

**Analogue Gamification Concept in Motivating Pupils for English Language Learning Engagement**

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**Yugeshineey Subba Rao**

Universiti Selangor, Malaysia

**Email:** [yugeshineey@gmail.com](mailto:yugeshineey@gmail.com)

**Khatipah Abd Ghani**

Universiti Selangor, Malaysia

**Email:** [khatisj@unisel.edu.my](mailto:khatisj@unisel.edu.my)

**Rita Wong Mee Mee**

Universiti Selangor, Malaysia

**Email:** [ritawong@unisel.edu.my](mailto:ritawong@unisel.edu.my)

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**Abstract**

It is difficult for English language instructors to provide a fun and conducive environment to ensure student participation. As the current younger generation prefers gamified learning over traditional methods, it is an additional responsibility for educators to cater to students' needs and transform the classroom into a more learner-centred lesson. This study proposes an analogue gamification concept implemented in English language lessons to elevate young learners' motivation and engagement. The study presents the theories that can set a strong foundation and guide language teachers to assist with gamified lessons. The game elements in analogue gamification effectively serve the purpose alongside suitable methods and tools. The presence of technology also plays a role in gamification. The integration of gamification in the delivery of lessons is deemed successful in keeping young learners committed and stimulated to acquire knowledge. However, there are obstacles to the merging of both components. Moreover, it also depends on the content mastery of the educator's ability to amend learning materials to suit the teaching strategy or technique without compromising its credibility.

**Keywords:** gamified learning; game elements; motivation; engagement; ESL

## 1. Introduction

Educational technology impacts the growth of education significantly. This becomes more apparent when the current era utilises technology that advances at a fast pace (Omar et al., 2021), for almost everything in our daily lives, despite the relevance of traditional methods. This justifies the reason young learners are more inclined towards games. Due to their exposure to the latest gadgets and technology; thus, educators tend to include it in their lessons. The usage of technology in the classroom helps learners be independent and active in their learning process (Aini, 2013). This is vital as the current education no longer serves the purpose of merely equipping learners with information. However, instead, it is to prep them to be active critical thinkers of the 21<sup>st</sup> century (Ratnaningsih, 2016). Hence, the collaboration of lessons and games, both digital and analogue, plays a vital role in the educational context to cater to learners' needs in the present situation.

Game-based learning (GBL) and gamification differ in certain aspects. GBL refers to the overall form, whereas the latter only employs the game features present in a game to apply it in a non-game context (Hanif Al Fatta et al., 2019). The learners do not engage themselves in a game. Instead, they participate in a setting that uses the game features perhaps to be rewarded with points whenever they can correctly answer a question or execute a task successfully, according to the same study. A few commonly used game features include points, levels, badges, and leader boards, which can keep learners focused, stated Stanculescu et al. (2016 as cited in Siti Nurul Mahfuzah Mohamad et al., 2017).

English language teachers constantly need to galvanise their lessons to ensure it is appealing to the pupils. Therefore, they do so by seeking new strategies that may succeed in alluring their learners. The traditional method that utilises the chalk-and-talk approach is deemed obsolete and no longer applicable due to its inability to motivate learners to do better academically. Thus, gamified learning opted as an alternative. As it is more visual than verbal, they can recall information better because it is easier to recollect one's memory by seeing than reading (Laskaris, 2014). Varışoğlu et al. claim that gamification allows learners to connect the dots between concept learning and putting it to practice (2013 as cited in Öztürk & Korkmaz, 2020), thus providing learners with the opportunity to improve.

The rationale for including games in lessons is due to the fact that it motivates pupils to seek knowledge (Ebrahimzadeh & Alavi, 2017). It also makes them eager to participate in their learning process (Poondej & Lerdpornkulrat, 2016), and this is crucial because the more they are engaged in the lesson, the more it favours the

outcome. Unfortunately, teachers face trouble ensuring their lessons are enthusiastic enough for the pupils to be involved (Woo et al., 2021). They encounter numerous challenges merging technology and education to adapt their lessons to suit the modern era.

