

Remote Teaching at Algonquin College

FACULTY COURSE EXPERIENCE REPORT

2021 Survey and Focus Group Findings

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Executive Summary

In March, 2021, 214 Algonquin College faculty members (daytime programs only) completed a survey about their remote teaching experiences during the 2020/21 academic year. In addition, 37 faculty members attended focus groups to share ideas and discuss their insights about teaching remotely during the pandemic.

Faculty participants in the study had a lot to share. They provided detailed comments about their course experiences. Most expressed the challenge and fatigue that came with the rapid pivot to remote teaching. However, they also suggested that online/hybrid learning would be beneficial for both faculty and students - if implemented strategically with appropriate organizational supports and resources. Instead of applying a “one size fits all” approach, participants advocated for a need to purposefully match modality options to learner needs and readiness, program needs, and professor characteristics.

FINDINGS

Key themes that emerged from faculty comments include:

- Hybrid (mixed face to face and online) course delivery is the future
- Face-to-face and in-person interaction is an essential college experience
- Pivoting to remote teaching was effortful
- Engaging students online was challenging
- Academic integrity and grades inflation was a major concern
- An increase in hybrid/online delivery requires strategic planning and investment in both faculty and course development

RECOMMENDATIONS

Based on data from this study, three key recommendations are provided:

- Develop a college-wide strategy for the delivery of high-quality hybrid/online learning experiences for full-time programs
- Invest in course redesign and faculty professional development to support high-quality hybrid/online course development and delivery
- Invest in digital learning tools beyond the Learning Management System (LMS) to enhance the learning experience and support more streamlined approaches to managing learning activities and assessments

Introduction

COVID-19 brought radical changes to how daytime students and teachers experienced their college courses during the 2020/2021 academic year. The rapid transition to remote teaching was an unprecedented opportunity for professors teaching on-campus to try new technology and facilitation techniques to deliver their courses remotely. The challenge was met with creativity, adaptability, and many hours of hard work. Lessons learned from this experience can shape sustainable post-pandemic options for learning at Algonquin College.

This study is a snapshot of Algonquin's remote teaching experience at the course level. Evolving the learning experiences of courses to be more flexible and student-centred requires understanding how professors experience the teaching process. The hope is to sustain what worked well and enhance support for promising teaching and course delivery practices.

About the Study

The purpose of the study was to collect information about how faculty in daytime programs experienced remote teaching.

Data was collected via an online survey and focus groups.

A total of 214 faculty surveys were completed during a three week period from February 23 to March 12, 2021.

Three focus groups were held via Zoom web conferencing from March 3 to 11, 2021 with 37 faculty participants.



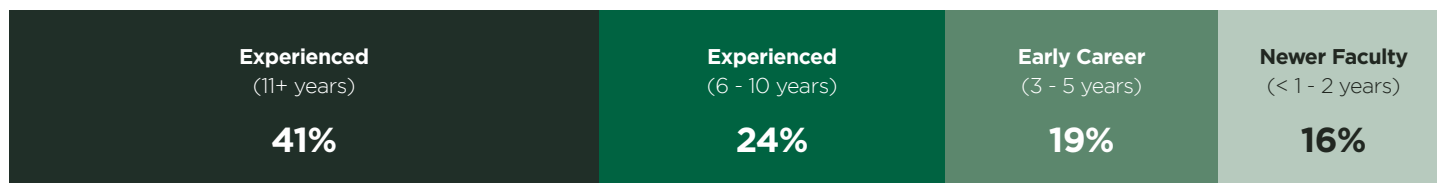
“Teaching remotely has been a life changing experience for me.”

Survey participant

The Survey

PARTICIPANTS

Full-time	54%	Ottawa.....	95%
Part-time	21%	Perth	2.4%
Partial-load	25%	Pembroke	2.4%



In What Areas Did Respondents Teach?

- Business, Business Agriculture, Accounting, Finance, Entrepreneurship, and Marketing21.3%
- Health Sciences, Geriatrics, and Wellness11.7%
- Information Technology 10.8%
- Police and Community Studies9%
- Architecture and Building Studies8%
- Arts and Media Design8%
- General Arts and Science7%
- Languages6.5%
- Trades and Apprenticeships4%
- Hospitality, Travel and Tourism 3.8%

SURVEY RESULTS

Survey questions asked faculty to share how the pivot to remote teaching impacted their teaching practice and student learning during the 2020/21 academic year.

