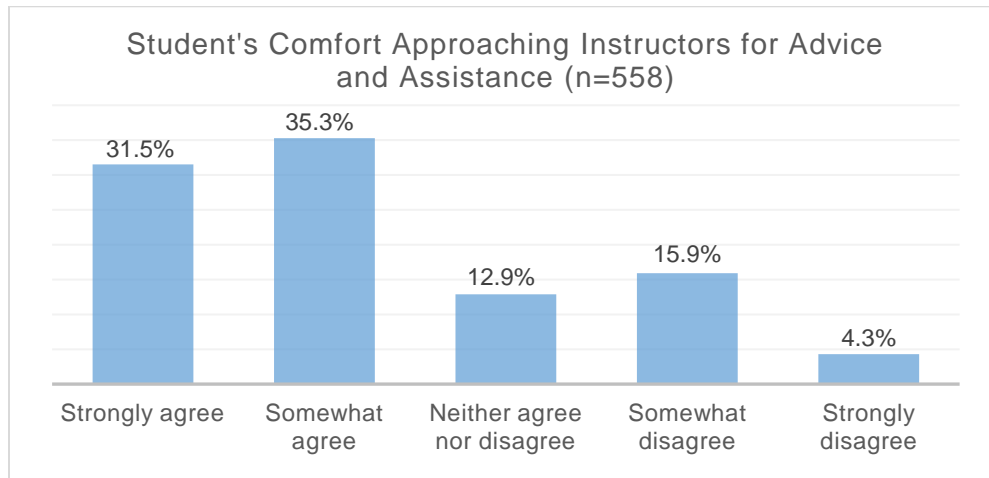


Additionally, students were asked to reflect on their comfort levels asking questions and approaching instructors for assistance, both of which are factors captured within the theme of instructor availability and approachability. As shown in the graphs below, while most students stated that they felt comfortable asking questions and approaching their instructors, there was also a large percentage of students who did not feel comfortable doing so.



As displayed in the graph above, while the majority (68%) of students stated that they either strongly agreed (32.1%) or somewhat agreed (35.9%) that they felt comfortable asking questions, a sizeable number of students (21.3%) stated that they either somewhat disagreed (16.2%) or strongly disagreed (5.1%) with the statement, indicating that they did not feel comfortable asking questions.

Similarly, as shown in the graph below, while most students (66.8%) either strongly agreed (31.5%) or somewhat agreed (35.3%) that they felt comfortable approaching their instructors for advice and assistance, 20.2% of students either somewhat disagreed (15.9%) or strongly disagreed (4.3%) with the statement.



Students also qualitatively identified a number of factors related to instructor availability, responsiveness, and approachability that were either satisfactory or unsatisfactory.

### **SATISFACTORY**

Many participants stated that when their instructors were open to meetings and communications and responsive to questions, both in class and outside of class, they were satisfied with their learning. Participants gave examples of the numerous ways in which their instructors have made themselves available to students, which are similar to the ones identified earlier in this section, including: via email, office hours over Zoom, class time dedicated for questions, meetings, check-ins, and chat groups. One participant noted that having responsive instructors made them feel that instructors cared about their academic success in the course, which contributed to their motivation and engagement. Another participant noted that it was not only the availability of instructors that made their online learning experience satisfactory, but also that they felt that their questions were taken seriously by the instructor. Others noted that instructors were also able to refer them to other services or resources when required which was helpful for their learning and was identified as an important aspect of instructor availability.

### **UNSATISFACTORY**

Many participants also identified which aspects characterize unsatisfactory instructor availability. Some of the responses provided stated that instructors did not respond consistently to questions via email or discussion boards. Participants expressed how a lack of timely instructor responsiveness and availability negatively impacted their learning, either through lack of clarity or confusion when completing assignments, feeling unsupported by instructors, or feeling disengaged. One participant noted that even when they had an emergency and requested an extension, they never heard from their instructor, causing them significant stress. A number of

participants shared the observation that instructor availability decreased compared to prior to the transition. In addition to instructors' lack of responsiveness, a few participants stated that they felt instructors have not made themselves sufficiently available to students. A number of participants noted that they received unsupportive emails from instructors which made them feel discouraged and unmotivated in the course, thereby "escalating the stress and confusion of the course".

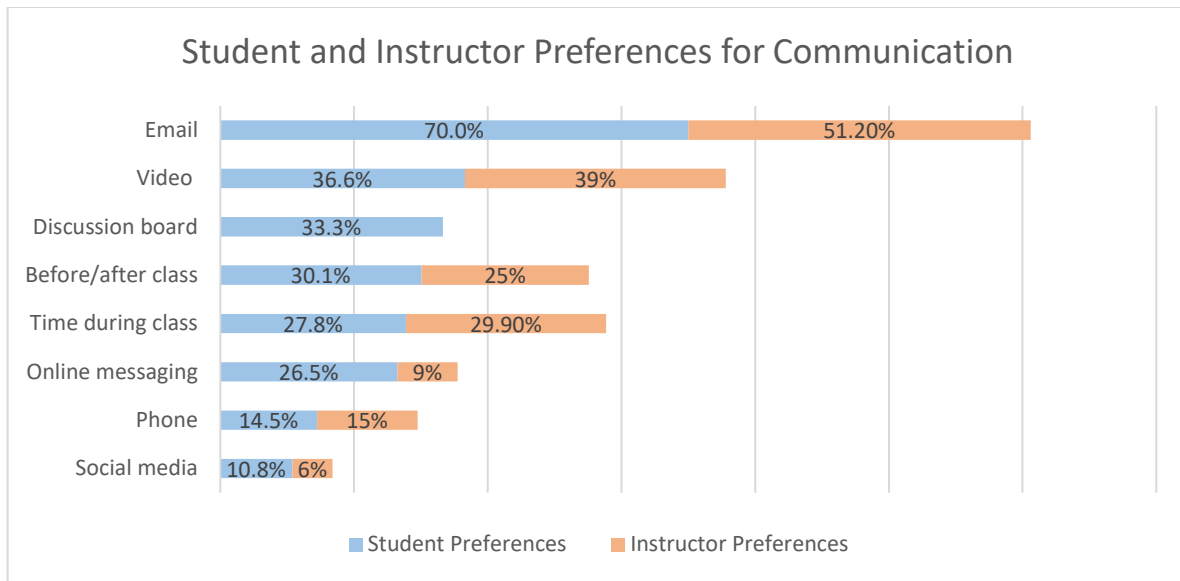
### **STUDENTS' AND INSTRUCTORS' PREFERRED METHODS OF COMMUNICATION**

As a follow-up question, both instructors and students were asked to rank their preferred method of communication with students and instructors, respectively. The methods that students reported their instructors using were similar to the methods that instructors reported currently using for communicating with students and are summarized in the graph below. The preferred methods among instructors for communication with students, in order from most preferred to least preferred, were as follows:

- (1) Email – 51.2%
- (2) Video office hours – 39.0%
- (3) Class time – 29.9%
- (4) Time before/after class – 25.0%
- (5) Phone – 15.0%
- (6) Online messaging – 9.0%
- (7) Social media – 6.0%

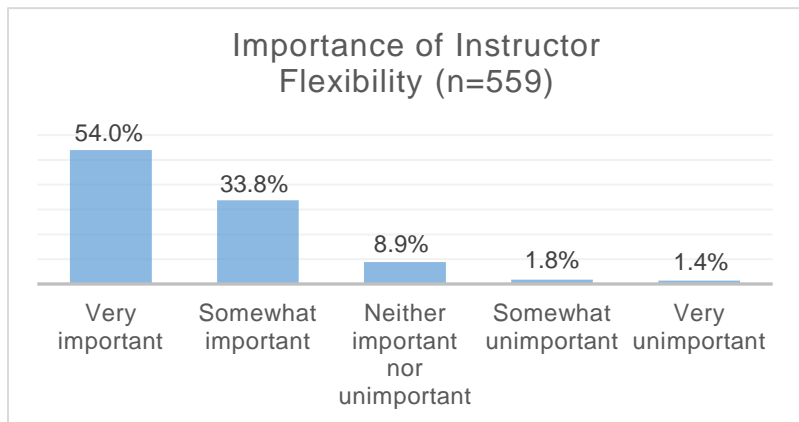
Student responses for their most preferred methods for communication with instructors were similar to those provided by instructors, with slight variation. Students' preferred methods for communication were as follows, in order from most preferred to least preferred method:

- (1) Email – 70.0%
- (2) Video office hours – 36.6%
- (3) Discussion board – 33.3%
- (4) Time before/after class – 30.1%
- (5) Time during class – 27.8%
- (6) Online messaging – 26.5%
- (7) Phone – 14.5%
- (8) Social media – 10.8%

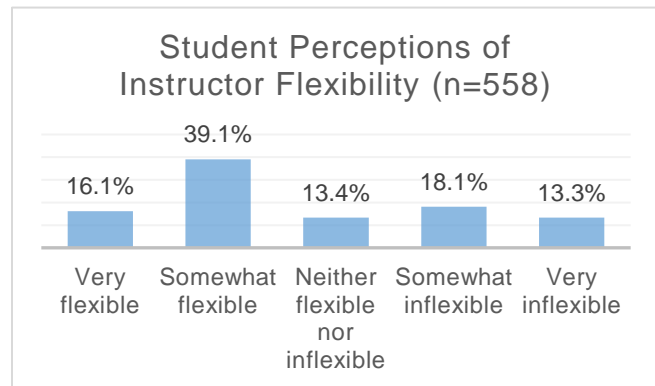


### c) INSTRUCTOR FLEXIBILITY

While deadline flexibility was ranked last in importance to students' online learning, this factor was commonly discussed qualitatively as an important in determining students' satisfaction with their online learning experience. The majority of students (87.8%) identified instructor flexibility as either very important (54.0%) or somewhat important (33.8%) to their learning.



Overall, student perceptions regarding instructors' flexibility varied. While 55.2% of students said that their instructors were either very flexible (16.1%) or somewhat flexible (39.1%), 31.4% of students said that their instructors were either somewhat inflexible (18.1%) or very inflexible (13.1%); 13.4% of students stated that their instructors were neither flexible nor inflexible.



In their qualitative responses, students discussed a number of aspects that determined whether their instructors' level of flexibility was satisfactory or unsatisfactory.

### SATISFACTORY

Students highlighted aspects related to accommodating student needs, flexibility with deadlines, and flexibility with assessments and course design as satisfactory. Many participants emphasized the importance of flexibility with regards to deadlines and attendance, particularly due to the challenges that students may be experiencing due to the pandemic, including financial stressors and work obligations, caregiver and parenting responsibilities, and impacts of the pandemic on student mental health. A number of participants expressed satisfaction with instructors giving students options to make decisions and options to provide feedback regarding assignment parameters, deadlines, and course materials. A few examples of instructor flexibility are provided by this participant:

*“My professors are very understanding of the mental toll online learning has on students, so they make adjustments to the course class-by-class (e.g., cutting down on readings, changing the methods of teaching from discussions, to videos, to guest speakers, as a way to keep things refreshing.) [...] Also the flexibility of deadlines because they understand that with the online-learning format and the pandemic, students have taken a hit to their motivation”.*

Another participant stated that their instructors provided the option to re-distribute the weight of course assignments or drop the lowest grade, which allowed them more flexibility. Numerous participants expressed that they felt that their instructors’ flexibility demonstrated empathy and understanding of the stressors and challenges that students were going through, which made them feel supported and engaged in their learning.

### **UNSATISFACTORY**

In contrast to the satisfactory aspects described by participants above, many participants stated that their instructors were not accommodating of requests for extensions, had limited flexibility with deadlines and “harsh marking with no options for improvement”, and were not willing to make changes to the workload, despite student requests, which made their learning unsatisfactory. One participant described a situation where they were told to “drop out of a course” because they experienced difficulty meeting deadlines. A number of participants expressed that instructor inflexibility was particularly upsetting due to the unique challenges that students were experiencing due to the pandemic, specifically the impacts of the pandemic on student mental health and financial challenges and the unique and varying circumstances that students experienced learning from home, all of which were impacting their ability to meet deadlines and necessitated instructor flexibility:

*“It is extremely hard to feel motivated to learn [the] class material and be active in the online learning format when most professors have been extremely unforgiving with deadlines [...] mental health and environment [are] now completely different, possibly harder, than before”.*

Many participants noted that this inflexibility exacerbated their stress and caused them to feel unmotivated and unsupported in their learning, which, compounded with existing challenges due to the pandemic, negatively impacted their online learning experience.

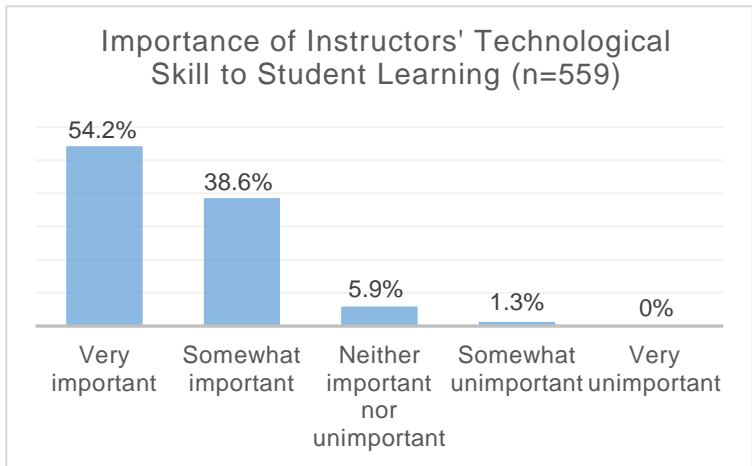
A few participants also discussed instructor inflexibility beyond deadlines, citing that instructors “forced” students to appear on camera, which they felt was inflexible and not accommodating to varying situations and/or privacy concerns that students may be experiencing while learning from home. One participant described a situation when they had an accessibility concern, and



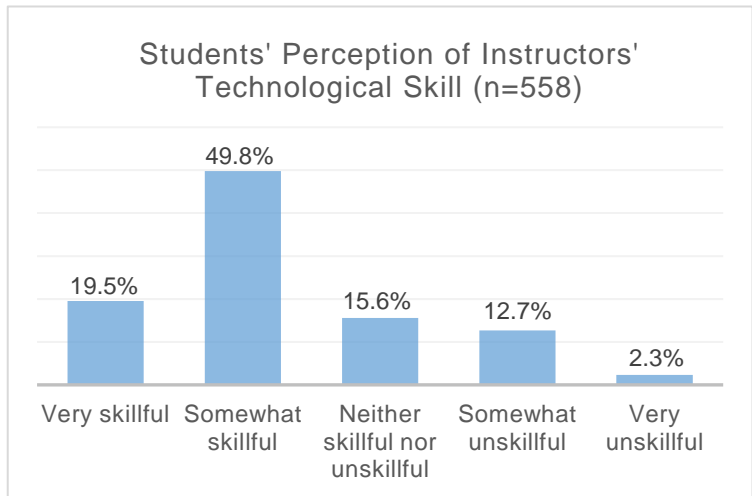
their instructor was not able to accommodate, leading to the student feeling frustrated and subsequently struggling in the course.

**d) INSTRUCTORS' TECHNOLOGICAL SKILL**

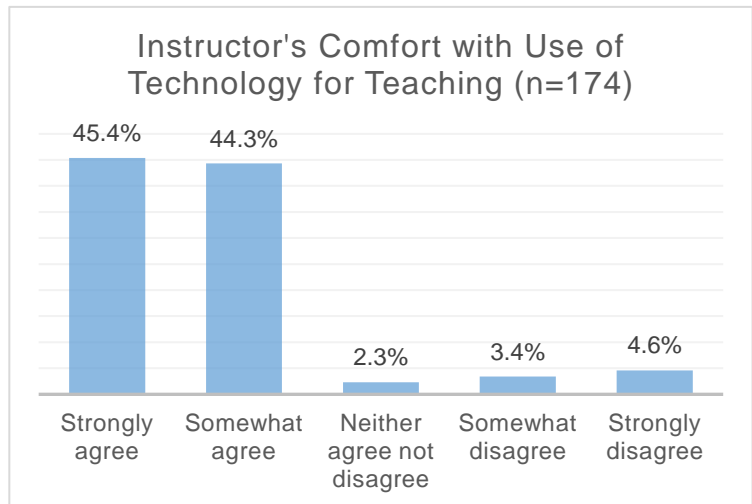
The last quantitative factor related to instructor-specific factors was instructors' technological skill. This factor did not emerge as a theme from students' qualitative responses. When asked how important this factor was to student learning, the majority of students (92.8%) stated that instructors' technological skill was either very important (54.2%) or somewhat important (38.6%) to students' learning.



Students were also asked to indicate their perception of their instructors' technological skill. Approximately half of the students (49.8%) perceived their instructors to be somewhat skillful in technology, followed by 19.5% who stated that their instructors were very skillful in technology. About 15% of students stated that they perceived their instructors to be either somewhat unskillful (12.7%) or very unskillful (2.3%) in the use of technology, and 15.6% of students perceived their instructors to be neither skillful nor unskillful in the use of technology.

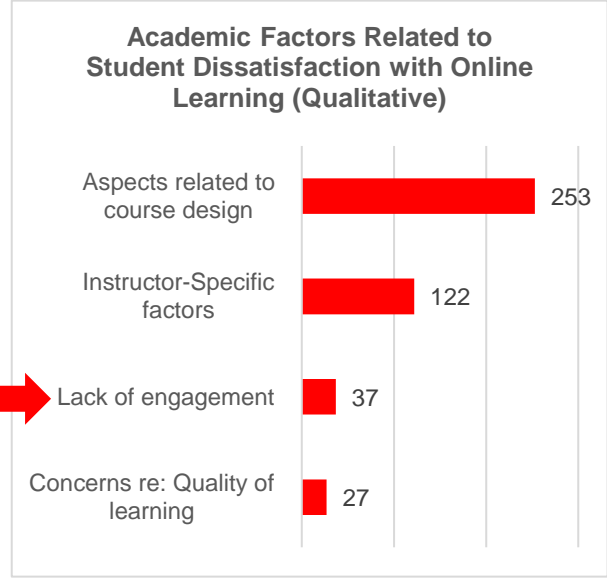
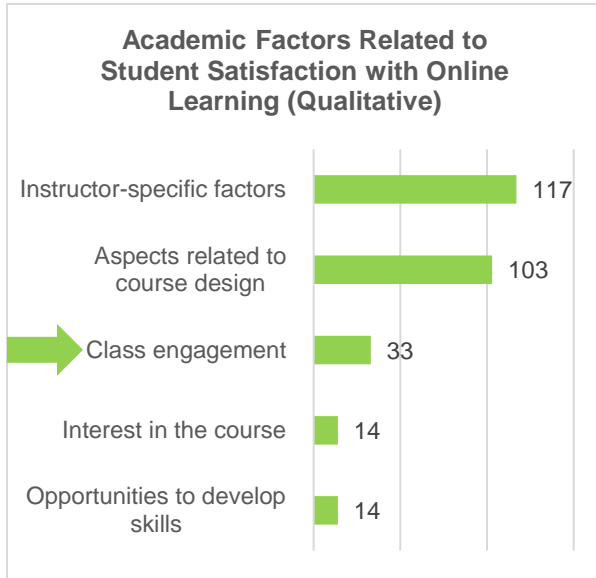


Instructors also reflected on their level of comfort with use of technology for teaching. The vast majority of instructors (89.7%) stated that they either strongly agreed (45.4%) or somewhat agreed (44.3%) that they felt comfortable using technology for their teaching. Only 8% of instructors stated that they either somewhat disagreed (3.4%) or strongly disagreed (4.6%) with feeling comfortable using technology for their teaching.



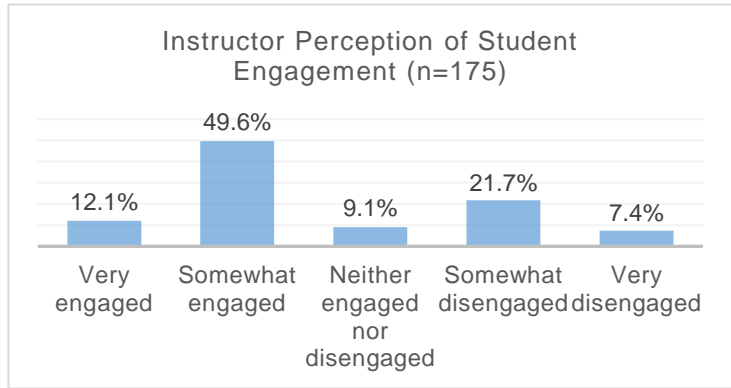
### (3) CLASS ENGAGEMENT

Qualitatively, students discussed class engagement and their level of engagement in their course as important factors impacting their satisfaction with their online learning. Quantitatively, students ranked this factor as 8<sup>th</sup> in order of importance to their learning.



