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April 10, 2023

Dr. Clare Haru Crowston Dean of Arts Buchanan A240 University of British Columbia Vancouver, BC V6T 1Z4

Dear Dr. Crowston,

To stay competitive UBC must keep in touch with students' preferences and the latest in teaching trends.

This report, Increasing Distance Education Classes at the University of British Columbia (UBC), investigates the demand for an increased availability of online, asynchronous, and hybrid classes by students who commute to campus and/or are employed.

Data was collected from UBC students regarding the necessity for increased distance education and class flexibility, mainly due to decreased study times from commuting to campus or working. Professors were interviewed to determine relevant perceived challenges for course preparation as well as the pros and cons of each format, and research was conducted to analyze the benefits of distance education. This report includes the background on how to maintain university rankings and excel in classroom interactions.

The data was analyzed, and the recommendations are outlined to improve the distance education experience/program so that UBC continues to rank highly in Canadian University ratings.

Thank you for the opportunity to present the findings of this investigation. Please, contact me at amccoan@student.ubc.ca if there are any further questions you would like to discuss.

Sincerely,

Sury McCoon

Amy McCoan

Increasing Distance Education at the University of British Columbia

For Dr. Clare Haru Crowston Dean of Arts University of British Columbia Vancouver, British Columbia

by Amy McCoan ENGL 301 Student University of British Columbia

April 12, 2023

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ABSTRACT

To maintain prominence, Canadian universities are ranked by a rating system. They're evaluated on the teaching environment, research, and research influence. Currently, the University of British Columbia (UBC) ranks second in Canada. To increase the ranking to number one while maintaining a high position, expanding, and improving the distance education program is critical. As the campus is not geographically central in Vancouver, many students travel to campus in transit. Furthermore, inflation and the cost of living have required more students to gain employment during their university years. It was discovered that time spent in transit interfered with study time. Respondents agreed that the University of British Columbia did not offer enough online

courses. Provided the opportunity to take more online courses, respondents felt they could increase their grade percentage average (GPA), mental well-being, and life satisfaction. Happier students with higher grade averages can only positively impact UBC's ratings and rankings.

Recommendations are provided, which include assessing topic suitability regarding the conversion of courses from in-person to online, performing a cost analysis report, and expanding professional development for professors and teaching assistants. Creatively redesigning the distance education sector will benefit UBC as much as it will its students.

INTRODUCTION

Definition of Distance Education and Class Formats

For this report, distance education will only refer to:

- Online: "instructor supported with real-time classes" (University of British Columbia [UBC], n.da).
- Asynchronous: "instructor supported (UBC, n.da).
- Hybrid classes: "classroom + online" (UBC, n.da), including Panopto streaming.

Online classes are those taught solely online via Zoom where classes are usually not recorded for replay, making attendance mandatory on predetermined dates and times (UBC, n.da). Asynchronous classes refer to online courses taught either via Zoom sessions that are recorded or pre-recorded videos where students can watch the replay at their convenience (UBC, n.da). Some asynchronous classes are also taught only online, without Zoom. Finally, hybrid classes include both in-person attendance and online learning (UBC, n.da). Some professors can stream their classes live using Panopto. These definitions will be used interchangeably throughout the report. Currently, most courses offered at UBC are listed as in-person. Students are required to be in class at a specified time and date, and attendance often counts as part of a participation grade.

Background of University Rankings, Commute Time, and Employed Students

According to Times Higher Education (2022), the University of British Columbia currently ranks second in Canada and 40th worldwide (UBC, n.db). To earn rankings universities are heavily evaluated on their teaching environment, research, and research influence ("World University", 2022). To continue research and ensure its influence, there must also be a conducive teaching environment. Having adequate time to study will lead students to

maintain high-grade averages that lead to post-graduate work. For those students who live outside of campus and downtown Vancouver, this can be challenging.

