

Gamified Classroom Acceptance among Undergraduates in Malaysia

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Abstract

Educator nowadays are shifting to the gamification model as they seek new and innovative methods to engage students in the classroom. Gamification is a teaching style that mixes elements of games into the classroom environment to aid student learning. Gamified classroom certainly provides several advantages such as drive high levels of motivation, assisting cognitive development, improves student engagement and enhance intuitive system. This study investigate the undergraduate acceptance on gamified classroom that using both Autocount accounting software and Monopoly. A survey on the 53 undergraduates found that 100% respondent are satisfied with the gamified classroom. Undergraduates believes that gamified education improving their learning experience in accounting, thus increase their academic performance. They feel motivated and engaged with the educator during the class.

Keywords: Gamified Classroom, E-learning, Role-Playing game, Undergraduate, Accounting

Introduction

Traditional classroom instruction, in which teachers communicate in front of the class while the students listen, is a technique of teaching and learning that is inadequate to motivate the learners to focus on class (Randi & Carvalho, 2013). Students may find it challenging to grasp and understand what they have learned, even with the use of lectures and a lot of multimedia content, such as slides, videos, and animations (Hudson, 2003; Wyn & Stegink, 2000). Educator nowadays are shifting to the gamification model as they seek new and innovative methods to engage students in the classroom. Gamification is a teaching style that mixes elements of games into the classroom environment to aid student learning. Gamification that promotes interaction between educators and learners through group projects, along with other collaborative methods, may improve student learning results. (Randi & Carvalho, 2013). The purpose of this research is to examine the accounting undergraduate acceptance on gamified classroom.

Literature Review

Gamification is the application of game components in contexts other than competitions to enhance user interaction and engagement (Deterding et al., 2011a). It is said that by

dramatically altering the roles of educators and learners, game-based learning has unquestionably changed conventional teaching methods (Kottob & Ibrahim). Researchers and educators have long recognised that games have the power to increase student engagement in learning (Lam & Tse, 2022). Gamification gives players feedback to track their progress toward goals, but players can also affect progress by their actions the way they play the games (Bayerl et al., 2019). Students at all academic levels gain greatly from game-based scientific learning, according to Tsai & Tsai (2020). Although its impact on academic attainment is still up for question, several of these studies indicate that students in the gamification group demonstrated enhanced attention, positive feedback or learning motivation compared to the control group (Ke et al., 2015). Currently, the concept of "gamification" is being utilised to enhance learning by introducing gaming components into lessons. (Landers & Callan, 2011).

During the COVID-19 outbreak, the digital teaching and learning methods that used to inspire students is gamification (Chan & Lo, 2022). At all levels of the educational system, online instruction has replaced face-to-face instruction as a result of the COVID-19. One of the most common strategies and approaches utilised by educators today is learning through gamification since it fosters an enjoyable learning environment that may improve students' academic performance (Tamrin et al., 2022). Although gamification and competency-based education are receiving more scholarly attention, little is known about educators and learners acceptance on the use of gamification to increase students' skills (Mart-Parreo et al., 2019). Every person can have fun and be motivated by playing video games. Gamification is the act of re-creating this kind of experience in applications that aren't traditionally thought of as games. Many instructors want to increase student engagement and enthusiasm in the classroom because they feel that traditional methods are no longer as effective (Cheong et al., 2014). Gamification may be especially well-suited to learning methodologies like social constructivism since learners preferred social contact, engagement, feedback, and enhanced learning (Cheong et al., 2014). The fall in student motivation and engagement that the educational system is now experiencing may partially be resolved by the application of gamified classroom. In particular, gamified subject have significant positive effects on the higher institution learning environment (Alsawaier, 2018). This shown that gamified classroom is accepted among educators and students.

Research Methodology

The type of this study is descriptive analysis. The primary data which is questionnaire were used as a data source for this study. Questionnaire were chosen as the data collection method because this study involves a large number of students from private higher learning institution. The questionnaire is distributed using google form. The target population for this paper is the accounting undergraduate student of private higher learning institution in Malaysia. The final sample for this study is 53 students. Sampling techniques that used in this study is simple random sampling technique.