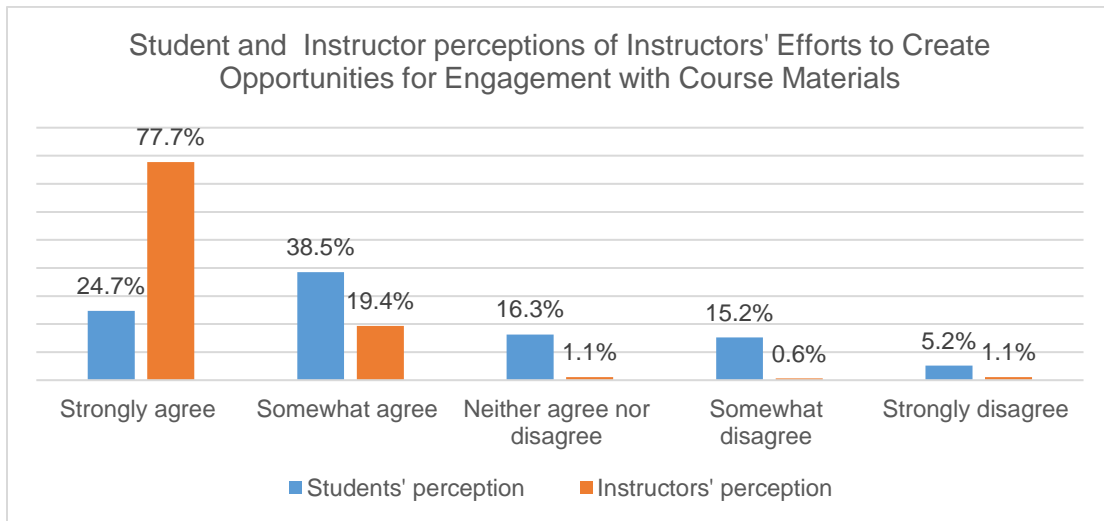
- Student Ranking in Order of Importance (Quantitative)**
- (1) Classroom environment
  - (2) Interest in the course
  - (3) Supports available to students
  - (4) Course design
  - (5) Instructor availability
  - (6) Course expectations
  - (7) Instructor supportiveness
  - (8) Level of engagement in the course
  - (9) Deadline flexibility

In the survey, instructors were invited to report their perceptions about student engagement in their online courses. Overall, the majority of instructors (61.7%) stated that students were either very engaged (12.1%) or somewhat engaged (49.6%) in their online classes. However, a large percentage of instructors (29.1%) indicated that students were either somewhat disengaged (21.7%) or very disengaged (7.4%) in their courses. It is noteworthy that these findings may suggest that a large percentage of students are not engaging in courses in ways that meet instructors' expectations

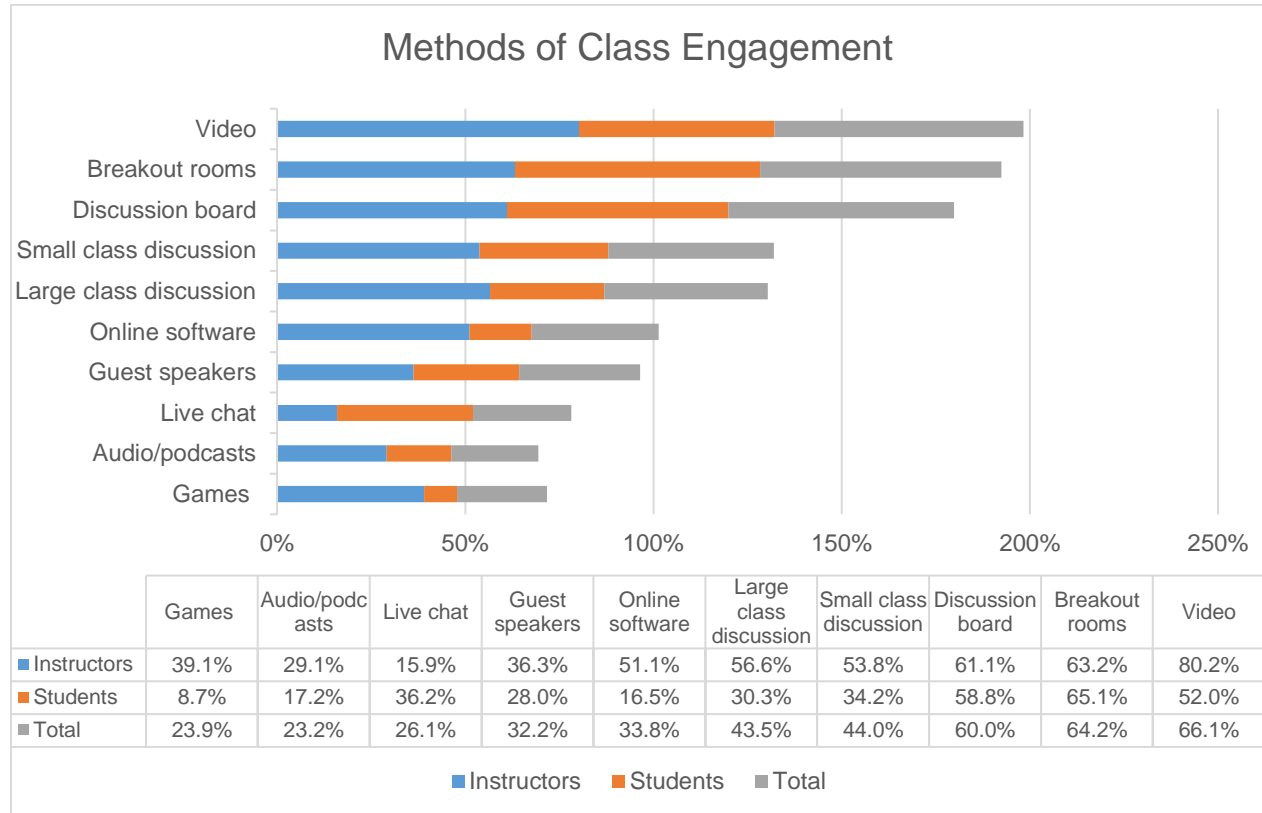


Instructors were also asked to reflect on the statement “I try to create opportunities for engagement with the course materials in ways that are helpful for student learning”. Almost all instructors (97.1%) stated that they either strongly agreed (77.7%) or somewhat agreed (19.4%) with this statement.

Students were also asked about instructors creating opportunities for engagement with course materials. When comparing both student and instructor responses (as seen in the graph below), it is evident that student and instructor perceptions differ in terms of instructors' efforts to create opportunities for engagement with course materials. While most instructors (97.1%) stated that they strongly agreed or somewhat agreed that they have made efforts to create opportunities for engagement with course material online, student responses varied significantly, with most students (63.2%) either strongly agreeing (24.7%) or somewhat agreeing (38.5%) that their instructors created opportunities for engagement with course materials, and 20.4% of students stating that they either somewhat disagreed (15.2%) or strongly disagreed (5.2%) with that statement.



Students and instructors were asked to indicate which methods were most frequently used by instructors for class engagement. Overall, the most popular methods of class engagement used, in order from most popular to least popular, were video, breakout rooms, and discussion boards. The least popular methods of engagement, as reported by students, were live chat, audio, and games.



In follow-up to the above question, students were asked an open-ended question regarding activities that they feel would enhance their engagement in class. Numerous recommendations were identified by students, which are presented below in order of the most commonly to least commonly provided responses.

- **Presenting information via mediums other than lecture** including videos, discussions, recorded lectures, podcasts, activities, demonstrations, case studies, and guest speakers.
- Participants discussed the importance of instructors actively **encouraging engagement and participation**. Some examples including asking questions, encouraging students to turn their cameras on and participating in class, facilitating icebreakers for students to increase their comfort with each other, and providing space for social conversations or “off topic” conversations as would normally occur in an in-person classroom, as stated by this participant: “Informal discussions other than the course work to break ice and make it feel like we’re actually in a classroom where instructors will often go off topic for a few minutes”.
- **Group activities** such as class discussions, breakout rooms, games, participation activities, and group projects. Participants stated that those activities can help to develop relationships with classmates, allowing students to feel more comfortable and engaged with each other and providing opportunities to discuss the course materials both inside and outside of class.
- Use of **interactive online software/applications** such as questionnaire and polling systems.

- **Independent modules/simulations** such as lab quizzes, interactive online lessons, and worksheets. Such activities were identified as enhancing engagement by providing ways to learn that differ from traditional lectures, allowing students to learn and review the materials at their own pace, and enhancing understanding of material discussed in class.
- Frequent **review and question-and-answer sessions** with instructor/teaching assistants. Numerous reasons were provided by participants for the inclusion of this activity, including the opportunity to interact with peers and the instructor, opportunities to review the content and engage in discussion, and opportunities to have questions answered and increased understanding of the material.
- **Synchronous classes** and the opportunity to include aspects of live lectures in classes was identified as beneficial for engagement. One participant discussed the contrast in their engagement between synchronous and asynchronous courses:  
*“I feel a human connection enhances engagement much more effectively. Some classes of my own, I visit office hours regularly and I feel more motivated in those [classes]. Some classes I try to engage with [the] instructor who doesn't seem to be bothered, and that interaction disengages me”.*
- Use of **chat and discussion boards**, including for interactions with other students as well as engagement with instructors. Numerous participants expressed that having instructors regularly post/check in via discussion boards such as providing a weekly summary or reminders would be helpful.
- Use of **Interactive games**.
- **Uploading recording lectures and providing materials ahead of class**. This was identified as beneficial as materials can be reviewed after class and at students' convenience as well as used to catch up on missed material.
- Facilitating **opportunities for students to connect outside of class** such as creating online spaces for students engage outside of class and facilitating study groups.
- **Smaller, more frequent assignments**.
- **Flexibility** in deadlines and assignment types.
- More frequent **breaks**. Participants explained that long lectures can lead to loss of focus and student disengagement.
- **Student-led activities** such as student presentations and student-led discussions.

Students also commented on the experiences relative to class engagement that contributed to their satisfaction and dissatisfaction with online learning.

## **SATISFACTORY**

Numerous participants discussed their satisfaction with the specific engagement activities that their instructors have implemented, which they stated helped to “humanize the online experience” and helped them feel engaged in their courses. Such activities included class discussions, use of practical and real-life scenarios, videos, guest speakers, group work, breaks, interactive use of technology, review questions, and polls and games, findings which were similar to those indicated in students' quantitative responses. One instructor expressed that the online classroom allowed for more interaction through activities in comparison to their physical classroom, due to the lack of physical space at their institution for testing out opportunities for creative engagement.

Others expressed their recognition of instructor efforts, including stating that they felt that their instructors were “trying hard”, “taking online learning seriously”, “being thoughtful about how

they are delivering the course online”, “going above and beyond”, “having a positive attitude”, and “trying to make things as normal as possible”. A number of participants expressed that the recognition of instructor efforts contributed to their motivation, engagement, and interest in the course, which contributed to their overall satisfaction with online learning. This is demonstrated in this participant’s response:

*“Most of my teachers try very hard to make this experience exciting and engaging despite the alternate format. I’ve had professors explain they bought fancy microphones to ensure recorded/live lectures are clear. One professor even excitedly shared they got a green screen to have fun backgrounds while he speaks. When professors show they are trying their hardest to make this experience amazing for us, it really makes you more engaged and more passionate about the lecture content and assignments you are doing.”*

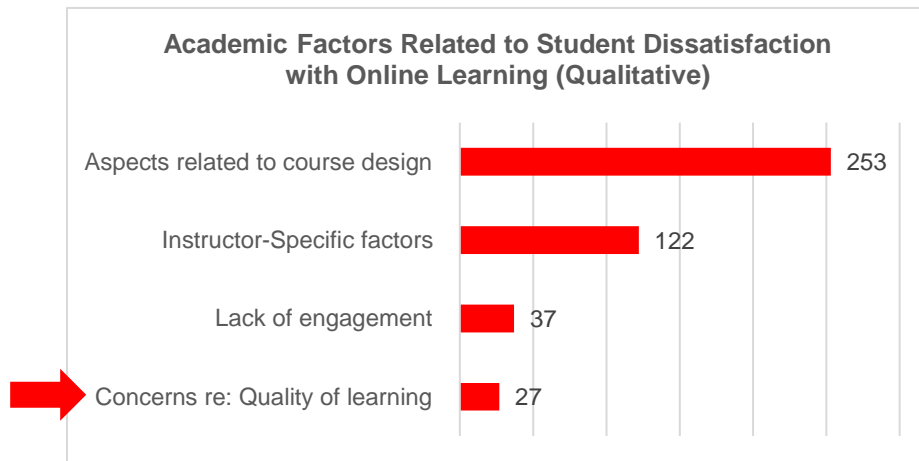
Another participant discussed their instructors’ efforts to learn more about effective online teaching, which they felt contributed to a positive learning experience:

*“[My instructor] in particular goes above and beyond to help with online learning and has done [their] research as to how to most effectively teach online. [They] learned what [their] options were in terms of technology and used them accordingly. [Their] course design works with the nature of the course and helps student stay on track with the material.”*

## **UNSATISFACTORY**

Participants also expressed dissatisfaction with the lack of engagement, both in class and outside of class. Many participants stated that they felt their classes were not engaging and frequently consisted of information read directly off the slides for synchronous courses, or solely written information for asynchronous courses. Participants noted that this format of courses made it challenging for them to stay motivated and interested and made it more difficult to understand and remember the material, as demonstrated in this response: “Listening to a recorded PowerPoint is super unengaging and I feel like I haven’t learned anything by the end of it, I find myself constantly zoning out and getting distracted because it is super dull”. Participants also noted that due to a lack of engagement, they were not able to interact with the instructor and peers to the degree that they wished, leading to lower engagement in the course overall, “inability to make friends”, and dissatisfaction with their online learning experience. A few participants noted that while instructors made efforts to engage students, such as through facilitating discussion boards or breakout rooms, they felt that students “didn’t actually care about what anyone else was saying”.

Another participant noted that even in the presence of engagement opportunities, the online learning environment and their home situation made them feel uncomfortable engaging in class: “I do not feel comfortable going on camera and speaking in front of a class as I am at home and others are listening and making noise in the background”.

**(4) CONCERNS REGARDING THE PERCEIVED QUALITY OF LEARNING****UNSATISFACTORY**

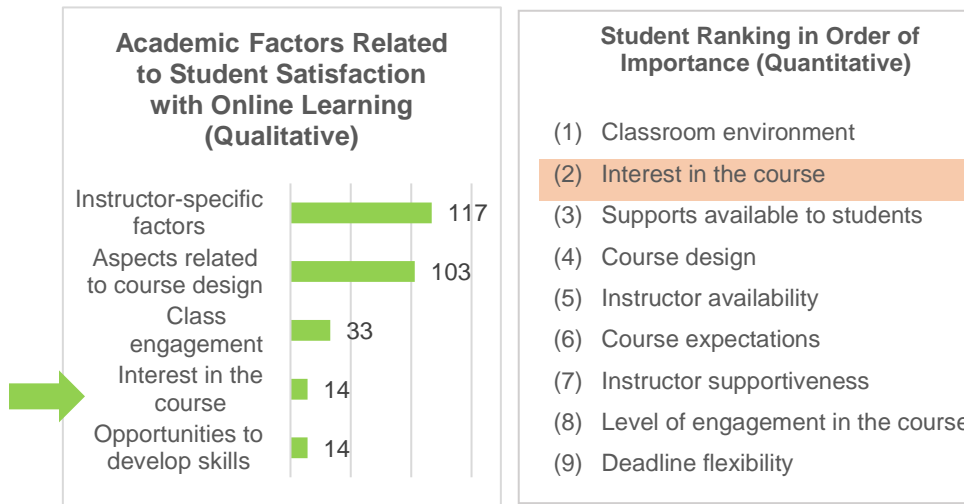
Numerous participants expressed concerns regarding the quality of the education they were receiving as well as their preparedness for the future. In their responses, participants discussed their perception of the education they were receiving as being “inadequate”, “not good”, “unprepared”, “lesser value”, “disappointing”, “unsatisfactory”, and “self-taught”. This was connected to a number of the previously mentioned factors, including independent and asynchronous learning, lack of engagement and interaction with instructors, lack of availability of instructors, and increased workloads. A number of participants stated that they felt they “didn’t learn anything” this past semester and felt that the quality of education that they were receiving was lower compared to in-person instruction. One participant explained how, in their view, online courses prevented them from learning in a way that was optimal for them, leading them to feel that the education they were receiving was unsatisfactory.

Another participant expressed their disappointment with their learning this past semester:

*“I feel as though I did not learn much this semester, I was just doing assignments to get this over with. This is saddening to me because this was a really important year in [my field of study] and I was very excited about all the things I would learn”.*

**(5) INTEREST IN THE COURSE**

Although student interest in the course was ranked 2<sup>nd</sup> in order of importance compared to other academic factors, fewer qualitative responses focused on this factor.

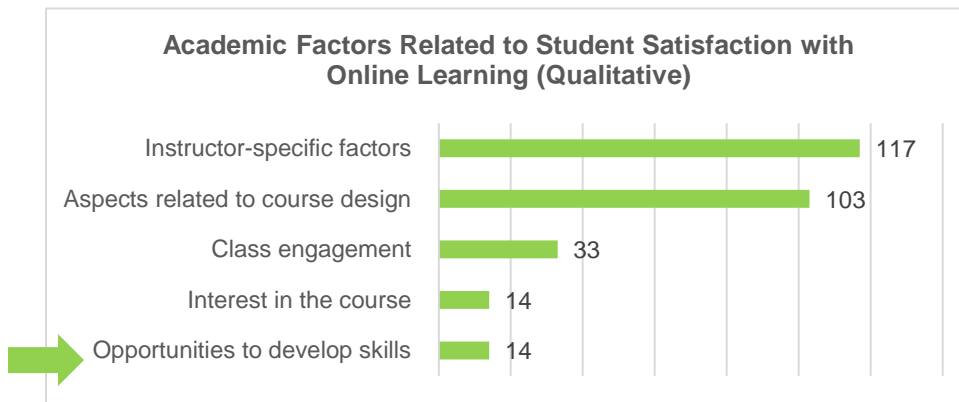


**SATISFACTORY**

A number of participants identified that their interest in and satisfaction with the course content was a factor that contributed to their overall satisfaction with online learning. Many participants stated that they found the content of their courses interesting, relevant to their field of study, up-to-date, and valuable. One participant explained that their interest in their courses lead them to enjoy their studies and to feel that their learning was valuable which motivated them to stay engaged in the course.

**(6) OPPORTUNITIES FOR SKILL DEVELOPMENT**

Opportunities for skill development was one of the less common themes that emerged from students' qualitative responses. This factor was not explored quantitatively.



Numerous participants identified that online learning provided them with opportunities to strengthen existing skills and develop new skills, which contributed to their learning satisfaction. A few participants discussed opportunities to strengthen their proficiency and comfort using online technologies and tools such as Zoom and Outlook, which they feel will be helpful post-graduation. Other participants discussed soft skills that they developed such as time



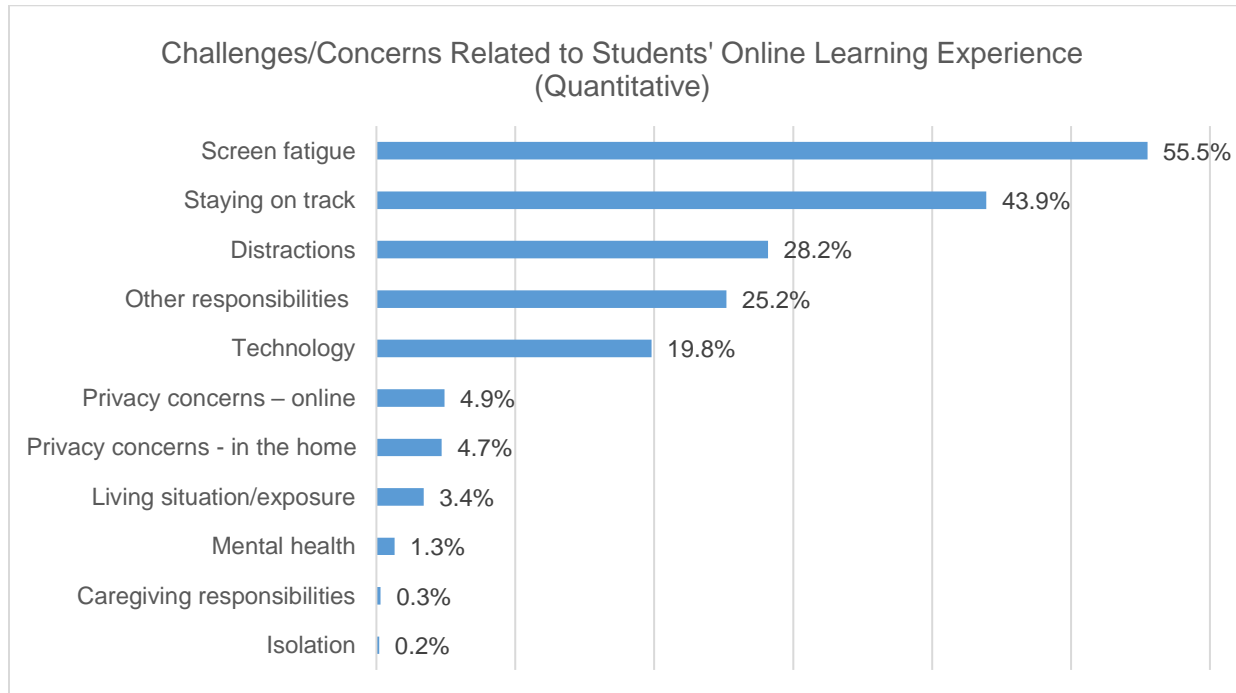
management and organization, which can be helpful to them in their studies and beyond, as stated by one participant: “[Online learning] is challenging me to become a better student”. One participant mentioned that online learning provided them with the opportunity to connect with speakers from around the world which was helpful to their learning.