Located on the Point Grey Peninsula, UBC had an average daytime student population of 42,550 (UBC, 2022b), in the fall of 2021. It was reported that students on average made 131,200 weekday trips to and from campus (UBC, 2022b). Of these trips 51% were made on transit, and 48% in personal vehicles (UBC, 2022b). These statistics suggest that nearly all students spend some time commuting to campus. The travel time from downtown Vancouver on transit is approximately 1 hour return daily (Google, n.d.). However, for those students living in Port Coquitlam, Surrey, or Squamish for example, the commute is often up to 4 hours a day. At a full-time (in-person class) course load, this is up to 20 hours of commute time per week and further adds to 300 hours over the semester. This time is valuable and could be spent studying, or doing activities that contributes to their mental well-being. Employment is also assessed as a factor of time constraints interfering with studies. Since the COVID-19 pandemic, inflation has driven up the cost of housing, food, utilities, and tuition. With Vancouver rated as the second most expensive city in Canada ("Cost of Living", 2022), it follows that 20% of undergraduate students worry they will not be able to continue attending UBC (Turdy, 2022). Students who work a part-time job (20hrs/week) are in the same time-constraint position as their commuting counterparts. Increasing the flexibility of online course choices for these students may contribute to UBC retention rates.

Purpose and Intended Audience

The purpose of this report is to assess the demand, feasibility, and potential impact of increasing online, hybrid, and asynchronous classes for students who commute more than two hours to campus daily or are employed. The results are analyzed, compared to, and supported by current research, and recommendations are provided on how to offer the best distance education for the University of British Columbia. The primary audience for this

report is the Dean of Arts at UBC, Dr. Clare Haru Crowston. The secondary audience consists of Dr. Erika Patterson, Professor of ENGL 301.

Data Sources and Method of Inquiry

Primary research for this report consists of a voluntary and anonymous student survey that assesses how commute time impacts students' feelings, actions, and decisions toward distance education at UBC. The survey, designed on Qualtrics, consists of ten multiplechoice questions (see Appendix A) and takes approximately two minutes to complete. The survey was distributed on the Piazza discussion board for PSYC 365 and on a Facebook group called "The University of British Columbia (UBC) – Class of 2027". Fifteen students responded to the survey. Results are analyzed and compared against the current UBC course offerings and literature. Interviews were conducted with two PSYC professors: Dr. Rebecca Todd and Brandon Tomm to assess the pros and cons of offering distance classes versus inperson classes. The interview consists of three short questions (see Appendix B). The Dean of Arts, Dr. Clare Haru Crowston, was emailed similar interview questions (see Appendix C) to assess the pros and cons and cost benefits: no response was received. Secondary research methods include a literature review to support and guide recommendations and inform background research. A complete assessment of the number of online, hybrid, and asynchronous classes offered in the PSYC department for the Winter 2022 and Summer 2023 semesters, was accomplished to support recommendations.

Scope of Inquiry

These are seven main points of inquiry.

- 1. How great is the demand for increasing the availability of online classes?
- 2. Would students take more classes if they did not have to commute?
- 3. Do students who commute and/or work value or desire an on-campus "experience"?

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- 4. Do students feel like they would get higher grades and more life satisfaction from taking online classes and not commuting?
- 5. What are the pros and cons of teaching distance versus in-person classes?
- 6. How many classes are currently offered as distance education at UBC?
- 7. What is the cost of creating more online lectures and labs?

COLLECTED DATA

Analysis of Current Class Formats Offered at UBC

Age Demographics

Over the Winter 2022 and Summer 2023 semesters combined, UBC offered 174 in-person classes (82%) and 37 distance education courses (18%) in the Psychology department. These excluded thesis courses, work placement, directed studies, and practicums.

Analysis of Student Surveys.

Demographics such as: age, commute time and employment status were obtained.

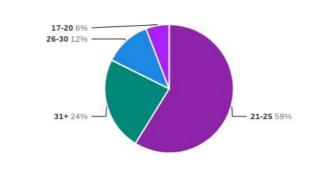




Figure 1 indicates that most students (59%) are between the ages of 21-25 years, 12% are over 31, and only 6% are between 17-20. Roundtrip commute times to campus and employment status were also obtained (Fig. 2).

