

Cross-sectional study assessing online teaching effectiveness during the Covid-19 Pandemic

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BACKGROUND

On March 12th, 2020, in response to the Covid-19 pandemic, the Government of Ireland announced the closure of all higher education setting and as a result many third-level and higher educational institutions were forced to deliver their content online. Face-to-face teaching was limited to prevent transmission of disease. Covid-19 caused serious disruption of teaching, learning and research globally. The general consensus around ensuring safety of patients and students was for the removal of students from the clinical environment by pausing clinical rotations (AAMC, 2020; Ahmed et al.2020; Rose, 2020; Liang et al. 2020).

AIM

Our study looked into using the modified Student Evaluation of Online Teaching Effectiveness (SEOTE) to measure effectiveness of online teaching during Covid-19 pandemic.

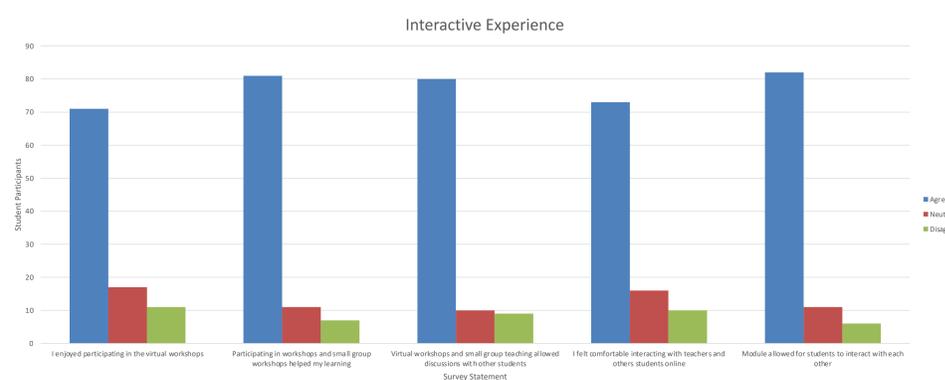
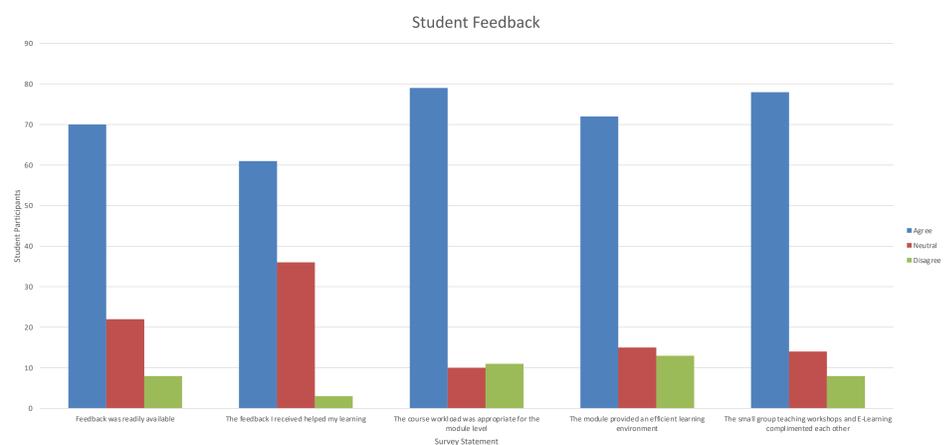
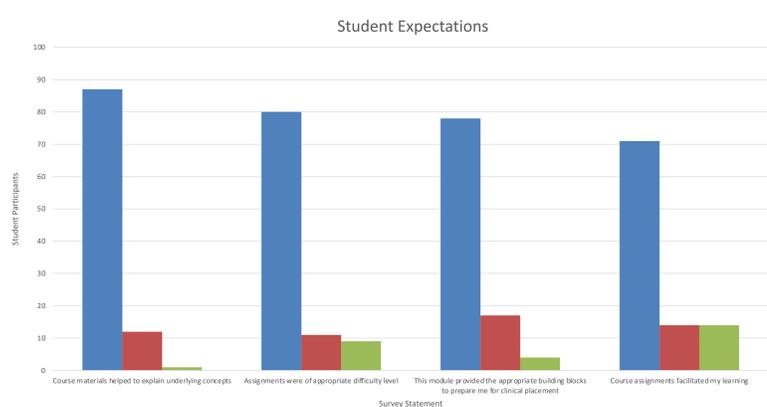
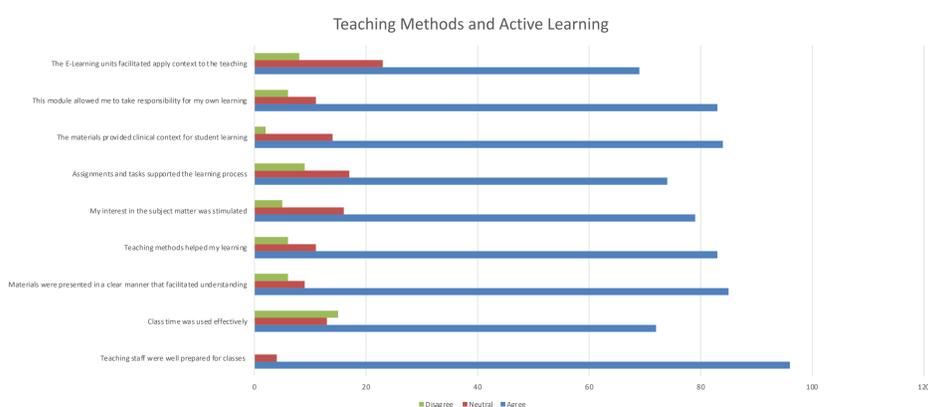
METHOD

