Research Article

Understanding the Advantages and Disadvantages of Online Classroom Game among Postgraduate Students

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Abstract

University students nowadays are millennials and are more prone to technology usage in their daily life. Therefore, being literate in the new era of technology is not only about being able to save, upload and download materials, share and chat and respond to online activities in real time. In order to keep up with the current needs of millennials, educators need to revise their teaching techniques coordinating them not only with the knowledge on subject but also with the current use of technology in education. This research further looks into the usage of classroom game and identifies the advantages and disadvantages of using online classroom game. This study was conducted qualitatively among 14 postgraduate students from the Department of International Business and Management Studies (Faculty of Business and Administration) particularly Human Resource Management. The students were selected among classes in which lecturers use online classroom game in their teaching method. The findings of this study highlighted the advantages and drawbacks of using online classroom game. This would make a significant contribution not only towards assessing the improvement of quality teaching and classroom engagement, but also involvement among students and lecturers that will help not only in terms of teaching improvement among lecturers but also in developing motivated, confident students, enhancing their learning abilities to become lifelong learners towards this change.

Keywords: Online Classroom Game, Classroom Game, Classroom Engagement, Students Motivation

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Introduction

Classroom games, simulations and gamification are beginning to be assimilated in the traditional educational process. According to (Yang, Chen, & Jeng, 2010; Chiang, Lin, Cheng, & Liu, 2011) classroom games are deployed extensively in the field of education, with the intention to examine the relationship between games and education. Further, Mohd (2020) looks to examine the classroom engagement upon using classroom games as digital or web-based games have increasingly being used to support learning.

Classroom games used in higher education include educational games (Çankaya & Karamete, 2009), digital game-based learning (DGBL) (Yang, 2012), and applied games (van Roessel & van Mastrigt-Ide, 2011). In addition, scholars, sometimes, include interactive exercises (Mueller, 2003), video games (Biddiss & Irwin, 2010), or even expand to next generation video games (Bausch, 2008), in the category of games. Gamification on the other hand, according to Deterding, Sicart, Nacke, O'Hara, & Dixon (2011), is defined as "the use of video game elements in non-gaming systems to improve user experience and user engagement" and has become a popular technique used across a variety of contexts to motivate people to engage in particular targeted behaviours. The popularity of gamification has been growing rapidly (Robertson, 2010). Classroom games, simulations and gamification show mixed effects across student performance, engagement, learning motivation and teachers' motivation. However, other studies focus only on certain disciplines which makes the gap in the literature concerning a clear framework of use across academic programmes still exist. The aim of this paper is to develop an understanding of the advantages and drawbacks of online classroom games among postgraduate students.

Literature Review

Students and technology are inseparable. Students are constantly on their phones, laptops, gaming systems, and even televisions. Technology is literally their world. It's no wonder, then, that today's students crave some technological interaction in education. Obviously, using technology all the time may not be a positive thing — we want to see students interact with each other, and we want to see them come out from behind a screen. But technology in moderation can be a great tool for students (and teachers). It often inspires students to work harder. It helps make learning more fun, fast-paced, and individualized. And most importantly, it helps engage all students.

Wang (2015) shows that integrating online classroom game into regular classroom lectures contributes to improvements in student engagement. In addition, Rosas et al. (2003) suggested that such tools excite students to actively engage in lectures and contribute to the learning environment.

Educational games are a great way to help encourage students to get involved in classroom although sometimes traditional classroom games (that is the ones that don't rely on technology) don't allow every student to fully participate. By incorporating technology into the classroom, you can create a more interactive experience for all students. If answers are being entered on a cell phone, tablet, or Chromebook, every student has a voice and a chance to shine. Digital games also make it easier to accommodate students with disabilities or special needs so they don't feel left out of fun classroom activities. Therefore, this research looks forward to examining the influence of online classroom game on the classroom dynamics and students' engagement,

