The Qualitative Report

Volume 28 | Number 7 Article 12

7-13-2023

A Qualitative Study on Malaysian Academics' Perceptions and Suggestions on Gamified Learning

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Recommended APA Citation

Eltahir, M., Annamalai, N., Uthayakumaran, A., Zyoud, S., Zakarneh, B., & alsalhi, n. r. (2023). A Qualitative Study on Malaysian Academics' Perceptions and Suggestions on Gamified Learning. *The Qualitative Report*, *28*(7), 2011-2028. https://doi.org/10.46743/2160-3715/2023.6102

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Abstract

This study explores lecturers' perceptions and suggestions on integrating gamified lessons in Malaysian higher institutions. The COVID-19 pandemic has drastically changed the norm of traditional classroom teaching by accelerating digital integration amongst educators and necessitating the need to address classroom gamification. To further understand educators' perceptions, we conducted in-depth interviews with 25 lecturers. We thematically analyzed the interviews by following the steps undertaken by Braun and Clarke (2006) to identify the emerging themes. The findings determine that educators found gamification suitable in teaching and learning activities during the set induction, reinforcement and assessment of specific skills. Several misconceptions also evident in this study. We conclude that although educators are familiar with gamification, they have not fully utilized the strength of gamification.

Keywords

gamification, game-based learning, higher education, perception, qualitative method

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The Qualitative Report 2023 Volume 28, Number 7, 2011-2028
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This study explores lecturers' perceptions and suggestions on integrating gamified lessons in Malaysian higher institutions. The COVID-19 pandemic has drastically changed the norm of traditional classroom teaching by accelerating digital integration amongst educators and necessitating the need to address classroom gamification. To further understand educators' perceptions, we conducted in-depth interviews with 25 lecturers. We thematically analyzed the interviews by following the steps undertaken by Braun and Clarke (2006) to identify the emerging themes. The findings determine that educators found gamification suitable in teaching and learning activities during the set induction, reinforcement and assessment of specific skills. Several misconceptions also evident in this study. We conclude that although educators are familiar with gamification, they have not fully utilized the strength of gamification.

Keywords: gamification, game-based learning, higher education, perception, qualitative method

Introduction

The seismic impact of the COVID-19 pandemic is immeasurable with educational institutions forced to revamp teaching materials to suit the circumstances. Faraj et al. (2021)) associated the term "breach" to the COVID-19 pandemic in order to underscore the unprecedented nature, extensive consequences, and prolonged duration of the global health crisis. Educational institutions worldwide faced unprecedented challenges where traditional classroom lectures and analogue interactions were forced to shut down, prioritising digital technologies as tools to deliver day-to-day lessons. The pandemic rewrote the rules of classroom digitalisation by necessitating educators to integrate technology in delivering lessons (Kabilan & Annamalai, 2022).

Although online learning has been evident in higher education for the past two decades, most teachers were not ready to go online during the pandemic (Scherer et al., 2021). The reason for this is that a significant number of educators lacked prior training or experience in online instruction. Their previous teaching methods, which emphasized face-to-face interactions, were insufficient to prepare them for switching to online teaching. Moreover, the

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transition to online instruction necessitates extra time and resources to adapt and revamp course materials, create multimedia content, and offer continuous support to students (see Annamalai, 2021) Consequently, educators faced various challenges when they solely depended on the virtual environment to deliver lessons (Händel et al., 2020; Roman & Plopeanu, 2021). In addition, educators experienced challenges keeping learners engaged during the pandemic (Hodges & Fowler, 2020).

While pandemic circumstances can be a sustained stressor, several approaches in teaching can offset the learning stress to create a positive and enjoyable learning environment temporarily. Hence, gamification can alleviate the physical and psychological limitations linked to a quarantine situation. Additionally, some educators may be hesitant to adopt a game as an educational resource due to its unconventional nature of learning and teaching, which diverges significantly from the traditional classroom setting. Examining the perceptions and suggestions of lecturers regarding gamification can yield valuable insights for designing instructional materials. Also understanding their preferences, concerns, and suggestions enables the creation of gamified learning experiences that align effectively with their teaching goals and objectives.

Gamification seems promising to enhance user engagement (Ding, 2019; Park & Kim, 2021). In this study, gamification is defined by technology game elements integrated in learning methodologies in any field of study. For example, it involves incorporating game elements and principles into educational activities and systems to boost student engagement, motivation, and learning results. It utilizes game design elements like points, badges, leaderboards, and challenges to establish an interactive and engaging learning environment.