A web-based cross-sectional study was conducted using a survey instrument to obtain responses from medical students completing a two-week online psychiatry module in June 2020. Students were rotating through St John of God Hospital, St Vincent's University Hospital, and Mater Hospital. The data was gathered during each iteration of the psychiatry online module (PSYC40150) in Brightspace.

Ethics exemption was obtained from UCD Ethics Department on 26th May 2020. Data analysis of closed question was done using SPSS version 25.0 (SPSS, Inc., Chicago, IL, USA) and Microsoft Excel. Descriptive statistics were produced for each question. Answers to closed questions were treated as ordinal variables. All responses from the open questions were entered into a word document to be analysed for recurrent themes and insights. Thematic analysis was conducted to elucidate the viewpoints of medical students around online teaching (Nowell et al. 2017).

RESULTS

The participants for this study were undergraduate and graduate entry medical students (n=100) who were enrolled in the online psychiatry core module (PSYC40150) in University College Dublin's Undergraduate and Graduate-Entry Degree in Medicine program. In terms of student engagement with online teaching, around 97.9% (n=97) attended classes regularly and placed effort in their learning (85.9%, n=85). Interestingly, only a small minority (6.1%, n=6) relied on the online recordings alone to complement their online learning. 81.8% (n=81) found the small group workshops to help with learning, as well as finding that it facilitated discussions with other students (80.8%, n=80). 73.7% (n=73) of participants were comfortable with interacting with teachers and other students online. 61% (n=61) found that feedback was readily available through online teaching. Around 38.4 % (n=38) experienced some level of technical issues with online teaching.



STRENGTHS & LIMITATIONS OF STUDY

1. Captured student data at an early stage of the Covid-19 pandemic.
2. Snapshot of student perspective only and does not provide a longitudinal account of student experience.
3. Follow-up study looking into the same cohort would provide additional information in terms of post-pandemic perspective.
4. Small sample size (n=100) from a single educational institution.

CONCLUSION

Although, the transition to a fully online model of teaching can be daunting it does present with opportunities to successfully meet teaching requirement through innovative approaches using online classrooms, e-learning material, workshops and break-out groups as demonstrated in our study. The full potential of online teaching still remains uncertain but the authors are confident that following Covid-19, online teaching may take up a new and exciting role within medical education.

RECOMMENDATIONS

1. Online teaching can potentially become an isolative experience for students and incorporating interactive opportunities such as tutors facilitating online teaching or opportunities for peer to peer interaction can improve this.
2. Highlights the importance of having tutors as a personal point of contact and emphasizes the benefit of having tutor accessibility through e-mail contact to complement one-to-one virtual meetings.
3. Highlights the importance of dividing teaching content into small units to help student focus (Bao, 2020).
4. Interactive teaching delivery such as workshops and online small group teaching contributes/potentiates active learning.