## Non-Academic Factors

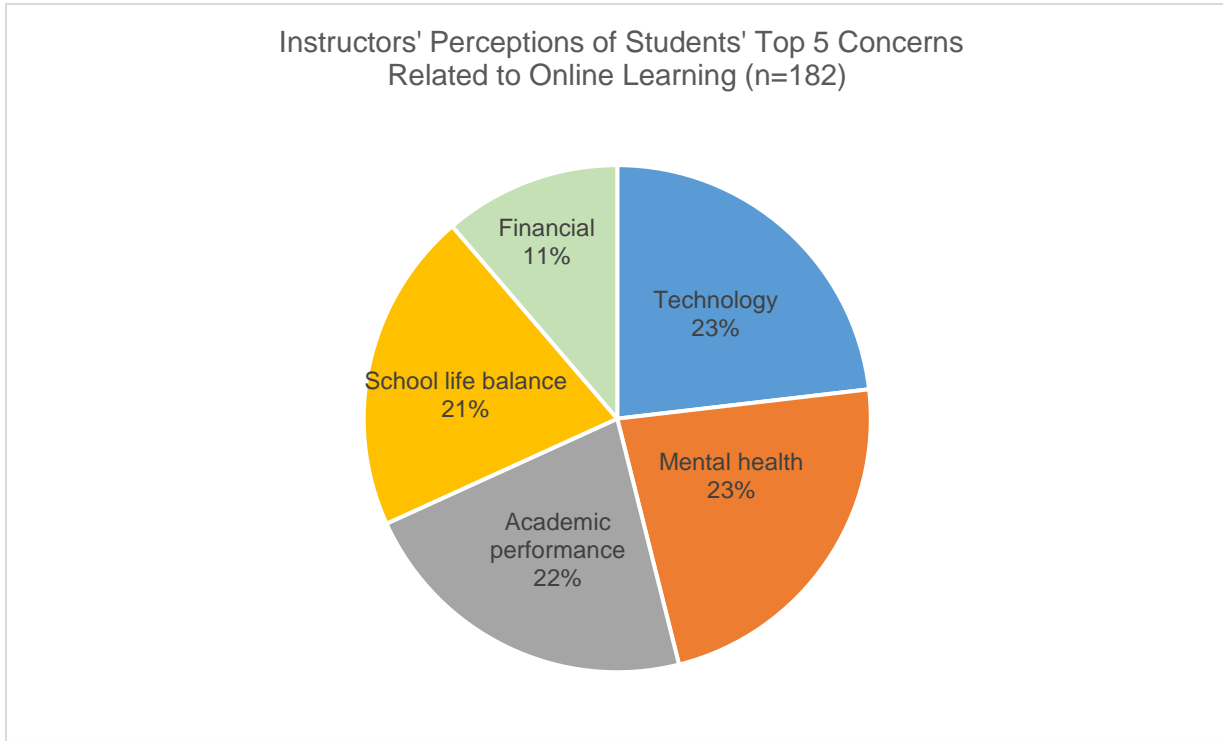
A number of factors related to non-academic aspects of students’ experience as online learners were explored both quantitatively and qualitatively, including factors related to students’ engagement with peers, perception of support from their institution, availability of and satisfaction with the supports and resources offered to students, and other aspects related to student experience. Some of the themes that emerged also touch upon the opportunities provided by online learning such as increased access to education, increased comfort, and other benefits, while other themes touch on the barriers and challenges that may hinder the ability to succeed in and enjoy their online learning experience. This section presents an examination of each of the non-academic factors, from both a quantitative and qualitative perspective, and how they relate to student satisfaction with their online learning experiences.

### WHICH NON-ACADEMIC FACTORS ARE RELATED TO STUDENT SATISFACTION WITH THEIR ONLINE LEARNING EXPERIENCE?

Students were asked to select all the non-academic challenges/concerns they experience related to their online learning experience. The findings are presented in the graph below. As shown in the graph, screen fatigue was the most commonly selected concern (55.5%), followed by staying on track (43.9%), distractions (28.2%), other responsibilities (25.2%), and technology (19.8%). Fewer than 5% of students selected the other concerns, including privacy, living situation/exposure, mental health, caregiving responsibilities, and isolation. While these results are mostly supported by the quantitative findings, factors such as mental health and living situation were identified as significant concerns in students’ qualitative responses which will be described in this section.

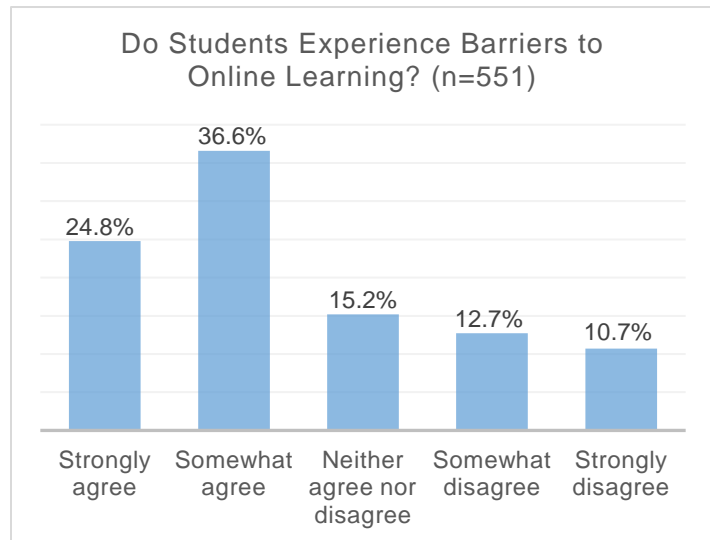


Instructors were also asked to identify what, in their opinion, were the most significant student concerns affecting students' online learning. The five most common concerns that emerged from instructors' responses were as follows: (1) mental health – 23%; (2) technology – 23%; (3) academic performance – 22%; (4) school-life balance – 21%; and (5) financial – 11%.

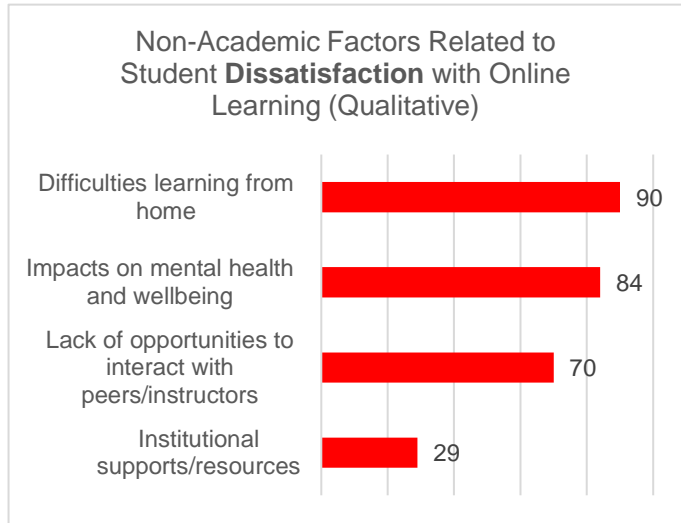
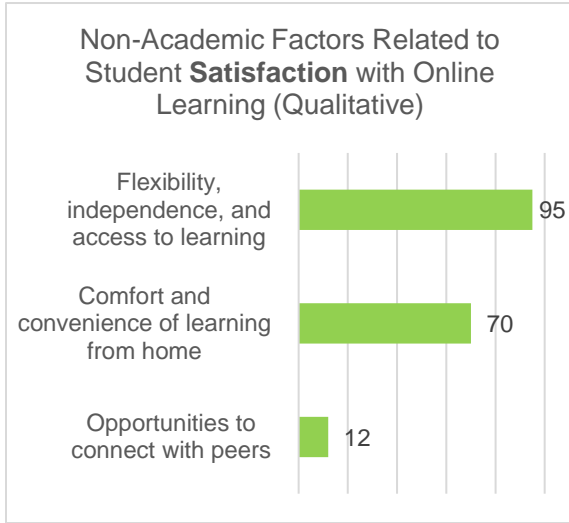


While some of the responses provided by instructors and students were similar, these findings demonstrate that students' and instructors' perceptions regarding the students' concerns affecting their online learning differ.

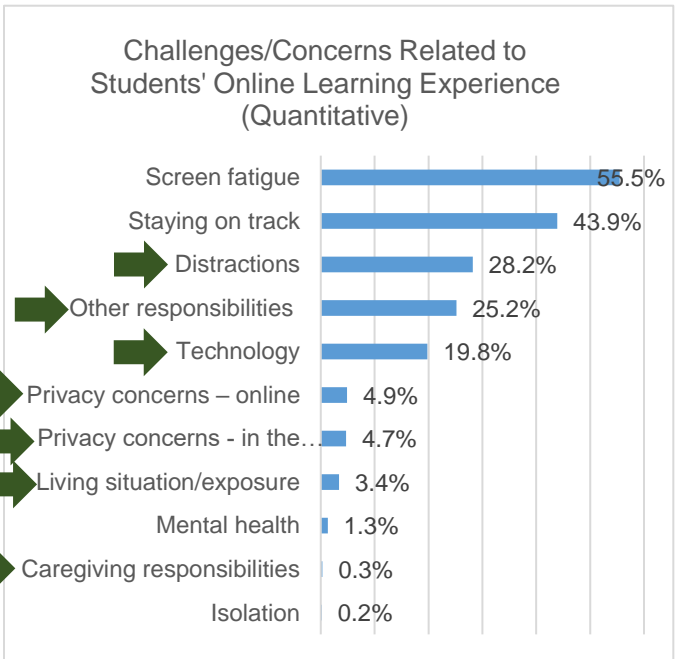
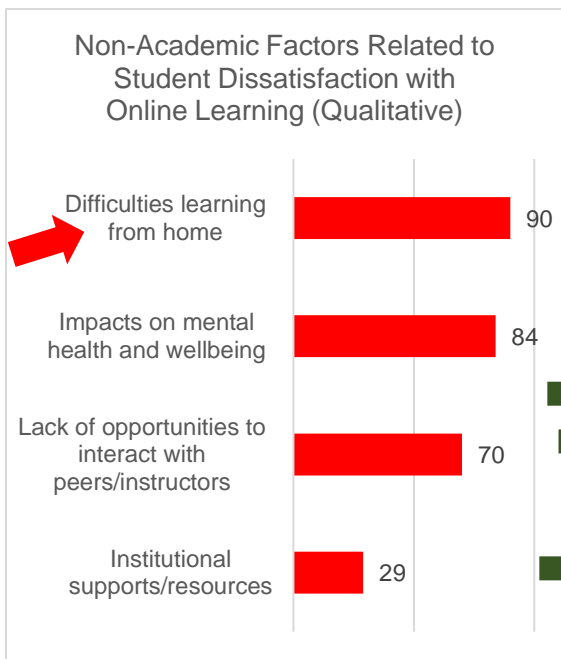
Many of the factors discussed above are barriers to online learning, making online learning challenging for students who face these barriers. In fact, when students were asked whether they experienced barriers to online learning, the majority of students (61.4%) indicated that they experienced barriers to learning online (24.8% strongly agree, 36.6% somewhat agree) that hindered their learning process.



Students were also asked to qualitatively reflect on the factors that lead to their satisfaction and dissatisfaction with their online learning experience. Quantitative findings related to these themes are used throughout this section to provide a picture of how important these factors are and student experiences of/satisfaction with these factors. The main themes that emerged from student responses were: (1) difficulties learning from home; (2) impacts on mental health and wellbeing; (3) flexibility, independence, and access to learning; (4) comfort and convenience of learning from home; (5) opportunities to connect with peers/instructors; (6) availability of supports and resources; and (7) feedback solicitation. Each of these themes is discussed in more detail below.



**1) DIFFICULTIES LEARNING FROM HOME**



**UNSATISFACTORY**

The most commonly stated theme relative to non-academic factors impacting student satisfaction with online learning was difficulties learning from home. Similarly, quantitative findings show that aspects related to this theme were selected by many students as challenges/concerns when it comes to their online learning experiences. A number of aspects related to difficulties learning from home which are discussed in further detail below include: a) distractions/difficulty concentrating, including other responsibilities and factors related to students' living situations; and b) Wi-Fi and technological challenges. Both were categorized as unsatisfactory, leading to students' dissatisfaction with their online learning experience.

**a) Distractions/Difficulty Concentrating**

Students identified distractions and general difficulty concentrating as unsatisfactory factors, which were exacerbated by issues such as overall living situation, other competing responsibilities, as well as not having a dedicated study space. Many participants noted that they found it difficult to focus on their learning as they got distracted by their surroundings at home, other competing responsibilities such as parenting, caregiving, and work, or other tasks in the home such as cooking and laundry, as demonstrated in this response: "While e-learning seems like a blessing, I need that in-class learning to focus my mind on my studies [...] at home, I want to fold laundry while I should be paying attention to tutorial". One participant stated that their learning suffered due to childcare responsibilities that they had to tend to while studying from home:

*"For one evening class I will receive a much lower grade simply because it is scheduled in the evening when I do not have childcare and my spouse is also in a class. I'm sure other students experience similar challenges but there is little to nothing done about this".*

One participant also spoke to the unique challenges that graduate students experience in their learning relative to balancing a number of competing demands including as students, instructors, parents/caregivers, researchers, and other roles. Other participants spoke to distractions such as living with others, including "toddlers screaming or singing within earshot" or "living with 6 other people who cannot be forced to be quiet all day". Others also spoke to experiencing distractions online, such as getting distracted on their phone/computer during class, as explained by this participant:

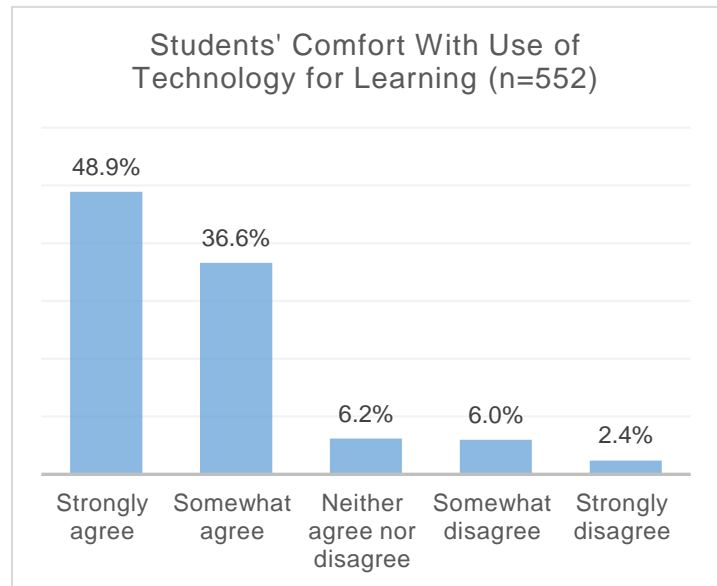
*"I find that when I was in class, I always put my phone on vibrate and into my bag and I had no problems not touching it because the professor could see me and vice versa. However, now with school being online and most of my classes not requiring me to have my camera or microphone on, it has become a little bit more challenging to put my phone (and other distractions) away to focus on the lesson".*

A number of respondents stated that it was challenging for them to focus on their online learning due to not having a dedicated study space at home, which not only made it difficult for them to separate their school and home life, but also made it difficult to focus on schoolwork or made learning uncomfortable and engagement in classes unfeasible. Lastly, participants spoke to how the course design, for example 3-hour lectures without a break in between, also made it difficult to concentrate and absorb the content.

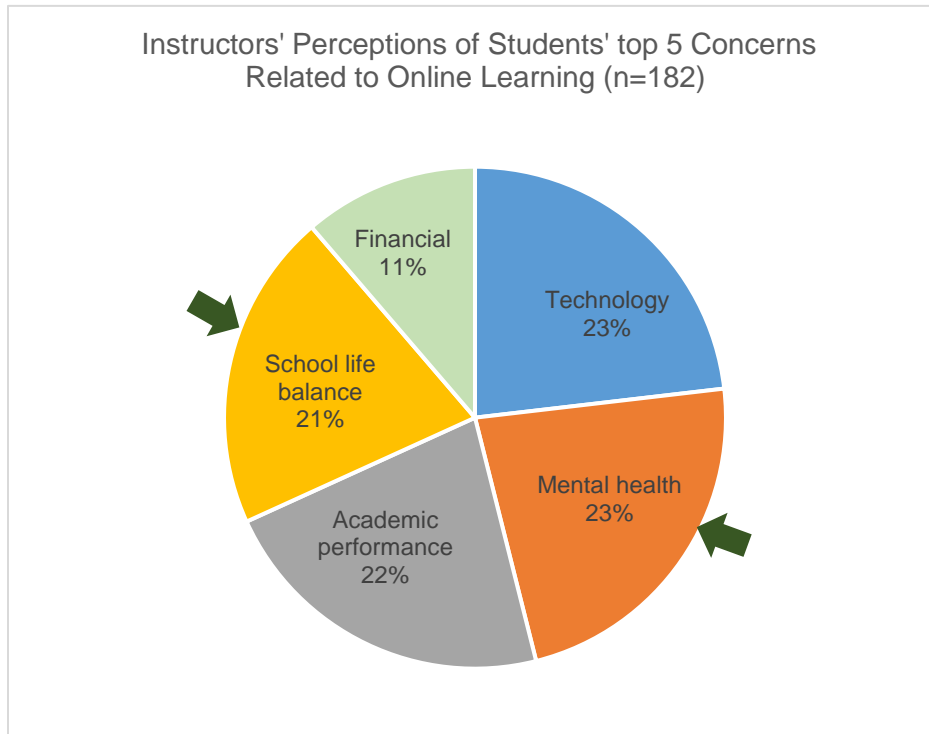
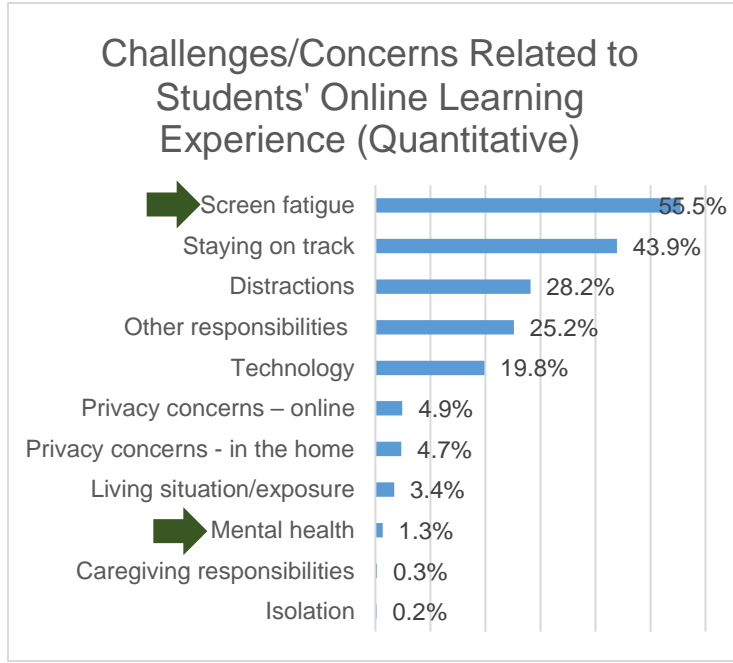
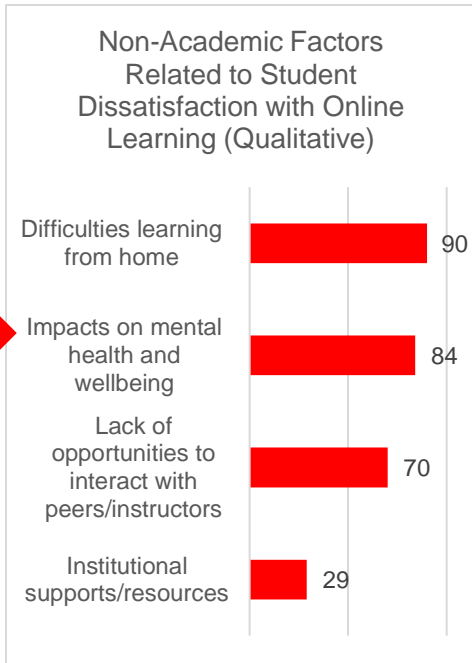
**b) Wi-Fi/Technological Challenges**

Internet and technological interruptions were also identified by a number of participants as a significant factor contributing to learning challenges. Numerous participants noted that they frequently experienced issues such as Wi-Fi interruption, slow internet connection, challenges with their computer, interruptions with the online learning platform, challenges learning new systems, as well as internet and technological challenges on the instructors' end. Participants indicated that those challenges have led to issues such as being logged out during a test, errors in submitting assignments leading to missed assignments, lags in communication, cutting out of audio impacting online discussions and presentations, distractions, feelings of frustration and stress, lack of engagement, disruptions to learning, and missing important content. A number of respondents highlighted that this was a particular disparity experienced by students living in rural and remote settings, where internet connection tends to be poorer compared to urban centers.

A number of students also stated that they experienced challenges using technology in general or learning how to use technology for their learning, which added additional stress to their experience. Earlier in the survey, students were asked about their comfort level using technology for their learning. While the majority of students (85.5%) stated that they either agreed (48.9%) or somewhat agreed (36.6%) that they were comfortable using technology for their learning, 8.4% of students stated that their either somewhat disagreed (6.0%) or strongly disagreed (2.4%) with the statement, indicating that they were not comfortable with the use of technology for their learning. As students indicated, trying to troubleshoot technological challenges or learn the system by themselves added additional stressors and hindered students' ability to learn online.



## 2) IMPACTS ON MENTAL HEALTH AND WELLBEING



## UNSATISFACTORY

One of the most prominent themes was the significant impact that the transition to online learning had on student mental health and wellbeing. This was identified as the top concern in the quantitative analysis, and the second greatest concern in the qualitative findings. Many participants identified that they were struggling with issues such as: a) increased stress and burnout, 2) difficulty establishing a school-life balance, and 3) screen fatigue, all of which were related to students' dissatisfaction with their online learning experience.

### a) Increased Stress

A large number of participants noted that they were experiencing significant stress and burnout, and felt that online learning was “draining” their mental health, with one participant stating: “I have never had such high stress levels in my life”; others expressing concern regarding the mental health of their peers. This was identified as particularly challenging for students who experienced mental health challenges prior to the pandemic, which were now compounded by this transition. Commonly noted reasons included being “constantly overworked” with demanding workloads, testing requirements and restrictions, lack of support and flexibility from instructors, experiencing social isolation, challenges related to the pandemic, financial stressors, responsibilities such as work, parenting, and caregiving, and challenging home situations. One participant explained how academic factors contribute to the challenges that students are experiencing that impact their learning: “[...] frankly makes myself and many other students feel more alone and hopeless than a global pandemic already has”.