The term has been described as enriching a service by incorporating elements that foster engaging and interactive experiences, ultimately facilitating the users' overall value generation (Huotari & Hamari, 2017, p. 25). It is a well-established approach in the educational context and is appreciated for its' fun and play nature to increase motivation (Bozkurt & Durak, 2018; Van Roy & Zaman, 2018). Its voluntary interactions with the system and its affordances promote one psychological outcome, particularly through motivation and engagement: to mold one's behaviours (Koivisto & Hamari, 2019). Gamification has also resulted in a change of behaviors in a heavy cognitive task because of its positive correlation with intrinsic motivation (Legaki et al., 2021).

We argue that gamification will ameliorate the adverse psychological reactions to stressful conditions during tragic situations when students are confronted with lockdown and social distancing. Before such implementation takes place, it is pertinent to understand educators' decision-making processes analytically. The goal is not to promote gamification in education per se but to understand, explain, and predict changes in teachers' behaviour concerning integrating gamification in their online learning environment. Most studies are focused on developing frameworks and strategies without examining teachers' understanding of specific approaches (Faraj et al., 2021). We speculate that the effective implementation of gamification, which is part of digitalization, must be understood by investigating educators' perceptions. Such investigation is pertinent since the pandemic has harshly revealed inherent vulnerabilities and constraints in the manner in which organizations embrace digitalization (Faraj et al., 2021). The findings may train educators and support them so that they are prepared to design quality teaching practices for any tragic situations and, more specifically, to provide us with a better understanding of educators' decisions to use gamification in their practices.

Meredith (2016) affirms that persuading educators to value and adopt gamification requires a repository of reliable literature analysis to support gamification in their lectures. Thus, it is vital to understand the educator's needs and preferences towards integrating

gamification into their pedagogical practices. Consequently, teachers' practices, purposes, and challenges that underlie their decision-making processes must be studied (Kriek & Stols, 2010).

Therefore, an in-depth qualitative study is well suited to gain more comprehensive data via interviews. This approach strongly supports our findings and discusses the strengths and barriers to developing and implementing gamification effectively. Our study leaned on more qualitative data to fill a portion of the gap in the existing literature by investigating the usage of gamification in the Malaysian setting in higher institutions. Most studies in gamified learning are conducted in Spain, followed by the United States, Germany, and the United Kingdom (Meredith, 2016). However, more studies must be completed in different settings to understand its nature better and process.

The objectives of this study are:

1) to determine if academics are aware of the term "gamification" in higher education
2) to examine academics' perceptions of the use of gamification in higher education.
3) to determine the suggestion put forward by the educators to improve the practice of gamification in higher education.

Research Question 1: Do academics possess knowledge of the term "gamification" in the context of higher education?

Research Question 2: How do academics perceive the utilization of gamification in higher education?

Research Question 3: What recommendations do educators propose to enhance the implementation of gamification in higher education?

Review of Related Studies

In this section, a literature review on gamification, an emerging technique in the field of education, is presented. This literature review aims to provide an overview of existing research and scholarly discussions on gamification in education. By examining the current body of knowledge, this section aims to deepen our understanding of the use of gamification as an instructional strategy and to identify the literature gap.

A study by Jurgelaitis et al. (2018) examined the impact of gamification on a computer science course offered to undergraduate students in the Faculty of Informatics at Kaunas University of Technology. The course was implemented on the Moodle focusing on teaching Unified Modeling Language (UML) and its application in the Unified Process for software development. The study introduced the gamified course metamodel, which outlines a level-based course structure and various gamification elements such as points, rewards (coins, items, and badges), leaderboard, content locking, and trading. The findings revealed that the gamification-based lessons improved students' motivation and course grades.

A mixed-method study by Ding (2019) examined the use of gamification to increase student engagement in online discussion. The research employed a mixed methods approach and involved 70 students enrolled in an asynchronous online political science course at the undergraduate level. The study findings indicate that the gamification approach had a positively impacted the number of comments and performance in online discussions for students who were more familiar with the gamification approach. However, the results suggest that the gamification approach did not foster a sense of community among the students. The responses

gathered from interviews and open-ended questions echoed similar findings, with more students in the gamified group expressing that the online discussions required them to think critically. The study suggests that the limited influence of the gamification approach could be attributed to various factors, including the facilitation of the approach, the types of badges used, and technical issues.

In the same year, Dehghanzadeh et al. (2019) conducted a systematic review of gamification for learning English as a second language (LESL) and reported that LESL is a relatively young field of study, with most gamified lessons focusing on high schools. The findings reported that positive learning experiences in gamified LESL environments were characterized by enjoyment, engagement, motivation, and fun.

Another study related to motivation by Park and Kim (2021) investigated the effect of gamified online learning and reported a positive impact on students' motivation. The study involved 140 elementary and middle school students, and the outcomes were measured using a previously developed survey instrument. The results indicated that the incorporation of gamification in online learning positively influences learner motivation and comprehension of educational content. Based on these findings, this study suggests that gamification should be employed as a sustainable approach towards achieving the United Nations' Sustainable Development Goal 4 (SDG 4), which focuses on ensuring "quality education."

