Exploring the Usage of Twitter in Higher Education

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Abstract
The use of technology in the context of higher education is not a novel idea as lecturers and students have used different types of technology such as smartphones, software, and social media. In recent years, social media like Twitter have been extensively used to decimate information about learning. However, there is a global disparity between the use of social media sites like Twitter for higher education; some countries use it extensively, while for some, its use is a rarity. This situation is evident in Malaysia, where there is a low percentage of students and lecturers using Twitter in teaching and learning. Furthermore, there are limited studies related to Twitter in the context of higher education in Malaysia. Based on this gap, this study aims to devise a strategy for using Twitter in Malaysia's higher education context. This study discusses some of the strategies that can be implemented in conducting learning inside or outside the class. In addition, the study's findings can benefit many education stakeholders by exploring ways to optimise the use of Twitter in Higher Education Institutions (HEIs).
Keywords: Twitter, Higher Education, Education Strategies, Social Media, Student Engagement

Introduction
Social media is an essential platform for communication in this globalised era (Matamoros-Fernández & Farkas, 2021). It has many benefits to individuals and the community (Fan et al., 2021). For instance, social media can be used convey information effectively without time and location constraints (Danial et al., 2021). Due to its interactive nature, social media has attracted billions of users worldwide, including in Asia and Malaysia. The extensive number of social media users has motivated businesses, government and non-government organisations and educational institutions to social media to reach their target audience for various purposes (Fan et al., 2021; Danial et al., 2021).
In the context of education, Twitter has several unique features that facilitate effective delivery of information to students. These features include direct messaging, the 'tweet' function, link integration with other sources like videos, and an interesting interface (Lokman

et al., 2019). Lecturers can use Twitter to notify and remind students about homework and assignments and share important and relevant resources (Umezulike & Nwagu, 2018). Moreover, lecturers can also optimise the use of Twitter to create quizzes or question and answer sessions to support students' learning. The use of Twitter has also been found to effectively improve students' engagement or response (Ratheeswari, 2018). Lokman et al. (2019) further noted that the use of Twitter facilitates two ways communication via direct message or retweets posts, all of which can increase students' interest in learning and their engagement.

However, despite the positive findings, some scholars are still doubtful over the effectiveness of using Twitter in higher education, specifically whether students can use and further integrate Twitter into learning (Rockinson-Szapkiw & Szapkiw, 2011). While there is evidence that social media can be used for socialisation or communication between individuals or groups (Danial et al., 2021), the extent to which Twitter can present information related to lessons and does not act as a distraction platform for students' learning process is still unclear. Furthermore, studies on using Twitter in education are very limited, particularly in Malaysia. Due to this, there is a need to study the effectiveness of using Twitter in the context of higher education. This study used observation which is deemed as a suitable method for collecting data for education studies as recommended by (Juanda et al., 2021). Hence, the objective of current study is to explore the effectiveness of using Twitter in the higher education context.

Twitter and Student Engagement

Twitter is a popular social media platform (Lokman et al., 2019). It was introduced in 2006 and has gained popularity due to its micro-blogging and social media capabilities. It allows users to write and share short messages or comments up to 140 words. Over the years, Twitter has become a popular medium for people to stay in touch or communicate with each other (Umezulike & Nwagu, 2018). Twitter also has a retweet function where people can share other people's messages and create a thread of comments to interact with others. Twitter has received overwhelming responses from the public as shown by millions of tweets are generated daily (Effrosynidis et al., 2022; Sadasivuni & Zhang, 2022). Undoubedtly, Twitter attracts the younger generation as it allows them to interact with each other, regardless of location, time or socio-demographic backgrounds (Umezulike & Nwagu, 2018). In the context of education, Twitter can be used as an effective communcation tool between the students and the lecturer. Students can also optimise Twitter to stay informed, connect with others, express opinions on particular topics or initiate a discussion on these issues (Umezulike & Nwagu, 2018).

According to engagement theory, students' engagement, in this study, refers to their involvement in the context of cognitive processing and their motivation to learn (Kearsley & Schneiderman, 1999). Students' engagement is an essential aspect in the learning process as it is related to students' acquisition of knowledge and information (Barkley, 2005). Subsequently, reducing students' cognitive in teaching and learning can motivate them to engage in more learning activities (Wishart & Blease, 1999). In this light, the inclusion of technology in education has been proven to increase students' engagement in learning (Ratheeswari, 2018). Rockinson-Szapkiw and Szapkiw (2011) stated that as a pedagogical strategy, the use of technology facilitates learning by improving the students' engagement and productivity. Therefore, this study focuses on the use of Twitter for teaching and learning in the context of higher education. As stated previously, Twitter is categorised under general teachnology.

Strategies for using Twitter to Increase Students' Engagement

At the beginning, the students must register their own Twitter accounts before using and posting their posts. This is common for almost all platforms, including social media (Maclean et al., 2013). Students must have a valid and active e-mail and fill in information such as their username and password. After that, verification is done through e-mail to finalise the account registration. After completing the process, the student can use their Twitter account and follow the official account for the lecturer's subject. Students who actively use Twitter or have a Twitter account can use their account.

The lecturers are required to make a twitter account for their subject. The registration process is similar to students' or individual registration, as described above. Then, the lecturers will share the link for the Twitter account for the students to follow as the lecturer will use this platform as the main communication medium. In other words, students are advised to prioritise using the Platform Twitter if they want to get in touch with the lecturer apart from other platforms that can be adopted, namely e-mail. In addition, lecturers should use the Twitter account as the main platform to share additional materials, for instance, YouTube videos or links to the website or retweet relevant information. In this light, lecturers can elicit responses more quickly from students (Al-Daihani, 2016). Thus, this study agrees that the use of Twitter as a medium of communication can increase engagement between lectures and students.