If given a choice, learners are sure to choose games over a pen and paper activity as they are practically glued to their gadgets. However, gadgets require technology to function. This is a matter to be considered when involving unfortunate learners and educators who have limited to no access to the modern age luxury – technology. Despite incorporating it in schools, there are still those unaware of how to use ICT tools (Ghavifekr et al., 2016). This disadvantage leaves no other choice but for the educators to take it upon themselves to adapt to the situation and opt for a method that can cater to learners' needs with no technology required – analogue gamification. It is similar to gamification, but the additional term generates a new meaning to it.

It is not a requisite for gamification to be solely digital to ensure it has the potential to function, as it is only required to be learner-centered and content-oriented (Lenz et al., 2018). The enjoyment experienced by players in a game retains them to be continuously involved. It is the same bit that improves learners' motivation and engagement in the concept of gamification (Alsawaier, 2017). This is due to the ability of gamification to intensify the yearning for an accomplishment and reputation. Pondering the significance of gamification in education and its effects on learners, this study contributes to the enhancement of pupils' motivation in English language learning through analogue gamification.

## **2. Purpose of the Present Study**

The main purpose of this study is to propose a conceptual model of analogue gamification to elevate learners' motivation and engagement during English language lessons.

## **3. Literature Review**

Learning is deemed an effortless process, especially when learners are motivated and eager to acquire knowledge (Buchner & Zumbach, 2018). The main aim of education is to ensure learners are motivated to focus and participate in a lesson and its content. Gamified learning has the potential to do so, and it is proven when 67% of students concur that it motivates and keeps them engaged compared to traditional

courses (Chapman & Rich, 2018). It also allows the learners to compete healthily (Hashim et al., 2019). As far as they are concerned, they are going against one another to gain rewards and ranking while gaining input subconsciously in a fun way as they compete. Hence, it is upon the teachers to provide opportunities for fun learning to play its role in motivating and engaging students.

Unfortunately, there are limited studies regarding the integration of gamification in an educational context although it yields a positive outcome. Nevertheless, a scoping review was conducted to acknowledge the resources and it was identified via search strings consisting of keywords relevant to the concept of gamification. Online databases such as Scopus, Web of Science (WOS), and Education Resources Information Center (ERIC) were browsed using the search strings and keywords as shown in the table below.

**Table 1: Search string/keyword**

Database	Search string/Keyword
Scopus	TITLE-ABS-KEY("game element*" OR "game feature*" OR "gamification" OR "educational game*") AND ("elementary education" OR "primary education" OR "primary school") AND ("language learning" OR "language skill*" OR "English lesson" OR "ESL") AND ( LIMIT-TO ( SRCTYPE,"j" ) ) AND ( LIMIT-TO ( OA,"all" ) ) AND ( LIMIT-TO ( PUBSTAGE,"final" ) ) AND ( LIMIT-TO ( DOCTYPE,"ar" ) ) AND ( LIMIT-TO ( SUBJAREA,"SOCI" ) ) AND ( LIMIT-TO ( PUBYEAR,2022) OR LIMIT-TO ( PUBYEAR,2021) OR LIMIT-TO ( PUBYEAR,2020) OR LIMIT-TO ( PUBYEAR,2019) OR LIMIT-TO ( PUBYEAR,2018) AND ( LIMIT-TO ( LANGUAGE,"English" ) ) AND ( LIMIT-TO ( EXACTKEYWORD,"Gamification" ) OR LIMIT-TO ( EXACTKEYWORD,"Educational Game" ) OR LIMIT-TO ( EXACTKEYWORD,"Motivation" ) OR LIMIT-TO ( EXACTKEYWORD,"Education" ) OR LIMIT-TO ( EXACTKEYWORD,"Educational Games" ) )
Web of Science (WOS)	(((TS=(gamification OR gamified OR game element OR game feature)) AND TS=(English OR English language skill OR ESL)) AND PY=(2018-2022)) AND DT=(Article) AND LA=(English) AND WC=(Education & Educational Research)
Education Resources Information Center (ERIC)	(game element OR gamified learning OR gamification) AND (English language skill OR ESL OR EFL) AND (primary school OR young learner OR elementary education)

Gamification is not restricted to education as it exists in many other fields. However, this study revolves around its usage in English language learning. Hence, there were a few criteria to consider to filter the studies presented in the databases. The

articles that fit the requirement were deemed eligible as a reference to aid the current study. The predetermined criteria are shown in the table below.