A recent study by Rincon-Flores and Santos-Guevara (2021**)** during the COVID-19 pandemic used gamification with reward system tactics to inspire students to participate in higher education actively. This study presents the findings of two undergraduate courses (Calculus and Development of Transversal Competencies) designed with a gamified approach using rewards. Through analyses of online surveys, final grades, and their correlations, it was observed that gamification successfully motivated students to engage in the learning process actively and improved academic performance.

Another study during the COVID-19 pandemic by Vapiwala and Pandita (2023) integrated gamification software and technology in student assessment and evaluation. A structured interview method was employed, and 200 responses were gathered from post-graduate students. The study highlights the significant role of gamification in e-learning and the assessment of students, particularly in the post-pandemic educational landscape.

In the local context, (Ab. Rahman et al., 2018) implemented the gamification technique in a Malaysian polytechnic to enhance learners' engagement in the Database Design subject. The study used Technology Acceptance Model (TAM) and the Student Course Engagement Questionnaire (SCEQ). The findings showed that learners favored gamification because of the Perceived Ease of Use (PEOU) and not the benefits they gained (Callista Anak Yunus & Kim Hua, 2021) conducted an experimental study to investigate the influence and effect of Quizizz, a gamified educational tool to improve ESL students' learning irregular English verbs. The findings revealed that Quizizz is effective in improving students learning of irregular verbs but also appeared to be an invaluable tool for instilling interest and passion in acquiring the English language.

These studies attest to how extensively and immensely the studies in the field of gamification have grown and expanded in recent years. Intriguingly, the literature on gamification is increasing and spreading in various directions, similar to any other approach or tool that have great potential to control education development. However, there is a research gap in the field of gamification and education when it comes to conducting thorough qualitative studies. Most of the studies reviewed above have employed mixed methods and quantitative approaches. Furthermore, studies have examined the effects and advantages of gamification on student engagement, motivation, and learning outcomes. There is a noticeable research gap in exploring the perceptions, and suggestions by educators when incorporating gamification strategies into their teaching methods.

Educators are the critical agents of teaching and learning activities and are crucial in introducing pedagogical innovation in their lessons. The literature on gamification that has been produced thus far appears to be relatively under-represented in educators' perceptions (Sanchez-Mena & Marti-Parreno, 2017). Limited studies were conducted on educators, particularly in the Malaysian context. Furthermore, gamification is still at the infancy level, and what is known about the approach is still fragmented knowledge from various perspectives (Koivisto & Hamari, 2019). The gap in the literature should not be ignored, and Figg and Jaipal-Jamani (2018) asserted the need for educators to further integrate gamification as an instructional strategy that would engage the current digital natives. Before such implementation takes place, there is a need to investigate educators' perceptions, experiences, challenges, and suggestions on the gamification approach in the higher education context.

Self-of-the-Researcher

As instructors in higher education, our aim is to contribute to effective learning through the use of technology gamification. We recognize that in the 21st century pedagogy guidelines, technology-based gamification is strongly emphasized. While we do not oppose the use of technology in gamification, implementing technology-based gamification requires additional preparation from instructors, which can be challenging due to various constraints such as time, space, and skills. We believe that teaching approaches should be diverse, and therefore we promote technology-based gamification. It is with these considerations and principles in mind that we conducted this research. In order to remain receptive to new and unexpected discoveries in a qualitative case study, it is crucial to maintain a flexible and curious approach during the research process. This can be achieved through open-ended questioning techniques, which encourage participants to provide detailed and diverse responses, thus uncovering unforeseen insights and viewpoints. Additionally, sharing preliminary findings with participants for validation or clarification fosters a collaborative environment that strengthens the reliability and precision of the findings, while also enabling the integration of unanticipated perspectives.

Methods

Research Design

This study employs a qualitative case study approach to examine how lecturers comprehend, perceive, and provide recommendations regarding the incorporation of gamification into their instructional methods. Qualitative case study allows in-depth investigation of the underlying issues and reasons for the occurrence of certain behaviours resulting in a comprehensive understanding of the more in-depth experience of individuals (Yin, 2017).

Participants

The study recruited participants utilizing purposeful sampling. This sampling strategy involves selecting individuals who can fulfil a specific purpose in relation to the research question and offer valuable insights into a phenomenon (Creswell & Creswell, 2017).

