

Transforming a Dental Hygiene course from face-to-face to online: Assessing the impact on the student



Ava K. Chow and Nazlee Sharmin, School of Dentistry, Faculty of Medicine and Dentistry, University of Alberta.

Background

Integration of technology in higher education has enormous potential for online teaching and learning. Although the number of online courses is growing every year in post-secondary education, it is still a developing area that needs innovations for effective online-teaching and assessments, to meet student demand, and to increase student engagement in an online environment.

The Dental Hygiene (DH) program offered by the School of Dentistry at the University of Alberta has traditionally delivered Oral Biology II, OBIOL 302, as a face-to-face course in the Fall semester to dental hygiene students. In 2020, however, the course was moved to asynchronous online delivery in the Spring semester to manage the disruptions of the COVID-19 pandemic. We had to make some major pedagogical changes and design alternate assessment options. We conducted a study with an aim to examine the impact of this transition on the student experience.

Research Questions

- What are the students' perspectives on the flexibility and workload of the online course?
- How comfortable are the students with the alternative assessment methods?
- From the students' perspective, what can be done to improve the course?

Research Method

We have collected data through online survey and interviews. Third year Dental Hygiene students, who have taken the online Oral Biology -II (OBIOL 302) course were invited to the study through email list-servs.

We have compared the academic grades of the online students, with their peers who have taken the same course, with the same instructors teaching the same content, but in a face-to-face environment.

The thematic analysis of the interview data will be analyzed.

Results

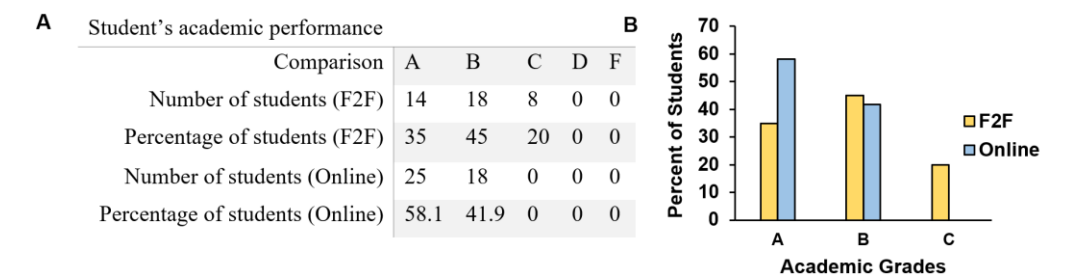


Figure 1: Comparative performance of online and F2F students by grade category. Online students showed overall higher performance compared to the F2F students.

STUDENTS' RESPONSE TO QUESTIONS ON A SCALE FROM 1, LOWEST, TO 5, HIGHEST (MEAN SCORE)

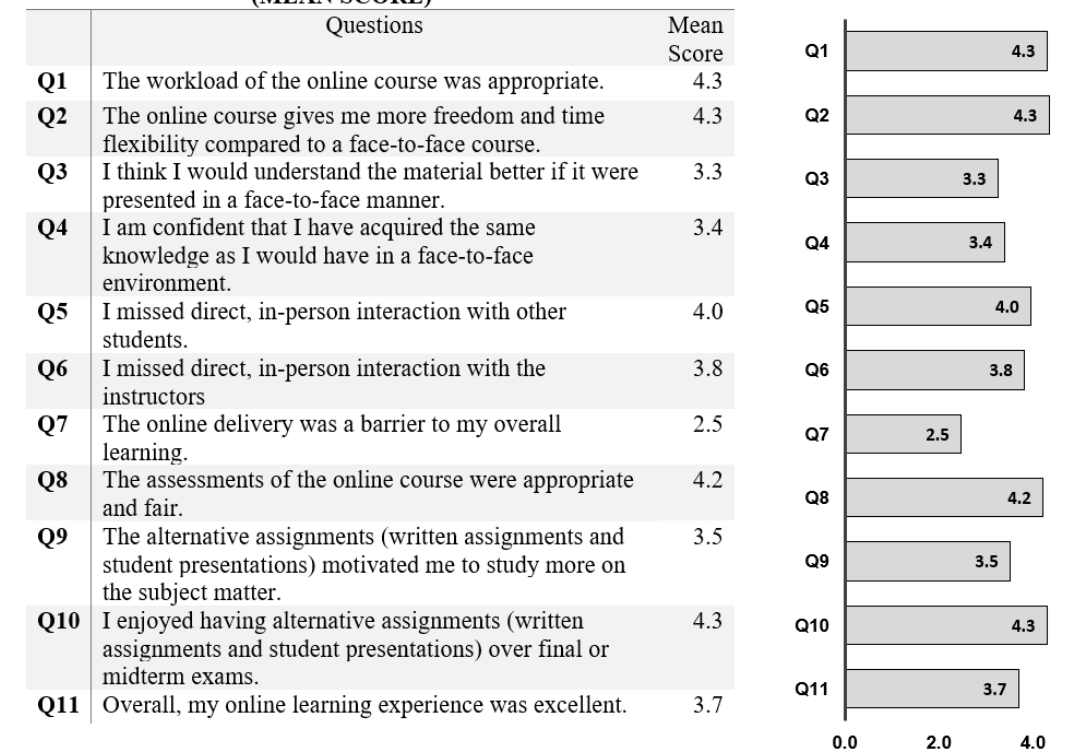


Figure 2: Students were asked to score the survey items on a 5-point Likert scale (1=Strongly disagree, 5= Strongly agree). Mean scores were calculated for each question.