

A Novel Approach to Enhance Students' Attention Span: A Digital Framework Among the Polymer Engineering Technology Students

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Abstract

In higher education, retention of the digital natives' attention span throughout the lecture is a challenging task. Gibbs (1992) found a drop in attention between 10 and 30 minutes into the lecture, which has been associated with the passive nature of the standard format, and has consequences for learning approaches and outcomes. Usually Institute of Technology of University of Moratuwa (ITUM) offers 120-minutes lengthy lectures. Because of the monotonous nature of the lecture, the students tend to sleep or talking each other without concentrate into the lecture content. So lengthy lectures should be punctuated with periodic activities by introducing lecture breaks to retain the students' attention.

This study was focused to investigate the potential of a digital framework as a lecture break. The implemented digital framework was "kahoot". Kahoot is a web programme and it is a game based response platform. This user friendly website gives the ability to create quizzes and surveys about any subject area. In ITUM, the computer room is the next door to the lecture room. All the students were facilitated with individual computers with the internet facility. After 30 minutes of the lecture, students were allowed to respond for the quiz (5 questions) accessing through kahoot. Depending on answer choice and speed, kahoot give students a score. The students enjoy playing kahoot because it is fast paced, visual, and energetic.

Active engagement of the students for two to four minutes through kahoot helped them to become re-energized for the next 15 to 20 minutes mini-lecture. Three to four quizzes were conducted for one lecture period. Descriptive statistics of the students' responses for the close-ended questionnaire emphasized the new digital framework helped them to actively engage in the lecture, ability to judge their knowledge level and to enhance time management skill, knowledge retention, language skill and further helped them to practice as self-directed learners. This study concludes that a simple digital framework, kahoot can act as effective lecture breaks by enhancing students' attention span while facilitating the development of graduate attributes.

Keywords: *Students' attention span, Lecture breaks, Digital framework*