Another participant explained how academic and non-academic factors work together to cause stress: “I stress about how I will fund my schooling so I overwork myself just to come home and stress about failing a class and doing poorly in the rest.” Another participant discussed the bidirectional relationship between online learning and mental health, stating: “Online learning negatively affects my mental health so I am less productive and studying is harder.” A number of participants noted that they were commonly feeling “anxious”, “hopeless”, “drained”, “suffering”, and “overwhelmed”, which, combined with the demands of online learning and a lack of “social outlet”, was leading them to experience significant burnout and difficulty engaging in their learning. A number of participants expressed a desire for increased supports from their institutions, including student check-ins, information regarding counselling services, as well as a more “prevention-focused” approach to mental health in terms of the design of courses, testing, workload, and the supports available to students.

### b) Difficulty Balancing School and Life

A number of participants expressed that they experienced difficulty with balancing school and life due to the lack of separation between work, school, and home life. One participant explained how this reality negatively impacted their wellbeing: “being at home all day due to studies and other situations weighs me down, mentally and physically. I feel drained as time slowly ticks by.” Participants explained that, in some cases, they did not have a dedicated study space at home or only had one room in the house, which made it “nearly impossible” for them to separate school and home life and to feel that there was “no escape” from school:

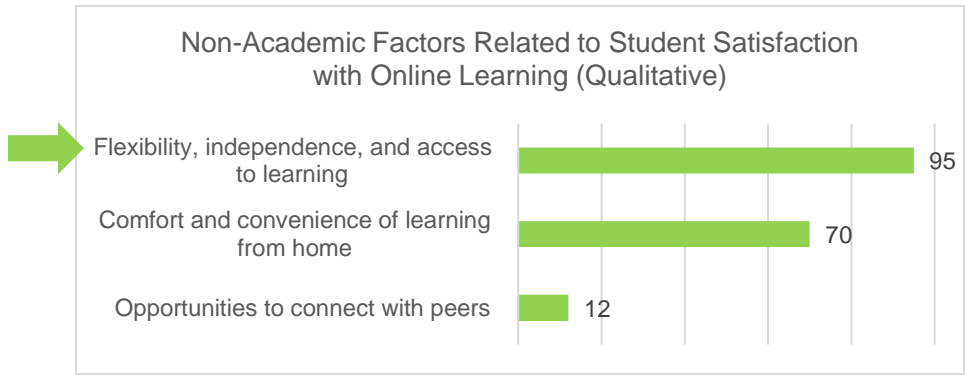
*“Outside of the pandemic, I work mostly at the office which gives a clear division of work, home, and school. Even though I have an office job, I am out of the house and have a commute. Since I am working from home I feel that there is no escape from video calls or screen time”.*

One participant expressed that they felt they were “living the same day on repeat”. This made it challenging for participants to focus for long periods of time and to remain motivated, as well as not feeling able to rest outside of school or work. Others explained that, beyond the lack of physical separation, demanding workloads, and lack of set schedules (i.e., asynchronous classes), also made it challenging to find time to do things outside of school such as work, family, and social life, which negatively impacted their learning, as explained by this participant: “I don’t have a satisfactory amount of time doing anything else with my life which affects the quality of my work and education”.

**c) Screen Fatigue**

The last commonly shared concern was screen fatigue, which was the top concern identified in the quantitative results. Many participants shared that they spent “hours on end” looking at a screen, often for 12+ hours a day, causing a large array of consequences including fatigue, difficulty focusing, eye strain, vision decline, headaches, brain fogs, back and neck pain, burnout and mental health challenges, and exacerbation of existing health conditions and chronic pain. A number of participants spoke to the fact that due to online learning, combined with restrictions due to the pandemic, all of their activities, including social, extracurricular, academic, reading, and work, all required the use of a computer, leading to significant amounts of screen time and time indoors. A number of participants discussed how this reality significantly impacted their wellbeing and their ability to be successful in their studies, contributing to an inability to complete requirements as demonstrated in this response: “Screen fatigue has made me more tired more frequently throughout the day so I don’t have as much energy to complete assignments as I would have had if classes weren’t online.”

**(3) FLEXIBILITY, INDEPENDENCE, AND ACCESS TO LEARNING**



**SATISFACTORY**

This factor was most commonly cited by participants as contributing to their satisfaction with online learning and only emerged in students’ qualitative responses. Participants discussed the increased flexibility that online learning offers, including opportunities such as: a) working at their own pace, b) making their own schedule, and c) being able to access education from anywhere.

**a) Working at Own Pace**

Many participants discussed the benefits of being able to work at their own pace, including going over the material multiple times, working ahead, and taking breaks when needed. A



number of participants discussed that having those options helped them with focus and attention which increased their engagement with the course and understanding of the material. One participant discussed how prior to online learning they missed important material, which is something that online learning allowed them to avoid:

*“The experience is better online [...] you are able to listen and watch lecture material as many times as you need to understand it better. For in person lectures, you would have to go along with the speed of the instructor if you don’t understand something you cannot come back to listen to it again. You will just have to move on and sometimes because you haven’t understood the materials before the rest of the class you feel lost”.*

Another participant discussed how being able to go at their own pace made classes more accessible to them: “Mental health issues arise and it is reassuring to know that even if I cannot dedicate time at a specific time, I will still be able to catch up.” One participant noted that “everyone learns differently”, which is why being able to go at their own pace made education more accessible and inclusive of diverse learning needs.

### **b) Flexible Schedule**

Numerous participants also stated that online learning allowed them the flexibility to be able to balance various responsibilities including employment, parenting, caregiving, and other roles in addition to being a student by being able to make their own schedule and managing their time. As explained by a number of participants, this flexibility also allowed them to learn in a way that met their learning and accessibility needs, including choosing the times that worked best for them and allowing them to take care of their health and wellbeing. A few participants also noted that being able to manage and plan their own time allowed them to have more success in their studies and manage stress better.

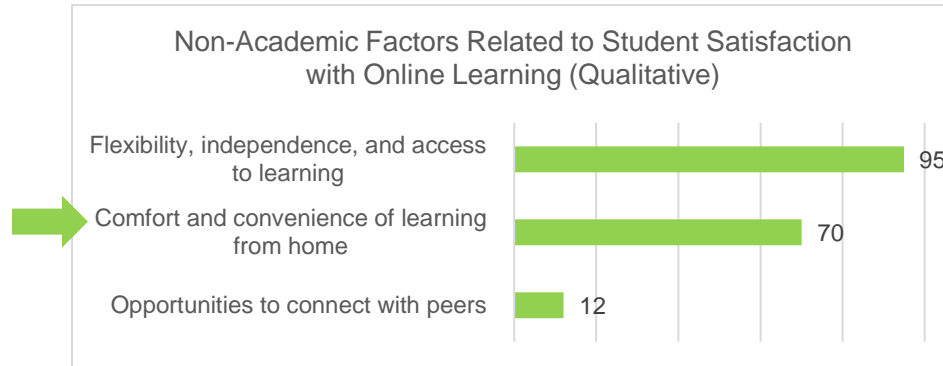
Additionally, online learning allowed a number of participants to “multi-task”. Examples included completing schoolwork during work time (i.e., during lunch) or while caring for children, which saved them time. A number of participants discussed that online learning was beneficial to them as parents; since they no longer had to obtain childcare, they could work around their home schedules and focus on their family when needed, as demonstrated in this response: “I’m able to focus on the content instead of dealing with babysitters, worrying about costs of childcare, travel time, etc. I can do [school] after my kids go to bed, on my breaks at work, etc.”.

### **c) Being Able to Access Education from Anywhere**

Lastly, participants discussed that online learning provided them with increased access to education, specifically related to the ability to access online learning from anywhere. A number of participants expressed that the shift to online learning allowed them to enroll in their program of choice, which they may not have had the opportunity to do otherwise due to needing to relocate closer to campus or to commute. A number of participants discussed their experience as mature students with established families and networks, who would not have been able to relocate for school, as explained by this participant: “I registered for the course in the program because the entire program is being offered online. I would not likely have taken it if I had to attend in-person as it would not likely fit in to my family duties”. A few other participants shared that in the past, lack of accessibility on campus and disability-related travel limitations prevented them from accessing education; online learning provided them with the opportunity to further their education: “I would probably [not have been] able to take these courses pre-COVID due to travel limitations caused by my disability and because I do not live close to the university.”

Lastly, participants commented on the benefits of having constant access to their online learning platform, allowing them the convenience and flexibility of being able to travel and attend class from anywhere with internet access.

#### 4) COMFORT AND CONVENIENCE OF LEARNING FROM HOME



#### SATISFACTORY

Another commonly cited theme was the comfort and convenience of learning from home. Participants focused on a number of benefits, including: a) increased comfort levels; b) benefits for mental health and wellbeing; c) increased sense of physical and emotional safety; and d) no need to commute to class.

##### a) Increased Comfort Levels

Numerous participants stated that they enjoyed the comfort and convenience of learning from home, including being able to wear comfortable clothes, not having to wake up as early or stay on campus all day, feeling relaxed and being able to turn their cameras off when needed, not having to carry belongings, feeling comfortable in their own environment, being able to study from anywhere they choose, working from their couch or bed, and being able to live at home with family.

##### b) Benefits for Mental Health and Wellbeing

Other participants also shared that online learning benefitted their mental health and wellbeing, leading them to be more productive, focused, and engaged in their studies. Participants provided examples of activities that they were able to do at home to take care of their needs that contributed to their wellbeing, including moving around or going for a walk when needed, being able to attend class even when ill/feeling under the weather, being able to turn their camera off or disengage when needed, eating during class, and taking breaks.

##### c) Increased Sense of Physical and Emotional Safety

Many participants also expressed that learning from home allowed them to feel safer emotionally and reduced the challenges that they experienced with in-person learning due to their anxiety. Participants explained that being in a comfortable environment that felt safe to them lessened anxiety and social pressures, which helped them feel more engaged and comfortable: "I struggle with anxiety, so online classes prevent me from having any anxiety attacks in class and prevent me from feeling uncomfortable within the environment I'm learning in." Others shared that they enjoyed the privacy offered by online learning, and the ability to

interact with others on their own terms and from the comfort of their own home, as stated by this participant: “It’s easier to meet [people] [...] I’m shy so the screen in between us can be helpful.” Lastly, a few participants commented on the physical safety provided by learning from home; specifically, the ability to isolate and stay safe during the pandemic.

#### d) No Need to Commute to Class

Many participants identified the reduced need to commute to class as one of the most significant benefits of online learning. Participants cited three main benefits brought about by this factor, including time saved, reduced costs associated with commuting, and reduced need to leave the house in unfavorable weather conditions.

Time saved was the most commonly cited benefit. Participants stated that they felt that online learning “remove[d] time out of the day for travelling between classes and from home to school”, which allowed them to have more time for other academic and non-academic activities. Many participants provided examples of the activities that they were now able to engage in due to the time saved from not having to commute to class, including spending more time studying and writing assignments, not having to wake up as early, spending more time with loved ones, and taking breaks when needed. One participant explained that this time saved allowed them to be more productive: “I can be more productive during non-class times because I don’t have to travel to school, or between classrooms on campus.” The second benefit cited was reduced cost associated with commuting such as gas and a parking pass. As explained by this participant, these reduced costs contributed to a reduction of the stress that they experience related to their finances: “I’m also saving a lot of money with regards to not needing to buy a parking pass or gas, which takes some pressure off of my finances.” Lastly, a few participants stated that online learning has given them the opportunity to stay home during the colder weather periods of the year, making them feel more comfortable in their learning.

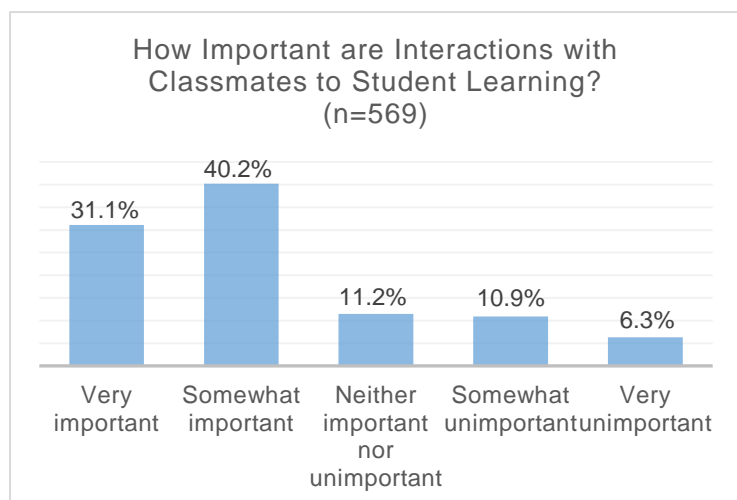
### 5) OPPORTUNITIES TO CONNECT WITH PEERS

Many students highlighted opportunities to connect with peers, whether inside the classroom or outside the classroom, as important for determining their overall satisfaction with online learning.

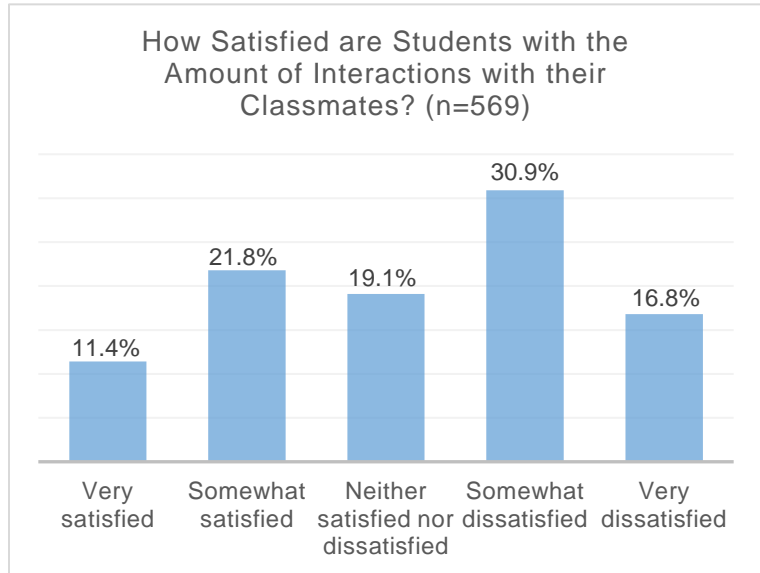
#### STUDENTS’ INTERACTIONS WITH CLASSMATES (IN-CLASS)

Students were asked questions specific to their interactions with classmates in their courses.

Students were asked to quantitatively reflect on the importance of interaction with classmates to their online learning experience as well as their level of satisfaction with the amount of interaction with their classmates. The majority of students (71.3%) identified interactions with their classmates as important (very important, 31.1%; somewhat important, 40.2%).

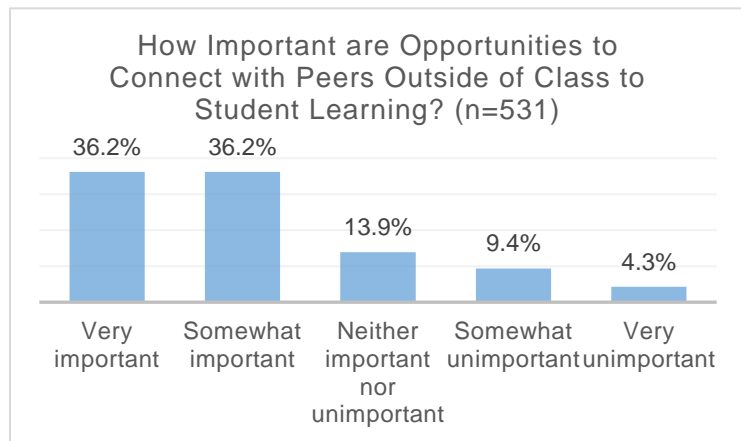


When asked about their satisfaction with the interactions with classmates, almost half of students (47.7%) were dissatisfied with the amount of interaction with their classmates (somewhat dissatisfied, 30.9%; very dissatisfied, 16.8%). Only 11.4% were very satisfied and 21.8% were somewhat satisfied with the amount of interaction with their classmates. Clearly, student dissatisfaction about the amount of interaction with classmates represents an area for improvement. This conclusion also reflects the responses provided by students in the qualitative section.

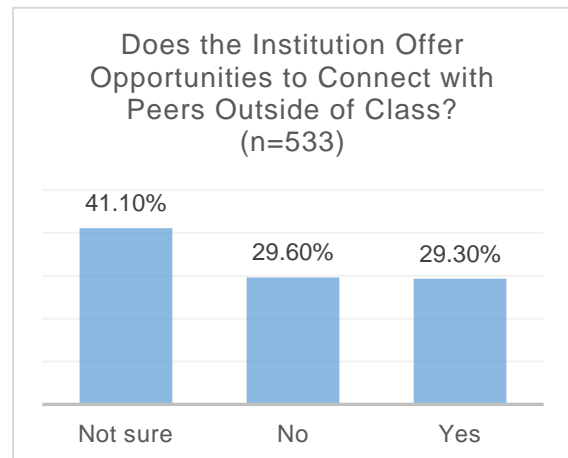


**STUDENTS' INTERACTIONS WITH PEERS (OUTSIDE OF CLASS)**

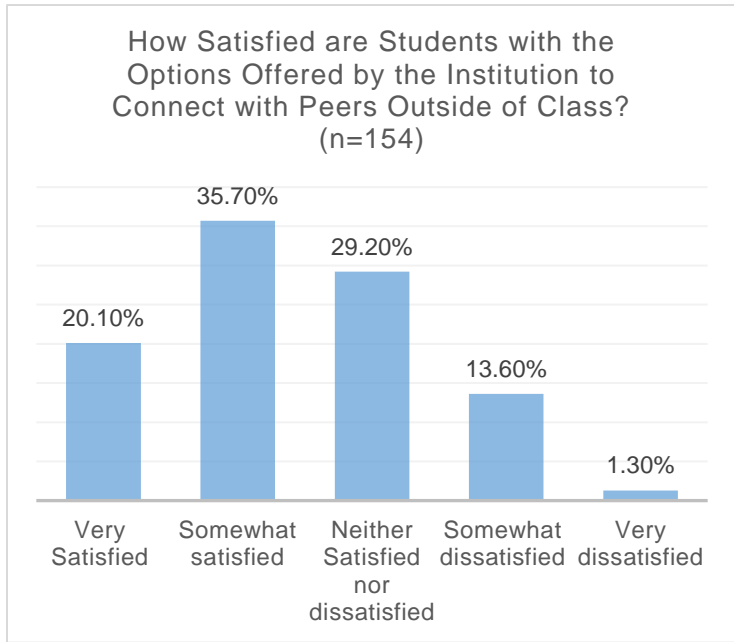
Similar to opportunities to connect with peers in class, the majority (72.4%) of students also indicated that opportunities to connect with peers outside of class were either very important (36.2%) or somewhat important (36.2%) to their learning.



Students were also asked whether their institution offered students opportunities to connect with peers outside of class. A large percentage of students (41.1%) stated that they were not sure whether their institution offered opportunities to connect with peers outside of class. About a third of participants said 'no' and 'yes' (29.6% and 29.3%, respectively).

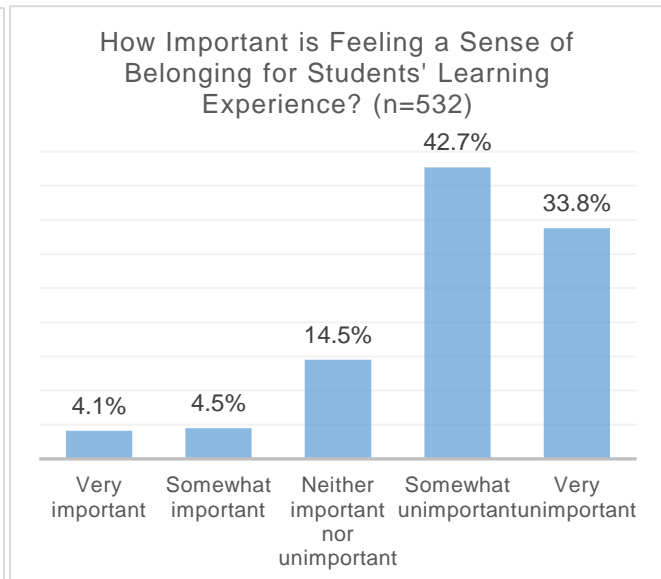
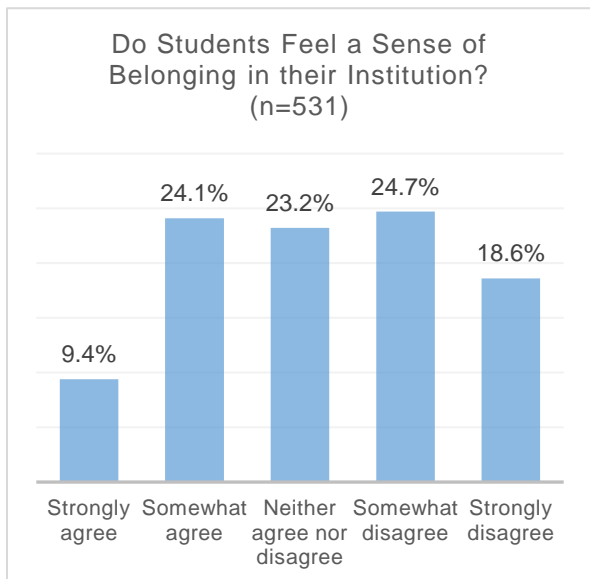


Students who said “yes” to the previous question were asked a follow-up question about their satisfaction with the options offered by the institution to connect with peers outside of class. Over half of students (55.8%) stated that they were either very satisfied (20.1%) or somewhat satisfied (35.7%) with the options offered. Almost 30% stated that they were neither satisfied nor dissatisfied with the options provided. About 15% were either somewhat dissatisfied (13.6%) or very dissatisfied (1.3%) with the options offered. While more students were satisfied with institution-organized options to connect with peers outside

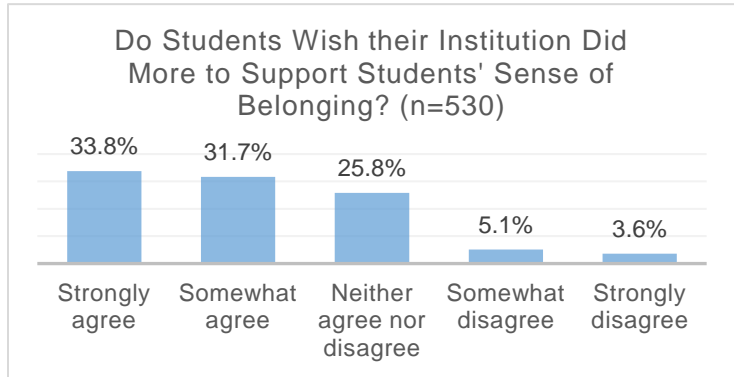


of class than connecting with them in class (55.8% versus 33.2%), it is important to keep in mind that a notable number of students indicated that their institution either did not offer out-of-class events for students to connect with one another or students did not know about such events. Students not knowing about institution organized events to connect with peers outside of class is an important gap and suggests there needs to be increased and more strategic advertising of activities by the institution, assuming the events are available to students.

