Emerging Faculty Needs for Enhancing Student Engagement on a Virtual Platform

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Abstract

As a consequence of the COVID-19 pandemic health professions education, the world is living a major disruptive change and technology is being used abruptly to maintain teaching and learning. Face to face sessions have been replaced by virtual online lectures, the same occurred to small group tutorials, which have been replaced by interactive webinars. It is of paramount importance to acknowledge the role of technology and the presence of various applications and programs which facilitate this paradigm shift from face to face to virtual learning. The main challenges which face medical and other health colleges are the needs to train faculty members to heavily use technology in education and converting their materials to suite various online platforms. In addition, there is a great need to enhance students engagement in online learning to overcome the imposed physical barriers, which is not the case in face to face learning. The aim of this opinion piece is to draw light on the new needs for faculty development associated with digital transformation and the need for enhancing students engagement on a virtual platform.

Keywords: Virtual Learning; Faculty development; Engagement

Introduction

As a consequence of the COVID-19 pandemic health professions education, the world is living a major disruptive change and technology is being used abruptly to ensure maintenance learning and teaching.

The near future of education in medical and other health colleges after the pandemic of COVID-19 has been discussed before and yet remains an open area for discussion and personal projections (Goh and Sandars, 2020). The transition into this future is what the world is living at the moment and the indulgence into available technologies and artificial intelligence is being approached now with very little time to focus on quality of education.
COVID-19 pandemic effect on Medical Education

COVID-19 pandemic has actually led to the extensive disturbance of medical and health professions education and training as well as continuous professional training (Ahmed et al., 2020; Murphy, 2020).

Some examples include decrease face to face teaching and training, marked shift of medical and clinical instructors to clinical and health related care, widespread of quarantine, influence of illness on health profession instructors and also students and trainees. Actions to ensure social distancing have actually included closure of medical and other health colleges and shift to work and study from home for both instructors and also students and trainees. Local and regional as well as global traveling, and participation in training programs and conferences has unfortunately been halted. Physical participation at workshops and training courses as well as seminar, conferences, meetings, clinical attachments and also visiting fellowships programs was discontinued. Unfortunately, there have additionally been a raising number of fatalities that include physicians as well as various other health care professionals. On the bright side, many faculty have been forced to introduce technology into their instruction.

Response to the COVID-19 pandemic

As a direct result of the COVID-19 crisis, educators started utilizing already existing technologies to implement an informed transformation to the virtual plane. They became aware of these technologies and used the least possible features to deliver the content in the shortest possible time (Iwai, 2020). A massive amount of content was developed in a short time. The main target was to offer an alternative to students in order to make sure that the content covered is satisfactory for student progression.

Face-to-face large group sessions have actively been replaced by virtual lectures, utilizing various available technologies for screen capture as well as online streaming. In addition small group tutorials have were shifted to more interactive online sessions utilizing internet based conferencing programs and applications (Goh and Sandars, 2020). Questions are raised regarding assessment of students especially in differentiating exams and how this ought to be performed in light of the social distancing approach. As a result of the threat and the pressure of time we started seeing marked collaboration in between medical and other health colleges to make share of teaching resources and materials (PIVOT MedEd, 2020). In addition company providers are actually increasing the collaboration and engagement with health colleges including medical colleges as seen from collaborations offered through CISCO systems offering their WEBEX application for 3 months for universities in Egypt.

What is at stake?

Despite the emerging transition into the future and the fact that educators were put under an unrealistic time constraint to adapt to the use of existing technologies, this resulted in establishing the transition to technology based education as an inevitable development in medical education. Yet in doing this, the core of education and learning was forgotten together with the concept of their evaluation.

Within the unplanned transition, the main focus became on compliance with technical needs and requirements at the expense of student centeredness, engagement and the educational environment.

For years, transition to student centered learning necessitated faculty development interventions to support it. The medical classroom has since become more engaging and many new instructional strategies and methods have been introduced as a result of increased educator awareness.
The recent chaotic transition to virtual platforms lifted the lid off a current need for faculty development that was not identified before. Faculty have demonstrated a need to be able to adapt their current knowledge and awareness of teaching methods and strategies and transfer them to the new virtual platform. The capacity to introduce innovation and innovative approaches into distant instruction utilizing the available technologies is a deficient area in faculty development.

**Case Study**

A faculty development plan to teach faculty implementation methods of item design with special focus on multiple choice questions was conducted as part of the contingency plan in place of the face to face training day that was planned before the COVID-19 situation escalation. The training was planned as a virtual synchronous meeting on zoom.

All attendees were trained on technical use of zoom. This was done through a series of videos in Arabic and English designed by our faculty and hosted on the YouTube Channel. Faculty were encouraged to watch the videos and comment on the videos posting their questions or feedback.

A section of these videos walked trainees through issues like opening and closing the camera, self-muting and unmuting, and sharing their screen (ASU-MENA-FRI, 2020).

During the training sessions trainees were prompted to listen and see the presentation through the share screen function of the instructor with his camera open. Instructor gave trainees the option to keep their cameras open to account for better interaction.

The "breakout rooms" function was used when a group work was required from the participants like eg. designing their own item.

In breakout rooms participants were encouraged to use the share white board function and to design their work as they would do on a flip chart. The screens were saved on the desktop of any of the participants and this participant was encouraged to share his/her screen when they were back to the main room to report out their work.

Break out rooms were timed according to the designated time for the activity and fellows were given a countdown of two minutes at the end of the activity.

Trainees utilizing the application demonstrated a high level of satisfaction with the new approach. Regarding the degree of engagement in the session from the participant opinion self-reported, they demonstrated an engagement of 90 percent which was statistically indifferent from the face to face session they had attended with the same trainer before the situation.

**Take Home Messages**

Our need for this transformation surpasses the quest for available technologies and applications. The focus on raising technical capacities of faculty to be able to use existing technologies is a need that has been identified for years and in most parts has been near adequately addressed. This leaves an unaddressed need to raise capacity of educators to adapt and integrate engagement mechanisms within their educational designs. This will come in two sectors one of which is raising awareness to the importance of student engagement and the second is filling their tool boxes with procedural adaptations to already existing teaching strategies rephrased in light of the virtual platform.
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Appendices

None.

**Declarations**

*The author has declared that there are no conflicts of interest.*

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