What Was the Learning Experience Like For Students?

The most frequently cited Zoom activity was professor lecture. However, many faculty integrated video and various kinds of active learning activities within their synchronous classes.

How many faculty members taught lab, studio, workshop and other hands-on/applied courses?



For faculty that taught applied courses, **34% taught on-campus** and **55% taught applied skills digitally**.

The applied digital experience for students included:

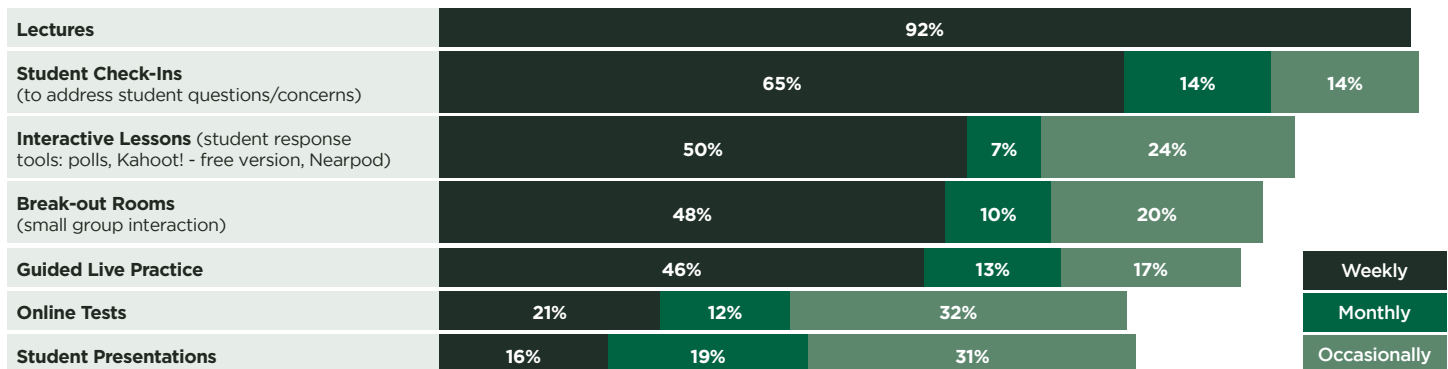
- Professor demo via Zoom 23%
- Guided student practice via Zoom 18%
- Remote access/simulated computer lab 12%
- Video-recorded professor demo6%
- Video-recorded student demo4%
- Student hands-on demo via Zoom 3%

How often did faculty members teach synchronous classes?

- 97% taught via Zoom (or other web conferencing apps like MS Teams)
- 3% did not teach synchronously

What were the top synchronous (Zoom) learning activities?

The most frequently used learning activities were:



Digital Learning Tools Used During Zoom Classes

Faculty engaged learners during Zoom sessions through interactive presentations, interactive activities within Brightspace (e.g. quizzes and discussion forums) and collaborative document group activities.

What technology tools did faculty use the most during Zoom classes?

Student Response Tools..... 28%

- 17% of responses referenced polling tools/interactive presentation tools such as Mentimeter (free tool), Slid.o (free version)
- Tools mentioned most frequently: Kahoot!, Nearpod

NOTE: In the absence of an Algonquin-wide license, most faculty are using limited, free versions.

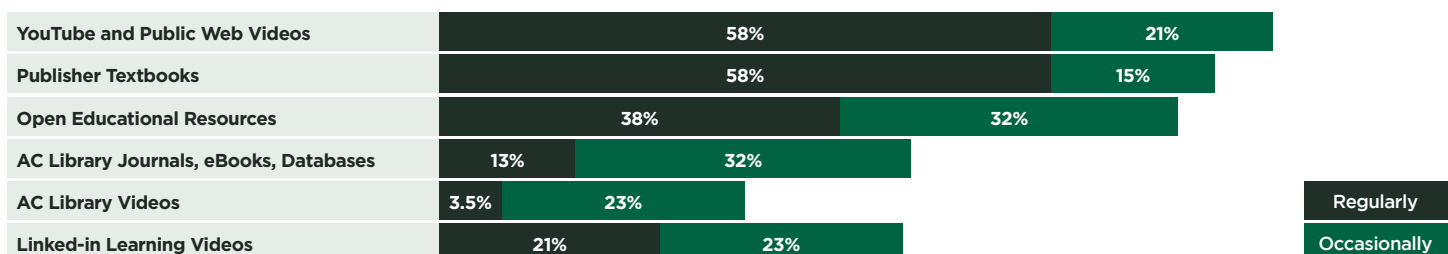
1. Brightspace Discussion Boards 22%
2. Brightspace Quizzes 21.5%
3. Zoom Break-Out Rooms 13%
4. H5p Interactive Learning Activities (Algonquin has license) 11%
5. Video (Recorded lectures, YouTube etc.) 11%
6. Collaborative Documents (Office 365 and Google Docs) 9%
7. Padlet (free version) - Collaborative Posting Board 8%