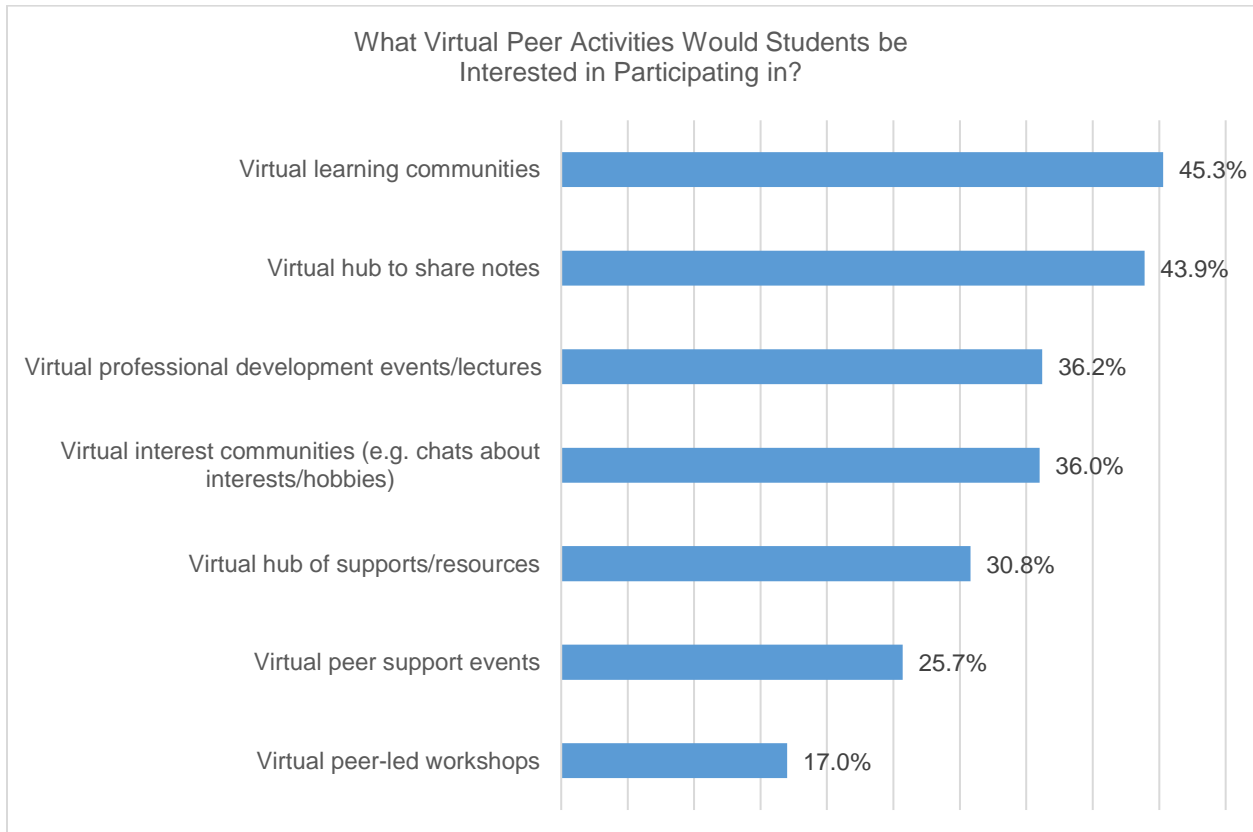
Students were also asked about their perceived sense of belonging at this institution; 9.4% of students stated that they strongly agreed that they felt a sense of belonging and 24.1% somewhat agreed with the statement. A large proportion of students (43%) stated that they either somewhat disagreed (24.7%) or strongly disagreed (18.6%), meaning that they did not feel a sense of belonging in their institution. When students were asked how important feeling a sense of belonging was for the learning experience, the majority of students (76.5%) stated that it was either somewhat unimportant (42.7%) or very unimportant (33.8%) to their learning experience.



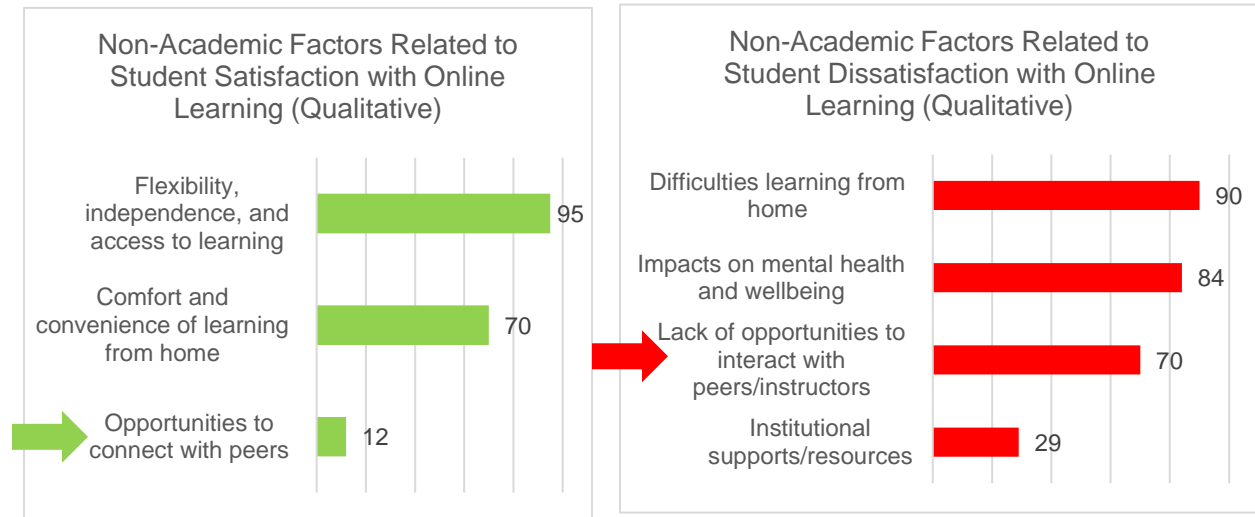
Students were also asked whether they wished their institution did more to support students' sense of belonging. The majority of students (65.5%) stated that they either strongly agreed (33.8%) or somewhat agreed (31.7%) with the statement. Only 8.7% of students either somewhat disagreed or strongly disagreed with the statement.



Students were invited to rank the types of virtual peer activities in which they might be interested. The results demonstrated that students are most interested in aspects of interactions with peers that are related to their learning (i.e., virtual leaning communities, 45.3%; virtual hub to share notes, 43.9%). Many students also expressed interest in non-academic virtual professional development events/lectures (36.2%), virtual interest communities (36.0%), and a virtual hub of supports and resources (30.8%). Also, 25.7% of students expressed interest in virtual peer support events, and 17.0% of students expressed interest in virtual peer-led workshops. These findings are displayed in the graph below.



In their qualitative responses regarding the factors that relate to their satisfaction or dissatisfaction with online learning, students identified opportunities to connect with peers as important factors relative to their experience as students. A number of aspects categorized as satisfactory or unsatisfactory based on student responses are outlined below.



### SATISFACTORY

Numerous participants identified opportunities to connect with peers, both inside and outside the classroom, as a factor contributing to their satisfaction with online learning. A number of reasons were cited for the importance of this factor, including being able to receive academic support and clarification when the instructor is not available, completing group work, and feeling engaged in class, all of which participants identified as important to their learning. A number of participants also discussed the importance of peer support, especially during challenging times, as demonstrated in the following response: “I am able to connect with other students because we are all going through this difficult time together, so we are able to help each other.” Various examples were provided of how connections with peers were facilitated, including through social media, study groups, breakout rooms, Zoom, email, group work, in-class activities, group projects, and discussion boards.

### UNSATISFACTORY

A significant theme that emerged from many responses was a lack of interaction with both instructors and peers and missing “human contact” and “face to face interaction”, which made student learning unsatisfactory. In their responses, participants spoke about the difficulties they experienced connecting with and getting to know their instructors and peers through a virtual format due to a variety of factors, including a lack of informal/social avenues to connect, lack of classroom engagement, technological issues, asynchronous classes, and/or discomfort connecting through camera. This was highlighted as a significant concern particularly for students in the first year of their studies, who have not met any of their classmates or instructors in an in-person format. Many participants expressed the sentiment of missing “real”, in-person contact and “authentic” discussions, noting that online conversations often felt “not meaningful”, “awkward”, “not genuine”, “challenging”, “inorganic”, or “just not the same”. Others also spoke to the difficulty they experienced communicating their thoughts or forming connections through a screen, for reasons such as anxiety, internet connectivity, peers and instructors not turning their cameras on, or comfort levels.

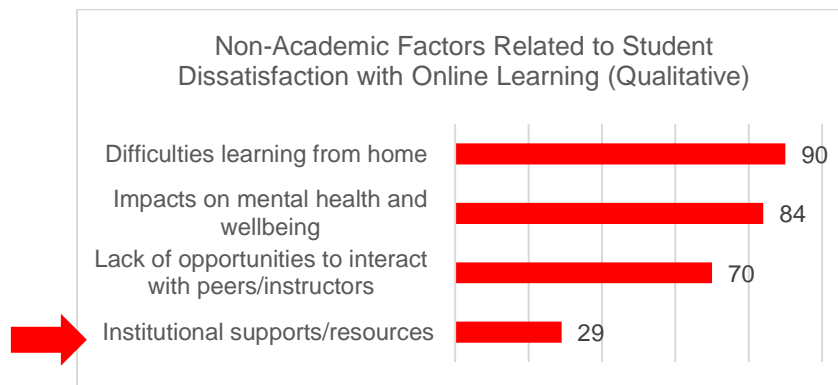
A number of participants discussed the informal aspect of in-person courses, which contributes to peer connections and learning: “you’re not sitting beside anyone or get to talk in person with people as you would before [with] in-person classes, so you miss out on that”. Another

participant stated: “Great learning can stem from casual discussion. I feel that online learning deprives us of that opportunity”. A few participants also noted that they were missing being able to form study groups, which helped to both relieve stress and help with learning through peer-teaching. Others spoke to the difficulty developing their network and connections with their instructors. Participants expressed that this reality – which, as one participant noted, is compounded by other social distancing measures in place due to the pandemic – further exacerbates the sense of social isolation, making them feel “lonely”, “isolated”, “disconnected”, and “disengaged”. A number of others expressed that they felt a “lack of community”, which has significantly impacted both their academic and learning experiences as well as their wellbeing.

Many participants also expressed feeling that they were lacking peer support and engagement activities which would normally be done through in-person events and opportunities to engage with peers, with one participant stating that “the sense of community among students has completely diminished”. Another participant stated that they felt that there was a lack of enjoyable activities available to students, that attempts to promote student engagement were mainly done by students, and that they felt their institution could facilitate more opportunities for support and engagement. While some participants recognized the efforts of their institution to build a sense of community, they felt that barriers such as “constant emails” caused students to miss this information, and that increased workloads and stress limited students’ willingness to attend such events.

## 6) USE OF STUDENT SUPPORTS/INSTITUTIONAL RESOURCES

The availability of support for students and other institutional resources was also an important finding that emerged both from quantitative and qualitative student responses. Students ranked this factor as 3<sup>rd</sup> in importance for their overall experience as online learners, and a number of students qualitatively identified this factor as a concern leading to their dissatisfaction with their online learning experience.

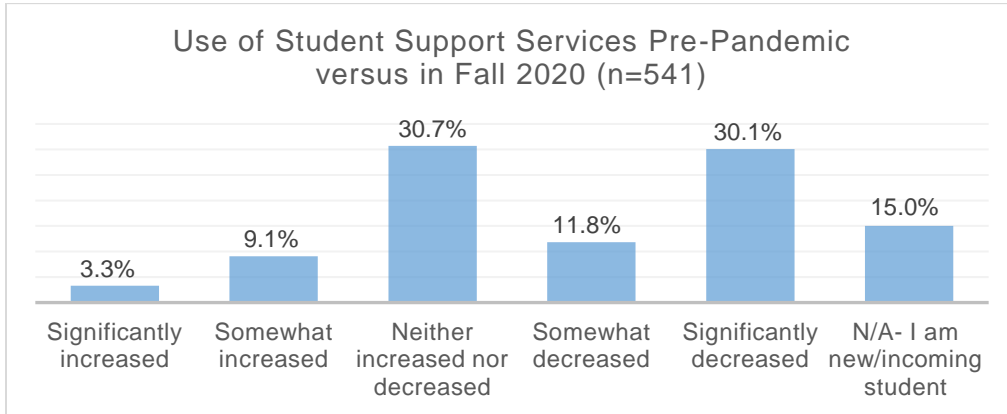


Students were asked a number of quantitative questions regarding their use of and satisfaction with various student support services such as counselling services, accessibility services, academic advising, library, student housing, admissions, international student services, interfaith services, wellness education services, financial services, career services, and other services identified through the environmental scan conducted at the beginning of this project.

When students were asked to reflect on their use of support services pre-pandemic versus in the Fall 2020 semester, nearly one-third of students (30.7%) stated that their use of services had not changed, and another third said their service use had significantly decreased since the transition to remote learning. The decrease in service use can be explained by factors such as



less access to services from home/not knowing about services, not feeling that services were required, or other factors not explored here.



Students were then asked to reflect on their use of services over the Fall 2020 semester. The results are summarized in the graph below. As shown in the graph, the top five most commonly used services by students, in order, from most commonly used to least commonly used were:

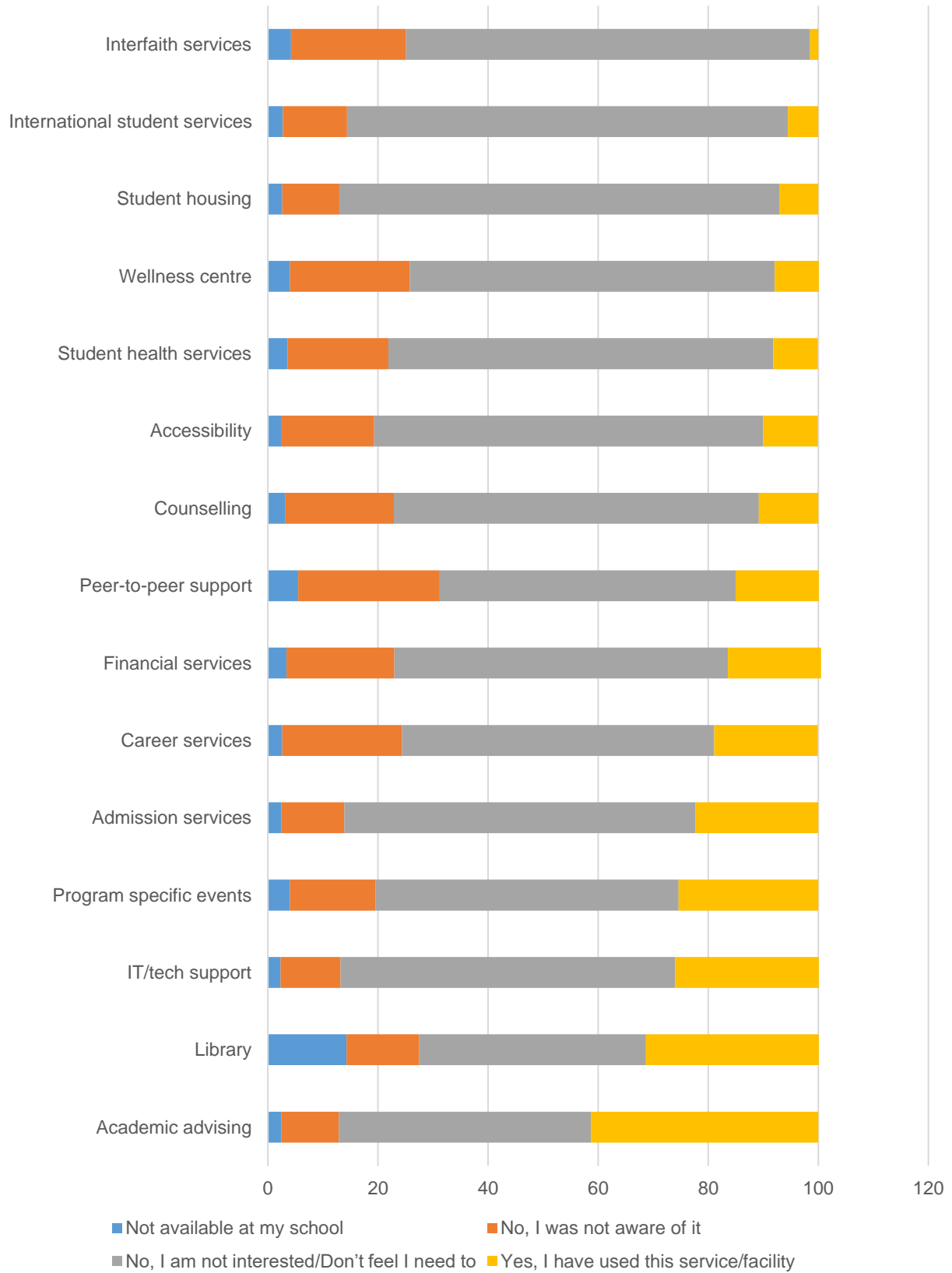
- (1) Academic advising – 41.3%
- (2) Library – 31.4%
- (3) IT/tech support – 26.1%
- (4) Program-specific events – 25.4%
- (5) Admissions services – 22.3%

The five least commonly used services were, in order from least commonly used to most commonly used were:

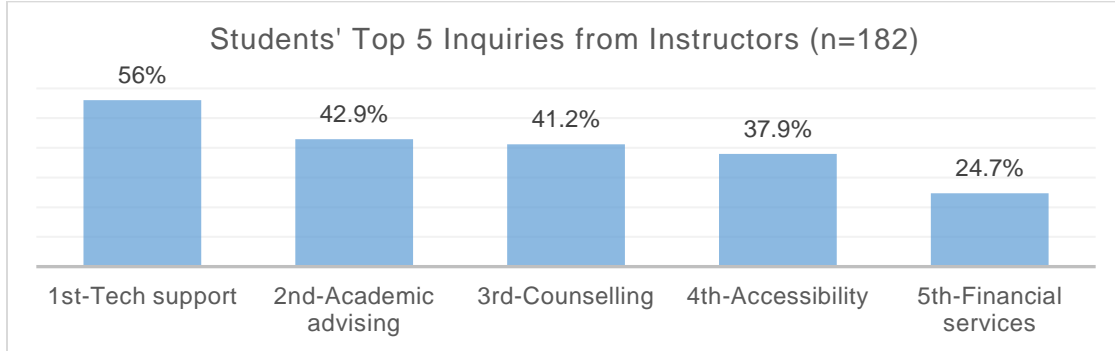
- (1) Interfaith services – 1.5%
- (2) International student services – 5.5%
- (3) Student housing – 7.0%
- (4) Wellness centre – 8.0%
- (5) Student health services – 8.1%

As displayed in the graph on the next page, in some cases, particular services did not exist at an institution or the student did not know they existed. However, across all services, sizeable proportions of students indicated they were not interested in the service (range: 41.2%-80.1%).

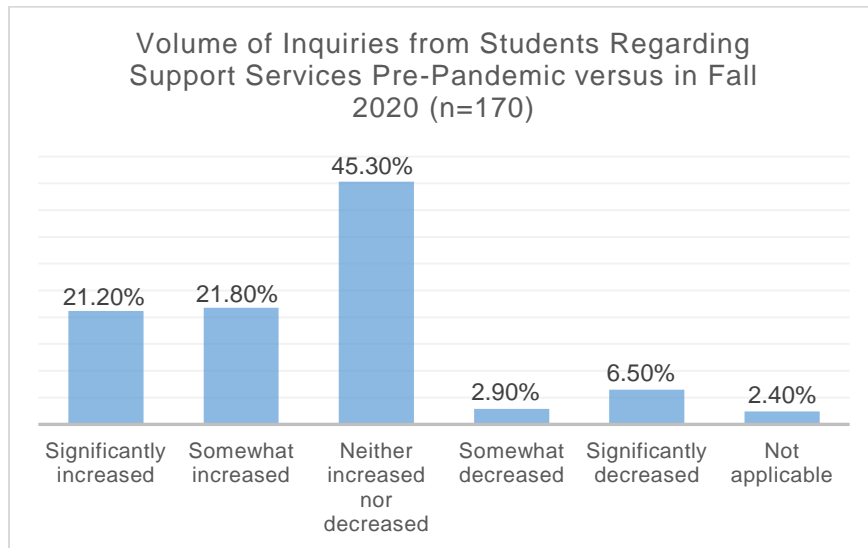
### Supports and services used in the Fall 2020 semester (%)



Instructors were asked to select the services that students have most frequently inquired about in the Fall 2020 semester. The most common reported service is IT and technological support, followed by academic advising, counselling, accessibility, and financial services. As outlined above, most common among students was academic advising (41.3%), thereafter library (31.4%) and IT and technological support (26.1%).