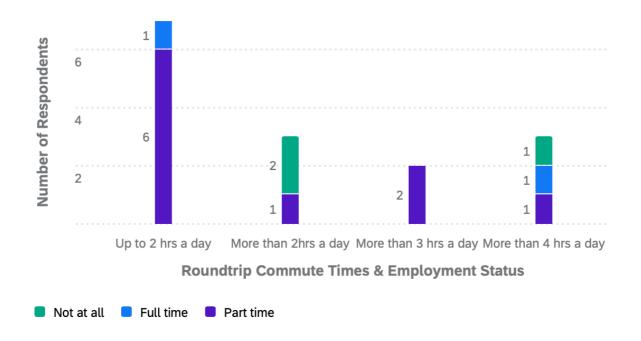


Fig. 2. Commute Time to Campus and Employment Status

Figure 2 illustrates that most students who responded only commute up to two hours a day however, 88% of them work part-time jobs. Nine students commuted more than two hours a day, of which five are employed in either full or part-time work. The effect of time in transit on studying was also measured, refer to Figure 3 and Figure 4. "Commuting to Campus:"

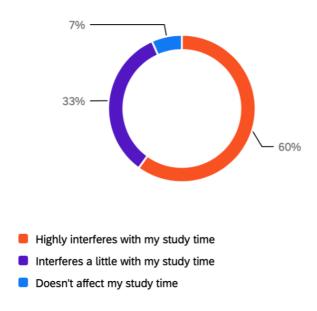


Fig. 3. The Amount Commuting Interferes with Study Time

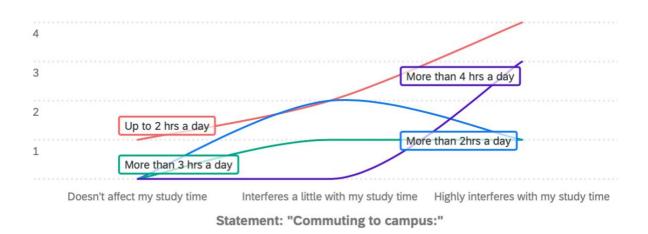
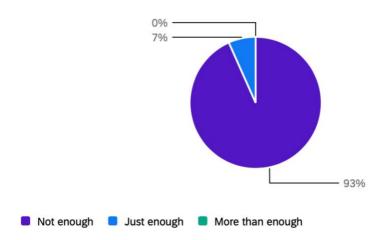


Fig. 4. Student Commute Time in Relation to the Level of Study Time Interference

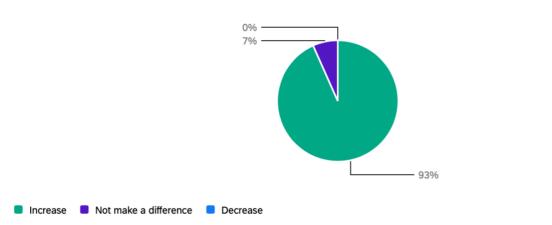
To some degree 94% of students feel that commuting interferes with their study time (Fig. 3). Most respondents agree that UBC does not offer enough distance education (Fig. 5.)



"The Amount of UBC Distance Education Class Offered is:'

Fig. 5. Students' Opinions on the Amount of UBC Distance Education Classes Offered

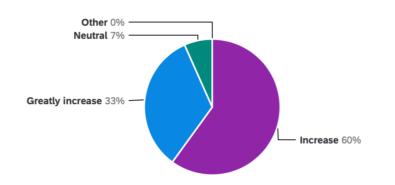
Students (94%) find that UBC does not offer enough online/hybrid classes and feel that their GPA and mental health will be positively impacted by increasing the availability of online courses (Fig. 6 & Fig. 7).



Please Fill in the Blank "Offering more classes online or in a hybrid format would _____ my GPA"

Fig. 6. Students' Predication of Impact on GPA by Taking more Distance Education

Figure 6 illustrates that 94% of respondents believe the opportunity to take more distance education will increase their GPA. Students' projection about their mental health was also assessed in relation to doing their degree over online courses.



