Results Summary
Survey administered by CITL
Report created by: Thomas Hawkins, Assistant Director (Technology)
INTRODUCTION AND PURPOSE

- This survey was conducted by CITL on behalf of Memorial University to help instructors and faculties plan for the technological capabilities of students for the Fall 2020 semester.
- The survey ran from June 17, 2020 to July 1, 2020
- The survey was public, but communications were targeted to students eligible to register for the Fall 2020 semester. 20,162 students were identified by the Registrar’s Office in this category.
- A summary of results will be presented to administrators and instructors to help plan for Fall 2020
SURVEY OVERVIEW AND LIMITATIONS

• All questions in the survey were optional, additionally, the survey was branching and not all participants would receive all questions
• 4081 responses were collected (20.24% response rate)
LIMITATIONS

- Users were not authenticated, so non-students, staff or instructors may have also completed the survey.
- Although eligible students were targeted, not all eligible students may be planning on registering, and therefore may have ignored the survey request.
- Students who registered after initial communications, or after the survey closed will not be included.
- Students who do not have access to technology or consistent internet access are likely under represented in this sample as they would not have been able to participate as easily in this survey.
DEVICES

• We asked a number of questions about devices and technology potential students would have access to for remote instruction in the fall semester.
STUDENT DEVICES

• Which of the following devices will you have available to use for your course work? (Select all that apply) \(n=4055\)

• Which of the following devices do you primarily plan on using for your course work? (Select one) \(n=3940\)
STUDENT DEVICES

Student Primary Devices

- Laptop: 93.8%, 86.4% Primary Device
- Desktop: 18.6%, 8.5% Primary Device
- Tablet: 2.3%, 25.7% Primary Device
- Smart Phone: 77.3%, 2% Primary Device
- Other: 0.3%, 0.5%
- None: 0%, 0.2%
STUDENT DEVICES

- This data shows that while most students (77.8%) have access to a smartphone, only 2% plan to use it as their primary device for fall instruction.
- Internal CITL data shows that smartphone usage in Brightspace is regularly around 32% of “visits” for the Spring 2020 semester.
  - This data is combined student/instructor visits, and a visit is a view of the homepage in Brightspace combined over a 30 minute period for a unique user.
- The vast majority of students (86.4%) have access to a laptop, and plan to use it for instruction in the fall.
DEVELOP RECENCY

• Was your primary device purchased within the last 3 years? n=3959
DEVICE RECENCY

Primary Device Purchased Last 3 Years

- Yes 65%
- Unknown 1.7%
- No 33.3%
DEVICE RECENCY

- This question shows that nearly two-thirds of devices that students will be using for their learning have been purchased in the last three years.
- This measure was selected as it was believed that device recency could be used as a proxy for a modern, well equipped computer, likely to meet the minimum requirements for remote learning.
- This was chosen instead of specifying a minimum hardware specification that the student would have to find out to complete the survey.
- Although one-third of students selected that their computer was older, or they weren’t sure the age, this does not mean that the computers are not capable. However, it is a caution that one-third of students are using older hardware.
OPERATING SYSTEMS

• What operating systems(s) does your device(s) have installed? (Select all that apply) n=3969

• Percentages add up to more than 100% as students could select more than one option, as they may have identified access to more than one device.
• This graph clearly shows that there is no single operating system that can be targeted for remote instruction.

• If specific software is required to complete course work, instructors may want to consider cross platform solutions whenever possible.
ACCESS TO ACCESSORY DEVICES

• Which of these other devices do you have access to? (Select all that apply) n=3865

• Percentages add up to more than 100% as students could select more than one device.
ACCESS TO ACCESSORY DEVICES

Student Access to Accessory Devices

- Microphone: 98.7%
- Webcam: 86%
- Camera: 73.5%
- Printer: 72.5%
- Scanner: 37.7%
ACCESS TO ACCESSORY DEVICES

- This graph shows some suggested accessory devices that instructors may wish to required for instruction and shows there is not universal access to these devices.

- If an instructor wishes to use synchronous sessions as part of their instruction, they may want to consider how to accommodate the 10%+ of students without access to a webcam or microphone.

- Also, workflows that require printing and scanning may also be a challenge for students as while 72.5% have access to a printer, only 37.7% have access to a scanner.

- And while many have access to a camera or webcam which can act as a substitute for a scanner, the quality of output will be much lower for the instructor to grade with
INTERNET QUESTIONS

• These questions gauged student access to high speed internet as well as looked at if they had a metered data plan. Both of these factors would potentially limit student access to online courses.
HIGH SPEED INTERNET ACCESS

• For the following questions, high speed internet is defined as 10 Mbps download speed and 3 Mbps upload speed.

• A speed test website was also provided if students were unsure of their internet speed.

• Do you have access to high speed internet? n=3922
HIGH SPEED INTERNET ACCESS

Internet Access Speed

- High Speed 58.1%
- Low Speed 21.4%
- Unknown Speed 19.6%
- No Regular Access 0.9%
This data shows that universal access to high speed internet does not exist for students in the fall semester.