In addition to enriching learning, the effectiveness of online classroom game depends on whether students perceive the games as appealing, accessible, useful and of high quality. Papastergiou (2009) also found that students rated online classroom game as more appealing and more valuable as an educational tool compared to other performance-tracking educational websites that contained the same content. In spite of a small "wear off effect" of long-term online classroom game use on student

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communication and enjoyment (Wang, 2015), students who continued to use online classroom game throughout the semester reported positive impacts on learning and engagement similar to the excited new users. Students also commented that, even after a whole semester of using online classroom game, they were still motivated to do additional study to prepare for the weekly quizzes. This research paper examines the understanding of the advantages and drawbacks of online classroom games among postgraduate students.

Methodology

A qualitative research approach for this study was chosen because qualitative methods are especially useful in discovering the meaning that people give to events that they experience (Merriam, 1998). Specifically, the phenomenological method was used to understand the effects of online classroom game on classroom dynamics, the influence of online classroom game on students' engagement, motivation towards learning and students' experience.

This study, which was based in the constructivist paradigm, used a phenomenological strategy to explain the effects of online classroom game on classroom dynamics, the influence of online classroom game on students' engagement, motivation towards learning and students' experience. Constructivist researchers focus on understanding and reconstructing the meanings that people (including the researcher) hold about the phenomenon being studied (Guba & Lincoln, 1994). Constructivists create knowledge through interaction between the researcher and participants (Guba & Lincoln, 1994), using dialogue and reasoning as the primary methods of investigation. Finally, constructivist researchers return frequently to the sources of data, asking what they meant to the participant and trying to integrate those with their meaning to the researcher (Rudestam & Newton, 1992). Phenomenology is effective in studying a small number of subjects – in this case, 25 participants – to identify the core of their experiences with the phenomenon

(**Creswell, 2003)** and to produce patterns and identify relationships of meaning that build new knowledge (Moustakes, 1994). Thus, for this study, semi structured in-depth interviews were conducted through Padlet with 14 Postgraduate students.

The qualitative research methods used for this study include purposive sampling, open-ended interviewing, and systematic and concurrent data collection and data analysis procedures. Specifically, the grounded theory or constant comparative method (Glaser & Strauss, 1967) was used to analyze the data and discover the influence of online classroom game on students' engagement, motivation towards learning and students' experience.

In this study, data analysis occurred in three phases. First, interview transcripts were reviewed several times, searching for "recurring regularities" (Merriam, 1998). Then researcher highlighted the quotes and phrases from the interviews that were significant to the study. Researcher looked through the transcripts to find relevant categories by using the constant comparative method (Glaser & Strauss, 1967). The researcher then named, coded and labelled the transcripts according to each category (Merriam, 1998). Next, the researcher looked into the coded interviews and looked for relationships within and across the data sources. A table was developed to compare various coded interviews. Finally, the researcher integrated and refined the categories until themes solidified (Strauss & Corbin, 1998).

Findings and Discussion

14 students that participated in this study are first-year students of Master's in Human Resource Management. In terms of the demographic distribution, respondents consisted of 20 % male and 80 % female students. The findings of this study highlighted the understanding of the advantages and drawbacks of online classroom games among postgraduate students.

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Advantages

In terms of advantages of online classroom game, the findings of this study found three main themes and they are: engagement, meaningfulness and excitement. The following paragraphs explain the findings according to theme.

Engagement

The first advantage of online classroom games is engagement. Students felt more engaged with the usage of online classroom game. This is supported by Wang (2015) and Rosas et al (2003) where online classroom game, when integrated with the regular classroom lectures, improves the classroom engagements. The following are the responses of R1, R4, R9, R11 and R13:

Increase the rate of student engagement in class activity – R 1-

No more dull and boring session throughout the online learning because students will pay attention to answer the questions at the end of each chapter. –R4-

Enhance student-lecturer engagement. –R9-

Attract student attention and the lesson become more engaging. –R11-

It is an exciting tool for engaging students having short attention span – R13-

Meaningfulness

Due to high students engagement, lecturers are able to measure understanding of lectures that were covered more accurately. It is also a good way to keep students engaged and encouraged them to have fun among the class. – R2-

