



GAMIFICATION IN CLASSROOM: CREATING MOTIVATIONAL AFFORDANCE TOWARDS ENHANCED PARTICIPATION

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Author's Biography



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Research Highlights

The objective of study is to observe if motivational affordance resulting from gamification activity may improve students' participation in classroom. The results from this study shows that students were passive, indifferent and reluctant to participate when traditional lecture was used for learning session. However, when gamification is supplanted to the traditional lecture, the classroom atmosphere changed, where students were found to be participating actively.

When being asked on their opinion regarding gamification activity in classroom, students gave remarkable comments on such activity, saying that it is enjoyable, fun, attractive and exciting. Furthermore, students also mention that gamification activity increases participation, improving motivation, creating competition, developing teamwork and bonding between students and lecturer and should be conducted more.

Research Objectives

Traditional lecture is a method that is largely used in the process of teaching and learning. Despite its advantage of enabling instructors to cover necessary contents in time, traditional lecture is associated to students' passivity and low engagement in classroom (McGarr, 2009). Students perceive that instructors play significant role in the teaching process, therefore students' level of participation will be minimal as possible. Furthermore, the transfer of knowledge from instructor to students is said to be lacking of thinking process and encourage intellectual passivity (Isaacs, 1989).

The drawbacks of traditional lecture has prompted instructors to find ways in producing more effective teaching techniques. Among the techniques ia using gamification, where instructor uses tools in the form of games, where the main objective is to engage students in the learning process. The low participation of students in classroom is due to their perception that they have lack of power to do so, therefore, they are more likely to be silent (Vandrick, 2000).

The objective of this study is to observe if using gamification activity in classroom can encounter the problem of students' passivity in the teaching and learning process. Self Determination Theory (SDT) suggests that humans will have motivation to perform a task if they believe that they have the power to perform the task given. With regards to this study, motivational affordance gained from gamification activity is believed to lead to psychological outcome and behavioral outcome, which in turn triggers students to participate in the classroom activity.

Methodology

The study employed qualitative action research methodology with some descriptive analysis. Two sets of students taking the course Enterprise Strategy in different semesters (A171 and A172) were observed.

The study was conducted in three phases and researcher has used observation in detecting students' behaviour. In phase 1, traditional lecture was solely used as the teaching and learning method on students in semester A171. In phase 2, also on A171 students, traditional lecture was supplanted with gamification activity. Meawhile, phase 3 deals with the same method in phase 2, however using different set of students (A172). In all phases, after the traditional lecture, students were required to get into groups and discuss the lecture content. Gamification was done after group discussion in phases 2 and 3 using Kahoot!.





Observation was done in all three phases. Participation rubric was used to record the observation data, where it represents students' behavioral outcome. At the end of phase 2 and phase 3, where the gamification was used, students were asked to fill in a set of questionnaire. Part A of the questionnaire was to assess their psychological outcome, adapted from previous studies (Cheong, Cheong, & Flippou, 2013; Witt, Scheiner, & Robra-Bissantz, 2011). In Part B of the questionnaire, students were asked to highlight their perceptions on using gamification in classroom.

The participation rubric and Part A of the questionnaire were analyzed using descriptive statistics, while Part B was analyzed using thematic analysis.

Results

In phase 1, when traditional lecture is used as the sole method in classroom, students were found to be passive, indifferent and reluctant to participate during teaching and learning session. During the group discussion, the discussion was dull, students silently discuss with the person next to him/her, not involving everyone in the groups. When being asked questions regarding the lesson taught during traditional lecture, no one volunteer to answer. Students only answered when their names were called, however, the way they responded showed lack of eagerness uninterested and seemed like taking the instruction as part of class routine.

In phase 2, however, when the instructor announced that there will be a game activity after the traditional lecture, the classroom atmosphere changed. Students seemed excited, listening to the lecture attentively, and jotting all the important points. After the lecture, they excitedly discussed the lecture contents with their group friends to get better understanding. During the gamification activity, the environment was alive. Everyone seemed to participate and try to give their best answer. Same results were observed in phase 3. Instructor recorded the behavioral outcome using the participation rubric, where it was observed that students participated or engaged themselves fully when gamification is supplanted to traditional lecture. For psychological outcome, students were asked to answer Part A of the questionnaire. Result showed that students perceived that they engaged, involved, enjoyed the gamification activity. Same results were observed in phase 3.

When being asked on their opinion regarding gamification activity in classroom (questionnaire Part B), students gave remarkable comments on such activity, saying that it is enjoyable, fun, attractive and exciting. Furthermore, students also mention that gamification activity increases participation, improving motivation, creating competition, developing teamwork and bonding between students and lecturer and should be conducted more.

The result from this study is in line with SDT. In this study, students believe that they have the control towards the game, thus creating motivational affordance to engage with the game. Motivational affordance created has triggered their psychological outcome, which can be seen in their engagement, enjoyment and involvement. Furthermore, psychological outcome has triggered their behavioral outcome, which was observed through their participation in the gamification activity.

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