Instructors may want to consider how to teach with lower bandwidth techniques to help reduce the bandwidth inequalities that exist among students or to survey their students directly in their courses.

Between 22.3% (Low speed and no access) and 41.9% (including unknown speed) of students may not have access to high speed internet suitable for synchronous sessions and other high bandwidth learning activities.
HIGH SPEED INTERNET ACCESS: INSTRUCTOR RESOURCES

- Instructor Resource: From face-to-face instruction to online teaching: practical considerations for synchronous and asynchronous teaching and learning
- Next Slide: Chart of activities placed on axis of bandwidth and immediacy to help select activities appropriate to the needs and available resources
HIGH SPEED INTERNET ACCESS: INSTRUCTOR RESOURCES

- High Bandwidth
  - Pre-recorded Video
  - Pre-recorded Audio
  - Asynchronous Discussions with Video
  - Asynchronous Discussions with Audio

- Low Bandwidth
  - Readings with Text/Images
  - Email
  - Discussion boards with Text/Images
  - Collaborative Documents

- High Immediacy
  - Video Conferences
  - Audio Conferences

- Low Immediacy

Created by: Daniel Stanford
Twitter: @dstanford
• Having a metered connection, or an internet plan with a data cap, means that if your internet usage is over the cap, you are required to pay an additional charge in addition to your usual monthly fee.

• Do you have a metered data connection, or do you have data caps on your internet service? n=3848

• Those who selected No Access in the last question (37) would not have seen this question.
METERED INTERNET CONNECTION

Metered Data Plans

- No: 54.3%
- Yes: 14.4%
- Not sure: 31.3%
A metered internet package is a pay-per-use package, or a package with a data cap, at which point bandwidth is charged or bandwidth is throttled (slowed down).

Can also be read as “How many students have unlimited internet packages?”

14.4% of students know they have limitations on their data access for the fall.

A high portion, 31.3%, are not sure if they have limits or not.

Students with data caps or pay-per-use may be more reluctant to participate in high bandwidth activities. Or may be faced with unexpected internet bills after their high bandwidth activities are concluded.
LEARNERS AND THEIR PREFERENCES

- The final section deals with learner self-reported preferences, and demographic information.
TEACHING APPROACHES

• Please identify your preference for synchronous or asynchronous teaching approaches.
  • Asynchronous approaches: You, your classmates and your instructor interact at different times within a flexible timeframe.
  • Synchronous approaches: You, your classmates and your instructor interact through the same online tool at the same time.

• n=3558

• A graph is also provided that groups together strong and slight preferences for each teaching approach.
TEACHING APPROACHES

Student Teaching Approaches Preferences

<table>
<thead>
<tr>
<th>Approaches</th>
<th>Percentage of Students Preferring Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Async Strongly</td>
<td>34.8%</td>
</tr>
<tr>
<td>Async Slightly</td>
<td>18.1%</td>
</tr>
<tr>
<td>No Preference</td>
<td>12.3%</td>
</tr>
<tr>
<td>Sync Slightly</td>
<td>15.9%</td>
</tr>
<tr>
<td>Sync Strongly</td>
<td>18.9%</td>
</tr>
</tbody>
</table>
TEACHING APPROACHES

Student Teaching Approaches Preferences

- Async Preference: 52.9%
- No Preference: 12.3%
- Sync Preference: 34.8%
These graphs show that a majority of students prefer to learn through asynchronous approaches versus synchronous approaches as defined in this survey.

Analysis was completed at the campus level as well, and the trends were similar across all campuses except for students who registered for the online campus. They more strongly preferred asynchronous approaches (70.2%)
TEACHING APPROACHES: INSTRUCTOR RESOURCES

• Remote Instruction via Asynchronous and Synchronous Technologies
  • https://blog.citl.mun.ca/instructionalresources/remote-instruction-via-asynchronous-and-synchronous-technologies/

• Tips for teaching Synchronously
  • https://blog.citl.mun.ca/instructionalresources/files/2020/05/Tips-for-Synchronous-Teaching.pdf

• Tips for teaching Asynchronously
  • https://blog.citl.mun.ca/instructionalresources/files/2020/05/Tips-for-Asynchronous-Teaching.pdf
TEACHING APPROACHES: INSTRUCTOR RESOURCES

• Guide to Teaching Online
  • https://blog.citl.mun.ca/instructionalresources/resources-related-to-instructional-and-learning-strategies/guide-to-teaching-online/

• Alternatives to lecturing
  • https://blog.citl.mun.ca/instructionalresources/alternatives-to-lecturing/
COMFORT LEVEL WITH DEVICES

- Describe your comfort level with using your devices and the internet to complete your course work for the Fall semester:
- n=3887
COMFORT LEVEL WITH DEVICES

Comfort Level Using Devices and Internet for Remote Learning

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>Percentage of Students Selecting Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>V comfortable</td>
<td>31.3%</td>
</tr>
<tr>
<td>S comfortable</td>
<td>39.4%</td>
</tr>
<tr>
<td>Neither</td>
<td>9.2%</td>
</tr>
<tr>
<td>S uncomfortable</td>
<td>14.2%</td>
</tr>
<tr>
<td>V uncomfortable</td>
<td>6%</td>
</tr>
</tbody>
</table>
COMFORT LEVEL WITH DEVICES

• Overall, students are comfortable using their devices and internet access for remote learning (70.7%).