Instructors were also invited to share whether the volume of inquiries from students regarding support services have changed since the transition to fully remote learning. While 45.3% of instructors stated that inquiries from students neither increased nor decreased, a similar percentage (43% of instructors) stated that inquiries from students either significantly increased (21.2%) or somewhat increased (21.8%).



Students were asked about their satisfaction with the services that they accessed in the Fall 2020 semester. This question was only shown as a follow-up question to those who selected “yes, I have used this service/facility” in the Fall 2020 semester. Overall, the results showed that the majority of students were either very satisfied or somewhat satisfied with the services they have accessed, with satisfaction percentages ranging from 64% to 83%. The percentages of students who indicated that they were either somewhat dissatisfied or very dissatisfied with services was much lower, ranging from 7% to 18%.

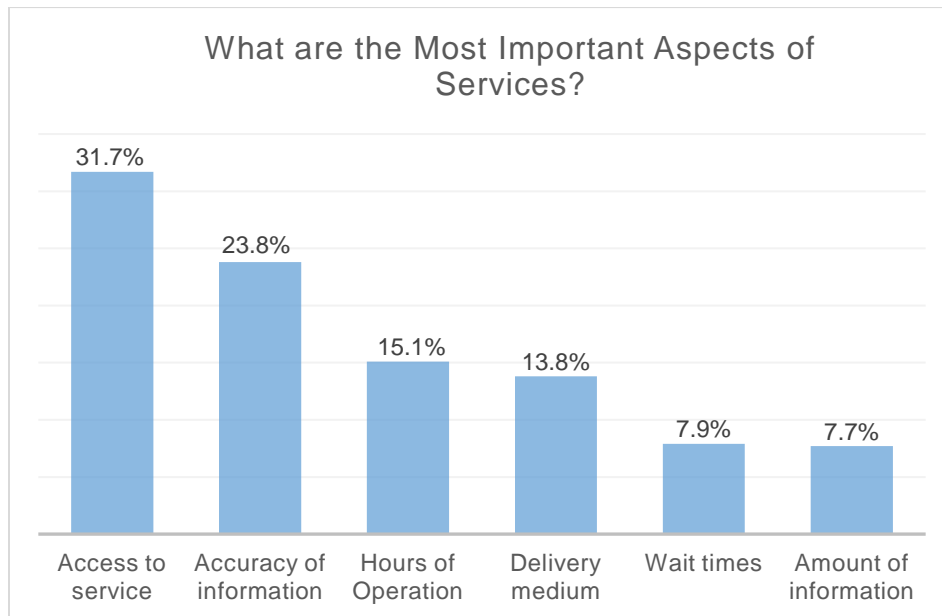
The top five services that the largest percentages of students rated as “very satisfied”:

- (1) Wellness centre – 48.7% very satisfied
- (2) Career services – 42.4% very satisfied
- (3) IT/tech support – 42.3% very satisfied
- (4) Counselling services – 37.5% very satisfied
- (5) Accessibility services – 37.3% very satisfied

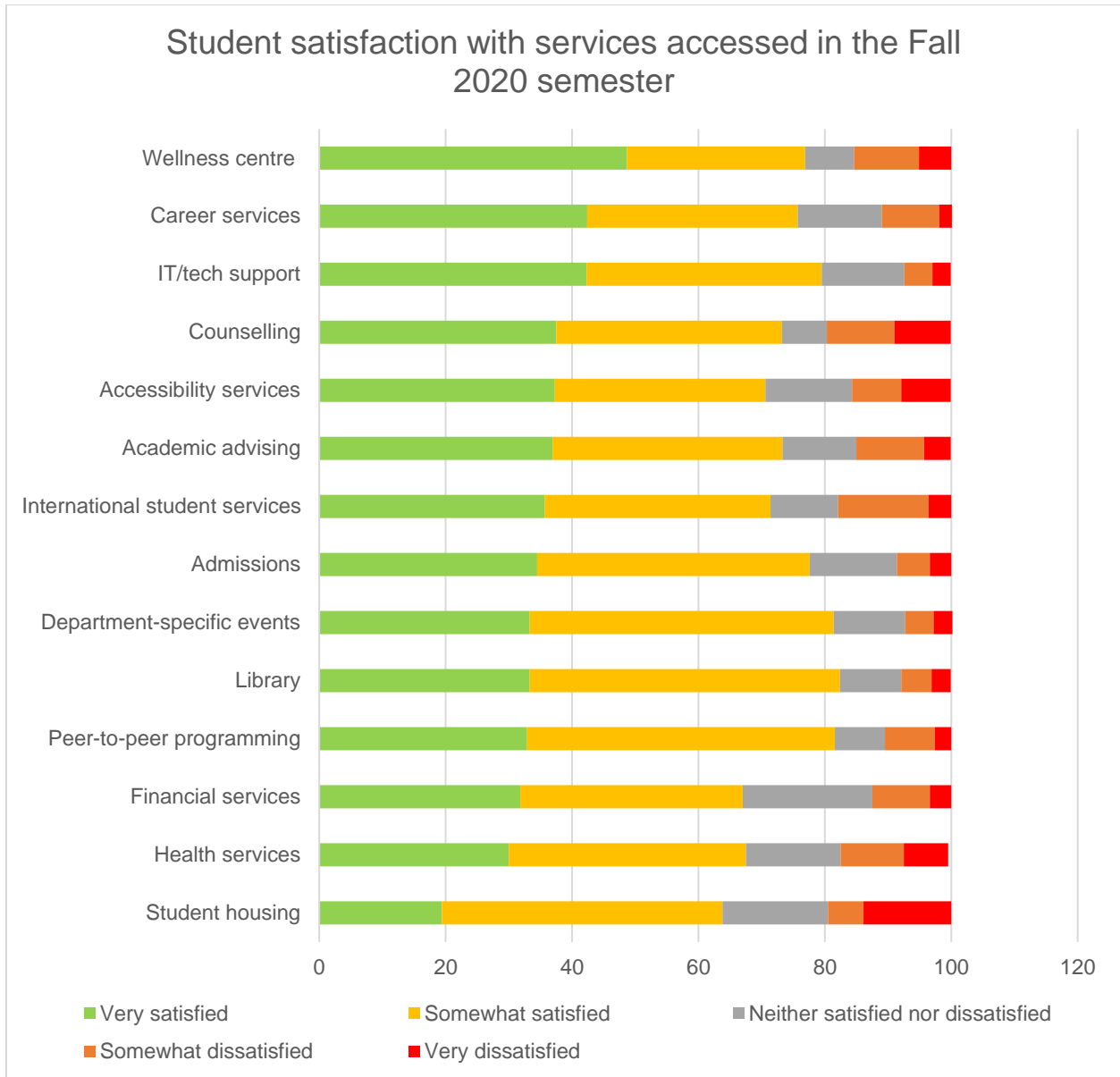
Interestingly, the five services that had the higher percentages of “very dissatisfied” responses includes some of the services on the previous list, but overall, very few students selected the “very dissatisfied” option.

- (1) Student housing services – 13.9% very dissatisfied
- (2) Counselling services – 8.9% very dissatisfied
- (3) Accessibility services – 7.8% very dissatisfied
- (4) Health services – 7.0% very dissatisfied
- (5) Wellness centre – 5.1% very dissatisfied

Students who indicated they were very dissatisfied with the services listed above may be facing access barriers or may not find the services responsive to their needs.



Students were also asked to rank what the most important aspects of services were for them. The majority of students (31.7%) stated that access to services was the most important aspect, followed by the accuracy of information provided (23.8%), hours of operation (15.1%), delivery medium (13.8%), wait times (7.9%), and amount of information provided (7.7%). These results are summarized below:



In follow-up, students were asked about their most preferred methods of accessing services. The preferred ways of accessing each service are presented below and summarized in the graph that follows. For each service, the modes of service delivery are presented in rank order from most preferred to least preferred way of accessing the service.

**Library**

- (1) In-person – 50.7%
- (2) Website – 49.9%
- (3) Email – 30.8%
- (4) Chat – 12.4%
- (5) Workshop – 9.2%
- (6) Video – 8.7%
- (7) Phone – 8.5%

**Academic advising**

- (1) Email – 48.6%
- (2) In-person – 39.1%
- (3) Phone – 25.5%
- (4) Video – 19.5%
- (5) Website – 18.3%
- (6) Chat – 14.4%
- (7) Workshop – 5.4%

**Counselling services**

- (1) In-person – 39.1%
- (2) Phone – 26%
- (3) Video – 23.4%
- (4) Email – 21.3%
- (5) Chat – 13.7%
- (6) Website – 11.1%
- (7) Workshop – 4.1%

**Health services**

- (1) In-person – 38.5%
- (2) Phone – 24.4%
- (3) Email – 22.1%
- (4) Website – 16.5%
- (5) Video – 15.2%
- (6) Chat – 10.8%
- (7) Workshop – 3.4%

**Faculty/program specific events**

- (1) In-person – 36.8%
- (2) Email – 28.3%
- (3) Video – 27%
- (4) Website – 22.4%
- (5) Workshop – 20.8%
- (6) Chat – 9.5%
- (7) Phone – 6.9%

**Career services**

- (1) Email – 39.0%
- (2) In-person – 35.5%
- (3) Website – 28%
- (4) Video – 18.8%
- (5) Workshop – 17.0%
- (6) Chat – 13.1%
- (7) Phone – 12.4%

**Peer-to-peer programming**

- (1) In-person – 27.8%
- (2) Video – 20.6%
- (3) Chat – 20.5%
- (4) Email – 15.9%
- (5) Website – 13.1%
- (6) Workshop – 8.8%
- (7) Phone – 8.5%

**Wellness education centre**

- (1) In-person – 23.9%
- (2) Workshop – 19.6%
- (3) Video – 18.3%
- (4) Website – 17.3%
- (5) Email – 14.6%
- (6) Chat – 6.9%
- (7) Phone – 6.1%

**Financial services**

- (1) Email – 35.7%
- (2) Website – 23.6%\*
- (3) In-person – 23.6%\*
- (4) Phone – 18.5%
- (5) Chat – 10.8%
- (6) Workshop – 8.5%
- (7) Video – 7.5%

**Admissions**

- (1) Email – 38.6%
- (2) Website – 25.2%
- (3) In-person – 22.4%
- (4) Phone – 21.1%
- (5) Chat – 8.5%
- (6) Video – 7.4%
- (7) Workshop – 4.4%

### **Accessibility services**

- (1) In-person – 19.0%
- (2) Email – 18.7%
- (3) Website – 13.4%
- (4) Phone – 11.1%
- (5) Video – 6.7%
- (6) Chat – 6.1%
- (7) Workshop – 2.6%

### **Student housing**

- (1) Email – 18.8%
- (2) In-person – 16.5%
- (3) Website – 12.8%
- (4) Phone – 7.4%
- (5) Chat – 4.6%\*
- (6) Video – 4.6%\*
- (7) Workshop – 2.6%

### **IT/tech support**

- (1) Email – 42.4%
- (2) Phone – 22.7%
- (3) Video – 22.4%
- (4) Website – 19.8%
- (5) In-person – 18.2%
- (6) Video – 12.6%
- (7) Workshop – 3.6%

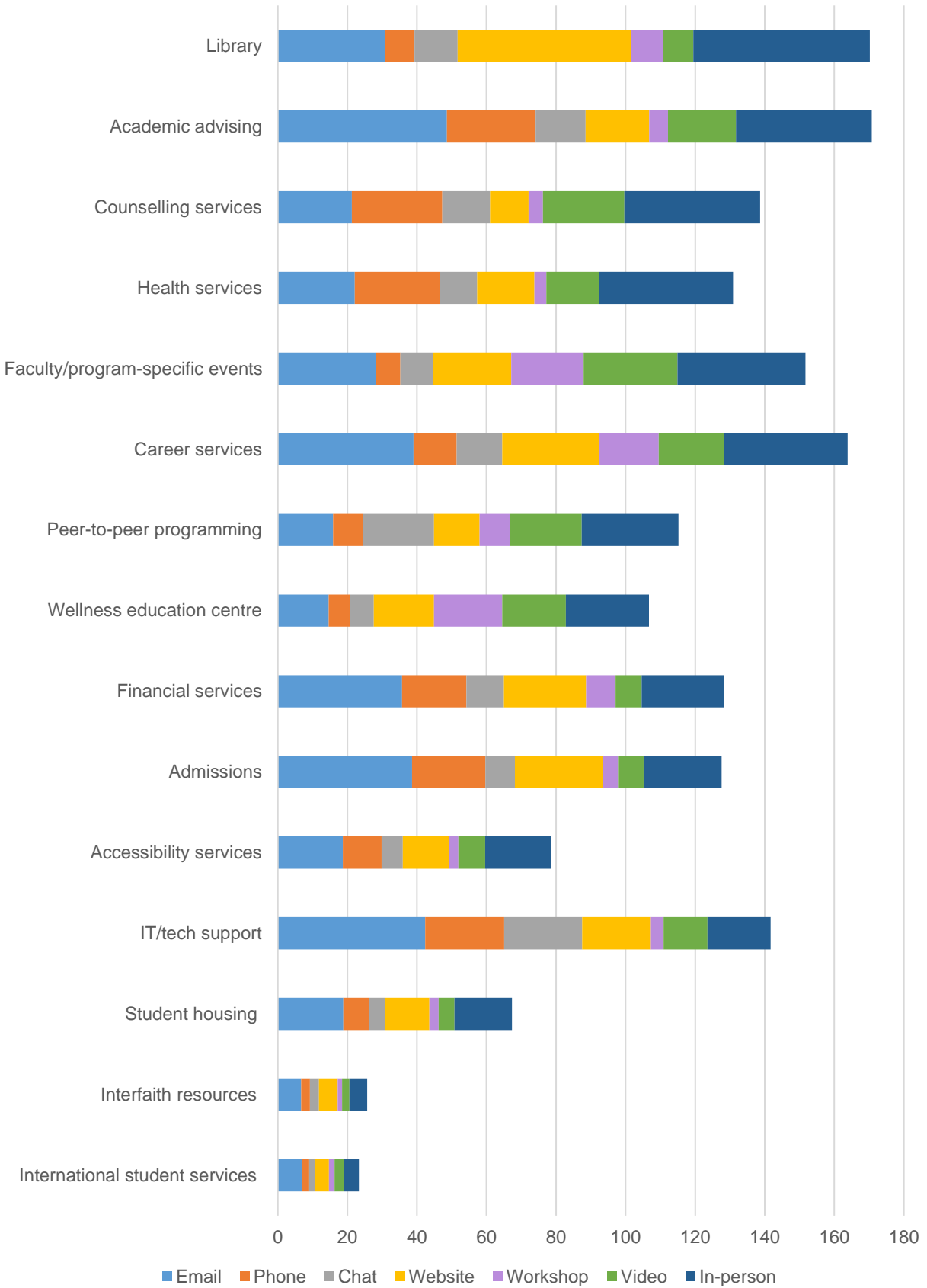
### **Interfaith resources**

- (1) Email – 6.7%
- (2) Website – 5.4%
- (3) In-person – 5.1%
- (4) Chat – 2.6%
- (5) Phone – 2.5%
- (6) Video – 2.1%
- (7) Workshop – 1.3%

### **International student services**

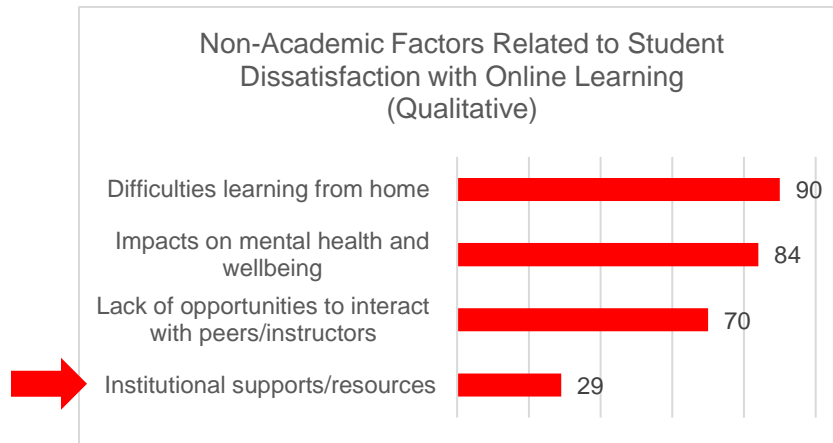
- (1) Email – 7.0%
- (2) In-person – 4.4%
- (3) Website – 3.9%
- (4) Video – 2.6%
- (5) Phone – 2.0%
- (6) Chat – 1.8%
- (7) Workshop – 1.6%

### Students' Most Preferred Ways of Accessing Services (%)





A number of participants also qualitatively discussed aspects related to the supports and resources offered to students by their institution. Specifically, students expressed dissatisfaction with a number of factors related to students' institutions as well as the availability and access to supports, resources and activities.



### UNSATISFACTORY

Participants expressed that they felt there was a lack of resources available online or resources that have not been properly adapted to an online format, including student supports and services, access to labs and library, information, and other resources that would normally be accessible to students on campus. The quantitative findings indicated that almost one-third of students stated that in the Fall 2020 semester they were accessing fewer resources than they have pre-pandemic. Taken together, the findings discussed here may indicate that students find these services more difficult to access in a remote format. Additionally, a number of students indicated that they experienced barriers to accessing services, which prevented them from utilizing these services. Another participant noted that many of the extracurricular activities and clubs that contributed to their post-secondary experience have been cancelled due to the pandemic, which significantly diminished their ability to interact with other students and their experience as a student.

A number of participants also expressed dissatisfaction with their institution as a whole, stating that they felt their institution did not support student needs which, they noted, was evident through a lack of accommodation and lack of supports. One participant stated that their dissatisfaction with their institution as a whole negatively impacted their mental health.

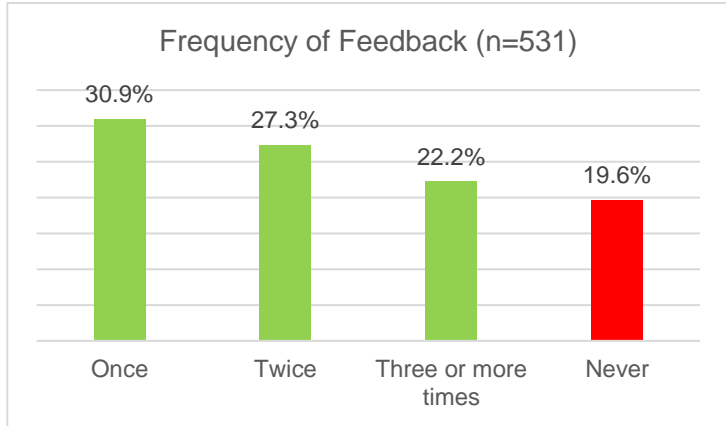
A few participants noted that the response time from services was “very slow” or unhelpful, all factors leading students to feel dissatisfied with their experience. A number of participants also discussed specific services by the institution with which they were dissatisfied, including accessibility services, continuing education, academic advising, orientation programming, or efforts to promote student engagement, either due to slow response times, ineffective support, or concerns with specific aspects of services, as explored previously in this section. One participant stated that the process of onboarding with accessibility services was time-consuming and put them at a disadvantage in their schooling:

*“[...] the disability onboarding process happens after acceptance, [which] places late admitted students with disabilities at a distinct disadvantage. No amount of accommodation will make up for grades lost during an entire semester waiting for an onboarding appointment and clinical evaluation.”*

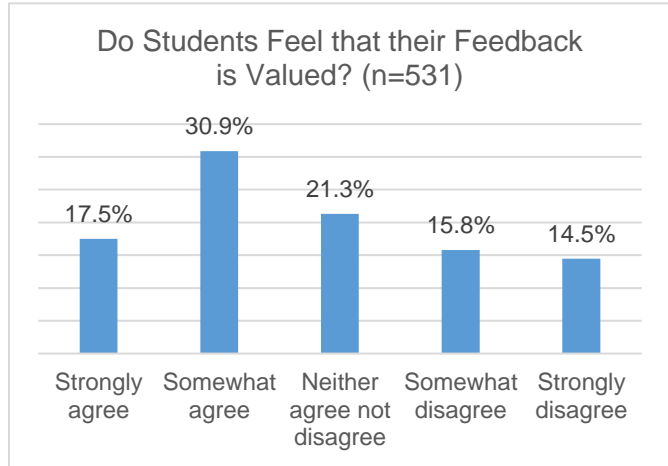
## 7) FEEDBACK SOLICITATION

The last non-academic factor which was explored in this study focused on instructors' seeking feedback from students. Although this factor did not emerge as a theme from students' qualitative responses, both students and instructors were asked quantitative questions regarding instructors seeking feedback, which was identified as an important factor related to students' experience as online learners.

Students were asked whether their instructors solicited feedback in the Fall 2020 semester and, if so, how many times students were asked for feedback. The majority of students (80.4%) indicated that they have been asked for feedback throughout the Fall 2020, including 30.9% who were asked for feedback once throughout the semester, 27.3% were asked for feedback twice, and 22.2% were asked for feedback three or more times.

