

Over the last few months, we have all become much more experienced with working and learning online. As we look to the future, we will no doubt carry on with a certain measure of digital teaching and collaboration. What will this new experience look like? Stephen Downes looks at our recent experiences using online learning and conferencing and paints a picture of what the longer-term future is likely to look like. He'll talk about what technologies worked, what didn't, and what we've learned about navigating the online environment.



#### It's Hard at First

- "Student evaluations indicated that the course was considered adequate but less than ideal. Although grade performance in the course was similar overall to that in previous years, it is important to note that student perception of learning in this course was that it was significantly more difficult..." <a href="https://journals.physiology.org/doi/full/10.1152/advan.00140.2020">https://journals.physiology.org/doi/full/10.1152/advan.00140.2020</a>
- It feels like everything takes longer online
- It gets easier

### It's Hard at First



"You cannot just replicate what you do IRL. I knew this, intellectually. But, I didn't really know this until term started."

https://medium.com/damian-radcliffe/lessons-learned-9-takeaways-from-teaching-online-during-covid-19-8400cc3b36b0

https://royalsociety.org/blog/2020/ 09/teaching-during-lockdown/

• Why is the student using a pencil and paper?

### It's Not All Business

- Traditional learning environments include a lot of socialization and off-topic chit chat – online learning tends to skip that step and get straight into the work
- It shouldn't
- "Despite staying in touch with my colleagues via online platforms I have missed the one-to-one interaction of 'chats in the corridor' and 'popping into classrooms'." <a href="https://royalsociety.org/blog/2020/09/teaching-during-lockdown/">https://royalsociety.org/blog/2020/09/teaching-during-lockdown/</a>
- "Teaching remotely provided a new opportunity to focus on how to carve out time for social and emotional activities with each class in the absence of face-to-face connections."

https://www.edutopia.org/article/reflections-and-lessons-learned-remote-learning



# Support Online Learning Staff

- Traditional support: eg., training in online course design, approaches to teaching use of key tools (eg. <a href="https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-2-support-for-instructors-is-essential-for-quality-online-learning/">https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-2-support-for-instructors-is-essential-for-quality-online-learning/</a>)
- But online learning staff are going to eventually have to learn to learn these on their own

## Support Online Learning Staff

- Recommended practice is to have a tech or support person working alongside an instructional person
- "Different faculty or support staff members had a variety of roles including facilitating the event, running the PowerPoint presentation, creating polls, handling student technical problems, and monitoring the meeting chat." <a href="https://journals.physiology.org/doi/full/10.1152/advan.00140.2020">https://journals.physiology.org/doi/full/10.1152/advan.00140.2020</a>

#### The Value of Live

• "There is a value to hosting live classes... At a time when all the days feel the same, many students also tell me how valuable this is. For some, it is the only fixed point in their weekly calendar. Especially for students living alone, it not only helps to create some routine, but also a sense of community." <a href="https://medium.com/damian-radcliffe/lessons-learned-9-takeaways-">https://medium.com/damian-radcliffe/lessons-learned-9-takeaways-</a>

from-teaching-online-during-covid-19-8400cc3b36b0



- Using streaming video for lectures so people can watch them or review them after the fact
- "Record your Zoom classes, so if a student cannot join you, they can catch-up later. Be sure to record + share, the audio, as well as video, version of the class. The audio version consumes much less bandwidth." <a href="https://medium.com/damian-radcliffe/lessons-learned-9-takeaways-from-teaching-online-during-covid-19-8400cc3b36b0">https://medium.com/damian-radcliffe/lessons-learned-9-takeaways-from-teaching-online-during-covid-19-8400cc3b36b0</a>

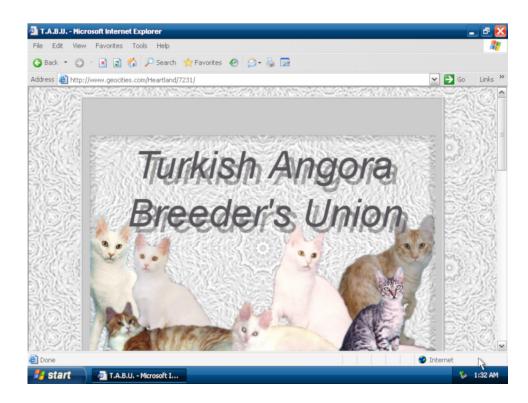
- Open Educational Resources widely available, can be added to a course without adding to production costs
- "This is something that we will be continuing to use in the near future as a school. I'm proud that we have created over 45Gb of remote learning resources, with over 170,000 resource views."