Twenty-five participants within the age range of 35 to 50, consisting of nine male lecturers and sixteen female lecturers with strong computer literacy, were interviewed from six higher education institutions in Malaysia. The participants were teaching undergraduate courses related to natural sciences (PL1, PL2, PL3, PL4, PL5, PL6, PL7, PL8, PL9, PL10, PL11), education (PL12, PL13, PL14, PL15, PL16) and social sciences (PL17, PL18, PL19,

PL20, PL21, PL22, PL23, PL24, P25). Table 1 illustrates the demographic characteristics of respondents.

Table 1
Demographic Characteristic of Respondents

Students	Age	Gender	Faculty
PL1	35	male	Biology
PL2	32	female	Biology
PL3	32	female	Biology
PL4	32	female	Pharmacy
PL5	32	male	Pharmacy
PL6	31	female	Pharmacy
PL7	32	female	Chemistry
PL8	41	female	Chemistry
PL9	40	female	Chemistry
PL10	40	female	Physics
PL11	43	male	Physics
PL12	46	female	Education
PL13	47	male	Education
PL15	46	female	Distance Education
PL16	34	female	Distance Education
PL17	34	male	Communication
PL18	34	male	Anthropology
PL 19	35	female	Anthropology
PL 20	36	male	Anthropology
PL 21	46	male	Architecture
PL 22	31	male	Architecture
PL 23	46	female	Architecture
PL 24	49	female	Communication
PL 25	50	female	Communication

The fact that the participants were from different disciplines bodes well with the Template Analysis that captures the phenomena from a "broader view" and gains "a community perspective" and did not take "a case-by- case approach" (Bush et al., 2019, p. 7). The participants were not from the same courses to ensure more diverse responses. Each interview lasted for 45 minutes, and lecturers were prompted for their perceptions, experience, challenges, and suggestions to improve the implementation of gamification.

This research gave careful attention to ethical principles. Before commencing the study, the participants received a detailed explanation of the study's purpose. The students were given a consent form outlining the study's objectives and the potential benefits of their participation. The consent form explicitly stated that there were no risks associated with taking part in the study. The study actively avoided any potential risks that could cause discomfort, embarrassment, or negatively impact the participants' emotional well-being (Mahmadun Nuby et al., 2019). Before the interview, participants were briefed on the confidentiality of the interviews and that these interviews were not a way to judge their teaching and learning activities. Lecturers were guided through the interview based on open-ended questions.

Three main questions guided the interviews:

1. What is your understanding of gamification in higher education? Can you explain with examples?
2. What is your overall perception of gamification? Can you provide examples to support your answers?
3. What are your suggestions to incorporate gamification in your teaching and learning activities?

During the interview, the recommendations provided by Gay et al. (2015) were taken into consideration. The interviewer recognized the importance of attentive listening in gathering valuable information. Hence, the interviewer actively engaged in listening to the participants, allowing them to express their thoughts and experiences without interruptions freely. The interviewer employed relevant follow-up questions when participants shared their thoughts to ensure comprehension. These questions were neutrally constructed to avoid any influence that could steer participants towards a specific response. By doing so, the interviewer aimed for unbiased answers and a more accurate understanding of their perspectives. This approach allowed participants to fully articulate themselves before introducing additional questions or comments.

Using qualitative research methodology such as interviews allows researchers to investigate how participants perceive and provide suggestions related to gamification in the specific context of higher education. This approach enables a comprehensive understanding of the socio-cultural, institutional, and individual factors that influence participants' perspectives on gamification. By using open-ended questions, participants can freely express their ideas, preferences, and potential enhancements concerning the implementation and design of gamified educational experiences. The valuable insights gathered through this process can guide the future development and improvement of gamification strategies in higher education. The six-step thematic analysis provided by Braun and Clarke (2006) guides this study's categorization of emerging themes. The steps are familiarizing the data, generating initial codes, searching for themes, reviewing themes, defining, and naming themes and producing the report.

Familiarizing the data. To begin the analysis process, researchers must familiarize themselves with the interview data by thoroughly reading and listening to it. This entails transcribing the interviews verbatim and immersing oneself in the data to understand the participants' perceptions and suggestions on gamification in higher education.

Generating Codes. Researchers generate initial codes or labels that capture important concepts, ideas, or patterns related to gamification. These codes are used to categorize relevant segments of the interview data that align with the research objective. For example, “you can use it for” (PL5) and “beginning stage, trigger some concepts, once the concepts caught their attention, icebreaking” (PL7) are related to the category related to “set induction.”

Searching for themes. The researcher proceeds to classify and group them into potential themes. These themes serve as broader categories that capture related codes and reflect recurring patterns or topics within the data. The researcher identifies connections and relationships between codes, organizing them under overarching themes that represent key ideas or phenomena emerging from the interviews. For example, the ‘set induction category’ is further categorized to suitability of gamification in learning process.