Table 2: Inclusion and Exclusion Criteria

Inclusion criterion	Exclusion criterion
Published from 2018 onwards	Not journal article
Focus on English language learning	Not educational context
Application of gamification/game elements	Full text not attained or incomplete

Based on the search strings and criteria, this study managed to identify n=4 research articles on the application of gamification to motivate young learners and keep them engaged throughout the process of English language learning. These articles reflect the effectiveness of its inclusion in the lesson and emphasise that gamification does not imply the creation of games. Instead, it enables education in a fun and engaging circumstance for the learners using game elements without compromising its credibility. The articles are presented in a literature matrix as shown below.

**Table 3. Literature Matrix**

Title	Aim/Objective	Game Element(s)	Findings
Sun & Hsieh, 2018	To examine the effect of gamification elements present in an interactive response system (IRS) on English learners' motivation, engagement, and attention	Points, leader boards, and timers	The gamified IRS was able to spark interest among the students and increased their intrinsic motivation. It also positively influenced their levels of emotional engagement and focused attention
Idris et al., 2020	To examine the effectiveness of <i>Kahoot!</i> in mastering simple present tense verb	Leader boards, points, and feedback	The game elements that are present in <i>Kahoot!</i> enhances students' learning experience and improves their learning achievement. It also increases their motivation to learn grammar in a different manner
Abusa'alek & Baniabdelrahman, 2020	To investigate the effect of using gamification on Jordanian EFL sixth grade students' reading comprehension	Levels, points, rewards, and leader boards	Students in the experimental group performed better than the students in the control group in the reading comprehension post-test, indicating that gamification is more effective than conventional instruction
Anak Yunus & Hua, 2021	To explore the impact of Quizizz on the enhancement of irregular past tense verbs	Leader boards and points	Students were eager to learn as they developed positive attitudes during the gamified intervention

Sun and Hsieh (2018) study with 144 seventh-grade students as respondents focused mainly on applying game elements in an interactive response system (IRS). The gamified IRS was used in the quasi-experimental research to distinguish between countable and uncountable nouns. And the difference between "how many" and "how much." It provided a conducive learning environment for the students, who claimed that they could concentrate better in the lesson as it was exciting and different from usual. They were also motivated to participate more in lessons due to the interactive activities.

Next, Idris et al. (2020) conducted a study in Malaysia on the effectiveness of Kahoot! as a gamified platform in present tense mastery. The participants were 31 young English as the second language (ESL) learners aged 9. The software displayed game elements such as leader boards, points, and feedback, which effectively reinforced the participants' mastery of present tense verbs. The study also concluded that gamification enhances the learners' grammar learning experience as there were significant differences in the test scores prior to and after the intervention.

Abusa'alek conducted another study regarding gamification, and Baniabdelrahman (2020) investigated its effect on Jordanian English as a foreign language (EFL) learners' reading comprehension. The study required 71 sixth-grade students to undergo eight (8) weeks of a 45-minute reading comprehension activity session twice a week. The instructional program yielded a positive outcome as the experimental group showed

better results than the control group, indicating that gamification is more effective than conventional instruction.

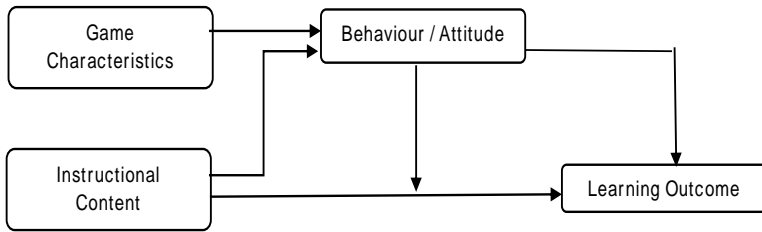
Lastly, Anak Yunus and Tan (2021) explored Quizizz as a gamified learning tool in the ESL classroom. The quasi-experimental research involved 30 primary school ESL learners aged 11. They were introduced to the game elements in Quizizz, such as leader boards and points in activities focused on improving their learning of irregular past tense verbs. The test scores reflected the progress of their performance; hence, it implies that gamification does assist in enhancing their grammar. The learners also displayed interest and eagerness to participate in the learning process involving gamification.

### **4. Research Method**

Attention must be diverted to the merge of both analogue gamification and learners' motivation to yield a fruitful outcome. With the aim for this merge to function, several underlying theories are used as a reference to set a strong foundation. The theories stated are Lander's Theory of Gamified Learning and Vroom's Expectancy Theory. They give an insight into how gamified learning and learners' motivation operate in an educational setting involving language learning.