https://royalsociety.org/blog/2020/09/teaching-during-lockdown/



• Example: Caribbean Examinations Council (CXC) Learning Hub ... a space for learners, educators, parents and employers to access multiple high-quality resources supporting teaching, learning and assessment. <a href="https://learninghub.cxc.org/">https://learninghub.cxc.org/</a>

• However as some point out, "a lot of open educational resources lack high-level media production values." <a href="https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-6-we-are-beginning-to-see-the-advantages-of-media-and-open-educational-resources-for-teaching-and-learning/">https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-6-we-are-beginning-to-see-the-advantages-of-media-and-open-educational-resources-for-teaching-and-learning/</a>







## Beyond the Broadcast

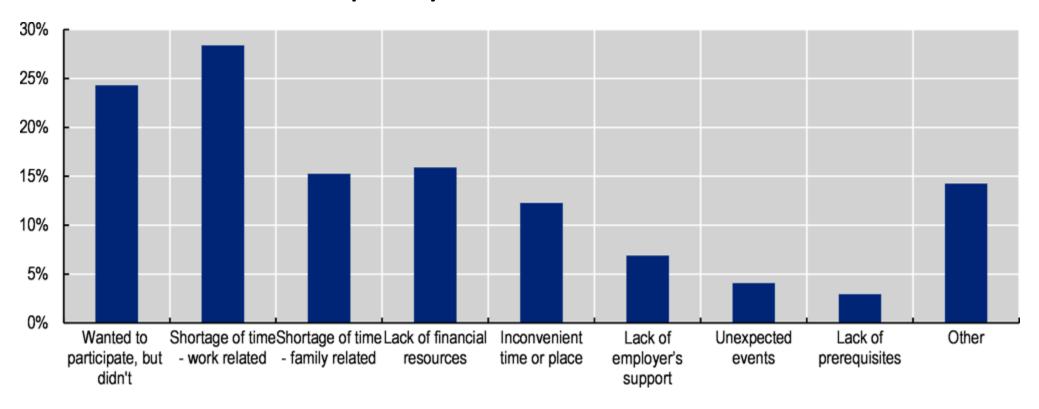
- Horror stories of 8 hours watching lectures on Zoom?
- "Real and meaningful <u>learning</u> occurs in the classroom only when curriculum goes beyond rote memorization and lecture-based instruction." The same applies even more so in online and distance

learning. <a href="https://www.brookings.edu/blog/education-plus-development/2020/08/07/taking-distance-learning-offline-lessons-learned-from-navigating-the-digital-divide-during-covid-19/">https://www.brookings.edu/blog/education-plus-development/2020/08/07/taking-distance-learning-offline-lessons-learned-from-navigating-the-digital-divide-during-covid-19/</a>

#### Create Routines

Working and learning at home requires that you set routines for yourself.

- Set loose schedules to provide predictability, prioritization of tasks, division of time/balance
- Share them with stakeholders (e.g., children, educators, therapists)
- Include wake/bedtime, exercise, school, chores, and free time <a href="https://www.pattan.net/assets/PaTTAN/c4/c452a4c0-3e0d-45ad-aa7b-43f07d301139.pdf">https://www.pattan.net/assets/PaTTAN/c4/c452a4c0-3e0d-45ad-aa7b-43f07d301139.pdf</a>



 Online Learning can increase access, especially for adult learning or remedial learning

https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/#figure-d1e206

- When we moved to online or remote learning, we learned right away that a significant number of people didn't have adequate internet access (what's the appropriate bandwidth? 10 mbps?)
- OECD: "Unequal access to the Internet risks exacerbating existing inequalities in education and training." <a href="https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/">https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/</a>

- There's also accessibility in the sense of ensuring people with disabilities have alternatives to audio, text and video
- Also: "We have had limited success with engaging our pupils who have mental health issues." — "we have found that Teams has been very helpful with allowing catch ups with mental health professionals." <a href="https://royalsociety.org/blog/2020/09/teaching-during-lockdown/">https://royalsociety.org/blog/2020/09/teaching-during-lockdown/</a>
- As well, 2020 highlighted a range of other equity issues related to race, culture, language and gender

Affective
Networks
The "WHY" of learning

Provide multiple means of

Representation

Recognition
Networks
The "WHAT" of learning

Provide multiple means of Action & Expression Strategic Networks
The "HOW" of learning