Reviewing the themes. The identified themes are then reviewed and refined by the researcher. This involves examining the coherence and consistency of each theme and ensuring that the codes within each theme are distinct yet interconnected.

Defining. Once the themes have been reviewed and refined, the researcher provides clear and concise definitions. This entails developing precise descriptions that capture the

essence of each theme and its content. It is also crucial to name the themes appropriately, reflecting each theme's core idea or concept.

In the final step, the researcher produces a narrative report that describes describing and analysing. This report offers a comprehensive overview of the identified themes, supported by relevant quotes or excerpts from the interview data.

Trustworthiness of the Qualitative Data

Member checking was used to establish credibility (Creswell, 2008). The information provided during the interview was compared to the information in the processed data by returning the transcripts of the interviews to the participants. The transcripts of the interviews were shared with the participants, along with a description of the research setting and the participants involved to establish transferability. Furthermore, to enhance the reliability of the coding process, three different lecturers independently coded the identified themes, thereby employing investigator triangulation. Three coders were trained to categorize the data. Inter-rater reliability was conducted to assess the research procedure's level of agreement and consistency (Armstrong et al., 1997). Miles and Huberman's (1994) inter-rater reliability were employed. The three authors independently engaged in separate analyses to identify the emerging themes. An agreement of 80% was achieved. The differences in opinion were solved via discussion.

Results

The following section will discuss the themes related to educator's knowledge of gamification, suitability of gamification in learning processes, negative issues related to gamification, and suggestions to implement gamification in higher education.

Educators' Knowledge of Gamification

This theme's central focus is to understand educators' awareness regarding gamification in higher education. The primary objective is to investigate how educators discovered gamified elements in their teaching methods. By examining educators' viewpoints, we can acquire valuable insights into the existing knowledge landscape concerning gamification. There were no subthemes for this particular theme.

Many participants highlighted that they had learned the term 'gamification' from the courses conducted by the university for professional development and conferences. For example, one of the participants mentioned that "I heard the term gamification from my peers, and I have attended workshops on gamification conducted by CDAE (Centre of Development for Academic Purposes)" (PL4). The university's professional development centre has initiated programs with gamified approaches for lecturers to embed into teaching methods. The participants stated: "We have to attend workshops for continuous progress in teaching development. I heard it from CDAE. CDAE has circulated the email on gamification" (PL5) and "workshop organized by the university" (PL11). Social media was also mentioned as a medium for them to understand what gamification all is about. PL16 said that he learned about gamification "in social media called TUTOR, a popular social media in the US and Europe."

Further, conferences and innovative competitions were mentioned in their interviews to peek at how other researchers and practitioners work on gamification. The lecturer reported, "I heard it when I went for a competition on innovation and education in 2017. It was simple gamification for Mathematics students in high school" (PL22).

The participants obtained information about gamification from various sources, including professional development courses, workshops organized by the university's Center of Development for Academic Purposes (CDAE), and social media platforms like TUTOR. This indicates that educators' attentiveness to the multiple influences and information channels have shaped the participants' understanding of gamification. Furthermore, the mention of conferences and innovative competitions highlights the participants recognition of the broader scholarly and practical context surrounding gamification, enabling a comprehensive exploration of the subject.

Suitability of Gamification in Learning Processes

The central theme of this discussion focuses on the appropriateness of gamification in learning processes, specifically exploring its implementation in set induction, reinforcement and assessment approaches and its relevance for digital natives.

Set Induction

The first subtheme, 'set induction,' concentrates on how gamification can captivate learners' attention and prepare them for upcoming learning experiences. It examines the feasibility of utilizing game-like elements to engage students and establish a positive learning environment right from the start.

Participants highlighted that gamification is only practical when adapted for set induction. It will be apt to arouse interest and sustain students' interest during learning activities. Eventually, this will create an immersive learning environment, prepare learners, and induce the right mindset to learn. In their words:

> You can use it for icebreaking, but I am a bit sceptical when it comes to mastery of learning. Assessment is a bit difficult with gamification. For Design and Arts, it can't be used. It needs to be hands-on and takes time. Designing is more of creativity (PL5).

> Beginning stage, trigger some concepts, once the concepts caught their attention, they will be able to understand easily. Another thing is you can use as a continuity related to whatever needs to be taught (PL7).

In general, the participants' statements indicate that they have a grasp of the possible advantages and disadvantages of using gamification in education. They acknowledge the positive impact of gamification in captivating students' attention and stimulating their initial interest and conceptual comprehension. Nevertheless, they also acknowledge the importance of adapting gamification methods carefully and taking into account the specific needs of each subject. Additionally, they recognize the limitations of assessment within a gamified environment. These observations reveal a critical and thoughtful viewpoint regarding the practical implementation of gamification in educational settings.