#### **4.1 Theory of Gamified Learning by Richard Lander (2014)**

This theory revolves around game characteristics and instructional content on an individual's behaviour or attitude, contributing to the learning outcome. Gamification is often mistaken as many perceive it to replace a teaching and learning process. Contrary to the false connotation, gamification ensures the betterment of the processes, not replacing them (Landers, 2015). The instructional content used in this context must be functional because it acts as a catalyst that aids gamification. If it is faulty, it leads to the failure of the concept. The behaviour or attitude also influences gamified learning via instructional content. Learners deem to be more eager to participate in an activity when it includes something out of the ordinary, which in this theory refers to the game characteristics. Therefore, lessons augmented with the game elements yield a promising learning outcome, as shown in Figure 1 below.



**Figure 1:** Lander’s Theory of Gamified Learning

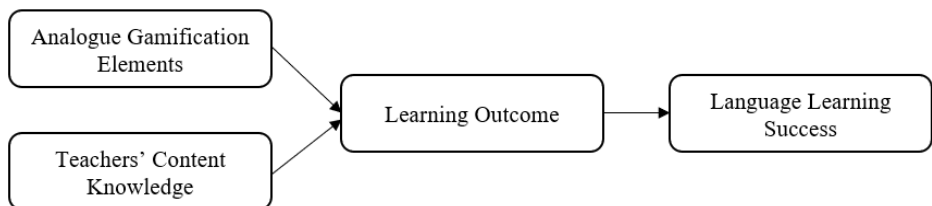
**4.2 Expectancy Theory by Victor Vroom (1964)**

This theory portrays the way people think and take action to obtain something they desire (Idemobi, 2010). An individual's urge to get things done is influenced by how they view their potential in executing the task and the price it is held worth. There are three significant components present in its model that plays a vital role in enhancing motivation levels – expectancy (effort), instrumentality (performance), and valence (reward). Expectancy refers to the effort an individual contributes to completing a task. On the other hand, instrumentality refers to the performance or execution of a task well enough to expect a satisfactory outcome (Idemobi, 2010). Valence is the rewards or worth on the anticipated end product (George & Humphrey, 2021). These components finally result in motivation and urge an individual to react, as shown in Figure 2.



**Figure 2:** Vroom’s Expectancy Theory

**4.3 Proposed Conceptual Model**



**Figure 3:** Proposed Conceptual Model



### 4.3.1 Analogue Gamification Elements

According to Lobo-Rueba et al., the evolution of both teaching and learning processes are affected in a good way (2020 as cited by Acosta-Medina et al., 2021) due to the potential of gamification to ensure it is enjoyable (Filippou et al., 2018), improves learners' motivation, dedication as well as their learning. Although the concept of gamification is commonly digital, the analogue version still has the undiscovered capability (Qiu, 2017). Like digital gamification, it adopts and adapts game features to assist a lesson by excluding the game itself. It insinuates that there should be no necessity to design a game, although its features are used in a specific circumstance (van Gaalen et al., 2021). The game elements present can be applied in the learning process due to their flexibility regardless of the absence of any digital medium (Zainuddin & Keumala, 2021). This matter is crucial for educators with unfortunate learners with no access to technology or facilities to aid their teaching and learning process.

### 4.3.2 Teachers' Content Knowledge

A teacher must be well equipped with the necessary teaching strategies or techniques. However, it would not be effective unless they master the information or material regarding a specific topic that is to be taught to language learners, according to Darling-Hammond (2008 as cited by Kultsum, 2017). This is defined as content knowledge, and it is a component found in the PCK theory by Lee Shulman (1987). Therefore, it is deemed an essential prerequisite for a teacher to ensure a successful lesson as they can make amendments to their teaching materials and decide the suitable gamification elements that can work compatibly with the lesson's content and the teaching strategy or technique applied. This was reflected in a study by Hill et al. (2005 as cited by Guerriero, 2014), which claimed that students' learning achievements are positively influenced by how well-informed their educators are.

### 4.3.3 Learning Outcome

Gamification elements are incorporated into a learning environment to spark learners' interest and encourage them to willingly participate in their learning process, which eventually yields promising learning outcomes (Huang et al., 2020). The learning outcomes in the proposed model are divided into three (3) components – learners' attitude, learners' motivation, and learners' engagement.