• Can we address access and equity through learning design? Bastes suggests UDDL <a href="http://www.cast.org/impact/universal-design-for-learning-udl">http://www.cast.org/impact/universal-design-for-learning-udl</a>

#### Broaden the Reach

- Broaden the range of online courses to include more blue-collar occupations
- Establish quality assurance mechanisms for online learning to ensure that online courses provide value for money/time to participants
- Develop effective testing methods and certificates to ensure that online learning is valued in the labour market;



#### **Motivation Matters**

- Motivation matters much more online
- OECD: "In addition to basic digital skills, online learning requires autonomy and selfmotivation." <a href="https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/">https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/</a>



### Reading the Room

• "In the classroom, many educators can 'read the room' and tell when things are going well and when they are not. Using a video chat platform left many instructors struggling to use this skill."

https://journals.physiology.org/doi/full/10.1152/advan.00140.2020

- It's important to do this deliberately:
  - "ask students for questions more frequently, with significant pauses (at least 10 s) to provide time for students to turn on their microphones and actually ask their questions."
  - "build assessment into synchronous events that allow the instructor to ensure that core concepts are clearly understood before moving on."
  - Asking for volunteers = awkward. "Replacing those check-in style questions with polling using platforms such as Polly, TurningPoint, or Poll Everywhere allows for greater class participation."

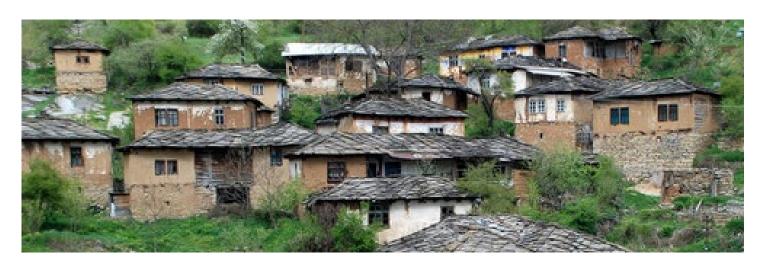
### Recognizing Learner Realities

- Brookings: "A key barrier we discovered through student surveys is that many youth have taken on new home responsibilities, cutting into time for their studies." <a href="https://www.brookings.edu/blog/education-plus-development/2020/08/07/taking-distance-learning-offline-lessons-learned-from-navigating-the-digital-divide-during-covid-19/">https://www.brookings.edu/blog/education-plus-development/2020/08/07/taking-distance-learning-offline-lessons-learned-from-navigating-the-digital-divide-during-covid-19/</a>
- This reflects a need to collect data from individual learners (or at least, to somehow allow those realities to be recognized)
- Online means additional realities, like time zones. <a href="https://journals.physiology.org/doi/full/10.1152/advan.00140.2020">https://journals.physiology.org/doi/full/10.1152/advan.00140.2020</a>

## It Takes a Village

- A number of studies show that when communities and parents are engaged in students' learning, academic achievement increases.
   <a href="https://eric.ed.gov/?id=ED474521">https://eric.ed.gov/?id=ED474521</a>
- Brookings: "After targeting outreach to families, we saw a 29 percent increase in participation in our remote programming"

https://www.brookings.edu/blog/education-plus-development/2020/08/07/taking-distance-learning-offline-lessons-learned-from-navigating-the-digital-divide-during-covid-19/





#### Flexible Assessment

- 2020 saw a great increase in online proctoring tools such as Proctorio (eg See <a href="https://www.insidehighered.com/news/2020/05/11/online-proctoring-surging-during-covid-19">https://www.insidehighered.com/news/2020/05/11/online-proctoring-surging-during-covid-19</a>)
- Students hated them.
- This practice is *not* recommended. "online proctoring systems, such as ProctorU or Proctorio, replicate a practice that isn't effective inperson. Exams are only good for a few things: managing faculty workload and assessing low level skill and content knowledge."