Reinforcement and Assessment

The second subtheme revolves around reinforcement and assessment approaches. It explores educator perception on how gamification can enhance students' comprehension and retention of knowledge.

The lecturers perceive gamification as a tool to address weaknesses and misunderstandings after completing certain skills, ideas and topics. PL15 opined that “it would be used after the lecture… during reinforcement." PL15 further detailed that "gamification cannot be used for the whole course, especially for teaching of English language." PL18 realised that gamification could be used "to test their prior knowledge before starting a lesson." For PL22, "it will be wise to use it after delivering the lecture." This will allow lecturers to provide intervention for students who are struggling to understand.

The lecturers agreed that gamification is very much related to engagement and motivation. Almost all participants agreed that gamification fosters motivation. It plays a part as a remedy when there is a decline in motivation. Therefore, it enhances learning and encourages positive learning outcomes. It is an attempt to inspire learners bored with textbooks and lectures. The participants highlighted that:

- For weaker group, it can motivate whereas smart group needs content delivery. Smart students prefer content delivery. It is a tool for motivation (PL20).
- It is suitable for all courses. It is not boring. Marking is easy, they get their results immediately, and they know their problems in answering the quizzes (PL22).
- For mathematics it is suitable to teach simple concepts (PL7).

The participants suggest that gamification can be utilized either as a reinforcement tool after a lecture or as a means to assess students’ prior knowledge before beginning a new lesson. This showcases the educators’ comprehension of gamification as a resource for intervening and supporting students who struggle with specific concepts. The lecturers unanimously agree that gamification is closely tied to engagement and motivation, recognizing its ability to counteract a decline in learner motivation. Additionally, the participants emphasized gamification's applicability in various courses. One lecturer highlights its benefits in motivating weaker students, while another mentions its suitability for all courses and its capacity to combat boredom. Furthermore, a lecturer specifically points out that gamification is well-suited for teaching elementary concepts in mathematics. These instances exemplify the versatility and adaptability of gamification as an instructional tool across diverse subjects and student groups.

The Appropriate Approach for Digital Natives

The subtheme of suitability for digital natives acknowledges the distinctive attributes of today's learners who have grown up in the digital era. It assesses how gamification aligns with the preferences, habits, and skills of digital natives, and how it can effectively engage and motivate them throughout the learning process.

Most digital learners are gamers and interacting in the virtual world is their daily routine. For this reason, engaging them in education with such gaming principles is possible. The lecturers commented:

- Students are most of the time exposed to games. Gadgets are allowed in the classroom; therefore, it is easy to have gamified lessons (PL1).
- It is suitable for the current generation because they are tech-savvy students (PL2).

In summary, the lecturers' remarks demonstrate their comprehension of the digital characteristics of contemporary learners and their inclination towards gaming and technology. They acknowledge the advantages that can be gained by integrating gaming principles into

education, allowing for effective student engagement and utilization of their existing habits and abilities. This illustrates an active and flexible teaching approach that recognises and utilises students' digital experiences and preferences throughout the learning journey.

Negative Issues Related to Gamification

This discussion's central theme revolves around gamification's implementation in higher education, with a particular focus on three negative themes that have emerged from the data analysis. These negative themes provide valuable insights into the challenges and concerns associated with the integration of gamification into the higher education landscape. The identified themes are as follows: (i) time consuming and (ii) not relevant to the course taught.

Time Consuming

The first negative theme, the time-consuming nature of gamification, highlights the concerns expressed by educators regarding the additional time and effort required to incorporate gamified elements into their teaching practices. This theme addresses the apprehensions surrounding the planning, preparation, and execution of gamified activities within the constraints of time typically faced in higher education settings.

The lecturers believed gamification would gobble up their precious time (PL5, PL6, PL12). PL24 expressed that "when lecturers gamify lesson, it is a waste of time" because they have only "2-4 hours of lectures" and it is "difficult to analyse when there are many students." They explained that they would spend more time unnecessarily, and such precious time could be used for a lecture. PL6 lamented that "a lot of time is needed to prepare the lessons, and the teacher needs to be clear about what needs to be done." Similarly, PL14 said that gamification "is not necessary because it takes too much time."

Multiple lecturers expressed concerns about the time commitment of integrating gamification into their lessons. They believe that implementing gamification would consume a significant amount of their precious time and detract their attention from delivering lectures. Additionally, the lecturers emphasized the importance of thorough preparation when introducing gamification. They stressed the need for clarity regarding the objectives and expectations of the gamified lessons. This showcases their conscientious approach to planning and executing gamification, demonstrating their understanding of the importance of thoughtful preparation to ensure its effectiveness.

