

Shifting teaching & learning online:

An Appreciative Inquiry investigation into changes in undergraduate health science education since COVID-19



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Background



Health science programmes have been delivered predominantly in face-to-face lessons (e.g. lectures, tutorials, practicals) with some online learning (e.g. recorded lectures).



COVID-19 has meant telecommunication and home-based learning for educational institutions are the default.

Online learning became predominant, with limited face-to-face classes.



Effectiveness of online learning has been researched in nursing¹, medicine² and diagnostic radiography³.

Online learning is emerging as the panacea. Advantages include maintaining social distancing, greater flexibility and accessibility. A significant disadvantage was the lack of hands-on lessons⁴.

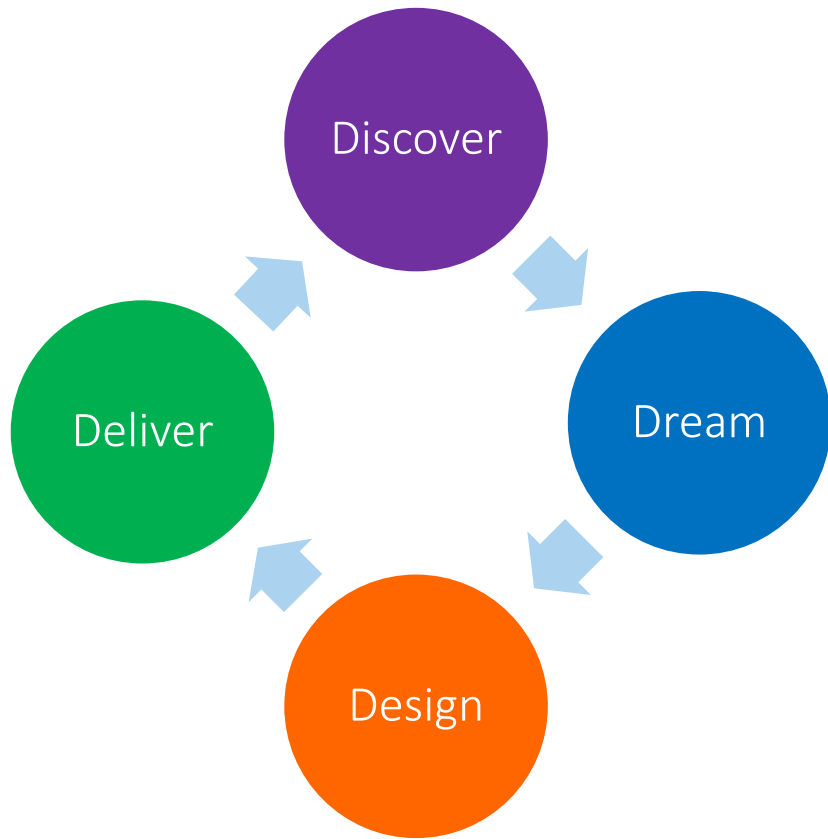


Understanding how changes in learning and teaching methods have affected students and faculty is required to continually improve the quality of teaching and learning.

Aim

To explore undergraduate health science students' and faculty's perspectives on changes that have occurred to teaching and learning practices since COVID-19, and how it can inform future curriculum development

Methods – Appreciative Inquiry



Four main stages⁵ :

1. Discover how learning and teaching is happening

2. Dream what would an ideal state of learning and teaching look like

3. Design how to close the gap between current and ideal practices

4. Deliver what are the practical steps needed for change

Methods and Results



- Qualitative study using the Appreciative Inquiry approach⁵
- 103 students from Year 2 to Year 4 and 18 faculty members across the 6 health science courses were recruited through email to participate in the online survey
- Followed up with semi-structured online focus groups; 8 sessions conducted for 27 students and 4 sessions were conducted for 7 faculty members
- Qualitative data from the survey and focus groups were transcribed and coded using consensus coding and thematic analysis⁶



Online learning took place across many different platforms



Equal mixture of online and face-to-face learning is preferred



Mode of teaching should reflect learning outcomes



Maintaining engagement in online learning requires different strategies

Findings



Finding 1: Online learning took place across many different platforms

“At the start of COVID, I think **nobody was prepared** to go full-on online learning kind of platform, it **took some time for both students and the school to actually adapt to the online learning platform.**”



