Development of a model to enhance students' engagement in asynchronous online lectures

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A key challenge faced by Sri Lankan educators in recent years is the emergency and unplanned shift to online teaching from traditional face-to-face teaching, as a consequence unexpected Covid -19 outbreak. This was totally a new experience for Sri Lankan university students as well as for academics and was a huge challenge to the whole community owing to several issues such as lack of internet access, lack of available devices, lack of experience and financial and social issues. Despite these challenges, educators moved forward with online teaching by conducting lectures in real-time synchronous mode (via zoom / Teams platforms) and asynchronous mode (recorded lectures). And out of these two, the asynchronous mode was more popular among students due to facts such as any time accessibility to materials which reduced the cost as students could access them when data rates are lower, ability to repeat the lectures and go through them over and over and flexibility. However, a key disadvantage of asynchronous mode is the lack of student engagement and lack of active learning, which are principle components of lifelong and meaningful undergraduate education. This paper discusses the development and the implementation of the following model to overcome this issue and make the asynchronous learning process more active with enhanced student- lecturer interaction.
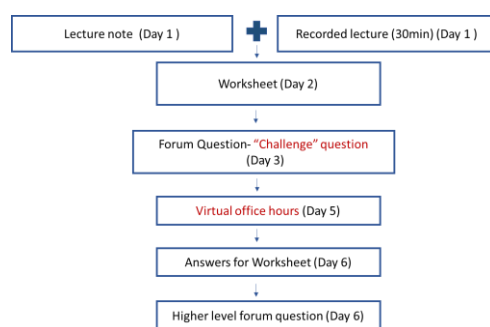

Figure 1: Proposed model to enhance students' engagement in Asynchronous lectures

In this model, major theory components were introduced to students using short lectures videos (< 20 mins) developed through the concept of micro-learning, followed by a worksheet related to the theoretical component covered in the video. Students were given 2 days to complete this and upload it to the LMS. Further, the forum question feature available in the Moodle platform was successfully utilized to create a dynamic environment by enhancing students' engagement and participation. Deliberately developed questions covering common misconceptions were posted as forum questions and the students were given marks for answering these questions. And, the lecturer was also actively involved in the process by providing feedback to their answers. After the submission of the worksheet, the lecturer conducted a real-time online session called "Virtual office hour", which was designed to answer questions of students. Key feature of this session was, students were asked to come up with questions they have related to theory component, worksheet and the forum questions. This solely was a student driven session and was structured to be different from a typical tutorial session by putting the students in the driving seat of learning, thus making it more active learning. Participation in this virtual session was entirely voluntarily and if students have unclear theory parts, they were encouraged to join and get them clarified. Finally, students were given a challenge question which requires higher order thinking, which allowed the instructor to gain an insight into the level of students' understanding. Further, students' perception on this model was investigated using a questionnaire and according to data, a higher degree of student satisfaction was observed. Moreover, the proposed model helps to increase students' trust in the teacher's care of their learning, which is crucial in the current online teaching paradigm.

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