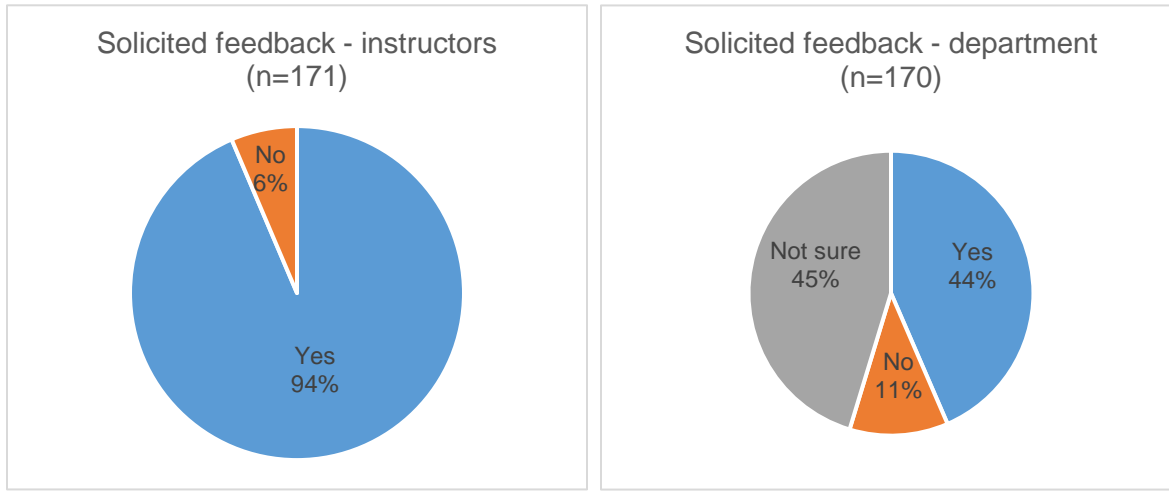


When asked whether students felt that their feedback was valued, many students (48.4%) either strongly agreed (17.5%) or somewhat agreed (30.9%) that their feedback was valued. A number of other students (30.3%) either somewhat disagreed (15.8%) or strongly disagreed (14.5%), meaning that they felt their feedback was not valued.



Instructors were also asked whether they have solicited feedback from students in the Fall 2020 semester. The majority of instructors, 94% stated that they have asked for feedback. Instructors were also invited to indicate whether their department had solicited feedback from students in the Fall 2020 semester. Nearly equal numbers of instructors either indicated that they were not sure/did not know (45%) or said yes (44%).

Instructors were then asked an open-ended follow-up question, asking them to describe the ways in which the feedback they have collected from students was utilized. A number of themes emerged, which are outlined below.



#### a) Improvements to course delivery and design

Many instructors expressed comments on improving their course delivery and design in response to student comments. One instructor shared:

*“I tweaked the way I taught and the lecture material to alleviate some of the issues that came up. E.g. when they said that online learning stopped them from being able to discuss class and assignment issues, I set aside time in the lecture for them to chat in private breakout rooms, when they wanted to review the materials from the week before, I started each lecture with a review of the work and the assignment from the week before”.*

A number of instructors also shared that they were advised by students that synchronous and face-to-face classes were preferred, which they were able to incorporate into their course design. Numerous instructors commented on the fact that they tried to offer more face-to-face activities for their students. One participant shared “We held more coffee and chat and tutorial days to encourage pedagogical conversation and address assignment related questions. These also turned into personal conversations about race and identity and personal difficulties with the pandemic”. A number of others outlined that students are missing in-person learning and that they find online learning a challenge. Some comments include: “Students find it hard to have to be at home and really miss the social interaction from the campus experience. They find online learning very difficult to do all on their own”; “they wish they were in class learning”; “they wish there was more time to learn the material”; and “Most preferred in class environment, too easily distracted with online teaching”.

#### b) Reduced workload and assignment accommodations

Many instructors also identified that they reduced workloads or offered accommodations on assignments. One of the instructors stated, “to better the nature of evaluation, [I re-jig] independent contributions and set more practical assignments and deadlines”. Another shared, “I have tried to adjust my expectations and leniency to accommodate their concerns, while still making sure they are learning”.

**c) Flexibility with deadlines**

Instructors also shared that, based on student feedback, they offered more flexibility with deadlines in order to alleviate the stress and concerns of students. Many instructors shared that they pushed back deadlines after hearing student concerns, lengthened the amount of time for online tests and quizzes, and reduced the word length of some online requirements.

**d) Understanding student challenges**

Instructors shared that students often stated they were generally distressed about online learning, were having a very hard time adapting, and many did not find online learning effective. One participant shared this comment: “generally my students are distressed about everything! Only a few are showing excellent adaptability and/or state they enjoy the on-line learning process”. Another shared, “they are extremely stressed [...] A lot dropped out because of the online learning is not their cup of tea”.

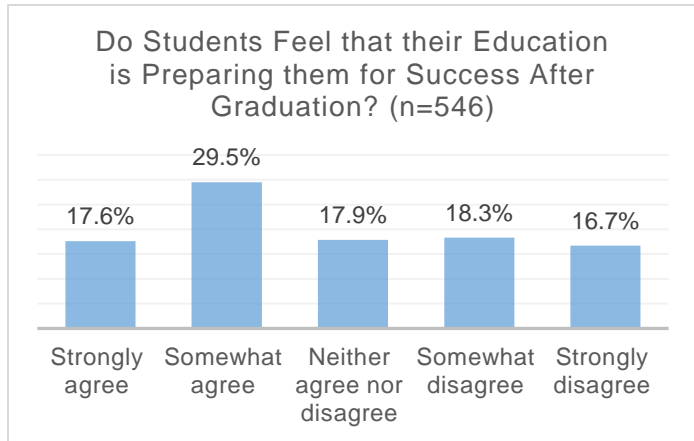
**e) Understanding what is working well for students**

Some instructors have identified positive comments from students, in terms of online learning not being as challenging as expected and learning from others instead of a textbook. Some comments include: “The feedback I have received from my students has been good regarding their experience online. Since the pandemic, I have found it easier to have guest speakers participate with my class because of the convenience of access”; “[...] They enjoyed sharing of my real-life experiences with them which they don't get from textbooks”; and they received “[...] a lot of comments about how they were worried initially but it worked out in the end”.

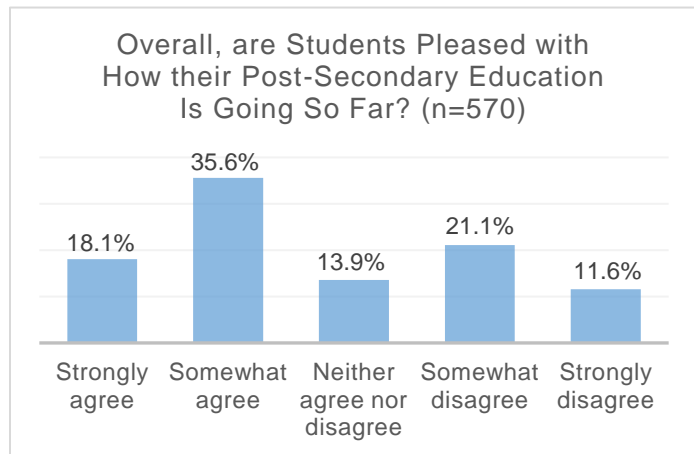
## OVERALL SATISFACTION WITH ONLINE LEARNING

Students were asked a number of quantitative questions inviting them to reflect on their post-secondary education and experience as online learners overall.

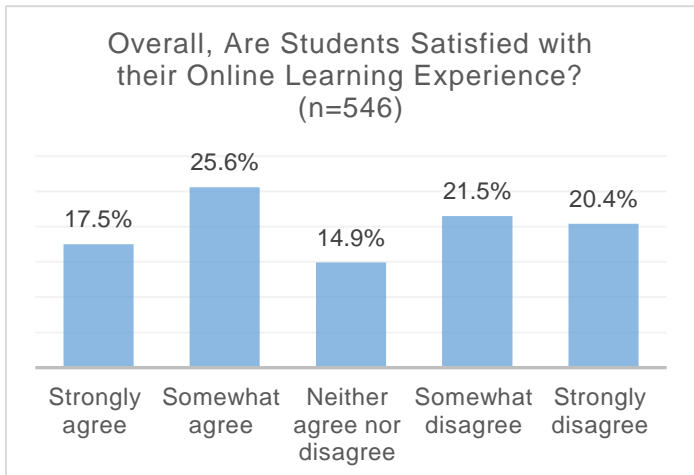
When asked whether they felt that their education was preparing them for success after graduation, student responses varied greatly. While 17.6% and 29.5% stated that they agreed or somewhat agreed, respectively, that their education was preparing them for success after graduation, 35% of students stated that they either somewhat disagreed (18.3%) or strongly disagreed (16.7%).



Similarly, when asked whether, overall, students were pleased with how their post-secondary education was going so far, results varied. While the majority (53.7% of students) selected that they strongly agree (18.1%) or somewhat agree (35.6%), indicating they are pleased, a large percentage of students (32.7%) either somewhat disagreed (21.1%) or strongly disagreed (11.6%), thus suggesting they are not pleased with how their post-secondary education is going so far.



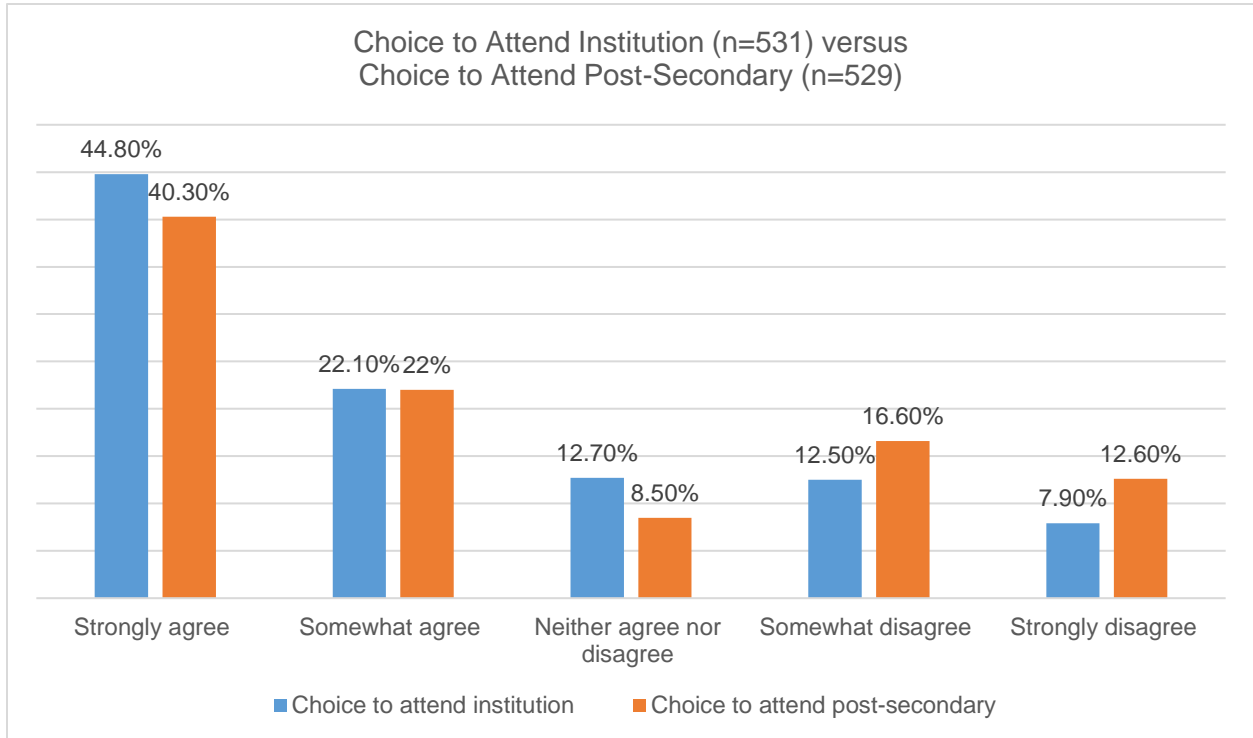
When asked to reflect on their overall satisfaction with their online learning experience, 43.1% of students indicated that they were satisfied (strongly agree, 17.5%; somewhat agree, 25.6%), and 41.9% were dissatisfied (somewhat disagree, 21.5%; strongly disagree, 20.4%) with their online learning experience. This finding illustrates that students' satisfaction with their online learning varies greatly; while many students are satisfied with their online learning experience, almost just as many students are dissatisfied.



When asked whether, if students had to do it all over again, they would still choose to attend **post-secondary education (in general)** in the Fall 2020 semester and whether they would still choose to attend **their institution (specifically)** in the Fall 2020 semester, the majority of students (62.3%) stated that they either strongly agreed (40.3%) or somewhat agreed (22%)

that they would still attend post-secondary, and a higher percentage (66.9%) – either strongly agreed (44.8%) or somewhat agreed (22.1%) – indicated that they would still choose to attend their institution. A lower, yet notable, percentage of students (29.2%) indicated they would not choose to attend post-secondary education in Fall 2020 semester if they could do it all over again (somewhat disagreed 16.6%; strongly disagreed 12.6%). Similarly, about one-fifth of students indicated they would not attend their specific institution in Fall 2020 semester if they could do it all over again (somewhat disagreed, 12.5%; strongly disagreed, 7.9%).

Overall, more students would still choose to attend their institution than students who would choose to attend post-secondary education in general, possibly suggesting that students' may be dissatisfied with their learning in general, not necessarily learning at their institution.



## RECOMMENDATIONS

The recommendations presented herein are framed within the understanding that the current COVID-19 crisis and quick pivot to remote learning will, no doubt, continue to pose challenges to the post-secondary education system moving forward. We understand that there are financial and human resources required to implement these recommendations, and the financial capabilities of post-secondary institutions in the province of Ontario are, and have been, compromised for quite some time. Nonetheless, the impact of this crisis on the various stakeholders within the post-secondary education system – including students, instructors, staff and administrators, service providers, and other academic stakeholders – will surely be felt for years to come. As such, it is important that the provincial government and stakeholders in the education sector continue to work together to address gaps and challenges that exist in order to deliver learning and teaching supports in ways that optimally meet the needs of students and instructors.

Numerous recommendations emerged from the voices of students and instructors, as well as through the analysis of data from student and instructor survey responses. Recommendations emerged in several areas, aligned with the themes identified in the data, which are outlined below:

### (1) ENHANCED INSTITUTIONAL AND DEPARTMENTAL SUPPORTS FOR INSTRUCTORS

The many responses provided by instructors and students who participated in the survey and focus groups revealed a significant need to examine the factors that contribute to students' online learning experiences. The results clearly illustrate that instructor-specific factors – such as instructor support, availability, technological skill, and flexibility; instructional design; and classroom engagement – significantly impact online learning. Throughout this study, students repeatedly highlighted the importance of these factors and the significant impact that their instructors had on their academic experience and overall student experiences. This is shown through many quantitative and qualitative findings, including:

- Close to 95% of students identified that instructor support was important to their learning;
- Almost 90% and 97.5% stated that having access to instructors outside of class and instructor responsiveness, respectively, were important to their learning;
- 87.8% of students identified instructor flexibility as important to their learning;
- 92.8% identified instructors' technological skill as important to their learning; and,
- Instructor-specific factors and aspects related to course design were the most discussed factors determining student satisfaction or dissatisfaction with online learning.

To best meet student needs and create pedagogical environments that are aligned with these beneficial factors, it is imperative that instructor capacity and resources are considered. As evidenced by data emerging from this research, many instructors had to quickly pivot their courses to a remote learning format, increasing instructor stress and putting additional demands on their workload, often working with limited resources and without added compensation. In many cases, this process led to instructional design that was dissatisfactory to students. It is important that these experiences are understood within the context of the significant challenges and pressures that many instructors experienced and the need to – as quickly and efficiently as possible – transition to a remote learning format, which was new to many. The survey results

demonstrated that, prior to the pandemic, only 1.1% of all instructors taught primarily online, and only 40% of instructors had experience with online teaching. Notably, while executing these transitions, instructors were also experiencing the challenges of the pandemic in their own personal lives as well.

While the majority of instructors (76.1% full-time faculty and 64.3% contract faculty) indicated that they have accessed training for online learning – in the form of webinars, independent research, workshops offered by the institution, professional development, or possess previous training in distance education – about one-third of instructors did not have such training available to them. Many instructors also indicated that they were offered a variety of supports from their institution and/or faculty/department to support the transition to online learning, including workshops, check-ins, supports from colleagues, technology and IT assistances, funding, and extra preparation time. However, many instructors also expressed that they had not received adequate supports to aid in their remote teaching. While the majority (75.3% and 75%) of instructors felt supported by their institution and their faculty/department, about 15% did not feel supported (both by institution and faculty/department).

The results revealed that contract faculty felt less supported by both their institution and their faculty/department than their full-time faculty counterparts. Compared to only 5% and 7.4% of full-time faculty who said that they felt unsupported by their institution and faculty/department, respectively, 17.7% and 20.7% of contract faculty stated that they felt unsupported by their institution and faculty/department, respectively. Overextended and undercompensated instructors may not have adequate tools to provide optimal online learning. As such, there should be a concerted effort to address the needs of contract faculty in terms of offering supports, deployment of comprehensive resources, fair compensation, and more stable work conditions.

Altogether, these findings show a crucial need to support all instructors. Typically, much of the onus is put on instructors to support student learning and engagement inside and outside the classroom. These expectations, however, must be supported by increased financial and human resources and the provision of necessary pedagogical tools. The pressures that are put on instructors to support and engage students need to be redistributed to other roles, including those focused on professional development outside of the classroom, student mental health and wellness initiatives, student affairs, and student experience and engagement programming.

Instructors could be supported through the creation of a national website/virtual repository that promotes information and resource-sharing, as well as offers instructors the opportunity to connect to peers through chats and discussion. Additional supports may include supporting instructors in obtaining tools for teaching online, such as those necessary for an optimal internet connection, upgraded laptops, and ergonomic home office needs. These are particularly important, as many students highlighted instructors' technical difficulties as dissatisfactory, leading to accessibility concerns such as poor sound/video quality or inadequate materials. Without the right tools and resources, both students and instructors will continue to suffer.

Additionally, instructors expressed a desire to provide feedback to the institution and to participate in planning processes and online learning enhancement efforts through forums such as surveys, focus groups, or advisory panels. Instructors emphasized the need for institutional and departmental leadership to facilitate open and transparent dialogue and to support instructors in a way that is responsive, timely, and considers both instructor and student needs. To that end, a need for institutional leadership to honour staff needs that go beyond



“congratulatory messages” is highlighted. This includes the need to actively pay attention to and address instructor and staff mental health and wellbeing supports during the pandemic and beyond.

## **(2) FLEXIBLE, ENGAGING, REALISTIC, AND STUDENT-CENTERED INSTRUCTIONAL AND COURSE DESIGN**

Students identified aspects related to instructional and course design as one of the key factors impacting their experience as online learners. The primary themes discussed by students were as follows: the organization and accessibility of course materials and the learning platform, the assessment methods used in class, the workload, the methods of course delivery and types of learning tools offered, as well as the course expectations. Diverse perspectives and preferences were expressed by students, making it clear that pedagogical methodologies need to be enhanced to provide opportunities for personalized, customizable, and flexible student-centered pedagogy that meet diverse student needs.

Reported by students were a wide array of preferences relative to the mode of online learning delivery (i.e., synchronous, asynchronous, or a mix of synchronous and asynchronous), the types of learning offered (i.e., auditory, visual, or tactile), as well as the preferred assessment methods. Student participants have demonstrated that student needs are diverse and varied. Therefore, it is necessary to consider the need for flexibility and customization for students' learning experiences. Student responses also highlighted the need to provide activities and deliver learning in ways which meet various learning styles, including through visual, auditory, tactile, and experiential learning. Many students expressed their dissatisfaction with a lack of experiential learning, stating that they felt they were missing out on developing skills that would be important for their future. As such, more experiential learning opportunities need to be developed and utilize technology creatively, such as through the use of simulations, case studies, interactive modules, as well as in-person opportunities for experiential learning such as labs and internships and field placements.

Students also expressed a desire to be able to bridge theory and practice. As such, course activities and assessment methods should allow students to practice various skills, including presentation skills, analytical skills, social skills, and others. Similarly, it is important that assessment methods offer customization and choice to students to capture the differing needs and preferences of students, particularly for assignments involving group work and testing. An overwhelmingly large number of students recommended that remote testing processes be reviewed and changed due to the significant barriers and stress that they create for students. As such, it is recommended that institutions assess the testing processes, software, and proctoring currently employed and consider alternatives to online testing, including take-home exams, assignments replacing exams, or online exams without the use of additional software.

Despite the variability in preference for synchronous or asynchronous learning, it was clear that, overall, both students and instructors preferred online learning that included both synchronous and asynchronous components. A variety of suggestions expressed by participants included: making recorded lectures available for later review, hosting live review sessions or office hours, facilitating check-ins/“meet and greets” between students and instructors, and remaining engaged through online tools such as discussion boards.

As recommended by both students and instructors, strategies need to be developed to ensure consistency between the design, materials, and organization of courses, ensuring that materials are easy to navigate and accessible, and that processes and modules are standardized.

Another major theme related to course design was the importance of utilizing engaging and interactive course activities. Suggestions included activities such as: small group activities, breakout rooms, interactive polls/games, independent modules, question-and-answer live sessions, chats and discussion boards, as well as opportunities for students to take leadership in teaching peers. Another suggestion that was echoed by many students was for instructors to create spaces to “humanize” remote learning and mirror some of the informal conversations that happen in typical in-person classes. Additionally, recommendations included allowing students the time at beginning of the class or during breaks (for synchronous courses) to check-in with each other and chat about topics that may or may not be related to the course material. As mentioned by numerous students, such engagement strategies can ensure that students are feeling connected to each other and comfortable in the classroom, which contributes to an overall sense of community. Consequently, both instructors and students highlighted the benefits of small class sizes for maintaining effective class engagement.