However, lecturers need to understand on how to use Twitter optimally and contribute to the effectiveness of lessons throughout the semester. Therefore, the next section will describe the study's findings. These inputs could help lecturers strategise how they use Twitter as the medium for communication and instruction in HEIs.

The use of the Twitter Platform in and out of Class Hours: Additional Material

Lecturers normally will share material additional with students through several methods like the knowledge management system. This is parallel with the findings of the study. Knowledge management system is a popular platform lecturers use to share additional material with the students. However, past studies argued that lecturers need to use other platforms to increase engagement with students and share teaching materials to overcome the weakness of the knowledge management system (Alserhan & Yahaya, 2021). Among the shortcomings include it can not be used on smart devices, making it challenging for students to access the material (Mohammadi et al., 2021). This study suggests that using Twitter can increase engagement and material accessibility. It allows students to access or retrieve additional materials on related topics.

Twitter can be used to share information or materials seamlessly to students. Lecturers can also share additional materials, including YouTube videos and website links, or retweet relevant information from other Twitter users. Furthermore, additional information can be shared outside school hours and accessed anytime which provide flexibility in learning. At the same time, lecturers should urge their students to activate the notification function to keep alert with posts and messages posted on the official subject's account. As a result, students will be notified when their lecturers or classmates share any additional material.

Furthermore, sharing additional material through the Twitter platform can improve the students' understanding of the topic learned. At the same time, Twitter also users to respond to the Twitter post (Rockinson-Szapkiw & Szapkiw, 2011). This mechanism is very useful in education and can increase stidents' understanding. In this instance, they can respond directly to the Twitter post if they have face issues to understand the materials.

Another stand-out feature of the platform is the direct message function. Using direct messages can increase the students' understanding because students can directly ask for clarification of something they do not understand (Rockinson-Szapkiw & Szapkiw, 2011). In the researcher's class, students often use the direct message function in or outside the class to ask questions, reflecting their positive response and their desire to understand a topic.

Using Twitter to Decimate Information Outside of the Classroom

Twitter can also be used as a medium to make announcements that are important to the students. The platform can decimate important announcements, including assessment dates and general announcements from the university or college (Murti & Maya, 2021). Before this, lecturers would announce important information to the students during class lectures or use printed materials. Some lecturers also use the learning management system to make important announcements to the students. However, this study recommends that lecturers use Twitter to decimate information and share important announcements for students in and outside the classroom, it will increasing communication effectiveness in learning.

Twitter is an effective medium of communication due to its interactive features. In this sense, the student can activate the function of the notification. When this function is activated, students will get a notification direct when the lecturer posts a new announcement. At the same time, lecturers can address and solve possible problems or issues, for instance, changing the schedule of the lectures to suit students who are not able to attend due to overlapping schedules. This can also improve students' engangement as they can directly respond to news or tweet or use direct messaging to explain the situation they face. Quick feedback fuction can contribute to improving the use of Twitter for decimating important information to students. This is also parallel with the findings of previous study that showed Twitter can improve the spread of information to the students which was conducted on a different topic (Al-Khalifa et al., 2022).

Another benefit of using Twitter is the ability to share messages with other users or followers (Reyna et al., 2022), which in this case, refer to the students. This feature allows lecturers to send messages direct and on-point within the words limit. This can increase students' understanding of the main points and can increase the message's effectiveness. This unique feature will also ensure only important information are being shared and avoid any irrelevant information. Therefore, the lecturers can implement this strategy to optimise the use of Twitter to increase students' engagement.

Conclusion

Twitter is a social media platform which combines social connections and microblogging. It provides accessibility, global reach and effective communication. This platform comprehensively covering almost all kinds of industries, including education. Despite all the challenges, Twitter still positively affects the user. For the context of this study, Twitter gives many benefits to the learning process, such as increasing engagement among students with the lecturer. Twitter can also increase the effectiveness of information delivery to students. Based on the findings, Twitter can be used for learning, i.e. for disseminating additional materials and the latest information to students. In this regard, one of the main factors contributing to Twitter's effectiveness is its interactiveness. Therefore, the findings and discussion in this study are expected to help lecturers and HEIs use Twitter in managing class

or for learning purpose. Future studies can develop new instrument or conduct an empirical analysis to examine the relationship between the statistical data.

This study has discussed the effectiveness of using Twitter in the context of Higher Education. In this regard, this study theoretically contributes to the body of knowledge on the use of social media in learning. This study's findings expand the existing literature on social media, specifically in the context of Twitter and education. In addition, this study focuses on Asian countries where studies on using Twitter for learning are still limited. The focus on Asian countries provides significant value to the body of knowledge on utilising Twitter in the context of higher education.

Regarding its practical contribution, this study's findings can benefit individuals directly or indirectly involved in the higher education sector, including educators and lecturers. Discussions on the study's findings can also guide lecturers in considering using this platform for learning. Twitter is an effective medium that can be used to connect and conduct the learning process with their students. In addition, the discussion of the study's findings can guide lecturers in formulating dynamic teaching strategies to achieve the main objectives of their respective courses. In all, this study has achieved its objectives and has made several significant contributions to the body of knowledge, especially in the specific context.

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