NOTE: Most faculty are reusing the 3 Padlets that come with a free account.

Digital Learning Resources Used Within Courses

Both publisher textbooks and videos via YouTube and public web sites were the most commonly incorporated digital learning resources. Comments throughout the survey suggest that not all faculty are aware of Algonquin's library resources.

What Learning Content and Supporting Resources Did Faculty Use the Most?



How Did Faculty Experience Remote Teaching?

While a few professors indicated little change to their teaching practice, the majority expressed making major adjustments to how they approached teaching and learning.

Supported by data that shows a significant use of lecture during Zoom sessions, faculty suggested that their teaching approach became more teacher-centred.

Group activities via break-out rooms and student response engagement such as polling and Kahoot! learning games were mentioned as the most effective remote teaching practices. These activities addressed the need to engage learners within synchronous Zoom classes.

Most faculty gained confidence in their ability to teach remotely over time. However, some expressed concern about how students that typically struggle fared worse during remote teaching.

Compared to teaching in person (on campus), how has your course planning and teaching practices changed to adapt to remote learning?

- Little to no change for some (some had been teaching hybrid courses or online general education courses)
- Switched to flipped learning (students review content on own, then attend class to apply knowledge)
- Became more teacher-centred
- Reduced in-class content, hands-on, and group work
- Spent more time on tech set-up
- Spent more time creating videos, quizzes, and interactive activities
- Used more open-book assessment
- Provided less individual student feedback in class
- Provided more feedback and individual support outside of class

“During in person class, everyone works through activities... but online, students seem to need more diversified activities to hold their attention.”

“More assignments, more teacher-led, “sage on the remote stage” pedagogy; less flexibility because it’s really, really hard to “read the room.”

“Attendance and progress was a key policy for students remaining in our program. The attendance has had to be adapted to ensure that students are “active” in their studies.”

How confident do you feel about teaching courses remotely?

- Extremely Confident25%
- Confident41%
- Somewhat Confident27%
- Not So Confident3.7%
- Not At All Confident3.27%

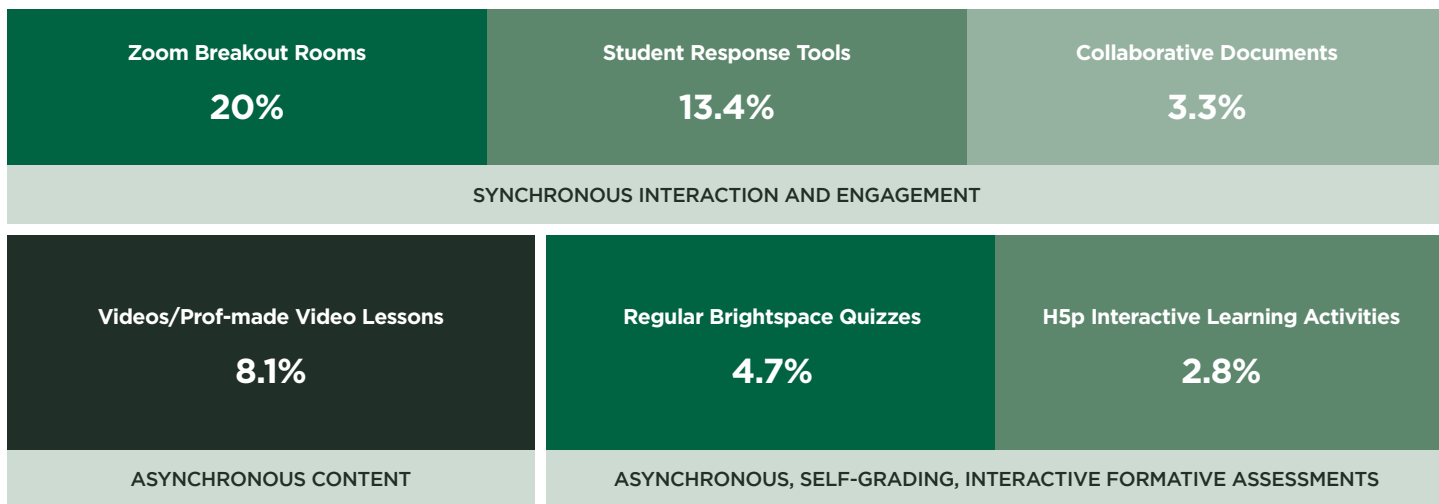
“Confident I’m doing well for some students, but not others.”

