SHORT COMMUNICATION

STRENGTHS, WEAKNESSES, OPPORTUNITIES AND CHALLENGES (SWOC) OF ONLINE TEACHING LEARNING AND ASSESSMENT IN A MEDICAL FACULTY.

Rajesh PK, Sethuraman KR

Faculty of Medicine, AIMST University, Malaysia

Corresponding Author
Prof. Dr. Rajesh Perumbilavil Kaithamanakallam
AIMST University, 08100, Malaysia.
Email: rajesh@aimst.edu.my

Due to COVID-19 pandemic and the movement control order, our faculty had to conduct all the teaching online. The adaptation to online teaching from a traditional face-to-face teaching literally happened overnight.

In this paper, we share our initial experiences and our perceptions of the Strengths, Weaknesses, Opportunities and Challenges.[1]

Our Strengths

1. A significant number of strongly committed faculty members, the "early adopters" of innovations, who adapted fast and well to the online demands. During an initial meeting to plan our online teaching-learning, we could identify a team of motivational leaders, committed trainers, and coordinators to support the 100 plus faculty members who were all willing to take up the challenge.

2. Our video conferencing tools and resources for synchronous teaching/learning: The university and faculty had adequate video conferencing facilities available to make a start. In a few days, we could train the faculty members to use the 'apps' and teleconferencing tools by arranging video conferencing meetings to provide hands-on experiential learning.

3. Availability of learning management system (LMS) platform: The University LMS, based on Moodle platform, was already in use exclusively as a repository of learning material, power point slides and resources, for asynchronous learning. This teaching staff progressively adopted the LMS for online synchronous teaching, such as conducting quiz-sessions, live chats, discussion forums, etc.

4. The use of digital technology encouraged more student participation. The feedback from students about online teaching/learning was generally supportive on our online initiatives.

5. Since 2010, our regulatory bodies have recommended 20% mandatory online teaching/learning. This was to achieve holistic attributes including management of information, continuous lifelong learning, and digital skills.

Our Weaknesses

1. 'Bandwidth bottleneck' has been a recurring problem, both at the teachers and the students end. With the entire country resorting to the internet for almost all activities in all walks of life, unstable internet is a matter solved by maximising the bandwidth speed, use of hotspots or data from additional sources.

2. Students not used to self-directed learning or online learning.[2] Some students, used to teacher-directed facilitated learning, have not adapted well to online and remote learning as much as their teachers have.

3. Lacunae in skills training: The hands-on experiential learning in the laboratory and clinical settings has come to a standstill with respect to psychomotor skills.[3] The medical students and the faculty are concerned about this; this lacuna makes online teaching less effective for the health professions.

4. Requirement of more online tools for assessment purposes: our LMS platform had never faced such heavy student traffic as it is currently facing. More plug-ins and enhancements are required to modify the platform to be able to conduct proctored online assessment. Progressively the university has added in the necessary tools like safe browser options and proctored assessment tools.

5. Even though proxy attendance reduced to zero, some truant students found new ways of skipping the session by keeping their video cameras off and attend to other things at home. Individuals can sign in with other's names and cause confusion.

Opportunities

1. Faculty/Student development activities: our faculty staff members have undergone quite a few training sessions to learn how to conduct online video conferencing activities and on the optimum use of the LMS. The staff participation in these faculty development sessions has been much better online than it was, when we used to conduct face to face sessions in the past.

2. The Faculty can now confidently launch online courses (MOOC/POC), schedule webinars, conferences, etc, based on the newly acquired digital skills of the faculty staff.

3. Smart scheduling: Online option can accommodate all health care related students to the basic university courses at one time. Our clinical year students now need to travel back to campus from their teaching hospitals. With the online facility, lectures could be made available for the students on their own devices.

4. This provides an economical option to involve our International faculty members in the regular teaching schedule.

5. There are opportunities to teach and assess the first two levels of Miller's prism of clinical competence [4]
   a. Level of "Knows": this could be tested by multiple-choice questions or using picture-anointing options on LMS.
   b. Level of "Knows how": the interpretation and application of the skills can be assessed by case presentation or by using extended matching items on LMS.
   The other two higher levels of the Miller's competence would be better discussed under challenges as it is difficult to teach and to assess them effectively online.

   c. Level of "Shows How": this is best taught at the bedside and assessed by OSCE or at the bed side by clinical examination.
   d. Level of "Does": this is best assessed by work-place based assessment and 360º feedback.[4]

Challenges

1. "Bombing" of the video conferencing sessions: Even after setting the safety precautions, we do have issues of unruly intruders who try to disrupt the session.

2. Accessibility issues of students: The bandwidth issues and other factors prevent some students from joining the synchronous lessons. Additionally, archiving of the video recording of the session for learning in asynchronous mode could solve this issue.

3. The possibility of Sharing/Shaming the material on social media: Some of the faculty members are concerned about the material that could go public. Unruly comments on the content, the teacher's accent etc, could be posted on social media. The solution is to prepare well, and upload vetted and well-referenced learning resources.

With the reflective SWOC as our base, the faculty had a dedicated session to gather more information on the staff's perceptions on the intricacies of online lesson planning, online teaching from the student and faculty perspectives, the learning outcomes achieved and the assessment plan. We could proactively revise our strategies, based on the staff experiences, to address the various issues that govern the effectiveness of online teaching-learning environment. This part of the process is being worked on and we would be pleased to publish that as soon as possible.

Discussion

As the pandemic situation evolved with upsurge of cases the students were totally confined to online teaching learning. When the situation improved and the regulatory bodies permitted face to face classes they were brought back in small groups to complete their practical sessions. The students also had their face to face and online assessments as per the situation warranted.

Polls were done in classes to get a consensus on the felt needs of the students. This pandemic ensured a greater degree of stakeholder involvement. With our strengths, we are confident that we would convert our weaknesses and challenges into opportunities for further improvement.

References

1. Esmeralda de los Santos & Nürşen A. Zanca. Transitioning to Online: A SWOT Analysis by First Time Online Business Faculty. e-Journal of Business Education & Scholarship of Teaching, Vol. 12, No. 3, December 2018, pp: 69-84.

2. Yeboah, A. K., & Smith, P. Relationship between minority students online learning experiences and academic performance. Online Learning, 2016, 20(4), 245–271. doi: https://olj.onlinelearningconsortium.org/index.php/olj/article/view/577

3. Ross M. Brockman, John M. Taylor, Larry W. Segars, Veronica Selke & Tracey A. H. Taylor Student perceptions of online and in-person microbiology laboratory experiences in undergraduate medical education, Medical Education Online, 2020, 25:1, 1710324, DOI:10.1080/10872981.2019.1710324

4. John J Norcini. ABC of learning and teaching in medicine. Work based assessment. British Medical Journal, 2003, 326; 753-755.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1125657/pdf/753.pdf