  <a href="https://www.edsurge.com/news/2017-04-19-online-courses-shouldn-t-use-remote-proctoring-tools-here-s-why">https://www.edsurge.com/news/2017-04-19-online-courses-shouldn-t-use-remote-proctoring-tools-here-s-why</a>
- Alternatives: watching for indicators of progress (eg. In discussion forums) and tracking traces (projects they do, things they say)
   https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-4-covid-19-showed-the-need-for-more-flexible-assessment-methods/

### Flexible Assessment

 OECD: "There is a risk that the proliferation of certificates and credentials from online learning may dilute its value in the labour market and in granting access to further training. Some regulation and standardisation are needed to guarantee that skills learnt online are recognised and valued by companies and education institutions."

https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/

### Hybrid Learning on the Increase

The potential impact of Covid-19 on e-learning enrolments

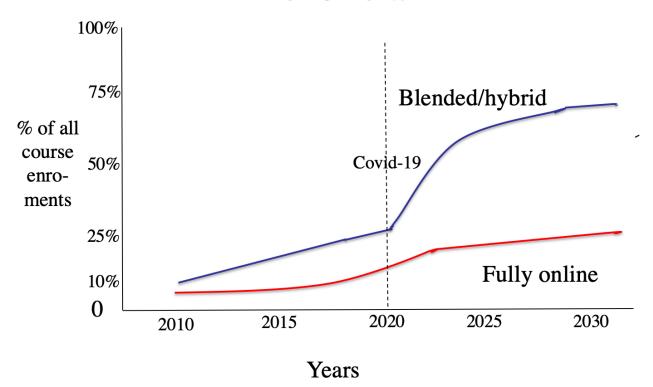


Image: <a href="https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-1-online-and-blended-learning-will-increase-substantially-post-covid-19/">https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-1-online-and-blended-learning-will-increase-substantially-post-covid-19/</a>

## Hybrid Learning: Issues

- Some sources say hybrid learning is "where some students attend class in-person, while others join the class virtually from home." Eg. <a href="https://www.owllabs.com/blog/hybrid-learning">https://www.owllabs.com/blog/hybrid-learning</a>
- This practice is *not* recommended
- Better: "Hybrid learning is a way of combining traditional classroom experiences, experiential learning objectives, and digital course delivery that emphasizes using the best option for each learning objective." Eg. <a href="https://ethinkeducation.com/blog/what-is-hybrid-learning-how-to-implement-a-hybrid-learning-strategy/">https://ethinkeducation.com/blog/what-is-hybrid-learning-strategy/</a>
- But ensure students have the resources for effective online, offline experiences

### Digital Learning in the Classroom

- Bates <a href="https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-8-we-need-more-flexible-learning-spaces/">https://www.tonybates.ca/2020/11/05/post-pandemic-lesson-8-we-need-more-flexible-learning-spaces/</a>:
  - Many institutions have a central learning commons, often linked to the library, but students also need many smaller, local learning spaces
  - More space and fewer students per room is not only healthier, but also allows for better learning.



#### Some Resources

- Tony Bates 10 Lessons for a Post-Pandemic World from Covid-19 for Canadian universities and colleges - <a href="https://www.tonybates.ca/2020/11/05/10-lessons-for-a-post-pandemic-world-from-covid-19-for-canadian-universities-and-colleges/">https://www.tonybates.ca/2020/11/05/10-lessons-for-a-post-pandemic-world-from-covid-19-for-canadian-universities-and-colleges/</a>
- OECD Policy Responses to Coronavirus (COVID-19) Early lessons from the COVID-19 crisis <a href="https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/">https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/</a>
- World Bank How countries are using edtech (including online learning, radio, television, texting) to support access to remote learning during the COVID-19 pandemic

https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtech-to-support-remote-learning-during-the-covid-19-pandemic

#### Some Resources

- Brookings: Taking distance learning 'offline': Lessons learned from navigating the digital divide during COVID-19
   https://www.brookings.edu/blog/education-plus-development/2020/08/07/taking-distance-learning-offline-lessons-learned-from-navigating-the-digital-divide-during-covid-19/
- Royal Society Lessons learnt during COVID-19 lockdown https://royalsociety.org/blog/2020/09/teaching-during-lockdown/
- UNESCO How are you learning during the COVID-19 pandemic?
   <a href="https://en.unesco.org/covid19/educationresponse/learningneverstops">https://en.unesco.org/covid19/educationresponse/learningneverstops</a>
- Damian Radcliffe. Lessons learned: 9 takeaways from teaching online during COVID-19: Tips for remote instruction developed in the past 10 Weeks <a href="https://medium.com/damian-radcliffe/lessons-learned-9-takeaways-from-teaching-online-during-covid-19-8400cc3b36b0">https://medium.com/damian-radcliffe/lessons-learned-9-takeaways-from-teaching-online-during-covid-19-8400cc3b36b0</a>