“I would do more remote teaching if I had the time to take all the training and do all the work to create a great course.”

“It has taken a long time to feel confident. Am almost there now but I dislike it as an approach. I can manage if I have to.”

What 1 or 2 remote teaching practices or learning activities have worked well for you?

- H5p Interactive Learning Activities2.8%
- Collaborative Documents and Padlet3.3%
- Regular Brightspace Quizzes4.7%
- Videos and Professor-Made Video Lessons8.1%
- Student Response Tools13.4%
- Zoom Break-Out Rooms 20%



Remote Teaching Challenges

Engaging students – especially during synchronous Zoom sessions – was the most thoroughly, frequently described challenge. Faculty described their concern about not connecting as well with students during remote teaching as they usually would via in-person classes. In particular, faculty mentioned that it was harder to identify when students were struggling and to provide personalized support during Zoom classes – especially since student cameras were often turned off.

Technology problems, such as slow and interrupted internet, and technology transitions (e.g. between sharing screens and break-out room sessions) was also a frustration since it disrupted the flow of learning and reduced available learning time in Zoom sessions. This resulted in activities taking longer and less content being covered in a Zoom class than it would in-person.

What were the top 2 or 3 challenges that you have faced while teaching your course(s) remotely?

- Engaging with students during Zoom classes
- “Reading the room” for student understanding and engagement
- Connecting with and getting to know students
- Helping shy and struggling students
- Ghost students/students who leave Zoom classes

“Unable to see students’ faces. I need to see them....to know if they have understood/if they have questions. This is what I miss the most. I my feel that I am delivering it in the best possible manner, but I am not sure if they have received it well enough.”

“Non-verbal cues from students especially when instructing sensitive topics i.e sexual abuse, victims of crime.”

“The elimination of ‘ambient learning’ in the studio environment - students do not hear me talking to other students about their work, so they learn less from each other.”

Technology Challenges

- Unstable internet connection
- Troubleshooting student problems challenging; takes up Zoom class time
- Multi-tasking and Zoom setup required takes up more Zoom class time
- Time zone differences

“I seem to spend more time on getting the technology right than on the content.”

“Difficult to troubleshoot problems online, especially if student lacks understanding. Hard to grab their mouse and show them on their machine. Difficult to debug issues with their environment settings and machines.”

“Trying to juggle the recording along with answering questions, reading the chat and keeping on top of the lesson.”

Academic Integrity, Academic Performance, Feedback, and Online Assessments

Professors perceived an increase in cheating and grade inflation. They also expressed concern about the quality of student learning outcomes – especially as it related to learning and demonstrating mastery of hands-on skills. Many mentioned that their ability to observe student performance and provide frequent, timely individual feedback was seriously hindered by being exclusively remote.

- More cheating
- Lower academic standards and marks inflation
- Challenge of assessing hands-on skills online
- Academic gap widened (good students do well; poor students do worse)

“We have lowered a pass mark by 10% in all courses. I am left mostly unsatisfied with results.”

“Quizzes where the pre-pandemic average was 65% now carry an average of over 80%”.

“Strong students have adapted quickly to this format. Students who are weak are even weaker online.”

Increased Workload – Not Enough Time for Prep and Grading

The majority of faculty reported that their preparation and student support activities increased significantly. Learning new tools, preparing new digital learning materials, dealing with technology issues, and responding to more individual student questions increased their workload.

- Everything took longer to do
- Difficult to provide individual student feedback

“Way. More. Time. It’s also been much more challenging designing meaningful engagement activities for a group of learners I’ve never met and who aren’t in front of me.”

“There is not enough time! Grading is probably the hardest part. It’s just so incredibly time consuming to grade electronically rather than on paper. I’m sure I’ll get faster, but it’s exhausting.”

