Enhancing classroom engagement through web-based interactive tools

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Under the University's Global Strategy 2020, with a mission to provide high-quality education to students, the University of Nottingham Malaysia (UNM) needs to consolidate and strengthen its teaching quality to address the changing expectations from students. Therefore, it is time to change the ways of teaching to align with the values and learning styles of new learners; especially Generation Z (born around 1995-2005), who have grown up with ubiquitous access to information technology and the internet.

In alignment with this concept, the Web-based Interactive Tool (WIT) could address the above weak point in a generic way that principally can help in every subject. Studies were carried out among students from Foundation in Engineering (FIE) and Department of Chemical and Environmental Engineering undergraduate program (CEE) in the University of Nottingham Malaysia. Three types of WIT, namely Padlet, Kahoot and Socrative, were explored and evaluated (which can be accessed free of charge online). A survey questionnaire was developed and about 383 students participated in this survey (FIE students = 44%, CEE students = 56%). Figure 1 shows the snapshots of engaging and interactive activities that made by using the WIT while Table 1 shows the outcomes from the survey.

Students had also provided positive feedback such as:

“Padlet is a great way to communicate with the lecturer during class time without having to interrupt his/her teaching flow as they can check Padlet when they are ready to address the questions or comments.” ~Student A~

“The fact that it is anonymous as well encourages more people to use it and not be shy. I hope more classes incorporate this sort of communication tool.” ~Student B~

“This WIT should be used in all modules, to have more interaction with student, create a lively class and make students more enthusiastic to be present.” ~Student C~

“It's fun and a really interactive way of learning as well as being innovative.” ~Student D~

“WIT is really an interactive tool and I feel that lectures are made fun through WIT as everyone can actively engage in the learning process. Personally, I feel that Kahoot is a really nice tool and it has seen a lot of lecturers starting to appreciate WIT.” ~Student E~

The findings clearly indicated that WIT tools do help to engage students and improve students’ learning experience. Students will be more proactive and engage with the lecturers in their learning. This will improve their knowledge retention in a more effective way and could improve their academic performance.
We are grateful to those who take the time to contribute to the EdSIG Newsletter. Please note that content and opinions are those of the contributor(s) named above (or in resources accessed online) and do not necessarily reflect the views of the Education Special Interest Group Committee or the Institution of Chemical Engineers.

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