Not Relevant to the Courses Taught

The second negative theme explores the perception that gamification may lack relevance in the context of specific courses. Educators doubt the alignment of gamification with the desired learning outcomes and subject matter of their particular courses. This theme delves into the considerations and reservations that educators encounter when deciding whether to integrate gamification into their curriculum.

Lecturers prefer their traditional teaching approach and are wary of committing fully to gamified lessons at this point. In their interviews, it is evident that participants are not willing to take the risk of failure. Lecturers concluded that gamification would be cumbersome to deliver information. They expressed their dissatisfaction by describing that:

> For my course [management], it is not relevant. My course is very much on calculation and understanding the industry. Drawing equilibrium diagrams for demand and supply is rather difficult. For post-graduate, I would say that it is

> not relevant. My students are working adults. Maybe for undergraduates (PL16).

Gamification is said to be more successful for primary and high schools. For example, the participants stated, "It is more suitable for primary and secondary school students" (PL4) because it is "more of games rather than learning" (PL9). Another participant opined that "Gamification is related to games, suitable for young learners" (PL10). At universities, the learners' emotional maturity is unnecessary to encourage fun and joy in their lessons. The participants commented that:

> It is not suitable in higher institutions. Students should be more focused and have passed the motivation stage. It is more practical in primary and secondary school students. (PL17)

Another participant highlighted a similar idea (PL23).

> It is suitable for primary schools because of its rewards. I don't think university students need rewards. Extra marks for the coursework, maybe (PL25).

While recognizing the potential benefits of gamification in primary and secondary school settings, the lecturers expressed reservations about its suitability and practicality in higher education. Their concerns revolve around the compatibility of gamification with the learning outcomes of their courses, the maturity level of university students, and the potential disruption to the established teaching approaches. Overall, the talk reflects the qualities of critical thinking and a realistic evaluation of the applicability of gamification in different educational contexts. The lecturers' comments demonstrate an understanding of the limitations and potential drawbacks of gamification, indicating a cautious approach to its implementation in their respective courses and institutions.

Suggestions

Concerning the research question on suggestions, lecturers gave suggestions on overcoming problems related to the implementation of gamification, which can be more practical in higher institutions. One of the participants said:

> It is expensive to bring experts to conduct workshops. Therefore, experts in specific courses/clusters need to get together and discuss the content accordingly. By doing this, they know what is suitable for their courses. Other clusters exhibit introduces their game element. Other lecturers can adapt based on their content. Teaching staff can have a competition to teach their gamified lessons (PL22).

Similarly, another participant highlighted that:

> The workshop should be conducted more demonstrative, rather than the facilitator giving the information. Additionally, the speaker should be a well-experienced educator in gamification areas so that the participant can get the reality check or benchmark of their practice (PL23).

The educators requested concrete examples before gamification is implemented. The participant stated:

> The quality of the gamification activities should be assessed by the experts so that the implementation of the activities can fully achieve the desired objectives in your teaching and learning. The quality involves the design, participation of the students and the way to assess their understanding after each of the gamification activities (PL17).

The participants offer practical suggestions to overcome challenges in implementing gamification. One idea is to have subject experts collaborate and discuss the content to determine its suitability for their specific courses. Another suggestion is to encourage competition among teaching staff to teach gamified lessons, fostering engagement and motivation.

Additionally, the participants recommend conducting demonstrative workshops led by experienced educators in gamification to introduce the concept effectively. They also express the need for concrete examples and expert assessment of gamification activities before implementing them, aiming for clear guidance and alignment with teaching and learning objectives.

Discussion, Limitations, and Pedagogical Implication

From the findings, we can infer that gamification is not new for lecturers. The lecturers are somehow familiar with the gamification approach and have attended training conducted by the university and workshops. They are also familiar with some of the gamification tools they used during workshops and conferences such as Kahoot, Socrative, and Quizizz, among the frequently mentioned platforms. However, we can infer that their knowledge of gamification is limited. There is a need for a 'familiarization effect' where lecturers need time to go hands-on before the strength is entirely noticeable. However, there is a positive sign that educators will consider gamified lessons because they perceive gamification as a practical approach for set induction. This is because of gamification's fun and engaging nature to arouse interest (Bozkurt & Durak, 2018; Ding, 2019; Rincon-Flores & Santos-Guevara, 2021). The findings also confirmed that the motivational elements in gamified lessons will entice lecturers to adopt gamification for positive learning outcomes. This is consistent with the findings of previous studies that gamification induces motivation (Legaki et al., 2021; Park & Kim, 2021) and enhances learning. The educators opined that gamification is appropriate to be use as an assessment tool which is also consistent with the findings of Vapiwala and Pandita (2023).