Please Fill in the Blank "My life satisfaction and mental health would ______ if I could take more classes online"

Fig. 7. Students' Prediction of Impact on Mental Health by Taking more Distance Education

Almost all respondents (94%) believe their mental health and life satisfaction will increase significantly if they could take online classes (Fig. 7).

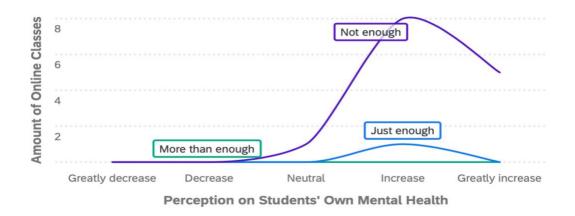


Fig. 8. Relationship Between the Amount of Current Distance Education and Mental Health

In that 94%, 14 out of 15 participants agree that UBC does not currently offer enough distance education courses (Fig. 8). The decision to enroll into a partial or full-time course load was also measured (Fig. 9).

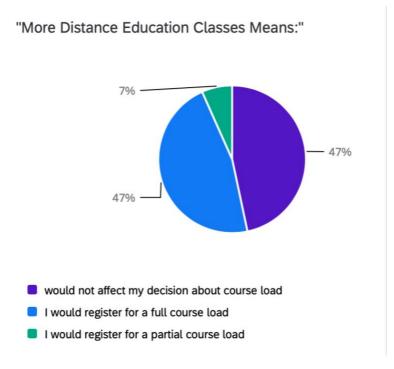


Fig. 9. The Influence on Choosing a Course Load if UBC Increased the Selection of Distance Education

Interestingly, only 47% of students report they will register for a full course load if more distance education courses were available. Another 47% said it will not affect their decision about course load and only 6% choose to register for a partial course load. It is unclear whether registering for a partial course load will be an increase or a decrease of credits for the respondents. Lastly, UBC prides itself on delivering social campus activities and an interactive campus experience. It is possible that this is an argument for the higher ratio of inperson classes on offer. Assuming that survey respondents are not living on campus or working when not studying, the importance of the campus experience was measured (Fig. 10).



Fig. 10. The Importance of UBC's "Campus Experience" by Age Group

The "campus experience" is deemed moderately important by nine students between 21-25 years of age. Only two responded as feeling it to be slightly important and four not at all important. No respondents chose "Greatly Important" or "Exceedingly Important" therefore the categories are excluded from the figure.

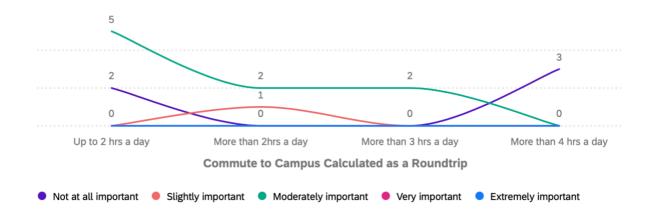


Fig. 11. The Importance of UBC's "Campus Experience" in Relation to Students Commute Times

Specifically, to assess if those respondents who value the campus experience more live closer to campus, the two results were graphed together (Fig. 11). Figure 11 illustrates those five out of the nine students who found the "campus experience" to be moderately important commuted under two hours to campus, whereas the other four transited above two hours. In contrast, all those who travel more than 4 hours away did not feel that being on campus is important.

Analysis of Professor Interviews.

Professor Rebecca Todd (PSYC 365) was interviewed over email and Professor Brandon Tomm (PSYC 309) over Zoom. Dr. Todd teaches her classes in a hybrid format with a split in-person recorded lecture (posted after class) and pre-recorded lectures with the option of an in-class discussion on those days. Professor Tomm's class is entirely in-person with no live streaming or recorded postings. Professor Tomm did post two pre-recorded lectures, one when he was sick and the other on a Midterm test day instead of making students come back for class.