This gamified classroom is combining existing application, which is Autocount[®] and Monopoly[®]. Student will use both applications simultaneously in the gamified classroom while adopting role playing games. Students were divided into six members per group and roles were given to each of the member; one student will act as accountant who will use Autocount, three students will act as board of directors for the company who will monitor the games progress

and giving advice to the management. Another two students will act as the management, who make the decision on behalf the company and the members who will play the Monopoly. The devices used is a laptop with Autocount application and Xbox One console to play Monopoly. Before student begin the games, they need to create a company and prepare the chart of accounts for the company they have created. The games session is conducted for 3 hours with educator supervision. All the in-game situation, decision and risk will be solely determined by the students. At the end of the session, students will upload the summary of activities on the Padlet and student feedback will be given to the students to fill in. Outcome of the activities is discussed at the end of the class.

Research Findings

Descriptive Analysis

The demographic breakdown of the sample is shown in Tables I and II. The sample was divided into 34 students who made up 34.2% of the female students and 19 students who made up 35.8% of the male students. The major portion of the sample's students (47.2%) had cumulative grade point averages (CGPAs) between 3.00 and 3.49, followed by 32.1% in the 3.50–4.00 range and 20.8% of students with grades of 2.99 or lower.

Table I
Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	19	35.8	35.8	35.8
	Female	34	64.2	64.2	100
	Total	53	100	100	

Table II
CGPA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00-2.49	3	5.7	5.7	5.7
	2.50-2.99	8	15.1	15.1	20.8
	3.00-3.49	25	47.2	47.2	67.9
	3.5-4.00	17	32.1	32.1	100
	Total	53	100.0	100.0	

Based on Table III, most students fully agree that gamification might help make learning more entertaining (4.09). They believed that if the gamified classroom was implemented, it would boost student participation. This is a result of the fact that students are engaging in more engaged class activities than in a conventional setting. These findings are corroborated by research by Alsawaier (2018); Kotob & Ibrahim (2019); Tamrin et al (2022), which found that gamified classroom involvement can boost student engagement. Most students (4.06) also fully agreed that gamification can increase learning satisfaction and increase tutorial and assignment completion rates (4.06 over 5). Additionally, most respondents (4.09 of them) believed that gamification may enhance student performance and that it gives teachers more freedom in how they can organise their lessons for their students (4.17). The average rating for the facilities, however, is just 3.57, showing that some students do not think that the school

has adequate resources to offer gamified instruction. With a mean readiness score of 4.43, all

	N	Min	Max	Mean	Std. Deviation
Gamification can help create more engaging experiences for students	53	3	5	4.09	0.687
Gamification can make learning more rewarding	53	3	5	4.06	0.663
Gamification can result in higher completion rates for tutorial and assignment	53	3	5	4.06	0.663
Gamification can improve student performance	53	3	5	4.09	0.597
Gamification can increase student participation in class	53	3	5	4.19	0.59
Gamification can improve learning process	53	3	5	4.25	0.617
I find gamified classroom is more effective than traditional in-class delivery.	53	3	5	4.26	0.625
An advantage of gamified classroom includes greater flexibility in arranging student class activities.	53	3	5	4.17	0.643
The institution has good facilities to provide gamified classroom	53	2	5	3.57	0.821
I am accepting the use of gamification in a classroom	53	4	5	4.43	0.5

undergraduates are accepted to use gamified classroom.

Table III

Descriptive analysis on gamified classroom

Conclusion

The flipped classroom strategy that instructors utilise nowadays includes gamified classroom. With modern technology, college students are exposed to more games. Most of the participants in this survey felt that gamification may contribute to more engaging learning environments in the classroom. They also acknowledged that gamification might increase learning satisfaction and boost tutorial and assignment completion rates. Additionally, according to the kids, gamification can enhance academic achievement and provide teachers more freedom to organise their lesson plans. In the end, every undergraduate agreed that gamified classrooms should be used in higher learning education. These findings can serve as a signal to higher education institutions that gamified learning is acceptable for undergraduate students.

Contribution of the Study

Gamification classroom has the potential to increase students' motivation and engagement in learning environments. This study may be helpful to educators and higher learning institution in assessing student acceptance of gamified learning environments. This study will be able to identify the educational needs of students and completely change the way of higher learning education especially in accounting.

Limitation of the Study and Recommendation for Future Research

53 undergraduate students are considered a small sample size, and it only focuses on one university, both of which might affect the findings. Future study can concentrate on expanding the sample size and employing a variety of programmes as a sample. Future study on student adoption of gamified learning environments can potentially benefit from comparing the institution in two different geographical area.

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