

## Embracing Online Teaching through Facebook Live

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**Highlights:** Due to the worldwide coronavirus outbreak that began in 2019, the education sector has been severely affected. Educators are forced to conjure up new strategies of teaching to ensure that the students obtain the knowledge they deserve. In this study, the aim is to explore an online teaching method, which is through Facebook Live. This study involves 55 first year undergraduate students from Universiti Teknologi Malaysia (UTM) who took a Linear Algebra course. A survey was given to the students for their feedback on the efficiency of this teaching method. The data analysis shows that the majority were satisfied with the method. Hence, we believe that Facebook Live is considered as an efficient way of delivering lessons.

**Key words:** COVID-19; Facebook live; Virtual classroom

### Introduction

In the past decade, various efforts have been made by the government as well as the educators to improve the quality of the students' learning and interaction. The idea of active learning aims to engage students during the learning sessions by being actively involved and reflecting on their works instead of watching and taking notes (Johnson & Johnson, 2008). There are many activities that can be done to implement active learning such as debates, presentations, and games. Traditionally, active learning is done physically. However, it might prove to be interesting to the students to involve the use of virtual applications such as Facebook and YouTube to hone students' creativity.

Recently, COVID-19 has resulted in a decline in effectiveness in performing daily activities, including lectures and other various learning sessions. UNESCO recently stated that half of the student population in the world is forced to be away from school because of this pandemic (Giannini, 2020). Due to campus closures, academic institutions in Malaysia have turned to online systems to continue the education process despite not being sufficiently ready to cope with the entire process (Nassr, 2020). The major concerns are for the students who are influenced by inadequate infrastructure, finance and psychological aspects. The most common problems these entail include poor internet connection and an inconducive learning environment at home.

Aside from that, for educators, online teaching must go beyond simply focusing on delivering the lessons but must also consider how a lesson is delivered and requires feedback from the students. This is because feedback from students shows how they feel, and it influences the teaching method to a large extent (Floden, 2016). With online teaching, various aspects need to be accounted such as time differences, internet access, and learning environment. On top of that, the most accessible platform should be adopted to ensure an ease of access and lower bar of entry for the students to join the lessons. Online conference calls, live streams and recorded lessons have long existed; thus, a variety of options can be taken into consideration.

In this study, Facebook Live is used as the platform of online teaching and the main aspects as stated are examined and explored by conducting surveys at the beginning and at the end of the semester to collect the data from the respondents, which are 55 first year undergraduate students in UTM who took a Linear Algebra course.

### Methodology

The sample consists of 55 first year undergraduate students enrolled in a Linear Algebra course. The students are from UTM currently enrolled in the Bachelor of Science in Mathematics programme. In this study, Facebook Live via a private group is chosen as the platform to conduct online teaching. One of the main reasons for choosing Facebook Live is that it is a free platform and easy to access (Johnson *et al.*, 2018) and can accommodate much slower internet connections for the students compared to other virtual meeting platforms such as Zoom and Webex. Besides that, the Facebook Live recording can later be saved as a video for future reference. Additionally, real-time comments and replies from students are enabled throughout the Facebook Live session.

Before using Facebook Live as the method of the virtual classroom, a survey was created and distributed to the students to collect their details and also enquire on their internet connection speed at their current location. All students were staying at their hometown so the internet data would be varying from places to places. During the online teaching, the lecturer conducting the online teaching used the features built into Facebook Live such as comments and reaction buttons to interact with the students. In addition, for cyber security purposes, the Facebook Live was broadcasted in a private Facebook event to ensure that only students from the class were participating.

At the end of each session, a feedback form was given to the students to allow them to share and report their opinions on the effectiveness of online teaching through this platform.

## Results and Discussions

A survey was sent to the students after each session to observe their views on using Facebook Live as the virtual classroom. The results showed that nearly 31% of students used their smartphones during the sessions. Since not all students have a personal computer (PC) or laptop at home, the image they view is more limited compared to those using a laptop or dedicated monitor.

The students were also asked to test their internet speed at *fast.com*. The results show that 14% of students are in the low speed category (less than 500Kbps), another 14% are in the middle speed category (501Kbps to 1Mbps), while the rest of the students had decent to excellent internet connections (greater than 1Mbps).

The students were also asked of their opinions with regards to whether Facebook Live is a suitable online teaching method. Two out of 55 students disagreed with this statement. Both students thought that Facebook Live's drawback was that it was difficult to communicate and interact with the lecturer since they can only use the chat features to ask questions. Everyone else agreed that Facebook Live is a suitable method. This is because they can always rewatch the recording if they had problems with internet connection during the lessons. And since Facebook Live accommodates for poor internet connection, the absence of persisting lag and a consistently clear image meant that the students were able to view the lecturer's notes and hear the lecturer clearly. A few students also stated that by using Facebook Live, they are not being distracted by other participants who forget to mute their microphones. Moreover, Facebook Live does not consume a significant amount of mobile data.

In short, approximately 96% of the students agreed that Facebook Live is a suitable method for online teaching. They enjoyed learning through this virtual method, which is one of the alternatives to face-to-face classes. Therefore, Facebook Live can indeed be conducted as one of the teaching methods for universities.

## Conclusion

In embracing virtual applications as one a medium for teaching and learning, it is important to create an effective and engaging environment for the students by keeping student-lecturer conversation open. Though physical classes are suspended for the time being, active learning should still be maintained. Afterwards, the experience and feedback from students are needed so that a high quality of education can be achieved. Through this study, students' opinions were thoroughly considered to decide on the efficiency of Facebook Live as an online learning method. It is concluded that Facebook Live is indeed an efficient way of online teaching.

## Acknowledgement

The first author would like to acknowledge the Ministry of Higher Education Malaysia (MoHE) and Universiti Teknologi Malaysia (UTM) for the research funding through UTM Fundamental Research Grant No 20H70.

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