“I am working 2-3 time more now at teaching than I did 5-10 even 20 years ago.”

Motivation and Work/Life Balance

As teachers skilled and accustomed to teaching students in-person, many struggled with synchronous Zoom teaching on a personal level.

- Lower energy and motivation
- Zoom fatigue and increased physical pain
- Social isolation

“I am tired and lonely. My back and shoulders are sore.”

“Missing the personal connection with students that cannot be recreated in an online environment.”

“It’s as if you’ve taken the skills I have and parked them and told me to do all the things I’m not good at.”

Resources Needed to Support Online Teaching and Learning

Describe tools and resources that could better support online learning and teaching experiences within courses.

Faculty have been relying on free versions of student response tools that have various limitations including maximum numbers of participants and activities that can be created per account. This has required professors to juggle between several different free tools to engage learners within synchronous learning.

A desire to have higher quality digital learning content was also mentioned. This was described in terms of easier to use media creation tools, continued licensing for media learning content such as LinkedIn Learning, and having in-house people resources to support creation of media-rich content.

There is a desire to streamline workflows (e.g. for grading) and lines of communications by reducing the number of different tools being used with students.

Respondents expressed strongly that there was insufficient preparation time and support resources for redesigning and preparing high-quality courses for a different modality.

Also the need for clear, centralized communication to students to clarify minimum technical requirements and to support navigation through the myriad of student supports available was also mentioned.

Faculty requested these tools most often, (listed in order of frequency):

- Padlet
- Kahoot!
- Mentimeter or Sli.do
- Nearpod
- Miro (collaboration/brainstorming)

High-Quality Media Content

Faculty described wanting more access to high-quality learning videos and media assets.

- Continued licensing for Linked-In Learning
- Customized, videos produced by in-house media experts in collaboration faculty and programs
- Media development support people and tools to help faculty to create their own content
- Access to copyright free images and audio
- Access to interactive simulations

Tools to Speed Up Grading Process

Some faculty members expressed how digital grading, especially of papers and visual design assignments, was very cumbersome and time consuming. It appears as though many chose to do paper-based grading since they consider it faster and more flexible in terms of how they can comment and provide feedback. And, it is a break from the computer.

Access to Google Docs

A few respondents mentioned that since many workplaces that students will work in do not use Office 365, Algonquin should make Google docs available as an option for collaborative work and document sharing.

Chat and direct messaging within Brightspace

Some faculty members mentioned supporting individual students via Teams chat, scheduled Zoom sessions, texting, or WhatsApp messaging. However, these chat options are outside of Brightspace. Also, some of those tools require professors and students to share their phone number. A need was expressed to reduce the number of different platforms that students are required to use in order to avoid confusion. The ability to chat within Brightspace was a specifically described option.

Faculty Support and Course Development Time

- More time to adapt and prepare courses for online/remote delivery
- Increased Learning and Teaching Services Support - more availability of one-on-one support for teaching and course development
- Professional development - ideas sharing and concrete examples of alternative, non-traditional assessments
- Real-time technology support - similar to eClassroom Support

Student Support and Communications

- Concierge to direct students to the resources and contacts
- Minimum technology requirements for remote teaching communicated to students e.g. the BYOD (Bring Your Own Device computer specifications) include web-cam and adequate internet speed

KEY THEMES - SURVEY COMMENTS

Enjoy teaching online/see many benefits

“Remote and online learning has worked better than expected. Student response is good. Costs and “dead time” commitment for both faculty and students reduced. eg food, parking, commute time, time lost between classes etc. Students report being more focused and engaged, and that attending school is much more simple than attending in person.”

“Happy to teach remotely for as long as required. Also loved teaching in person too.”

Face-to-face is an essential learning experience in many situations

“I wish we were back to face to face teaching, I believe this is hindering the learning experience for the students. Especially because I teach in the trades. Visual and physical engagement are a huge learning tool.”

“I have enjoyed teaching remotely I do, however, feel that students miss out on the many benefits of being in a face to face environment - developing interpersonal communication skills, building confidence, developing relationships, deriving the physiological benefits from human interaction [e.g., oxytocin release].”

A hybrid or mixed approach (f2f and online) would be beneficial

“We need to get back into the classroom this fall. A hybrid approach of remote and in-class would work at our campus.”

“I don’t mind teaching online I just don’t want it to be the only option.”