Both professors agree that providing in-person classes was valuable for getting to know students, discussing course topics, and real-time feedback on lecture material. Professor Tomm champions the in-person format over online classes. He reports that preparation was shorter, taking only half an hour for the in-person lectures versus 10 hours for recording them. He cites feeling anxious about logistical and technical issues for teaching the lecture over Zoom, which lead him to recording it instead. Regarding students' performance in class, he reports a 2% grade average drop on the midterm post the two recorded lectures, which he says has not occurred in previous in-person classes. Professor Tomm could not comment on the morale and well-being of students as he has not taught an online class and therefore had no basis for comparison.

Dr. Todd reports having made her pre-recorded lectures during COVID when she had more time. She describes enjoying a hybrid format as it gave rise to the voluntary discussion classes but also notes that it could be a con for students who prefer a "live lecture with a designated room and few distractions". Conversely to Professor Tomm, Dr. Todd finds that students generally do much better on online exams although she acknowledged that the chance of cheating is much higher. Lastly, when asked about student morale Dr. Todd said this was a "mixed bag". Overall, students seem to thrive more in-person, but some students enjoy the flexibility and convenience of online classes, and the online format can provide relief for those suffering from social anxieties.

Literature Review and Feasibility Discussion.

UBC has offered distance education since 1917 (McLean & Damer, 2012). The long and rich history UBC holds with remote education experience shone in 2020 when the COVID-19 pandemic forced all classes to be offered online. Many professors turned their lectures into pre-recorded videos for asynchronous viewing, lectured on Zoom, and used Panopto to live stream their classes; as a result, the foundation for online learning has been built. A systematic review and meta-analysis completed by Pei and Wu (2019) concluded that online learning was as beneficial as in-person learning. Cavanaugh, Jacquemin, and Junker (2022) added that switching to online classes positively affected GPA overall, however, noted that this was dependent on the class topic, for example: engineering versus medicine. Assumably more dedicated time and flexibility to study the course material would increase the grade percentage average which is conducive for students continuing onward to post-graduate work and research. By valuing the students' time, UBC's retention rates would climb, and students would rate their overall experience even higher. Castro and Tumibay (2021) summarize it best by stating:

"...from the student perspective, the convenience of online learning is particularly valuable to adults with multiple responsibilities and highly scheduled lives; thus, online learning can be a help to workforce development, helping adults to return to school and complete additional education that otherwise could not fit into their daily routines. From an institutional perspective, online modalities allow colleges to offer additional courses or course sections to their students, increasing student access to required courses" (p. 1383).

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DISTANCE EDUCATION AT UBC

The other benefit of improving the remote education experience is improving students' mental health and well-being. Committing less time to travelling and more time to studying could lower stress levels. Decreasing stress leads to greater health outcomes (Canadian Mental Health Association, n.d), more focused study time, and ultimately more satisfied students. By feeling valued by UBC and optimistic about their grades and classes, students would further rate their classroom experience positively. As a result, UBC would continue to be evaluated well in the teaching environment category.

UBC has already laid a strong foundation upon which to start expanding the distance education program, however, a cost analysis report would be beneficial to assess the most useful allocation of finances and resources in supporting this venture. To make distance education more robust, Meyer and McNeal (2011) suggest utilizing these three pillars:

- Using low-cost technology (PowerPoint, pre-recorded lectures, self-paced modules, etc.) to maximise finances and diversify the online format.
- Employing teaching assistants to support class interactions, facilitate class discussions, and grade assignments and tests.
- Utilizing group work, group discussions, and including abundant
 communication with the student and between faculty to improve learning.

University students have less time to attend in-person classes and could benefit from the increased flexibility that distance education can offer. To stay competitive post-COVID, UBC needs to be prepared to keep up with the demand for online teaching and empower the professors to feel equipped to teach online courses (Rapana, Botturi, Goodyear, Guardia, & Koole, 2020).