Student Participant 4

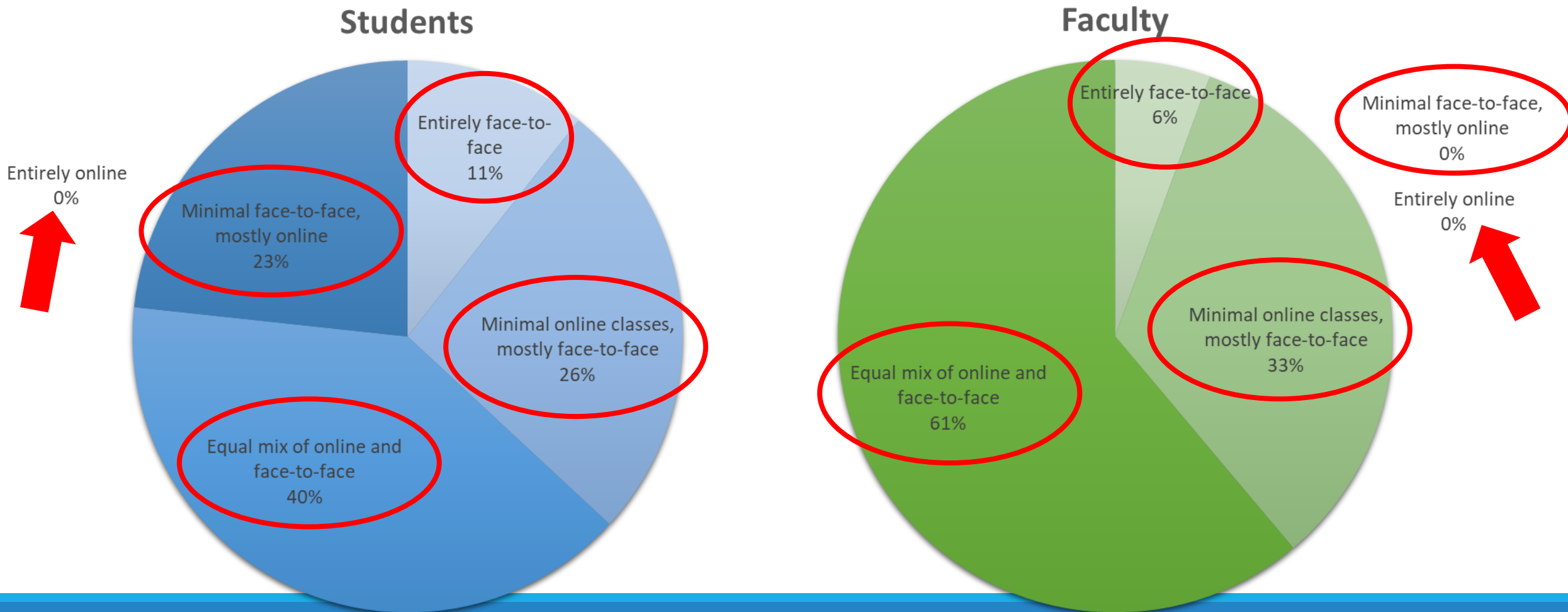
“We had put in place some things for online learning on a regular basis, **but prior to COVID-19, it was really only once a trimester.** In a sense, **putting content online for students to access is not new.**”



Faculty Participant 5



Finding 2: Equal mixture of online and face-to-face learning is preferred





Finding 3: Mode of teaching should reflect learning outcomes

"Let's say there were a lot of practical lessons where **physical handling is the main thing that should be taught**, then it'll be **very difficult for us to learn through online means**."



Student Participant 20

"The main thing that we need to watch out for is the learning outcomes that we want to achieve. **We need to fit the teaching content to the learning outcomes that we want**, so that we don't just simply apply online teaching for the sake of online teaching, or just do physical because we want to do it physically. But rather, looking at.. **how we can actually facilitate students' learning**."



Faculty Participant 1



Finding 4: Maintaining engagement in online learning requires different strategies

"Sometimes when you go into a breakout room and **your group members don't turn on the camera**, and then or some of the students are not even in the lecture, then **you can't actually conduct a group discussion with just yourself**. So, I guess that's one inherent limitation."



Student Participant 3

"So now, we do use **different platforms to get students to feedback**. For example, in lectures, we are using Zoom polls, Socrative, to get responses from students"



Faculty Participant 3

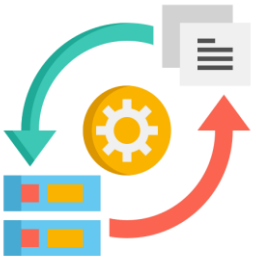
Discussion



Students and faculty expressed preferences for a mixture of online and face-to-face learning opportunities, but the ratio was not universally agreed. Current literature shows that blended learning is generally more or as effective than traditional face-to-face lessons, however, more research is required due to its large heterogeneity^{7 8}



Our study showed that students and faculty generally agree that interactive skills-based learning should remain face-to-face, while didactic learning can go online. It was also highlighted that the modality of delivering content should be tied to the learning objectives. It will be critical to integrate the 2 modalities seamlessly²



The initial shift to online learning was mainly migratory (putting face-to-face teaching online) as the changes to learning activities had to be made rapidly in response to social distancing restrictions implemented due to COVID-19. However, it should be noted that not all learning activities are suited for online modalities and an intentional transformational approach is required⁹.

Implications on teaching & learning in the lengthening wake of COVID

- Acknowledging that people's preferences to blended learning may not always be accommodated and it will be important to support people in learning and teaching in their less preferred mode.
- Explore new online options to engage students during lessons and redesign content to fit better with online media to achieve learning objectives.
- Consideration needed for how students can maintain their social connections and group learning through interactions in a blended programme.
- Enhanced or different support for students may be needed to independently manage their time, studies and mental wellbeing.
- Open conversations between students and faculty should be encouraged on the best teaching and learning practices.



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Thank you!

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