“Even though courses can be delivered completely remotely, there should be way to meet on campus occupationally, even if it is once a month or twice a term just to keep the human connection, or deliver content that is extremely difficult to be done remotely.”

“I really love remote teaching for some classes, but it’s definitely not ideal for other classes. I really hope that as faculty we’re given the choice for which courses to teach remotely and that we’re not expected to teach a course on campus and remotely at the same time. That would be awful.”

Remote teaching and learning is not for everyone - and every situation

“In terms of activities and evaluations I definitely don’t see it being the best option for the type of courses I teach. Sure it is convenient in terms of being able to “get out of bed and teach”, but education needs to be good quality and the interaction and experiential learning cannot be replaced by online learning.”

“For many of our students most learn by doing (I call them “see-touch-do”) They learn through interaction with others, this form of learning is NOT for them. I know I have lost a number of students who have dropped because of the format and they tell me that they hope to come back when this whole situation changes. This may not be the case though. On the converse, having an option for someone who likes this method it is fantastic!”

“Option for faculty who enjoy this format and demonstrate success to be given the option to maintain remote teaching.”

Must plan and design for effective online learning experiences

“Remote delivery needs to be included in our longer term vision for how courses are delivered. Embedded in a proper framework of continuous improvement, remote delivery is a valuable addition to our existing delivery modes: online, hybrid, and traditional.”

Focus Group Results

The intention of the focus group was to expand on, qualitatively, the data collected during the survey. One path of exploration asked faculty to describe what they considered to be qualities of effective online and hybrid teaching. Discussions during the three faculty focus groups centred on four questions.

Question 1: What online teaching practices have been working?

- **Begin Classes with Check-In and Time for Social Connection**
 - Icebreakers/small group break-out rooms
- **Provide Multiple Options for Learning**
 - Blend of learning activities: synchronous, asynchronous, break-out rooms, discussion board etc.
 - Interactive activities (H5p) for content review and immediate feedback
 - Pre-recorded video lessons – less than 10 minutes
- **Allocate Time Before and After Zoom Class to Interact With Students** - important to check in socially, make personal connects with students, and provide time to alleviate potential sources of confusion and stress.

Question 2: What are key competencies/qualities of effective online/hybrid teaching?

- **Flexible** - Adjusts practices that worked well in classroom but may not work as well in Zoom class.
- **Dynamic and Creative**
- **Ready to Experiment/Willing to Take a Chance**
- **Transparent** - Encourages Students to Provide Feedback.
- **Technology Skills** – Zoom, Microsoft, Video Creation, Social Media.
 - Able to troubleshoot issues; adept at working online. Familiar with tools used by the online generation.
- **Communication Skills** - Provides clear expectations and respond to questions quickly.
- **Willing to Continuously Improve**
- **Empathetic and Patient; Provides Safe Environment to Make Mistakes and Learn**
- **Strong Organizational and Time Management Skills** – find time to continually improve learning experience.

Question 3: What have you observed about the student learning experience during remote teaching – in comparison to face to face?

Students Have Multiple Sources of Distraction

Homes are often not conducive to study; many work jobs.

Student Differences in Learning Online

- Some students thrive online (are self-directed, have self-discipline) while others struggle
- Requires students to have more self-motivation and better time management

Less Participation

Less face-to-face (camera on) conversations – many students use only the chat tool.

Monitoring Group Work in Break-Out Rooms

Not as effective as in face to face class.

Existing Learning Gaps Have Widened

Strong learners are participating; challenges of weaker students (e.g. less technical and engaged) are magnified.

Students May Expect a Traditional Experience

Need to clarify what learning experience will be to students.

Question 4: What key considerations need to be made related to course design and delivery of hybrid/online/blended learning courses?

Be Cognizant of Learner Profiles

Level-one learners are not well equipped for hybrid learning. Hybrid courses should be reserved for level two and above, once they are enculturated to college learning.

Avoid a “One Size Fits All” Approach to Hybridizing Courses

Compensation for course redesign to online delivery.

Teaching is an Important Value Proposition

If full-time courses become indistinguishable from online, then the price difference becomes a problem; the value is in our teaching.

Ensure That Students Understand Expectations for Remote/Online Learning

Too much information for students is coming from different areas; package it together in video instead of email.

Better Coordination Between Course Developers/Writers, Previous Teachers of Course, and New Prof

Provide checklist to ensure required learning requirements are maintained.

Online Proctoring Tool is Required

The temptation to cheat seems much greater online. For certain accredited programs, the need to ensure academic integrity is critical.