CONCLUSION

Summary of Findings

UBC offers far more in-person classes than online, hybrid, and asynchronous class formats. Nearly all the students who travel to campus or are employed agree that UBC should offer more online classes and that commuting interferes with studying. Students also predicted that their mental health, well-being, and GPA would all increase if they could take more courses online. Those respondents who lived closer to campus valued the "campus experience" more than those who travelled from further away. The professors fundamentally agreed on the value of student interaction and discussion in-person, however, disagreed on GPA test results and the time commitment to the preparation of course material. There were pros and cons to the impact on students' well-being for both in-person and online formats. No comment can be made on the cost-benefit of increasing distance education. The literature agrees it is beneficial to the university to strategically increase online courses.

Recommendations

Below are several recommendations for how to improve the distance education program.

1) Assessing topic suitability.

As not all topics are suitable for an online format, piloting a study to assess which topics would ensure student success and save time and cost.

2) Performing a cost analysis report.

Once topics are determined as being suitable in an online format, performing a cost analysis to plan the conversion of classes in the most efficient way to save cost in the long run.

3) Investing in professor professional development.

Maintaining a positive classroom experience will rely on ensuring professors have adequate training in the technology required for online courses, successful online pedagogy, and how

to prepare effectively for their course setup. Teaching assistants might also benefit from taking some of the same professional development if they are to assist in online courses.

4) Creativity in changing current courses.

It is imperative that creative thinking influence the final distance education program. Finding resourceful and innovative ways to change the current course format will both be to students' and professors' liking. For example, if changing a 300-student class from in-person to online is too costly, maybe making parts of it online would provide benefit. Lastly, within the course itself, professors ensuring that students have a variety of ways to interact and communicate with each other and faculty will lead to a greater sense of community and learning.

Appendix A

Student Survey Questions

Survey available at https://ubc.ca1.qualtrics.com/jfe/form/SV_aUWWjiUZ3sb40VE

- Q1 Please indicate your age range
 - o 17-20
 - o 21-25
 - o 26-30
 - o 31+

Q2 I Commute to campus (calculate as a roundtrip)

- Up to 2 hrs a day
- \circ More than 2 hrs a day
- \circ More than 3 hrs a day
- $\circ \quad \text{More than 4 hrs a day} \\$

Q3 I am employed

- o Part time
- o Full time
- o Not at all

Q4 UBC offers distance education (online/hybrid classes), the amount offered is:

- More than enough
- o Just enough
- \circ Not enough

Q5 Commuting to campus:

- Highly interferes with my study time
- o Interferes a little with my study time
- Doesn't affect my study time

Q6 Commuting to campus and/or working:

- Prevents me from taking more classes
- Doesn't prevent me from taking more classes

Q7 More distance education classes means

- I would register for a full course load
- I would register for a partial course load
- Would not affect my decision about course load

Q8 The "Campus Experience" is a term used to describe the social activities and interactions you could experience during your degree. How important is the campus experience to you?

- Not at all important
- Slightly important
- Moderately important
- o Very Important
- o Extremely important

Q9 Please Fill in the Blank

"Offering more classes online or in a hybrid format would _____ my GPA"

- \circ Increase
- Not make a difference
- \circ Decrease

Q10 Please Fill in the Blank

"My life satisfaction and mental health would _____ if I could take more classes online"

- o Greatly increase
- \circ Increase
- o Neutral
- o Decrease
- o Greatly decrease

Appendix B

Professor Interview Questions

- 1. What are the pros and cons for offering and teaching an online/hybrid class versus an inperson class?
- 2. In general, what are students' GPA/class averages for both formats?
- 3. Is there any differences in student morale/well-being between both formats?

Appendix C

Dean of Arts Interview Questions

- 1. What is the cost of providing online/hybrid classes versus in-person classes? Or if that is sensitive information, is there one type of class that costs more?
- 2. In general, what are students' GPA/class averages for both formats?
- 3. Are there any differences in student morale/well-being between both formats?
- 4. What are the pros and cons for offering and teaching an online/hybrid class versus an inperson class?

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