• Although most students have access to devices and the internet, 20.2% of those students are uncomfortable using them for remote learning.
Which of the following activities have you successfully completed online? (Select all that apply) n=3621

• Used Brightspace or another Learning Management System
• Completed an online quiz (as part of course work)
• Participated in a synchronous/live class using video conferencing software
• Streamed a recorded video as part of completing course work
• Recorded audio or video as part of a class project
• Accessed digital books or resources from a library or course site
• Accessed or used academic support services (e.g. tutoring help, writing help, counselling, academic advising)
STUDENT PAST EXPERIENCE

**Student Past Experience**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Percentage of Students Completing Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Quiz</td>
<td>93%</td>
</tr>
<tr>
<td>Used LMS</td>
<td>90.3%</td>
</tr>
<tr>
<td>Digital Resources</td>
<td>70.6%</td>
</tr>
<tr>
<td>Live Class</td>
<td>48.3%</td>
</tr>
<tr>
<td>Streamed Video</td>
<td>45.5%</td>
</tr>
<tr>
<td>Recorded Video</td>
<td>31.1%</td>
</tr>
<tr>
<td>Academic Support</td>
<td>21%</td>
</tr>
</tbody>
</table>
STUDENT PAST EXPERIENCE

• The purpose of this question was to gauge students past experience completing activities often used in online/remote learning.

• This shows that many students have completed online quizzes before, and used some form of learning management system.

• It also shows that fewer students have accessed academic support services, or recorded their own video and audio as part of course work.

• Instructors and administrators at Memorial may want to consider additional supports for students who need to access digital resources, participate in synchronous classes, stream instructional video, record their own video, and participate in academic support services as part of their fall semester.
TIME PER DAY FOR STUDY

- How much time per day (on average) will you have access to devices within your household for completing course work? n=3967
- This question was asked and many who had input into the survey was interested if other family/household responsibilities would prevent students from full participation.
TIME PER DAY FOR STUDY

Amount of Daily Time with Device for Study (on Average)

- More than 4 hours: 83.6%
- 2 - 4 hours: 13.2%
- 0 - 2 hours: 3%
- 0 hours: 0.3%
This graph shows that the vast majority of students (83.6%) who completed the survey will have more than 4 hours per day to work on courses with their devices.

This is likely due to the high number of full time students that completed the survey.

Unfortunately we did not ask if a student was full or part time, and therefore cannot break out the data along that distinction.

Resource: Estimating Student Effort

https://blog.citl.mun.ca/instructionalresources/estimating-student-hours-of-effort/
STUDENT LOCATION FOR FALL 2020

- Participants were asked where they would be studying, and if within Canada, would enter a postal code (n=3654)
• What is your campus of study? (n=3651)

<table>
<thead>
<tr>
<th>Campus</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grenfell Campus</td>
<td>329</td>
</tr>
<tr>
<td>Harlow Campus</td>
<td>0</td>
</tr>
<tr>
<td>Labrador Institute</td>
<td>1</td>
</tr>
<tr>
<td>Marine Institute</td>
<td>42</td>
</tr>
<tr>
<td>Online Campus</td>
<td>169</td>
</tr>
<tr>
<td>St. John's Campus</td>
<td>3110</td>
</tr>
<tr>
<td>Not Specified</td>
<td>430</td>
</tr>
</tbody>
</table>
• Instructional Resources site:
  • [https://blog.citl.mun.ca/instructionalresources/remote-instruction/](https://blog.citl.mun.ca/instructionalresources/remote-instruction/)
• Remote Course set-up Kit
  • [https://blog.citl.mun.ca/technologyresources/course-set-up-kit/brightspace-course-set-up-kit-for-remote-instruction/](https://blog.citl.mun.ca/technologyresources/course-set-up-kit/brightspace-course-set-up-kit-for-remote-instruction/)
• Guide for Preparing your Course for Remote or Online Learning
  • [https://blog.citl.mun.ca/instructionalresources/guide-for-preparing-your-course-for-remote-or-online-learning/](https://blog.citl.mun.ca/instructionalresources/guide-for-preparing-your-course-for-remote-or-online-learning/)
• Instructional Series and Learning Technology webinars (new series content to be added week of July 13)
  • [https://blog.citl.mun.ca/technologyresources/workshop-cons/](https://blog.citl.mun.ca/technologyresources/workshop-cons/)
• Getting Started with Teaching Remotely
  • [https://citl.mun.ca/TeachingSupport/instructionalcontinuity/getstarted.php](https://citl.mun.ca/TeachingSupport/instructionalcontinuity/getstarted.php)