By explicitly focusing on lecturers' suggestions, this study depicts a detailed picture of lecturers' needs for seminars and workshops focusing on gamification. Based on the findings, educators have highlighted the urgency for lecturers in the same domain pool resources and knowledge together. Also, they requested experts to review their designed gamified lessons. This implies that promoting gamification workshops or a popular teaching method will not be effective without considering the specific needs of the lecturers. If attempts were made to focus on the needs of educators, they would be more inclined to accept gamification as merit in pedagogical practices. According to Jong (2015), addressing educators' needs will encourage them to consider new approaches.

The researchers found several misconceptions about the gamification approach. Firstly, gamification is just about fun. The researchers argue that gamification has elements of fun to get the learners to learn in a slightly exciting way and more substantial learning commitment. It is a more consumable way of learning with appropriate content and objective set before

implementing the lesson. It should move away from the idea that it is about pontification that only uses badgers, leader boards, only points, badges and league tables and does not have any novelty effect in the long run (Huang et al., 2020).

Therefore, not to run the risk of just having fun during the gamified lessons, lectures can have a checklist of what needs to be achieved when a task is gamified. For example, state the study's objective to the learners and ask them to reflect on what they have learned in that lesson. Since higher education students need to be trained for personalised and autonomous learning, reflective writing would be an effective method. By doing so, students and lecturers will be on the right track with positive learning outcomes. Practical examples and a showcase of good practice will convince the lecturer of the quality of education via gamification. This will critically promote gamification in higher institutions. At the same time, lecturers will be more confident in delivering their content using gamification and not only for set induction and reinforcement activities.

Secondly, gamification is perceived as an ineffective approach for specific courses. Some disciplines have documented the positive experience of using gamification, such as pharmacy, management, and science courses (Sera & Wheeler, 2017). It is becoming a standard method in specific business, pharmacy, and management training where content is delivered successfully. Although the lecturers in this study indicate that gamification does not work for all courses, at the same time, two hours of lecture and reading a textbook also do not guarantee effective learning. It is just one strategy to drive learner action and behaviour change. Perhaps what needs to be considered in the implementation. The lecturers should also be exposed to many readily available online tools which can be integrated easily into their lectures. Therefore, it makes sense to add new avenues such as the one suggested by lecturers to have a workshop of lecturers from the same cluster to discuss how to gamify their course. Sharing various techniques and software will be a worthwhile attempt as well. Also, sharing ideas via competitions and workshops would be a practical approach. By doing so, educators can adapt lessons to suit the different learners, courses, and settings. One of the possible reasons for failure in gamification might be treating learning as homogenous, and educators fail to acknowledge that the learners' abilities and preferences vary at an individual level. According to Jia et al. (2016), the current gamified applications are designed to be one size fits all, which assumes that learners are the homogenous group that responds similarly to gamified lessons. Personalized gamified lessons need to be prepared to motivate and engage students for a positive educational experience. Bourgonjon et al. (2013) state that game-based learning demands careful orchestration of different knowledge domains. Thirdly, gamification is considered time-consuming. Lecturers must attend workshops to design gamified lessons that can be easily implemented with the point management system. Such platforms save much time and are effective in assessing students understanding of a topic.

Another misconception is that gamification is just about rewards. Reward and happy moments should be viewed as motivating element and can be translated to more enjoyable learning for a productive learning environment irrespective changes in the structure of the classrooms.

The study scrutinized the instructors' perceptions of gamification by describing the needs, preferences, suggestions, and challenges to apprehend the futuristic uses of gamification effectively. Through the perspective of educators, this research was able to foray into the needs and preferences of lecturers in gamification to develop adaptive gamified courses that can adjust to different lecturers' needs. Furthermore, this study demonstrates gamification as a teaching method that can be used in any discipline with careful planning. The researchers realized limitations in this study, which future studies may want to address. It is a small-scale study that may not reflect the overall perception of gamification in Malaysian universities. Future studies should consider using larger samples to obtain a richer and more wholesome

depiction of gamification in Malaysia. It is also advisable to include survey and observational methodologies as well. The research provides practitioners with valuable insights and recommendations for successfully incorporating gamification into their teaching methods. It also assists administrators and policymakers in making informed decisions and shaping policies regarding the implementation of gamification in higher education. Administrators can utilize this information to create supportive policies, allocate resources, and establish professional development opportunities for faculty members who wish to integrate gamification into their teaching approaches.

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Article Citation

Eltahir, M. E., Annamalai, N., Uthayakumaran, A., Zyoud, S. H., Zakarneh, B., & Al Salhi, N. R. (2023). A qualitative study on Malaysian academics' perceptions and suggestions on gamified learning. *The Qualitative Report, 28*(7), 2011-2028. https://doi.org/10.46743/2160-3715/2023.6102