There were several benefits and opportunities provided by online learning that students highlighted, including increased flexibility, independence, and access to learning. As identified by students, online learning allowed them to work at their own pace, create their own schedule, and be able to access education from anywhere at the click of a button. Additionally, many students celebrated the comfort and convenience of learning from home, the financial and efficiency benefits from time saved commuting to class, as well as the benefits for mental health and wellbeing such as the opportunities to be more intuitive in scheduling based on student needs and taking breaks when required. One focus group participant stated that:

*“It’s been quite helpful for me because I’m home and previous semesters I’ve tried five classes and I’ve always dropped one because it was just too much for me to be in class, but last semester I took five and did great. I think it was my best grade point average since being at university. So, it’s actually helped me more to be at home and not have to commute”.*

Several students also highlighted that the transition to remote learning made education more accessible to them, such as reducing concerns regarding social anxiety, allowing them to further their education without having to relocate from their communities, as well as allowing students who may not physically be able to attend courses in-person to have access to education. These themes clearly highlight the significant benefits that exist in remote learning that need to be maintained moving forward. Diverse student needs and preferences can be met in post-secondary education through flexible course and program design, including opportunities to take courses in both in-person and online and in both synchronous and asynchronous formats.

Overall, findings highlight the importance of implementing instructional design that is student-centered and one that applies an equity, diversity, and inclusion lens in order to be able to meet students where they are at. Student responses highlighted that many students have been and continue to experience significant challenges in their lives due to the pandemic, which impacts their learning and their experience as learners. As such, it is important that instructional design take into account these realities, and adjust expectations for workload and course demands to support students’ current capacity. Through trauma-informed teaching methods, instructors are well-positioned to implement positive class changes to meet the needs identified by students. Firstly, many student participants expressed difficulty in managing the workload in their remote classes. Expectations for work online can be reduced, such as by not having “so many final projects due all around the same time” and instead stagger them or allow more flexibility in deadlines. Another participant recommended to “make exams open book” when possible to

alleviate the pressure to memorize as much information. “Assessing alternatives to testing” or “coming up with creative solutions to better serve students” regarding online exams, while maintaining integrity, were also provided as important suggestions by numerous participants. Suggestions were also made to “not have a set point of a certain mark in order to pass the course”, but instead offer “credit/Withdraw for courses” to accommodate for student learners that are experiencing difficulties with remote learning. Overall, time consideration should be thought of differently, and not necessarily a one-to-one conversion from the in-class model to the remote model. For example, online discussion posts do not necessarily replace in-class discussion, and can feel especially onerous to students who must produce an additional written assignment, read other responses, and monitor the discussion board, instead of having dynamic discussions with peers in a live format.

One instructor stated that, in an ideal class environment, “teaching approach and philosophy [is] more [important] than which tools you're using,” insofar as having “flexibility to adapt” was crucial in a positive learning environment for students. The instructor suggested that an environment in which learner and teacher are “[figuring] it out together in one class” creates an experience of mutuality. Co-developing elements of best practices for facilitating virtual learning can be created in the first week of class to set the tone for how the semester will continue. Instructors and students both suggested that, “having students teach what they learn helps comprehension of the material increase,” and, “creating an online learning model that includes the students to learn and teach,” would be beneficial methods for improving the classroom learning environment. Options are important for students to feel that their wide-ranging needs are being thoughtfully addressed; this can include providing descriptive and organized course notes, ensuring good audio and video quality, ensuring accessible course materials that are easy to navigate, and providing opportunities for experiential learning (i.e., simulations, online labs, case studies, placement options).

### **(3) AN INFUSION OF AN EQUITY, DIVERSITY, AND INCLUSION LENS INTO THE REQUIREMENTS AND PRACTICES OF REMOTE LEARNING AND TEACHING**

Creating online learning environments that infuse principles of equity, diversity, and inclusion (EDI) into their content and course delivery is crucial for ensuring an equitable educational experience for all students. When sustaining remote education practices beyond transitional measures, intentional efforts must ensure accessibility through design which includes closed captions, audio supports, as well as provisions for educational design professionals to develop accessible courses from the ground up. Beyond accessibility, remote learning must recognize the diverse needs and realities of students and what disparities and barriers exist for students that may hinder their learning; requirements of studying from home have placed these EDI considerations at the forefront of online teaching and learning pedagogy. The examples below are just a sliver of the barriers that students provided that are making it challenging for them to participate in remote learning:

- Many students reported that they do not have a dedicated study space at home;
- Many students, particularly those living in rural communities, expressed that they experience challenges with internet connectivity, and that technology negatively impacts their ability to participate in class, complete assignments and tests, and achieve higher marks;
- Many students expressed that they lived with several roommates or family members, which impacts their ability to focus on school and participate in class;

- Many students reported having to work while attending school due to financial challenges, which reduces the time they have available for school and impacts their physical and mental health;
- Many students reported parenting and/or caregiving responsibilities, which were further complicated by school closures, lack of options for childcare, and other reasons significantly impacting their ability to engage in courses;
- Students reported experiencing accessibility concerns such as inaccessible platforms, difficulty focusing on a screen for many hours, negative health consequences from prolonged screen time and time indoors, among other concerns; and,
- Mental health challenges exacerbated by the pandemic were also cited by students as significant barriers to optimal remote learning.

Pedagogical and institutional approaches for both academic and non-academic programming need to adopt an EDI lens, which allows for the personalization required to meet diverse student needs. Responses provided by instructors show the recognition of the barriers that may be created by this type of instruction, as demonstrated in this participant's response: "as beautiful as the synchronous instruction is, it excludes some people from some classes." As such, instructor and institutional flexibility is integral in mitigating these concerns in remote learning. Instructors must be trained regarding educational equity and be made aware of the barriers and challenges that diverse student groups experience which impact – and often disadvantage – their experience as learners. Institutions should establish policies that allow for timely and accessible accommodations. While many institutions have accessibility services, those can often be challenging to access or may not provide timely support due to a lengthy onboarding process.

Institutions need to view accommodations through an EDI lens and move towards considering factors such as intersectionality, socioeconomic status, familial responsibilities, rurality, and other circumstances that may create barriers for students in their education and disadvantage them. Additionally, it is imperative that institutions enhance supports for students which enable them to take care of their physical and mental health needs.

This can be done by:

- Creating policies that support instructors to be able to provide flexibility and accommodations to students without a lengthy review process;
- Expanding financial supports to students impacted by COVID-19 in the form of scholarships and bursaries;
- Offering funding for childcare;
- Offering technological support for students;
- Making study spaces available for students who cannot study from home, such as supporting the ability to rent study rooms in the library;
- Utilizing vacant residence rooms as study spaces;
- Creating financial subsidies for expenses related to technology and internet connectivity;
- Offering internet hot spot devices for students living in rural and remote communities; and,
- Offering students choice and control over their studies.

Paying attention to EDI principles is of paramount importance, and needs to be integral in the development and delivery of online education, informed by a coordinated team of diverse campus stakeholders. EDI strategies in online learning should not lose sight of the intersectional

realities of race, class, gender, and ability, and be implemented in ways that are authentic, purposeful, and discerning.

#### **(4) COORDINATED, ACCESSIBLE, WRAPAROUND STUDENT-CENTERED SUPPORTS AND SERVICES**

The findings of this study highlighted the importance of student supports and services that go beyond academically-focused resources and also prioritize student mental health, student experience, and peer-to-peer connections. Many students identified screen fatigue, the impacts of remote learning on physical and mental health, difficulties balancing school and life, and lack of interaction with peers as significant challenges in their experience as online learners. These challenges, which all go beyond academics and pedagogy, necessitate an exploration of the institutional supports available to students to support them as remote learners, particularly throughout the pandemic.

In their responses, many student participants expressed a dissatisfaction with institutional supports and resources available to them. Students ranked student supports and services as one of the topmost key factors when it comes to their experience as learners. 30.1% and 11.8% of students shared that their use of support services significantly decreased or somewhat decreased since the transition to remote learning, respectively. Interestingly, however, 43% of instructors indicated that the volume of inquiries from students regarding support services has increased since the transition to remote learning, showing that students' need for supports have significantly increased since this transition. When taken together, these findings show that despite an increase in students' need for support, students' actual use of services decreased, raising the question whether students are experiencing barriers to accessing services in this new format. Additionally, when students were asked regarding their use of support services at their institution, between 3-15% (depending on the service) shared that they have not used a service because it was not available at their school, and between 10-20% (depending on the service) shared that they have not used a service because they were not aware of it. Anywhere between 6-19% of students (depending on the service) also shared that they were dissatisfied with the services they have accessed.

These findings highlight the importance of understanding what contributes to students' satisfaction with services and what barriers may exist for students in accessing services. Additionally, these findings show the importance of outreaching to students and ensuring that they are aware of the services offered to them, which can be done through orientation programming, centralizing services in the learning platform, and sending email reminders. Additionally, a virtual support hub could be created to centralize all supports and services available for students, provide information, and allow students to connect with staff and service providers directly. This would be similar to the way services are physically centralized in "wellness hubs" or "health services" in many institutions. Institutions need to assess student needs on a regular basis, particularly as they continue to evolve throughout the pandemic, and to be responsive to these changing needs.

Students identified the need for more mental health supports from various sources, including flexibility and accommodation from instructors, check-ins from the institutions, centralization of counseling and support services, as well as increasing access and reducing wait times. Services are needed in multiple forms of delivery – including opportunities for in-person services that can be done while taking public health guidelines into account – such as through phone, video, email, and chat supports. One student suggested having, "the option of someone

checking in on [fellow classmates]. Having an email sent out to all students from counselling services asking if they would like to book a zoom chat to talk about how they are doing”. Another student suggested that, “[for] students who are neurodivergent and have the inability to self-regulate properly [...] have support systems that will help students plan out their day and create a schedule that works for them”. This could be done either through the institution’s accessibility services or developed as an online tool that prioritizes user accessibility.

Further programming needs to be created to support students in establishing a healthy school-life balance, combat burnout, and provide students with the supports and tools they need to effectively learn from home. It is imperative that institutions ensure services are adequately staffed and resourced to be responsive to student needs in a timely and effective manner.

## **(5) ENHANCED INVESTMENTS IN STUDENT EXPERIENCE, COMMUNITY BUILDING, AND PEER-TO-PEER PROGRAMMING**

Despite opportunities for social connections outside of the classroom, many students explained that, with increasing workloads and responsibilities, they struggle to find the time to attend such programming or do not know how to access these opportunities. Nonetheless, students’ need for interactions with peers, both inside and outside of the classroom, is evident:

- 47.7% of students were dissatisfied with the amount of in-class interactions with classmates;
- 15% of students were dissatisfied with the options offered by their instruction to connect with peers outside of class;
- 43% of students stated that they did not feel a sense of belonging in their institutions’ community;
- 65.5% of students indicated that they wished their institution did more to support students’ sense of belonging;
- 41% of students were not aware of opportunities to connect with peers; and,
- Qualitatively, many students discussed the lack of fun extracurricular activities and opportunities to build community and interact with peers both inside and outside of their classes, contributing to a sense of isolation, disengagement, and dissatisfaction with online learning.

These findings demonstrate that there is a focus on peer-to-peer programming and the need for enhanced student experience programming. Students explained that many of the casual interactions that would normally occur on-campus – including informal conversations in common areas, walking through campus, or involvement in student clubs and other extracurricular activities – were not possible in an online format, causing students to feel isolated from others. Students lamented that a sense of community is less evident when interacting with peers online. This highlights the need for enhanced investment in student experience roles who can contribute to building community and facilitating supportive and peer-focused activities for students. Additionally, strategic and creative uses of online technologies and enhanced outreach to students are necessary in order to ensure that programming is reaching students and that students are aware of such programming. This could include utilizing multiple methods of outreach, including emails, newsletters, utilization of the institutional learning platform, the creation of a student experience phone application, and the creation of virtual spaces or hubs.

Students indicated that they would be interested in a number of virtual activities. The most common response was the desire for virtual learning communities and hubs to share notes,

connect with classmates, and have discussions about courses and support each other's learning. Students also expressed interest in professional development opportunities. Additionally, students were interested in peer-support based spaces, such as virtual interest communities, virtual hubs of supports/services, and virtual peer support events and peer-led workshops. It was also suggested that, in the beginning of each class or during break time, students have the opportunity for informal interaction, socialization, and checking-in with each other, which would replicate the community feel that students are missing from in-person learning.

Students also need to be empowered to organize and foster a sense of community themselves. This can be done by creating spaces for students to: organize a student experience committee, enhance the capacity of student unions and student clubs to enhance their capacity to outreach remotely, and perhaps hire community connectors/peer facilitators who can – in a peer-to-peer capacity – create opportunities for engagement. This would significantly alleviate the burden currently placed on instructors, staff, and service providers to create these spaces for students. This can build upon existing levels of student support and focus on student mental health that is preventative, both by fostering connection as well as by having connectors who can refer students to formal supports offered by their institution.

## **(6) DEVELOPMENT OF PRACTICE GUIDELINES, BEST PRACTICES, AND EVALUATION AND QUALITY ASSURANCE MECHANISMS FOR REMOTE COURSE DELIVERY**

Findings revealed noteworthy statistics regarding students' satisfaction with their post-secondary education:

- About 35% of students surveyed did not feel that their education was preparing them for success after graduation;
- 32.7% of students were not pleased with how their education was advancing;
- 41.9% of students were dissatisfied with their online learning experience; and,
- About 29% of students said that, if they had to do it all over again, they would not choose to attend post-secondary education in the Fall 2020 semester.

Qualitatively, students shared their dissatisfaction with numerous aspects of their online learning experience, including:

- Aspects related to instructional and course design such as the workload, assessment methods, the types of learning offered, and instructor-specific factors such as flexibility, support, availability, and overall organization of course content;
- The level of and opportunities for engagement with their courses;
- The opportunities for interactions with their classmates and peers;
- Difficulties learning from home;
- Institutional supports and services;
- Impacts on mental health and wellbeing; and,
- Their overall quality of learning.

Findings illustrated significant variability in the expectations and requirements imposed on students, as well as the extent of flexibility and accommodations offered. This highlights the need for the development of clear practice guidelines and quality benchmarks in order to ensure consistency in course design and requirements. Additionally, students' dissatisfaction with

elements of their education and learning experience necessitates the development and implementation of evaluation and quality assurance mechanisms embedded into distance education systems. These include meaningful and intentional efforts to engage stakeholders – including students, instructors, and staff – to collaboratively design evaluation mechanisms and practice guidelines.

Although efforts to engage students through the solicitation of feedback by instructors and departments were made throughout the Fall 2020 semester, a large percentage of students – 30.3%, about one-third – stated that they did not feel that their feedback was valued. Moving forward, mechanisms for transparency, collaboration, and accountability need to meaningfully include student stakeholders in all processes in order to truly capture the diverse needs and preferences of students. To that end, it is recommended that a committee on student needs for remote learning is established, which includes students representing various student groups, staff, instructors, service providers, and other stakeholders within institutions. The role of this committee would be to examine existing policies, conduct needs assessments and consultations with diverse groups of students, and assess student satisfaction in order to produce practice guidelines for online learning delivery.

## **(7) CONTINUED CREATION OF KNOWLEDGE, COLLABORATION, AND INFORMATION SHARING OF BEST PRACTICES IN ONLINE EDUCATION**

The COVID-19 pandemic has, without a doubt, transformed the future of post-secondary education, and remote learning is here to stay. As such, it is imperative that knowledge regarding best practices and opportunities within remote learning continues to be explored, researched, and shared through meaningful collaborations between stakeholders within Ontario post-secondary institutions. To that end, a provincial conference on remote learning in post-secondary institutions could be organized, inviting a number of stakeholder groups to share the lessons learned from the pivot to remote learning due to COVID-19 and to discuss the future of remote learning in a post-pandemic world. Additionally, a virtual online education hub could be created to centralize research, resources, webinars, and discussions regarding online and remote education, which could then be utilized by staff, administrators, instructors, and students. In addition to resource- and knowledge-sharing regarding the academic and instructional aspects of online learning, the creation of a provincial association for student experience professionals and community connectors could also be explored. Lastly, it is recommended that resources are allocated to the continual evaluation and study of online education, including cross-sectional and longitudinal studies of student and instructor remote learning experiences.

Future research directions could include an in-depth exploration of the unique learning needs and experiences of diverse student groups, including undergraduate and graduate students, students who are parents and caregivers, mature students, students from equity-seeking groups, international students, and first-generation students. Additionally, future research could focus more in-depth on the experiences and needs of instructors teaching in an online format, and what barriers may exist that could translate into practices that may not optimally meet student needs. Further research could explore aspects of instructional and course design, including innovations for remote experiential learning, best practices for online instructional design, as well as enhancements to the online learning platform. Regardless of focus, further research is needed to continue building the knowledge-base of online learning and ensuring that the new post-secondary education landscape created by the COVID-19 crisis continues to be



shaped in a way that allows both students and instructors to thrive through high-quality educational experiences.

## RESEARCH LIMITATIONS

In this section, we identify and explain the limitations that influenced this research project. In identifying these limitations, we wish to discuss the unique nature of the project, highlight areas for further consideration, and advise how future areas of study could be strengthened to address them.

### COVID-19 Context

Firstly, due to the COVID-19 context in which the development of the project took place, research processes were slower than usual. Processes such as research ethics approval took more time, which narrowed the timeframe for collecting and analyzing data. Additionally, the research team members and collaborators were not able to meet in person, and all communications took place online. Many of the informal and organic interactions that occur within a research team were, therefore, significantly absent due to the requirements imposed by the pandemic. The online nature of the communications in recruitment and data collection compromised the ability to reach participants who had remote accessibility concerns or lacked time due to their pandemic reality. The team was unable to recruit through physical mediums, such as through on-campus flyers or in-class presentations. This was reflected in the considerable lack of interest to participate in the follow-up focus groups.

The nature of this research topic was time-sensitive, with the goal of disseminating results quickly to maximize its benefits. Therefore, data was collected for a period of two weeks, which was a busy time near the end of term for both students and instructors. This may have limited the degree to which potential participants were willing to engage with the research.

### Participant Recruitment and Inclusion

Recruitment methods were executed equitably through various means, such as online public channels and listservs. However, it was difficult to control the speed and reach of the distribution of recruitment materials, leading some institutions to be overrepresented and underrepresented in the data. Additionally, ethics requirements were variable by institution, therefore some institutions were not able to participate in the research due to time constraints. Consequently, the survey was not able to capture the experiences of students and instructors from every post-secondary institution in Ontario.

### Participant Data

Our sample was a convenience sample because it was not feasible to conduct a random sample. With more time and resources, the necessary collaboration with the post-secondary sector for random sampling might have been possible. To conduct random sampling, colleges and universities would have to either provide student and instructors lists to the research team to establish a sampling frame, from which the random sample would be drawn for each group. Alternatively, each school would have to agree to distribute the survey to random samples of students and instructors at their institution. Given the use of convenience sampling, we cannot conclude that the student and instructor samples are representative of post-secondary students and instructors throughout the province.

Represented in the data were a number of students in their first year of study ( $n=205$ ), which was helpful in understanding the specific experiences of this population entering post-secondary education for the first time. However, because these students are new to their current area of

study, it was difficult to distinguish whether the challenges expressed were due to the nature of online learning or due to the transition into their academic career overall.

### **Future Directions**

Lastly, this report is intended to be a **snapshot** of the landscape of remote learning at Ontario post-secondary institutions in the Fall 2020 semester. Further exploration is needed to understand the long-term effects of remote learning for students and instructors, how emergency transitional methods have been adapted for ongoing implementation, and which student and instructor needs remain after wraparound strategies have been employed. The project can benefit from a follow-up in three to five years, once knowledge of best practices has circulated and opportunities for developing wraparound strategies have occurred.

For future surveys of this kind, it would be beneficial to solicit the important voices of administrative staff – who are central to the student experience – to leverage their insights in developing wraparound strategies. Additionally, future research efforts should focus on the specificities and experiences of equity-seeking student populations, which would scaffold the work presently conducted. Finally, future research can also explore how academic leadership (i.e., deans, directors, vice-presidents, and presidents) at post-secondary institutions managed the pivot to remote learning, and what lessons or best practices could be derived from their leadership strategies.

## CONCLUSION

The post-secondary learning landscape was irrevocably altered in March 2020, resulting in swift changes to the way post-secondary classes and services were delivered throughout Ontario. In this report, we have unearthed many important factors students and instructors identified as helping and hindering their educational progress during the shift, and recommended key areas for wraparound support strategies. Through person-centered, technology-enabled solutions, we have proposed recommendations for students and instructors to best navigate the current remote learning reality and ways to sustain momentum in a post-pandemic environment.

The report findings identified important factors that impact students' experience as online learners, including academic factors (i.e., aspects related to course design; instructor-specific factors; class engagement; concerns regarding the perceived quality of learning; interest in the course; opportunities for skill development) and non-academic factors (i.e., difficulties learning from home; impacts on mental health and wellbeing; flexibility, independence, and access to learning; comfort and convenience of learning from home; opportunities to connect with peers; use of student supports/institutional resources; feedback solicitation).

From these findings, we recommended: enhanced institutional and departmental supports for instructors; flexible, engaging, realistic, and student-centered instructional and course design; an infusion of an equity, diversity, and inclusion lens into the requirements and practices of remote learning and teaching; coordinated, accessible, wraparound student-centered supports and services; enhanced investments in student experience, community building, and peer-to-peer programming; development of practice guidelines, best practices, and evaluation and quality assurance mechanisms for remote course delivery; and, continued creation of knowledge, collaboration, and information sharing of best practices in online education.

The information presented in this report suggests that post-secondary institutions, academics, researchers, policymakers, and our provincial government have an important role to play in enhancing post-secondary student's remote learning experiences. We are acutely aware that this will not be an easy feat, given the financial constraints created by the COVID-19 pandemic. However, if we do not prioritize resource allocation for the enhancements discussed by instructors and learners in this report, then the post-secondary education system in Ontario cannot thrive. Investments in enhancing and responding to remote student needs will, no doubt, lead to long-term societal gains for Ontario's socio-economic and cultural expansion post-pandemic. As such, it is important to prioritize creative remote learning initiatives and embrace best practices to continue building an innovative educational environment for all Ontario post-secondary students.

*“Learning so much over the past year, and learning with the learners, has renewed and rejuvenated me. [...] Through necessity, we have opened choices so in the future – I don't know what it's going to look like – I am excited to be part of figuring that out.”*

– Instructor Focus Group Participant

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