#### **4.3.4 Learners' Attitude**

Attitude implies the proneness of an individual to display either a pleasant or unpleasant reaction towards something, and it consists of 3 elements – affect (A), behaviour (B), and cognition (C), based on the ABC Model of Attitude stated by Ajzen (1993 as cited by Mazana et al., 2019). The same study describes the affective element as the reflection of an individual's emotion towards the subject matter, which refers to English language learning. However, the behavioral element is the action taken in certain circumstances, and the cognitive element is one's insight into the learning content. In order to promote positive attitudes among learners, researchers suggest that educators adopt gamification in the lessons (Yildirim, 2017). Thus, learners' attitude is essential to obtain a fruitful outcome (Nou & Lynch, 2018), as it indirectly contributes to their motivation and will to participate in the lesson.

#### **4.3.5 Learners' Motivation**

Using the traditional approach has resulted in learners' demotivation, leading to a lack of engagement (Papadakis, 2016). In order to prevent it from prolonging, educators are entrusted with the responsibility to improve the learners' motivation level, both intrinsically and extrinsically. Motivation refers to the effort and needs to attain a goal with a positive attitude toward language learning (Ulfa & Bania, 2019). In a study by Zarzycka-Piskorz (2016 as cited by Idris et al., 2020), motivation in an educational context comprises the eagerness to succeed as they compete with the rest. It also establishes the desire to learn the subject matter thoroughly and sparks curiosity to identify the motive of an activity that leads to revision and reinforcement of their knowledge. Therefore, the learners attempt to carry out the activity planned by the educator. The effort is rewarded accordingly, in terms of points or badges.

### 4.3.6 Learners' Engagement

The success of a lesson can only be guaranteed if learners are fully involved in it. Engagement is defined as the feeling of relatedness with the task or activity at hand that is deemed necessary to secure a satisfactory outcome (Stevens et al., 2018). The more the learners are invested in their learning process, the more connected they are to the lesson, which directly causes an inclination in their progress. Hussein's study (2015, as cited by Idris et al., 2020) claims that gamification is associated with young learners because they view it as exciting and entertaining. Hence, they are continuously involved in learning based on the concept. Gamification and its game elements stimulate learners' engagement and gain more than just from the academic aspect (Papadakis & Kalogiannakis, 2017).

### 4.3.7 Language Learning Success

The effective integration of games and the elements in a language lesson is reflected when learners willingly participate in their learning process to enhance their achievement, according to Rao (2014, as cited by Idris et al., 2020). The same study researched the effect of gamification in enriching young ESL learners' grammar skills, resulting in a positive yield. It was also claimed that gamification could improve teaching and learning due to providing circumstances for learners to practice their thinking skills. Furthermore, they are also more eager to involve in gamified lessons for the sense of achievement as they gain points and a spot on the leader board in an attempt to accomplish their academic goals in language learning, as stated by Flores (2015 as cited by Yunus et al., 2021).

## 5. Conclusion

The concept of gamification does not differ much despite its versions – analogue and digital. The gamified lesson can be carried out without technology or gadgets as it is not compulsory (Zainuddin & Keumala, 2021) if it motivates learners and keeps them engaged. It serves the same purpose: to boost learners' motivation and promote fun learning. Educators have been integrating games into the teaching process. Therefore, their knowledge regarding the subject matter can be valuable as it helps them alter their lesson or teaching methods to match the chosen game features, which indirectly influences their decision to structure a language lesson. This saves time and cost on

behalf of the teachers in terms of lesson preparation. Therefore, the successful execution of the flow of the proposed model ensures learners' language learning success due to its ability to help influence learners' motivation levels and refrains them from disengaging from their lesson via the use of gamification.

### **6. Recommendation for Future Studies**

This study proposes a conceptual model that can aid educators who consider applying analogue gamification in their English language teaching to boost learners' motivation and keep them engaged. However, there are limited resources of literature on its successful implementation. Therefore, it is recommended to have more studies conducted concerning the effectiveness of analogue gamification to help improve the model. It may also be helpful if future studies are conducted experimentally to determine the perception of educators and the end-users, hence reflecting its significance in an ESL classroom.

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