Student engagement and motivation with Kahoot! is very high. Students are enjoy playing Kahoot! and will increase better understanding of the material covered earlier and increase students' knowledge. – R8-

Easy to understand the topic On the spot we will know which part we dont understand – R12-

Can refresh the student brain after each topic so that the student are alert on each topic they learn. Also act as kind of revision for the student after the end of the class. – R10-

The above are the responses on the advantages of using online classroom game in the classroom. Based on the above, online classroom game also creates meaningfulness in terms of understanding the subject being taught. The online game used in this study allows the students to build up the focus that leads to the understanding of the subject thus making any other preceding discussions more effective as claimed by R9 and R 7:

> *The advantage is student a well prepared, focusing to lecture and explaination, giving focus and full commitment during online class.* –R6-

> *The advantages of using this Kahoot! are we are more alert and focus to current chapter, we can observe our understanding towards that topic.*-R7-

> *Advantages i. Enhance student-lecturer engagement ii. Increases focus and interest on subject learnt iii. Enhances attention and healthy competition iv. Suitable side, additional learning aid aside normal lectures v. Increases motivation toward interactive learning* -R9-

Excitement

The third advantage of using online classroom game is excitement. The respondents find that online classroom game brings the class to live with fun and excitement. As claimed by R1, R2, R13:

> *Bring laughter and joy, it also as a stress relief after long talk and brainstorming in online class* – R1-

> *Encouraged them to have fun among the class.* –R2-

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It adds fun and excitement to a boring lesson and increase class participation –R13-

This is supported by Papastergiou (2009) and Wang (2015). According to Papastergiou (2009), online classroom game has a positive impact on student communication and enjoyment while Wang (2015) contended that students who used online classroom game are even more motivated and excited to prepare for their weekly games.

Disadvantages

In terms of the disadvantages of online classroom game, the findings of this study found three main themes and they are Demotivating, Time constraint and Speed over substance. The following paragraphs explain the findings according to theme.

Demotivating

The disadvantage is, to student didn't pay attention during class will lose and make them demotivated.-R3-

it demotivated for some that cannot answer the question correctly. –R10-

*Student feels frustrated as they di not get the correct answer plus getting the last place is not a good feeling. –R11_*

The above is the responses from R3, R10 and R11 who claimed that the drawback of online classroom game is that it demotivates students especially when students pay less attention in class and could not answer correctly during the game.

Time Constraint

The disadvantage is the time limit are too fast and we cant even have enough time to think of the correct answer.-R5-

Limited of time will allow the student to not give the correct answer and will respond accordingly-R14-

Time constrain is the second disadvantage stated by the respondents. R5 and R14 explained that the timing of the game is too fast that it messed up with their responses. However, the time is set on the game applications.

Speed over substance

R8 and R13 emphasized that:

Hard to track the student's progress since lecturer do not know which student answer it correct or wrong. Since students receive more points for quicker answer, it can emphasize speed over substance. –R8-

Extra credit emphasizes on reaction time, since students receive more points for quicker answers, it can emphasize speed over substance. –R13-

Conclusion

Using online classroom game-based technology is proven to be effective in enhancing language skills as well as useful in initiating and fostering classroom engagement. From the results, it is found that the students have grasped the classroom objective of mastering synonyms based on their textbook. From the students' responses, it is found that the advantages of using online classroom game include engagement, meaningfulness and excitement while the drawbacks include demotivating, time constraint and speed over substance. Through these findings, it is evident that online classroom game should be implemented in the classroom from time to time to engage the students in classroom participation.

This research has made some significant contributions in terms of theory building towards assessing the improvement of quality teaching, classroom engagement and involvement among students and lecturers using online classroom learning. This will help not only in terms of improvements in teaching among lecturers but also in developing confident students, enhancing their learning abilities to become lifelong learners towards this change.

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