Consider mental health training for all faculty specific to remote learning

“Students are more stressed than ever and we are on the front line.”

Summary

The overall results of this study echo findings in the *Digital Learning and Canadian Higher Education in 2020 National Report* (Johnson, 2021). Specifically their findings that:

- The rapid shift to remote teaching put a considerable burden on faculty and students that needs to be reduced in the future
- There is considerable optimism about the future of online and hybrid learning within post-secondary institutions, though there are impacts that need to be considered and mitigated.

Results also share a connection to recommendations made in a 2020 United Kingdom study *Learning and Teaching Reimagined: A Dawn for Higher Education* which suggest that higher education institutions should:

- Strategically plan for the digital transformation of learning and teaching
- Review strategic investment in digital teaching and learning
- Prioritize blended learning options wherever possible
- Accelerate blended learning adoption - with close involvement of students from design to delivery
- Ensure inclusivity and accessibility as integral curriculum redesign considerations
- Include within professional development plans digital training, peer support, and incentives to encourage skills upgrading

Summary findings of this report include:

- **Hybrid (mixed face-to-face and online) course delivery is the future**
Online learning can be beneficial for the right students, professors, and courses – with appropriate planning and resources.
- **Face-to-face and in-person interaction is an essential college experience**
Students benefit from in-person social interaction that also prepares them for the workplace.
- **Pivoting to remote teaching was effortful** Faculty reported a tremendous increase in workload (a 40 to 75% increase).
A lot of re-design work happened: new digital content and activities, new assessments. Increased time spent helping individual students outside of class time.
- **Engaging students online was challenging**
Students were more distracted and environments were not always conducive to focused learning. Turned-off student web cams left faculty feeling disconnected and not attuned to student learning needs.
Lack of usual student connection was demotivating and stressful for many faculty.
- **Academic integrity and grades inflation was a major concern**
With increased cheating observed, many were concerned about the quality of credentials. Many reported grade inflation coupled with uncertainty about how well students were learning. Reduced quality of learning outcomes was observed.
- **An increase in hybrid/online delivery would require strategic planning and investment in both faculty and course development**
Faculty recognized that the rapid adoption of face to face course delivery to “remote delivery” was not truly online teaching. Rather, online teaching required course re-design and additional faculty training.

Recommendations

01 Develop a college-wide strategy for the delivery of high-quality hybrid/online learning experiences

Considerations should include:

- **Student readiness for online/hybrid**
(online/blended learning is not recommended for first year students: See point 8 of [Ten Facts You Need to Know About Blended Learning](#))
- **Faculty readiness and desire to teach online/hybrid**
- **Workload for faculty and students**
Online is often mistakenly perceived as being less work
- **Class size**
Avoid increasing class size. Grading and connecting with learners is more effortful in online/hybrid courses

02 Invest in course redesign and faculty professional development to support high-quality online course development and delivery

- **Courses must be designed as online/hybrid to leverage its unique affordances**
In-person classroom teaching practices do not directly transfer into online environment
- **Re-design investment is opportunity to embed more student-centred practices**
Traditional teacher-centred practices will continue to migrate into online unless personalized affordances of technologies are leveraged via new digital pedagogical practices
- **Provide instructional/learning design, professional development, and digital content development support**
Expertise in digital pedagogy and learning design is required for developing high-quality online curriculum and learning experiences

03 Invest in digital learning tools beyond the Learning Management System (LMS) to enhance the learning experience and reduce professor workload

Adopt digital tools to support more active learning engagement, personalized learning, and collaboration

- Leverage technology for learning interaction and collaboration
- Consider technologies that support learner-content, learner-learner, and learner-teacher interactions
- Video lecture capture plays a role, but is a teacher-centric approach
- Pilot implementation of AR/VR simulation tools
- Pilot AI/adaptive learning solutions that can support personalized learning
- Purchase/support development of high quality media content (e.g. services to support faculty to create demos and simulations)

Research/pilot solutions that free up faculty time for more personalized learning interventions.

- Explore technology solutions and workflows that can reduce teacher workload and provide learners with timely feedback
- Using various technologies for different pedagogical tasks takes time
- Grading and providing student feedback is especially time consuming
- Invest in formative assessment tools (e.g. interactive lessons (like Nearpod), student response tools, simulations in which students receive immediate feedback and faculty can view student performance on particular items)

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